Insurance Council of Australia

Property based funding options for the NSW Fire Services Levy

7 June 2011

Deloitte.

Deloitte Touche Tohmatsu
ABN 74 490 121 060

Grosvenor Place
2225 George Street
Sydney NSW 2000
PO Box N250

Tel: +61 (0) 2 9322 7000
Fax: +61 (0) 2 0322 7001
www.deloitte.com.au

Alex Sanchez
General Manager Policy, Economics & Taxation Directorate
Insurance Council of Australia
Level 3, 56 Pitt Street
Sydney NSW 2000

14 June 2011

Dear Mr Sanchez

Re: Impact of replacing an insurance based fire services funding model with a property based model for New South Wales

I am pleased to present our final report on alternative approaches to funding the New South Wales' fire services. Please feel free to contact me if you have any questions.

Yours sincerely

Robert Southern
Lead Partner – Economics and Infrastructure Advisory

Statement of Responsibility

This report was prepared for the Insurance Council of Australia for the purpose examining the impact of moving from an insurance based model to fund the New South Wales fire services to a property based tax. .

In preparing this report we have relied on the accuracy and completeness of the information provided to us by the Insurance Council of Australia. We have not audited or otherwise verified the accuracy or completeness of the information and, to that extent, the information contained in this report may not be accurate or reliable. This is normal practice when carrying out an engagement such as this, but contrasts with an audit.

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Executive Summary

Background

This report outlines the findings of a model developed to examine the distributional impacts of changing the system of funding for NSW's fire services agencies so that it is based primarily on property values rather than insurance premiums. The model was developed by the Insurance Council of Australia (ICA) and Deloitte using data provided by the ICA and other publically available sources.

Fire services funding has been the subject of debate in NSW and across Australia and currently NSW and Victoria are the only states that continues to fund its fire services through insurance contributions (known as the Fire Services Levy or FSL), although Victoria is planning to implement a property based charge, as recommended by the 2009 Victorian Bushfires Royal Commission.

The key impetus for shifting from an insurance based funding system to a property based funding system is the problem posed by the uninsured and the underinsured. The owners of uninsured properties make no direct contribution to the funding of fire services, and the owners of underinsured properties pay less than the owners of fully insured properties when levies on the insurance industry are the main mechanism for funding fire services. This raises horizontal equity concerns and provides a disincentive for property owners to purchase adequate insurance coverage. This disincentive is increased by the combined effect of insurance taxes and GST charged on insurance premiums.

In NSW there are three organisations responsible for the provision of fire and related emergency services. They are Fire and Rescue NSW (FRNSW), the Department of Rural Fire Service (RFS) and the State Emergency Service (SES). At present 73.7 per cent of the total FRNSW, RFS and SES budgets are collected from insurance premiums, with the remainder coming from the NSW State Government (14.6 per cent) and local governments (11.7 per cent). The total amount of funding for these services in 2010-11 is $912 million, with $672 million contributed from insurance premiums.

Modelling

The preferred approach of Deloitte and the ICA was to comment on the distributional impact on property owners for each of the scenarios identified below by matching the current amount of FSL collected through insurance policies, for each property in NSW, and comparing this amount with the amount that would be collected under a property based charge, based on the land value of those properties.

Due to limitations with the data this approach was not possible and instead the approach adopted is one that shows the outcomes for the *average* insured residential, commercial and rural property owner, in each Local Government Area (LGA), comparing the amount of fire services contributions they would pay for a range of property based scenarios with the amount of fire service contributions they currently pay through their insurance contributions.[1] This allows us to comment on the distributional impacts for the *average property* in each LGA, but not on the distribution of impacts of all properties within the LGAs. This should be considered when interpreting the results.

The ICA has asked Deloitte to model the distributional effects of three broad approaches to funding the FSL through a property based charge, at a flat rate, a rate based on the service level in each LGA and a rate based on the fire risk of each LGA:

- **Scenario 1 – flat rate:** This scenario involves replacing the insurance based system with the application of a property based tax, based on land value and property type (residential, commercial or rural), applied evenly across NSW

[1] Deloitte and the ICA were not able to obtain land values for individual properties and could therefore only estimate results for the average property in each LGA. This is discussed in Sections 3.3 and 3.4.

- **Scenario 2 – service level:** This scenario also involves replacing the insurance based system with the application of a property based tax, based on land value and property type, but varying across NSW so that LGAs continue to contribute the same proportion of FSL funding as they did in 2009-10. LGAs contribute a fixed proportion of fire services funding. Basing the rates on property on the amount contributed by the LGAs is intended to reflect the cost of providing fire services in each LGA as well as the level of service provision
- **Scenario 3 – fire risk:** This scenario also involves replacing the insurance based system with the application of a property based tax, based on land value and property type, but varying across NSW so that properties contribute based on the fire risk of their LGA, estimated from fire incidence data provided by FRNSW.

For each scenario the ICA has asked Deloitte to model several iterations, varying the proportion of fire services to be funded through a property based tax and allowing for the inclusion of a motor vehicle tax, given the significant amount of resources that the fire services spend responding to motor vehicle incidents:

- **Part (a)** – insurance contributions only are transferred to a new property based tax
- **Part (b)** – insurance contributions *and* the state contribution are transferred to a new property based tax
- **Part (c)** – *all* contributions (insurance, state and local government) are transferred to a new property based tax
- **Part (d)** – insurance contributions are transferred to a combination of a motor vehicle and property based tax
- **Part (e)** – insurance contributions and the state contribution are transferred to a combination of a motor vehicle and property based tax.

Results

Insurance based contributions to fire services

The table below is based on information provided by NSW insurance companies to the ICA. It shows the average amount of FSL per property collected by insurance companies for the funding of fire services. GST and state taxes are charged on top of this amount, which increases the cost of the FSL to property owners.

Average FSL, including taxes for residential, commercial and rural properties

	Residential	Commercial	Rural
Average FSL per property, charged by insurer	$ 105	$ 666	$ 218
Taxes, including GST (10%) and state taxes (9%)	$ 21	$ 132	$ 43
Total FSL cost per property	**$ 126**	**$ 798**	**$ 262**

Property based contributions to fire services

For the scenarios modelled, on average there would be a saving to the average residential property across LGAs in NSW. The magnitude of that saving is dependent on the amount of revenue to be collected from a property based tax. Where a property based tax is used to collect the NSW State Government or local government's proportion of fire services funding, in addition to the insurance contributions, the average savings are smaller.

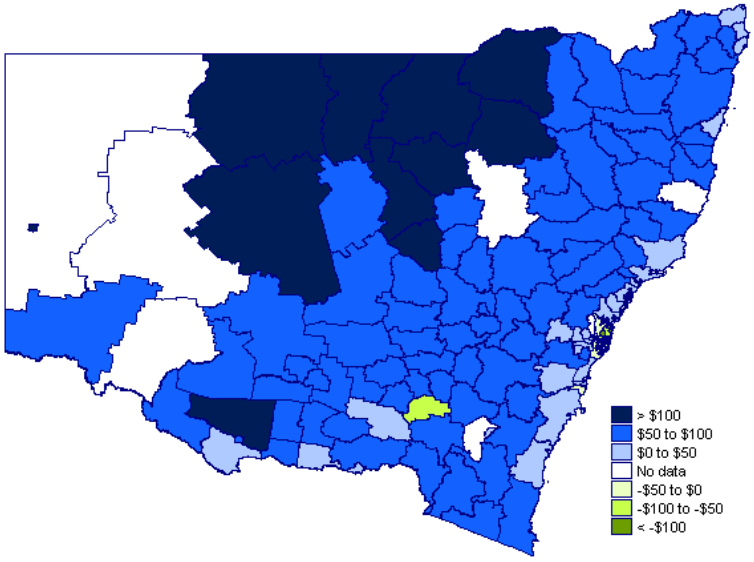
Outcomes for residential properties, Scenario 1

Part	Insurance	State Gov.	Local Gov.	Motor vehicle	Number of LGAs where average property has a net saving	Number of LGAs where average property has a net cost	Per cent of LGAs where the average property has a net saving	Average net saving for the average property
a	✓	-	-	-	120	28	81%	$ 41
b	✓	✓	-	-	112	36	76%	$ 26
c	✓	✓	✓	-	103	45	70%	$ 14
d	✓	-	-	✓	129	19	87%	$ 54
e	✓	✓	-	✓	120	28	81%	$ 42

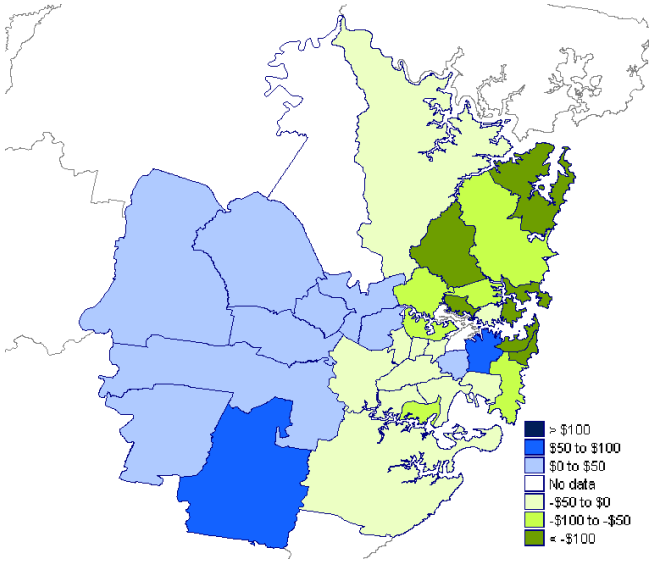
As the table above shows, residential results are almost the same for Part A, as they are for Part E. This is because the inclusion of an additional $25 annual tax on all motor vehicles in NSW is roughly equivalent to the current NSW State Government contribution, meaning that households would experience roughly the same outcomes as for Part A.

For Scenario 1, savings tend to be greater for rural LGAs that are located inland, compared with those located by the coast, and also for Sydney metropolitan LGAs that are located in the west of the Sydney metropolitan area, relative to those in the north and the east.

Annual saving, residential properties, NSW, scenario 1a



Annual saving, residential properties, Sydney, scenario 1a



By contrast the model shows that, the average commercial and rural property owner incurs a net cost under the scenarios modelled. This is partly a function of the decision on what proportion of revenue to collect from each of the three property types, as well as the other assumptions made in the model. It should also be noted that, while the model can estimate the impact on the average property in each LGA, there is significantly more variation in the value of commercial and rural properties and the outcome for the average property in each LGA may not provide a good indication of the outcome for most properties. The difference in the outcomes between the iterations of Scenario 1 is determined by the total amount of revenue to be collected from the property based tax. The average net cost for commercial and rural properties is lower for Parts A and E than for the other parts.

Outcomes for commercial and rural, Scenario 1

					Commercial		Rural	
Part	Insurance	State Gov.	Local Gov.	Motor vehicle	Per cent of LGAs where the average property has a net saving	Net saving for the average property	Per cent of LGAs where the average property has a net saving	Net saving for the average property
a	✓	-	-	-	38%	- $ 502	42%	- $ 219
b	✓	✓	-	-	35%	- $ 748	34%	- $ 310
c	✓	✓	✓	-	34%	- $ 945	27%	- $ 387
d	✓	-	-	✓	42%	- $ 293	52%	- $ 142
e	✓	✓	-	✓	38%	- $ 498	43%	- $ 217

The magnitude of results for Scenarios 2 and 3 are similar to Scenario 1, with the main difference being the distribution of LGAs where the average property has a net saving or net cost. In the case of Scenario 2 it is the proportion of FSL currently being contributed by each LGA that influences this distribution. For Scenario 3, the distribution of results is influenced by the distribution of fire events recorded by FRNSW in 2009-10.

Although the average results for Scenarios 2 and 3 are similar to Scenario 1, these scenarios were more likely to show a significant change in the amount of FSL being paid by the average property in

each LGA (either a significant saving or a significant cost). A lack of property level data prevents us from fully explaining the distribution of these results or from developing more complex scenarios based on either service level or fire risk.

Conclusions

All of the scenarios modelled overcome the limitations associated with an insurance based fire services funding scheme, however, none of the three scenarios modelled presents an obvious choice for the future of a property based charge to fund fire services. In terms of equity there are advantages and disadvantages associated with each.

Although the model has been able to provide a general indication of the distributional impacts on the average property, by property type in each LGA, there is considerable variation in property values within LGAs that has not been captured by this model. To further increase understanding of the distributional impacts of replacing insurance based fire services funding with a property based tax it is recommended that individual property from the NSW Valuer General be matched against comparable insurance data to allow for a more detailed modelling exercise of the distributional impacts on a per-property basis.

As well as providing a more detailed understanding of the distributional impacts, this type of modelling would allow for the development of more detailed scenarios. This may include the use of price caps and floors, fixed and variable components of the property and motor vehicle charges, or any number of other strategies that might be used to mitigate perceived inequities created under the scenarios modelled.

1 Introduction

1.1 Introduction

Fire services funding has been the subject of debate in NSW and across Australia. The majority of the funding for NSW fire services is currently provided by insurance companies through levies placed on insurance policies. Several other states (Queensland, South Australia, and Western Australia) have moved away from insurance based systems towards systems which directly charge property owners with reference to factors such as the value of property, the risk classification of the property, the location of the property and the use of the property. In Victoria, the only state other than NSW to fund fire services through insurance, the government has agreed to move to a property charge, following a recommendation from the 2009 Victorian Bushfires Royal Commission. On the 14th of May 2011 the Victorian Government announced that from 1 July 2013, FSL would be abolished from insurance premiums. The Victorian Government announced that a position paper would be prepared by the end of June 2011 on the implementation arrangements.

In each instance where a state has shifted from insurance-based funding to property-based funding, this has been decision to redress equity, economic efficiency and consumer behaviour issues posed by the uninsured and the underinsured. The owners of uninsured properties make no direct contribution to the funding of fire services, and the owners of underinsured properties pay less than the owners of fully insured properties when levies on the insurance industry are the main mechanism for funding fire services. This raises horizontal equity concerns and provides a disincentive for property owners to purchase adequate insurance coverage.

The basis of this report is a model developed by the Insurance Council of Australia (ICA) with assistance from Deloitte. The model calculates an alternative system for funding NSW fire services through the use of property based taxes. The report presents the results of the modelling and discusses options for improving the modelling.

1.2 Report structure

The remainder of the report is structured as follows:

Chapter 2 – provides background to the current funding system in NSW and other states

Chapter 3 – details the modelling assumptions and methodology used

Chapter 4 – presents the results of the modelling under the different scenarios developed

Chapter 5 – presents the conclusions of the analysis.

The report also contains two appendices:

Appendix A – contains some of the data used for the report

Appendix B – is a reference list.

2 Background

2.1 Fire and related services in NSW

In NSW there are three organisations responsible for the provision of fire and related emergency services. They are Fire and Rescue NSW[2] (FRNSW), the Department of Rural Fire Service (RFS) and the State Emergency Service (SES). The responsibilities of these organisations are briefly outlined below:

- FRNSW provides emergency risk management services from 338 stations across NSW. It promotes fire safety, manages fires and protects the State from hazardous material incidents and is the largest provider of non-fire rescue services in New South Wales. It provides direct fire protection to more than 90 per cent of the State's population, and has mutual aid arrangements with other emergency services that extend its services beyond gazetted fire districts.

  FRNSW also maintains a state-wide counter-terrorism consequence management emergency capability and is responsible for the receipt of all 000 and automatic fire alarm calls for both the FRNSW and the RFS. Its governing legislation is the *Fire Brigades Act 1989*

- The RFS provides a community-based fire service covering more than 95 per cent of New South Wales. The Service relies on over 70,000 volunteers to provide most of its fire management and fire protection services under the *Rural Fires Act 1997*

- The SES is a volunteer-based emergency management response and rescue agency established by the *State Emergency Service Act 1989*. The Service is the nominated agency responsible for providing assistance in floods, storms and tsunamis under the State Disaster Plan.

  The Service also has responsibility for 90 accredited rescue units and for providing assistance to the NSW Police Force, RFNSW, the RFS, the Ambulance Service of New South Wales and the State Emergency Operations Controller.[3]

2.2 Current funding arrangements

Budgets for FRNSW, the RFS and the SES are set by the Treasurer each year. They are funded according to the same methodology, primarily by a levy on general insurance companies, which is passed on to insurance policy holders. At present 73.7 per cent of the total FRNSW, RFS and SES budgets are collected this way, with the remainder coming from NSW State Government (14.6 per cent) and local government contributions (11.7 per cent).

Under the *Fire Brigades Act 1989*, the *Rural Fires Act 1997*and the *State Emergency Service Act 1989* general insurance companies are required to provide to the commissioners of the respective organisations an audited account of the amount of premiums received by the company for the previous financial year. These premiums are then multiplied by fixed rates ranging from zero to 80 per cent to determine the amount of *premiums subject to contribution*.[4]

The contribution by individual insurance companies is then determined in accordance with the following formula:

[2] Note that on 1 January 2011 NSW Fire Brigades changed its name to Fire and Rescue NSW
[3] NSW Department of Treasury, *Budget 2010-11 – Budget Paper 3, Police and Emergency Services*
[4] See *Fire Brigades Act 1989,* Schedule 1 – Proportion of premiums subject to contribution
http://www.legislation.nsw.gov.au/maintop/view/inforce/act+192+1989+cd+0+N

Box 2.1: FSL Contribution methodology

Contribution payable = $\frac{a \times b}{c}$

Where:

a is the total amount of premiums subject to contribution specified in the return made by the company
b is the total amount of fire brigade contributions payable by all insurance companies
c is the total amount of all premiums subject to contribution specified by all insurance companies

Insurance companies in NSW then make fire brigade, RFB and SES instalment payments into the recurrent expenditure accounts of the respective funds according to their contribution payable.

Each year the ICA assists its members to collect their contribution payable, by providing its members with estimates of the levy rates payable to certain classes of policies in order to produce the insurance industry's share of the FRSNW, RFS and SES budgets. The ICA does this by grossing up the *premiums subject to contribution* to 100 per cent. It then recommends the levy that be applied to those gross premiums. The percentages currently recommended are:

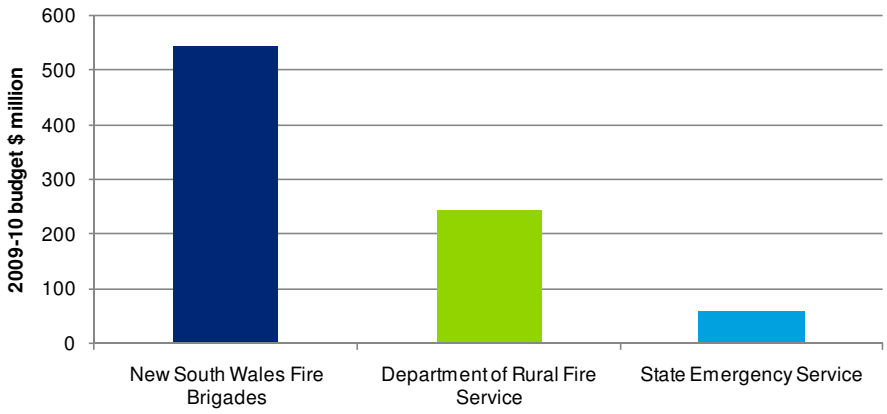
Table 2.1: Insurance Council of Australia advisory levy rates, June 2011

Policy type	Percentage of gross premium
Fire / ISR / Consequential Loss	40 per cent
Householders / homeowners	23 per cent
Motor	1 per cent

Source: Information provided by the Insurance Council of Australia

Total funding for the three services in 2009-10 was $847 million. The chart below shows the allocation of funding between the services.

Figure 2.1: FRNSW, RFS and SES budget estimates 2009-10



Source: NSW Department of Treasury, *Budget 2010-11 – Budget Paper 3, Police and Emergency Services*

2.3 Funding arrangements in other jurisdictions

Fire service agencies are funded in several different ways across Australia's states and territories. Queensland, South Australia and Western Australia have moved away from insurance-based systems towards property-based systems. Tasmania maintains a system which combines a levy on commercial insurance with a property-based levy. Tasmania and South Australia also have a specific levy on motor vehicles. Aside from New South Wales, the only state to maintain an insurance-based system

for both residential and commercial properties is Victoria. In Victoria the fire services levy was subject to the 2009 Victorian Bushfires Royal Commission. In its final recommendations the Commission recommended that the state replace the Victorian fire services levy with a property based levy and introduce concessions for low income earners.[5] The Victorian government accepted this recommendation and began a consultation process for the implementation of such a scheme.

The table below summarises the fire services funding arrangements in other Australian jurisdictions.

Table 2.2: Funding systems in other Australian states and territories

State	Funding system	Vehicle levy?	Contribution details
Vic	Currently insurance-based.	No	Insurance companies currently fund 75 per cent of Metropolitan services, with state and local governments evenly sharing the remainder[6] Insurance companies fund 77.5 per cent of rural fire services, with the state government funding the remainder[7]
Qld	Property-based (replaced insurance-based system in 1985)	No	Residential properties are charged based on building category and location. Commercial properties are charged based on fire risk category[8]
SA	Property-based (replaced insurance-based system in 1999)	Yes	Residential and commercial properties are charged based on location and land use[9]
Tas	Insurance/property hybrid	Yes	Insurance companies charged on the basis of commercial premiums. Local governments charged on the basis of property value[10]
WA	Property-based (replaced insurance-based system in 2003)	No	Residential and commercial properties are charged based on property value and location[11]
NT & ACT	Government funded	No	All funding is from consolidated revenue

2.4 NSW policy context

The way in which fire services are funded in NSW has been the subject of several recent policy discussions, including the Review of State Taxation, released in 2008 by the Independent Pricing and Regulatory Tribunal (IPART) and Public Account Committee of NSW Review of Fire Services Funding, tabled in the legislative assembly in 2004. The findings and recommendations of those reports are summarised below.

[5] Victorian Bushfire Royal Commission, *Final Report Recommendations – Recommendation 64,* July 2010
[6] *Metropolitan Fire Brigade Act 1958* (Vic)
[7] *Country Fire Authority Act 1958* (Vic)
[8] Part 10, *Fire and Rescue Service Act 1990* (Qld)
[9] *Emergency Services Funding Act 1998* (SA)
[10] Section 77, *Fire Services Act 1979* (Tas.)
[11] *Emergency Services Levy Act 2002* (WA) and *Fire and Emergency Services Authority of Western Australia Act 1998* (WA)

2.4.1 Review of Fire Services Funding (2004)

In 2003 the Public Account Committee of NSW (PAC)[12] was given terms of reference to prepare a report evaluating the current fire services funding arrangements and alternative funding arrangements.

The Committee found that the FSL is flawed because it is not universal and not all who benefit from fire services contribute to funding them. Anyone can choose not to contribute to fire services by not taking out insurance at prudent levels.[13] In its recommendations, the Committee favoured retaining the insurance based system, subject to a number of minor improvements, but made recommendations that further work be undertaken to ascertain the impacts of introducing a property-based levy for funding fire services for the commercial sector.[14]

The key recommendation, to retain an insurance based levy, was supported by government and the government agreed to consider the Committee's recommendations relating to the design of a property based system "if it is decided at some point in the future to re-examine the merits of a property based system." [15]

2.4.2 IPART Review of State Taxation

In October 2008 IPART released the final report of its review of state taxation in NSW. With reference to the FSL IPART found that fire services funding contributions (along with insurance duties) are the least efficient State taxes. Both these revenue sources penalise those who are prudent enough to take out insurance, and so encourage underinsurance and non-insurance. In addition, significant free-rider problems are associated with the fire services funding arrangements, where non-contributors benefit from the provision of fire services without contributing to the cost through insurance policies.[16]

IPART recommended that:

> *In the short term, the statutory contributions by insurance companies to fund fire services should be replaced by an equivalent, transparent property-based levy collected by local councils. The levy should be separately identified on rates notices, be phased in over time and be excluded from the municipal rates cap. The State Government's contribution to fire services should increase by the amount that the State Government currently contributes to the Fire Services Levy through insurance premiums.*[17]

[12] The Public Accounts Committee has responsibilities under Part 4 of the *Public Finance and Audit Act 1983* to inquire into and report on activities of Government that are reported in the Total State Sector Accounts and the accounts of the State's authorities
[13] Parliament of NSW, Legislative Assembly, *Public Accounts Committee – Review of Fire Services Funding,* September 2004, p xxi
[14] Ibid. p xxiii
[15] Andrew Refshuage, (then) Treasurer, *The Government's response to the recommendations arising from the final report of the Public Accounts Committee Review of Fire Services Funding*, 2 September 2005
[16] IPART, *Review of State Taxation,* Final Report October 2008, p 7
[17] IPART, *Review of State Taxation,* Final Report October 2008, p 9 (Recommendation 10)

3 Methodology

The purpose of this report is to present the results of a model developed by the Insurance Council of Australia (ICA), with assistance from Deloitte. The model is designed to show the distributional impact on property owners of shifting from an insurance based funding system for services to a property based funding system. This chapter outlines the methodology adopted in developing the model.

3.1 Characteristics of a property based tax

A shift from an insurance-based funding system to a property-based funding system entails two changes:

1. An increase in property rates charged by local governments on all property owners
2. A decrease in insurance premiums for insured property owners due to the removal of the FSL charged by insurance companies.

As discussed in the previous chapter, not all properties are insured. This means that funding is spread over a larger population under a property-based system than under an insurance-based system. For the average property owner with insurance this means a net saving because the increase in property rates is more than offset by the decrease in insurance premiums. However, because property values and insurance premiums differ by the location and type of property not all insured property owners in all areas are ensured positive net savings.

The model developed for this report estimates the net savings for insured property owners. Net savings are the difference between the increase in property rates and the decrease in insurance premiums. For the purposes of modelling, properties were divided into categories and charged different rates according to the *property type*.

In terms of *property type*, properties were divided according to whether they are residential, commercial or rural.[18] The share of total funding to be paid by each was based on an estimate obtained by the ICA of the proportion of total gross insurance premiums paid by each. It is assumed that this is approximately equal to the current fire service levy collection shares under the insurance-based system.

3.2 Scenarios used for modelling

The ICA has asked Deloitte to model the distributional effects of three broad approaches to funding the FSL through property based charge, a flat rate, a rate based on the service level in each LGA and a rate based on the fire risk of each LGA:

- **Scenario 1 – flat rate:** This scenario involves replacing the insurance based system with the application of a property based tax, based on land value and property type (residential, commercial or rural), applied evenly across NSW
- **Scenario 2 – service level:** This scenario also involves replacing the insurance based system with the application of a property based tax, based on land value and property type, but varying across NSW so that LGAs continue to contribute the same proportion of FSL funding as they did in 2009-10. LGAs contribute a fixed proportion of fire services funding. Basing the rates on

[18] This is based on the methodology used by *Professional Financial Services* in their report to the NSW Public Accounts Committee, *For Quantitative Modelling of NSW FSL Funding Methods.*

property on the amount contributed by the LGAs is intended to reflect the cost of providing fire services in each LGA as well as the level of service provision

- **Scenario 3 – fire risk:** This scenario also involves replacing the insurance based system with the application of a property based tax, based on land value and property type, but varying across NSW so that properties contribute based on the fire risk of their LGA, estimated from fire incidence data provided by FRNSW.

For each scenario the ICA has asked Deloitte to model several iterations, varying the proportion of fire services to be funded through a property based tax and allowing for the inclusion of a motor vehicle tax:

- **Part (a)** – insurance contributions are transferred to a new property based tax
- **Part (b)** – insurance contributions and the state contribution are transferred to a new property based tax
- **Part (c)** – all contributions (insurance, state and local government) are transferred to a new property based tax
- **Part (d)** – insurance contributions are transferred to a combination of a motor vehicle and property based tax
- **Part (e)** – insurance contributions and the state contribution are transferred to a combination of a motor vehicle and property based tax.

3.3 Preferred approach

The preferred approach was to comment on the distributional impact on property owners for each of the scenarios identified above by matching the current amount of FSL collected through insurance policies, for each property in NSW, and comparing this amount with the amount that would be collected under a property based charge, based on the land value of those properties. This methodology would involve:

- Obtaining insurance data from NSW insurers, including the amount of FSL collected for each insured property in NSW, including the address of the property
- Obtaining land value data from the NSW Valuer General, for each rateable property in NSW, including the address of the property
- Combining the two data sets by matching the addresses and removing properties that cannot be matched
- Comparing the results on an individual property basis and commenting on the distribution of the results.

This approach is similar to the approach that Deloitte and the ICA used to model similar scenarios for Victorian fire services funding in 2010 and the approach used by *Professional Financial Services* to model similar scenarios for the PAC Review of Fire Services Funding in 2004.

Unfortunately, Deloitte and the ICA were not able to obtain land values for individual properties from the NSW Valuer General. Instead we were provided with aggregate land values, by Local Government Area (LGA), from which we were able to estimate the average land value of properties by LGA. Deloitte has compared this with aggregated data from insurers, showing the average FSL collected by policy type, by postcode was available.

This limits the ability of the model to comment on the full distributional impact on property owners under the scenarios tested, beyond the effect on the average property in each LGA. The sections below discuss the data used for the modelling and the limitations of this approach.

3.4 Data sources used

The data used for the modelling has been collected from either the ICA, or from NSW Government departments.

3.4.1 Insurance data

The ICA has provided Deloitte with postcode level data from major insurers in NSW, showing the insured value of all buildings and contents, the total FSL collected and the number of policies. From this data, the average FSL per postcode has been calculated for each of the property types (residential, commercial and rural).

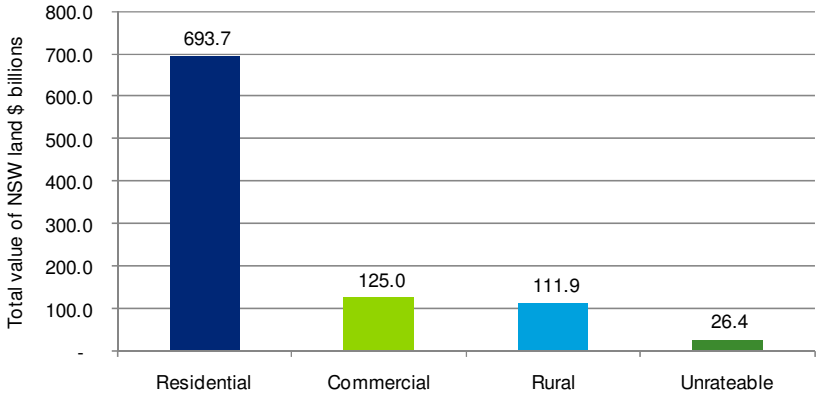
The data provided is a point in time estimate, collected in December 2010, the approximate mid-point of the 2010-11 financial year.

3.4.2 Property data

The ICA provided Deloitte with aggregate land value data, purchased from the NSW Valuer General, which shows the total land value in each LGA, by zoning types. For the purpose of the modelling Deloitte has classified the zoning types as being either rateable or unrateable. Rateable land has then been further classified as being predominantly residential, commercial or rural.

Based on the data provided, the total value of land in NSW is $957 billion, with 91 per cent of this land, or $931 billion classified as rateable.

Figure 3.1: NSW land values



The total number of rateable properties could not be collected from the same source as land values, in the absence of this data Deloitte has used the number of rateable properties provided by local governments to the NSW Division of Local Government. This data is classifies properties as either residential, business or farmland, which has been used as a proxy for our own property types of residential, commercial and rural. Dividing the land value data by the number of rateable properties data gives our estimate of average land value of each property type, for each LGA.

3.4.3 Fire services funding contributions

Level of funding

The fire services funding levels that are assumed to be transferred to a property based tax were discussed under Section 2.2. This data was provided to Deloitte by the ICA. In 2010-11funding for NSW fire services, including RFS and SES, grew by 11.6 per cent to $912 million. Contributions to this funding are shown in the table below.

Table 3.1: Fire services funding, 2010-11

Funding source	FRNSW	RFS	SES	Total
Insurance	$ 438,663,137	$ 189,469,434	$ 43,820,546	$ 671,953,117
State Government	$ 86,899,346	$ 37,533,972	$ 8,680,868	$ 133,114,186
Local Governments	$ 69,638,517	$ 30,078,594	$ 6,956,586	$ 106,673,697
Total	**$ 595,201,000**	**$ 257,082,000**	**$ 59,458,000**	**$ 911,741,000**

Source: Insurance Council of Australia

Insurance contribution to funding

The ICA make quarterly recommendations to insurers in NSW on the FSL charge (a percentage of total premiums) to meet their statutory funding obligations. These ICA advisory rates are not recognised in legislation and ultimately it is up to individual insurers to determine the FSL charges required to meet their funding obligations. In practice most insurers do not charge FSL on motor vehicle insurance.

Based on insurance data provided by the ICA the current level of contributions to the FSL from each of the property types identified are:

- Residential – 45 per cent
- Commercial – 49 per cent
- Rural – 6 per cent.

These proportions are held constant in each of the scenarios modelled.

3.4.4 Motor vehicle data

For the scenarios that include the use of a motor vehicle charge (parts d and e) it is necessary to make an estimate of the proportion of fire services costs that relate to motor vehicles. Callout information has been collected from the annual reports of FRNSW, RFS and the SES that shows the proportion of call-outs that relate to motor vehicle incidents (or, in the case of the SES the number of volunteer hours spent on motor vehicle incidents). This information is summarised in the table below.

Table 3.2: Activity related to motor vehicle incidents 2009-10

	FRNSW	RFS	SES*
Motor vehicle related call-outs	9,287	5,019	6,000
Total call-outs	62,397	20,146	387,520
Proportion of activity relating to motor vehicles	15%	25%	2%

* measured as total volunteer hours

Source: Deloitte analysis of 2009-10 annual reports for FRNSW, RFS and SES

As a simplifying assumption it has been assumed that the number of call-outs relating to motor vehicle incidents is representative of the proportion of total costs of responding to these incidents. Based on this assumption a weighted average of 16.8 per cent of the cost of fire services are incurred due to motor vehicle incidents.

The table below shows how this might be recovered from road users by the use of a flat charge on all registered vehicles. Consideration could also be given to varying charges based on vehicle type, for example requiring vehicles that have greater fire risk to pay more.

Table 3.3: Potential recovery of fire services costs from road users

Scenario	Amount to be recovered from road users	Number of registered vehicles	Amount to be recovered per vehicle
Part (d)	$ 113,170,681	5,498,972	$ 21
Part (e)	$ 135,589,839	5,498,972	$ 25

Source: Deloitte analysis of RTA and other identified data sources

3.5 Calculation of net savings

Using the data described above it is possible to calculate the net savings for the owners of the average property, for each property type, in each LGA. The net saving is equal to the forgone FSL on insurance premiums less the increased cost of higher property taxes.

The size of the net savings differs between the scenarios. Scenarios that involve transferring State Government or State and local government contributions to a property based tax have lower net savings to property owners than scenarios that only transfer insurance contributions. Similarly, scenarios that include a motor vehicle charge have higher net savings to property owners. The distribution of savings, by LGA, varies slightly between Scenario 1 and Scenario 2.

In calculating net savings, each observation of FSL provided by the ICA has been multiplied by 1.199, to take into account the 10 per cent GST charged on insurance (including the FSL) and nine per cent stamp duty charged in NSW.

It has also been assumed that the reduction in funding obligations is entirely passed onto policy holders, not retained by insurers.

3.5.1 Sample calculation

The box below demonstrates how the data sources described above are brought together to estimate a net saving for the average property in each LGA. The example uses the method applied in Scenario 1a to calculate the net saving for the average residential property in the LGA of the City of Sydney as an example.

Box 3.1: Example calculation – Scenario 1

1. **Determine the average FSL currently paid by owners of that property type, in the LGA, including taxes**

   From the data provided by the ICA the average FSL paid by residential properties owners in the City of Sydney is $133, with the addition of GST and stamp duty this amount is increased to $160

2. **Calculate the additional funding contribution to be paid by property owners**

   Under Scenario 1 the total revenue required for 2010-11, to replace insurance contributions to the NSW FS, RFS and the SES is $672 million

3. **Determine the total amount to be paid by owners of that property type**

   The property type is residential. Residential properties currently contribute an estimated 45 per cent of the FSL, meaning that amount of revenue required from that property type, for this scenario is $303 million

4. **Estimate the property rate increase per $1000 of land value**

   The total value of residential land in NSW is $694 billion. The rate of funding payable per $1000 of land value is equal to the funding figure determined in step 3, divided by this figure and multiplied by $1000 i.e.

   $$\frac{\$303 \text{ million}}{\$694 \text{ billion}} \text{ x } \$1000 = \$0.44$$

5. **Estimate the average value of that property type in the LGA**

   According to land and council data there are 82,110 residential properties, on land valued at $18.1 billion in the City of Sydney, meaning an average land value of $220,000 per property

6. **Apply the rate of funding payable to the average property value**

   $$\frac{\$0.44}{\$1000} \text{ x } \$220,000 = \$96$$

7. **Calculate net saving**

   The net saving is calculated as the difference between the amount identified in step 1 with the amount identified in step 6, noting that there is not GST or additional state taxes applied to a property based charge

   $$\$160 - \$96 = \$64$$

   The net saving for the average residential property in the City of Sydney is therefore $64

3.6 Limitations of the model

The modelling undertaken for this report is subject to a number of limitations that are worthy of consideration when interpreting the results.

- **Commenting on the distribution of net savings** – to fully understand the distribution of net savings on residential, commercial and rural property owners, data would need to be obtained at the individual property level. Property level data was provided by insurers for use by *Professional Financial Services* in their 2004 report to the NSW Public Accounts Committee. For privacy and cost reasons only de-identified, post-code level data was available from insurers. Similarly land value and rateable property data was only available on an LGA level, not by property as would have been preferred. The data available allows us to comment on the net savings for the average property in each LGA, which gives some indication of the distribution of savings across LGAs, but it does not allow us to comment on the variation of outcomes within the LGAs.
- **Difficulty in combining data from different sources –** Three main data sources were used to calculate net savings. These were, FSL data provided by insurers, land value data from the NSW Valuer General and rateable property data from the NSW Division of Local Government. These data sources were compiled at different times, according to slightly different methodologies. In some cases there are examples where the combination of data from multiple sources produces an unusual result. For example in some LGAs that report to have a very high rural land value, but only a handful of properties, indicating an unusually high average property value. To limit the effect of cases such as these, only LGA's with at least 100 properties of a given property type are included in the modelling.
- **Potential misrepresentation of current fire services contributions by property owners –** The bundling of policies which could have residential policies included with commercial ones (as is a typical practice for people using brokers to negotiate policies) could misrepresent the amount of fire services contributions collected from the different property types. Note that in the case that home and contents insurance for the same property are covered by separate policies the amount of fire services contributions has been calculated to include both policies. This avoids understating the amount of fire services contributions currently paid for by households.

4 Results

This chapter presents the results of the modelling. For each scenario the results for 'part A' are presented in aggregate form and by LGA. For parts B to E the results are presented in aggregate form only. The results should be considered in light of the limitations raised in the previous chapter.

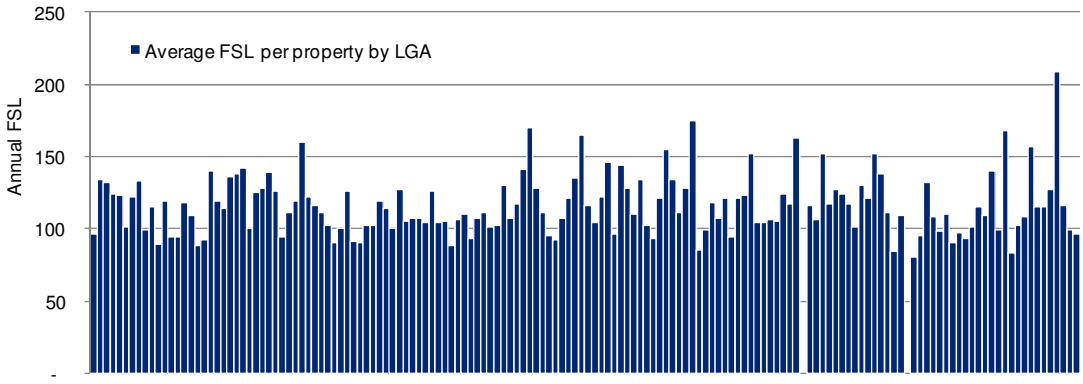
4.1 The base case

4.1.1 Residential FSL

Insurance data provided by the ICA indicates that the average FSL paid per residential property is $105. This amount is subject to the Commonwealth Government Goods and Services Tax (GST) and also to state government stamp duty. With the addition of 10 per cent GST and nine per cent stamp duty, the average cost of the FSL to insured households is $126.

The average amount of FSL per residential property, by LGA typically varies between $100 and $150, as show in the figure below.

Figure 4.1: Average FSL per residential property by LGA



4.1.2 Commercial and Rural FSL

Commercial FSL charges are, on average higher than residential ones. The average FSL per property for commercial properties is $666, plus the addition of a further $132 in taxes. For rural properties the average FSL charge per property is $218, plus taxes of $43.

Table 4.1: Average FSL, including taxes for commercial and rural properties

	Commercial	Rural
Average FSL per property, charged by insurer	$ 666	$ 218
Taxes, including GST (10%) and state taxes (9%)	$ 132	$ 43
Total FSL cost per property	$ 798	$ 261

4.2 Scenario 1

This section presents the results for Scenario 1. Scenario 1 involves replacing the insurance based system with the application of a property based tax, based on land value and property type (residential, commercial or rural), and applied evenly across NSW.

4.2.1 Part A results

Under Scenario 1- Part A $672 million is to be collected in the form of a property based tax, based on land value and property type (residential, commercial or rural), and applied evenly across NSW. The proportion to be collected from each property type and the resulting tax per $1000 land value is outlined in the table below.

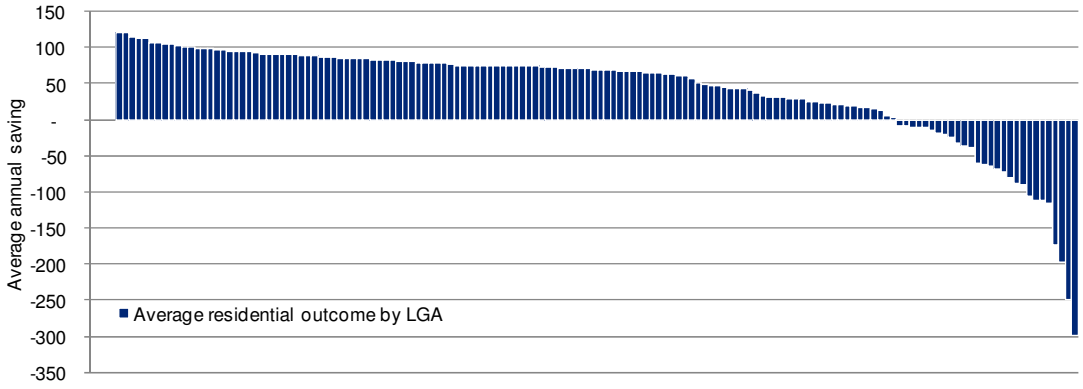
Table 4.2: Calculation of results

	Residential	Commercial	Rural
Proportion of FSL contribution	45%	49%	6%
Amount of contribution required ($m)	$ 303	$ 329	$ 40
Total state land value ($m)	$ 693,652	$ 124,965	$ 111,935
Resulting rate per $1000 land value	$ 0.44	$ 2.63	$ 0.36

Residential outcomes

Under this scenario there is a net saving to the average insured residential property in most LGAs compared with what they currently pay in insurance based taxes. Overall, the average residential property in 120 of the 148 LGAs, for which results could be obtained, have a net saving. The distribution of outcomes for the average residential property in each LGA is shown in the figure below.

Figure 4.2: Net saving for the average residential property, by LGA



On average, the average residential property in each LGA has a net saving of $41 per annum, although this outcome varies between the LGAs.

The distribution of outcomes for the average residential property in each LGA, for NSW and the Sydney metropolitan region, are shown in the figures below. The results highlight the impact that land values have on the amount of FSL paid under this scenario. Although the average property has a net saving for a majority of LGAs there are some LGAs, the impact tends to be greater for:

- Rural LGAs that are located inland, compared with those located by the coast

- Sydney metropolitan LGAs that are located in the west of the Sydney metropolitan area, relative to those in the north and the east.

Figure 4.3: Annual saving, residential properties, NSW, scenario 1a

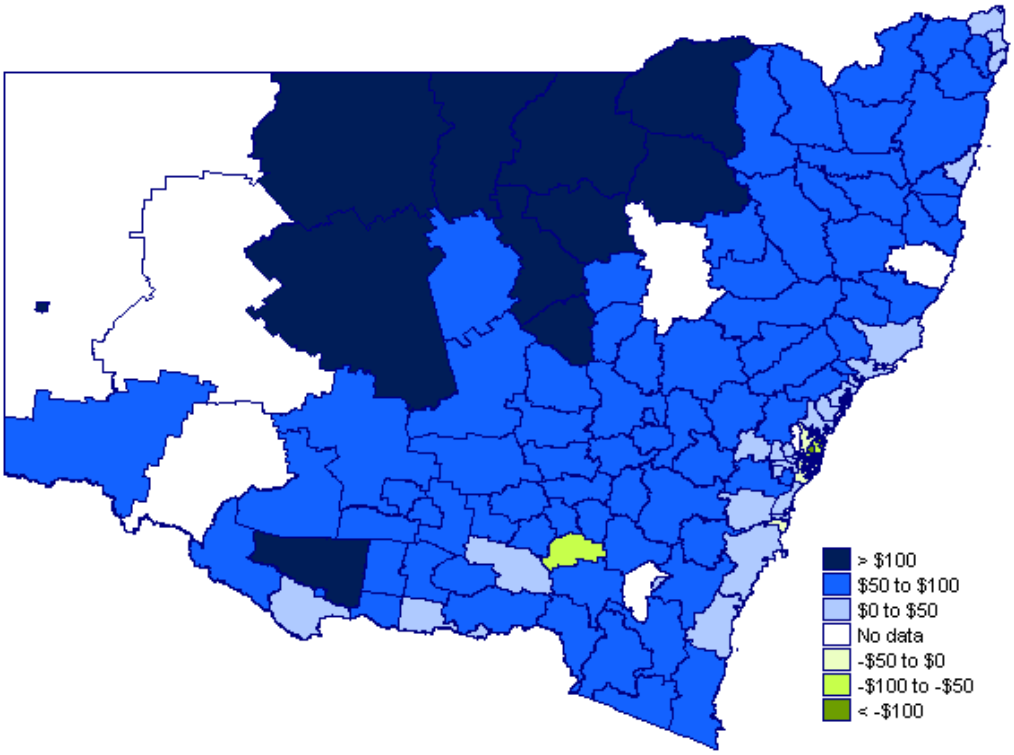
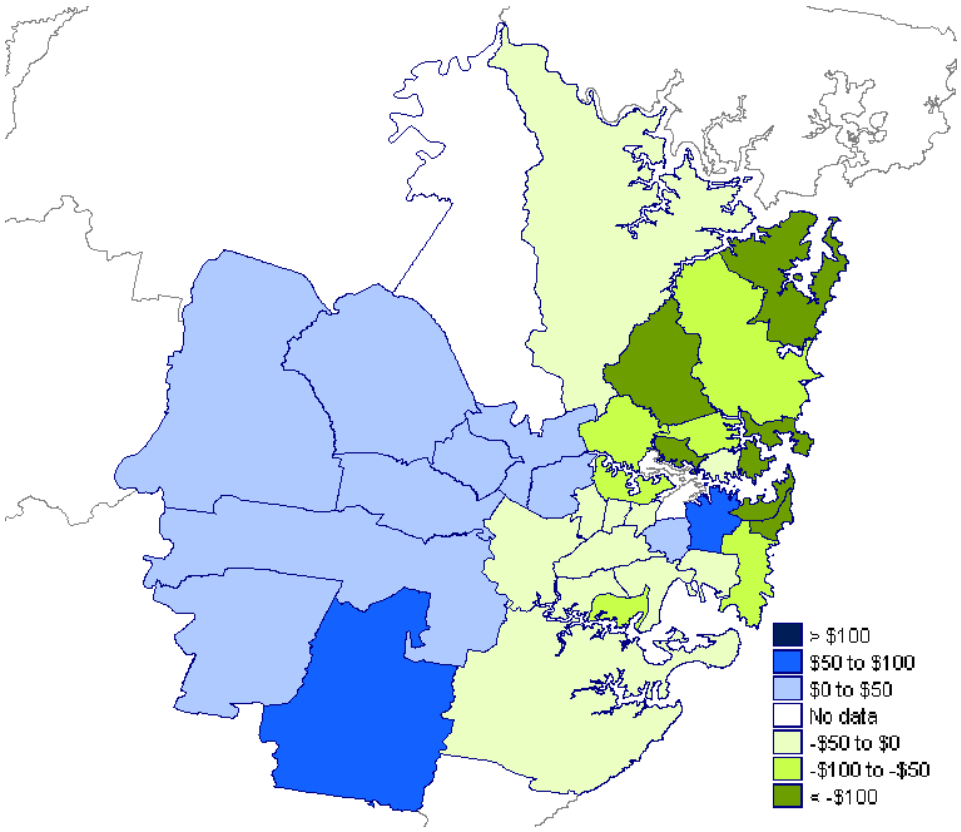


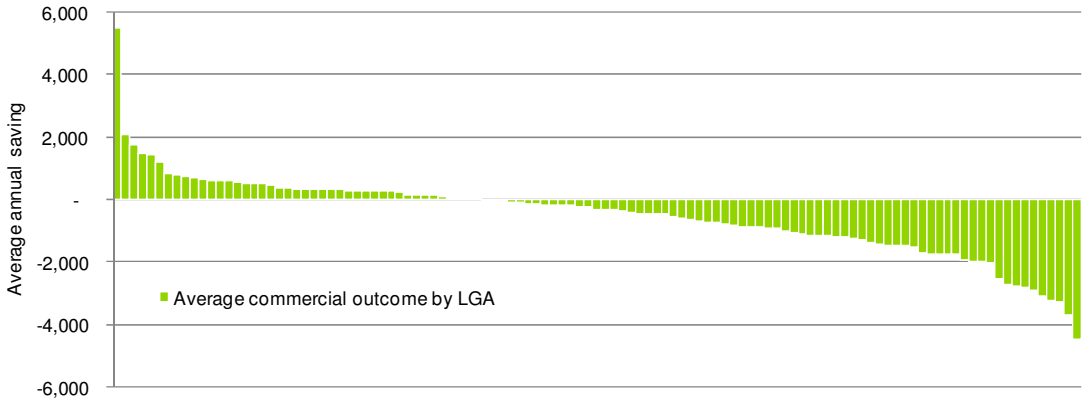
Figure 4.4: Annual saving, residential properties, Sydney, scenario 1a



Commercial outcomes

Overall, the average commercial property in 43 of the 113 LGAs, for which results could be obtained, have a net saving. The distribution of outcomes for the average commercial property in each LGA is shown in the figure below.

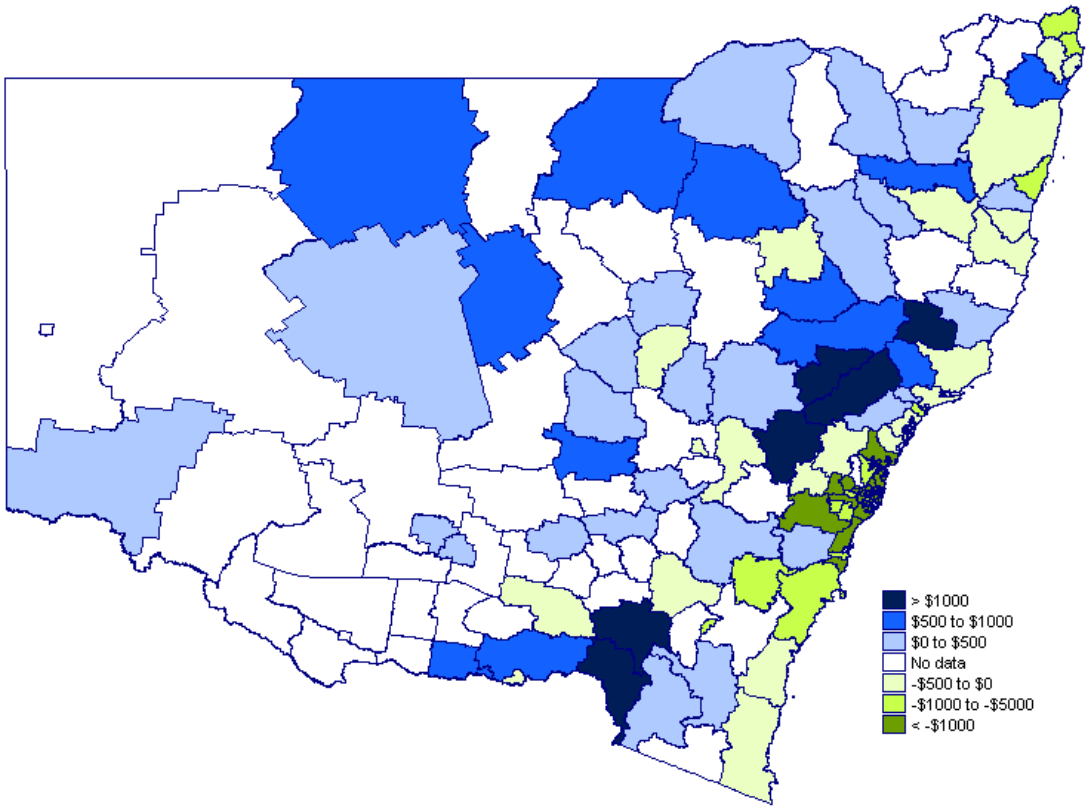
Figure 4.5: Net saving for the average commercial property, by LGA



On average, the average commercial property in each LGA incurs a net cost of $502 per annum, although this outcome varies between the LGAs, reflecting the decision to continue to collect the same proportion of FSL from commercial properties as is currently collected.

The distribution of outcomes is much more variable than for residential properties and a result was obtained for fewer LGAs, however the geographic distribution is similar to residential properties, with inland LGAs more likely to have a net saving compared to those in coastal areas, or near Sydney.

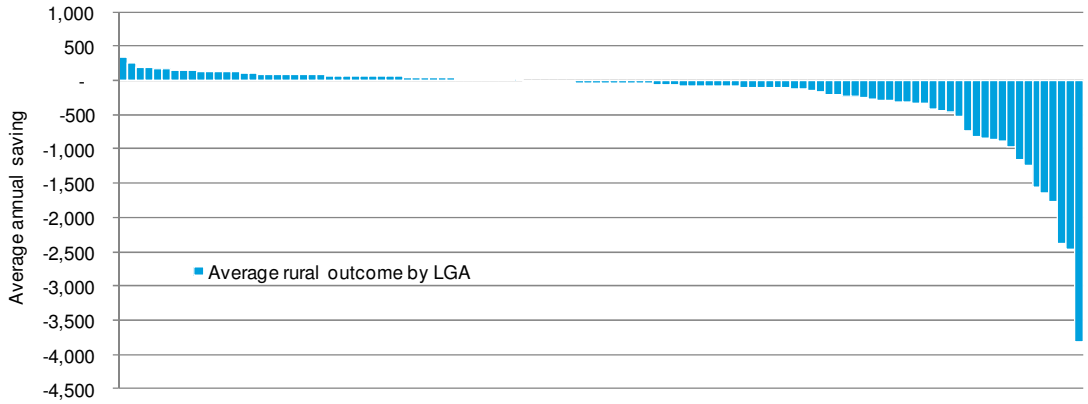
Figure 4.6: Annual saving, commercial properties, NSW, scenario 1a



Rural outcomes

Overall, the average rural property in 47 of the 112 LGAs, for which results could be obtained, have a net saving. The distribution of outcomes for the average rural property in each LGA is shown in the figure below.

Figure 4.7: Net saving for the average rural property, by LGA

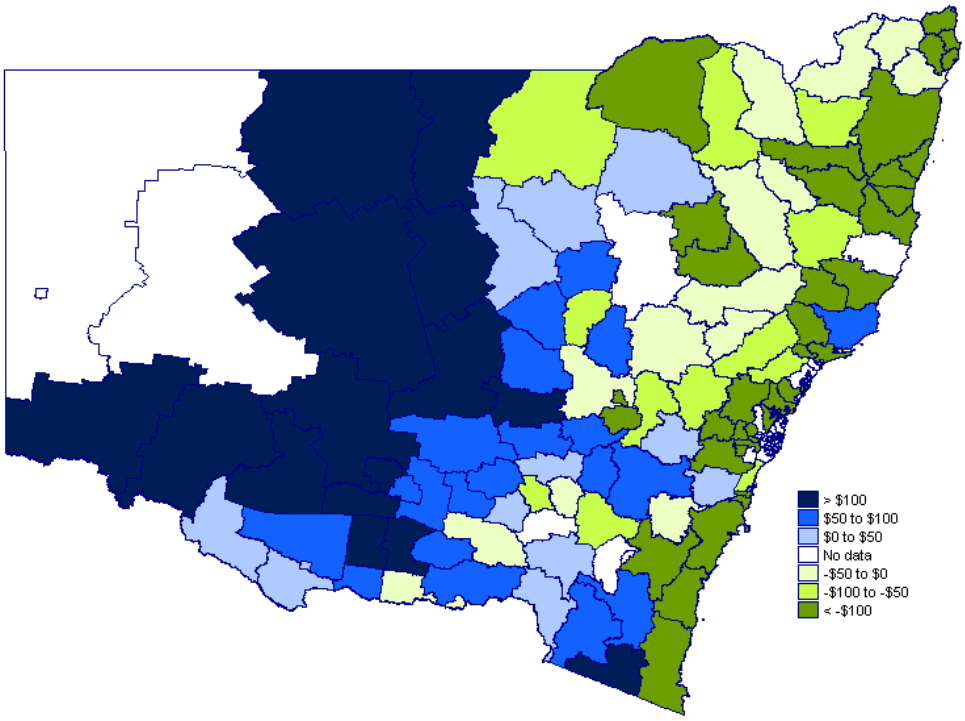


On average, the average rural property in each LGA incurs a net cost of $219 per annum, although this outcome varies between the LGAs, reflecting the decision to continue to collect the same proportion of FSL from rural properties as is currently collected.

The distribution of outcomes for rural properties is similar to residential and commercial properties, in that the average rural property in inland LGAs is more likely to have a net saving compared with the average rural property in coastal LGAs. This is likely to be influenced by property values. Although LGAs with fewer than 100 rural properties were excluded from the results, care should still be taken

in interpreting the distribution of rural results because they typically had fewer observations with which to estimate average outcomes per property.

Figure 4.8: Annual saving, rural properties, NSW, scenario 1a



4.2.2 Other results

For each iteration of Scenario 1, the distribution of the property based tax between the LGAs remains the same. The key difference between Parts B, C, D and E of Scenario 1 compared to Part A is the amount of revenue that needs to be raised from the property based tax.

- For Part B the property tax is used to recover the NSW State Government component of fire services funding, in addition to insurance contributions
- For Part C the property tax is used to recover the NSW State Government and local government components of fire services funding, in addition to insurance contributions.

Parts D and E incorporate a motor vehicle tax, to recover the estimated proportion of fire services costs associated with responding to motor vehicle incidents. This amount is estimated to be 16.8 per cent of the cost of fire services (see chapter 3).

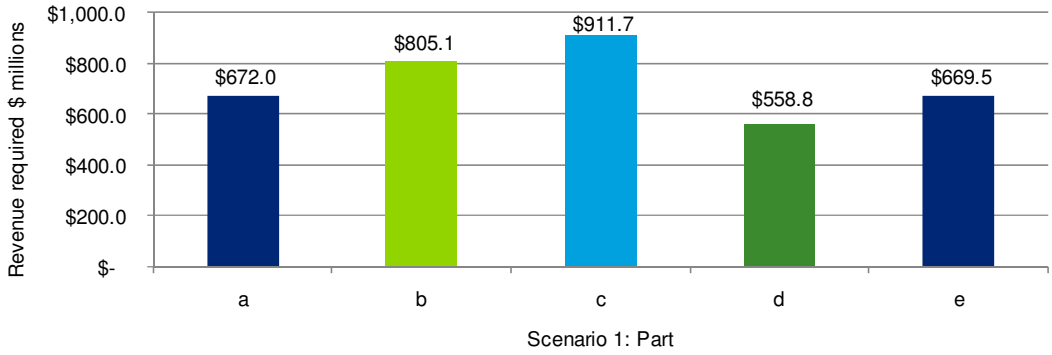
- For Part D 16.8 per cent of the insurance contributions to fire services are transferred to a motor vehicle tax, with the remaining proportion recovered through a property based tax
- For Part E 16.8 per cent of all contributions to fire services from insurance, NSW State Government and local governments are transferred to a motor vehicle tax, with the remaining proportion recovered through a property based tax.

Required revenue

The figure below shows the amount of revenue that would need to be collected from a property based tax, for each part of Scenario 1. If the tax were used to fund all of the contributions to fires services in NSW (Part C), then $911.7 million would need to be raised – 36 per cent more than is currently collected from insurance contributions. If insurance contributions were replaced by a property based tax, with a motor vehicle tax (Part D), $558.8 million would need to be collected from property taxes, 17 per cent less than is currently collected. A property based tax to replace all existing contributions to

fire services from insurance, NSW State Government and local governments, with a motor vehicle tax would be roughly equivalent to the amount currently collected from insurance.

Figure 4.9 Revenue required from a property based tax, by part



Property tax rates

Based on the revenue requirements outlined above a property based tax rate for residential, commercial and rural properties has been calculated for each part of Scenario 1. Consistent with the methodology outlined in the previous chapter the overall proportion of revenue collected from each property type has been held constant. The rates are shown in the table below.

Table 4.3: Estimated rates of property tax per $1000 of rateable land, Scenario 1

Part	Insurance	State Gov.	Local Gov.	Motor vehicle	Estimated rate of tax per $1000 of rateable land		
					Residential	Commercial	Rural
a	✓	-	-	-	$ 0.44	$ 2.63	$ 0.36
b	✓	✓	-	-	$ 0.52	$ 3.15	$ 0.43
c	✓	✓	✓	-	$ 0.59	$ 3.57	$ 0.48
d	✓	-	-	✓	$ 0.36	$ 2.19	$ 0.30
e	✓	✓	-	✓	$ 0.44	$ 2.62	$ 0.35

Effect on the average property, by LGA

The results for residential properties for Scenario 1 are shown in the table below. Like Part A, the other parts of Scenario 1 show that the average residential property has a net saving in a majority of LGAs. The average amount that the average property saves varies with the total amount of revenue to be raised from the property based tax.

As the table above shows, residential results are almost the same for Part A, as they are for Part E. This is because the inclusion of an additional $25 annual tax on all motor vehicles in NSW is roughly equivalent to the current NSW State Government contribution, meaning that households would experience roughly the same outcomes as for Part A.

Table 4.4: Outcomes for residential properties, Scenario 1

Part	Insurance	State Gov.	Local Gov.	Motor vehicle	Number of LGAs where average property has a net saving	Number of LGAs where average property has a net cost	Per cent of LGAs where the average property has a net saving	Average net saving for the average property
a	✓	-	-	-	120	28	81%	$ 41
b	✓	✓	-	-	112	36	76%	$ 26
c	✓	✓	✓	-	103	45	70%	$ 14
d	✓	-	-	✓	129	19	87%	$ 54
e	✓	✓	-	✓	120	28	81%	$ 42

The outcomes for residential and rural properties under Scenario 1 are generally negative, reflecting the decision to continue to collect the same proportion of FSL from rural properties as is currently collected.

Table 4.5: Outcomes for commercial and rural, Scenario 1

					Commercial		Rural	
Part	Insurance	State Gov.	Local Gov.	Motor vehicle	Per cent of LGAs where the average property has a net saving	Average amount that the average property has a net cost	Per cent of LGAs where the average property has a net saving	Average amount that the average property has a net cost
a	✓	-	-	-	38%	- $ 502	42%	- $ 219
b	✓	✓	-	-	35%	- $ 748	34%	- $ 310
c	✓	✓	✓	-	34%	- $ 945	27%	- $ 387
d	✓	-	-	✓	42%	- $ 293	52%	- $ 142
e	✓	✓	-	✓	38%	- $ 498	43%	- $ 217

4.3 Scenario 2

This section presents the results for Scenario 2. Scenario 2 involves replacing the insurance based system with the application of a property based tax, based on land value and property type, but varying across NSW so that LGAs will continue to contribute the same proportion of FSL funding as they did in 2009-10. To maintain these proportions the rate of FSL per $1000 of rateable land for commercial properties is kept at approximately 6 times the rate for residential land. The rate of FSL per $1000 of rateable land for rural properties is kept at approximately 80 percent of the rate for residential land. These rates are then adjusted for each LGA to match the proportion of revenue required from the LGA.

The two main factors influencing the average impact on properties in each LGA is therefore:

- The proportion of FSL currently being contributed by that LGA
- The value of properties in those LGAs

The proportion of FSL currently contributed, by each local government is shown in Appendix A. There are several local governments that do not make a contribution to fire services. Deloitte and the

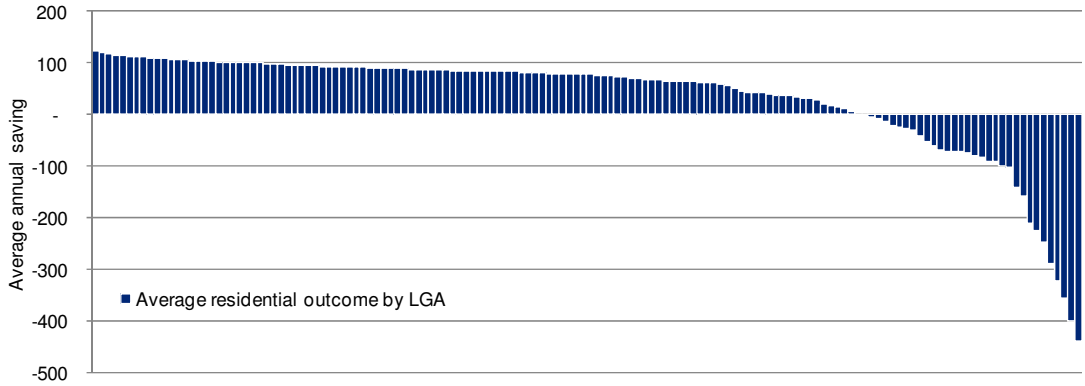
ICA understand that often these local governments have an agreement with a neighbouring local government to contribute to that LGA's share of FSL. In Scenario 2, properties in LGAs that do not contribute directly to fire services have been excluded from the results, so as not to inflate the cost savings.

4.3.1 Part A results

Residential outcomes

Under this scenario there is a net saving to the average insured residential property in most LGAs compared with what they currently pay in insurance based taxes. Overall, the average residential property in 111 of the 144 LGAs, for which results could be obtained (there are 152 LGAs), has a net saving. The distribution of outcomes for the average residential property in each LGA is shown in the figure below.

Figure 4.10: Net saving for the average residential property, by LGA



On average, the average residential property in each LGA has a net saving of $33 per annum, although this outcome varies between the LGAs.

The distribution of outcomes for the average residential property in each LGA, for NSW and the Sydney metropolitan region, are shown in the figures below. The distribution of results is different to Scenario 1a, in that there is not a noticeable difference in the outcomes for inland and coastal LGAs. In this sense it is clear that the proportion of FSL has an impact on the results for Scenario 2. Although the average property has a net saving in the majority of LGAs, noticeably, outcomes for the average property in rural LGAs are better than for those in the Sydney metropolitan region. Outcomes within the Sydney metropolitan region are similar to Scenario 1, in that they are typically better for western suburbs LGAs than LGAs in other parts of Sydney.

Figure 4.11: Annual saving, residential properties, NSW, scenario 2a

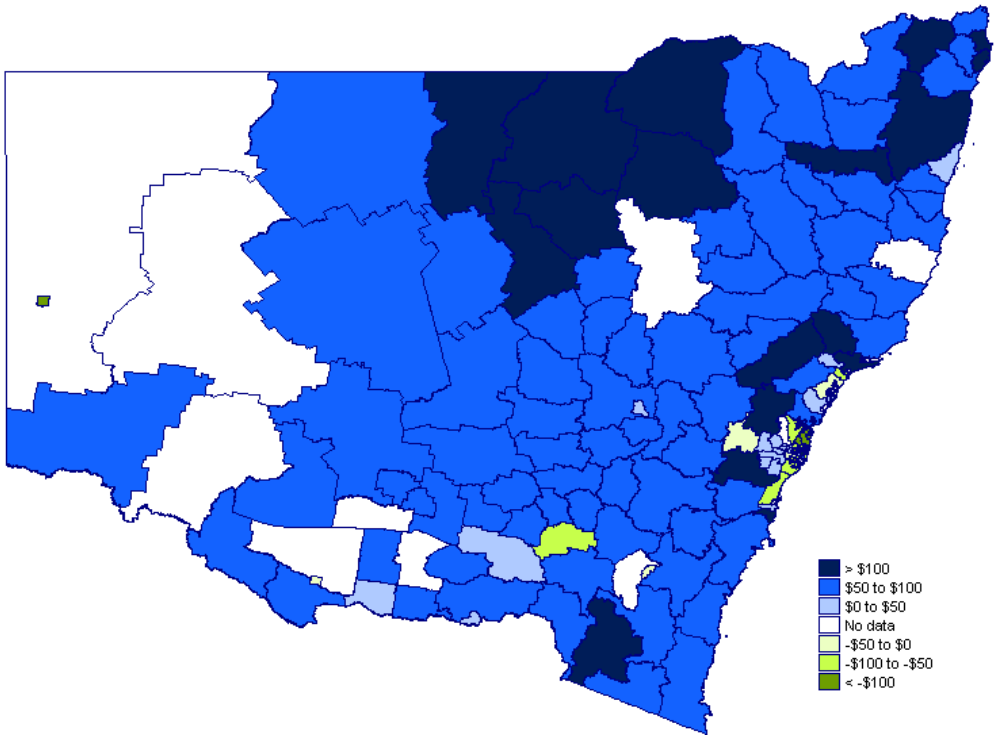
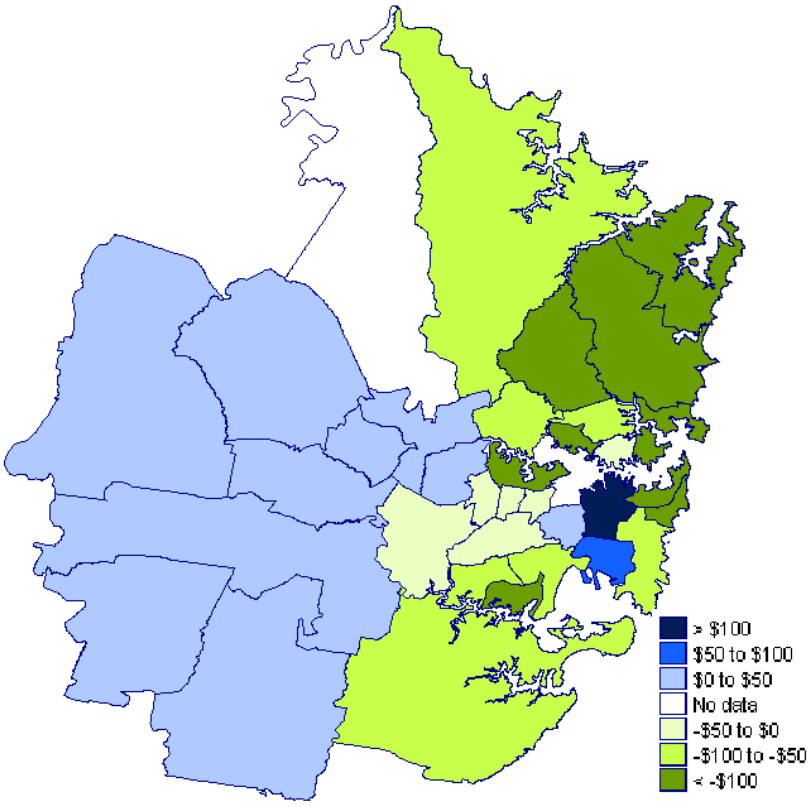


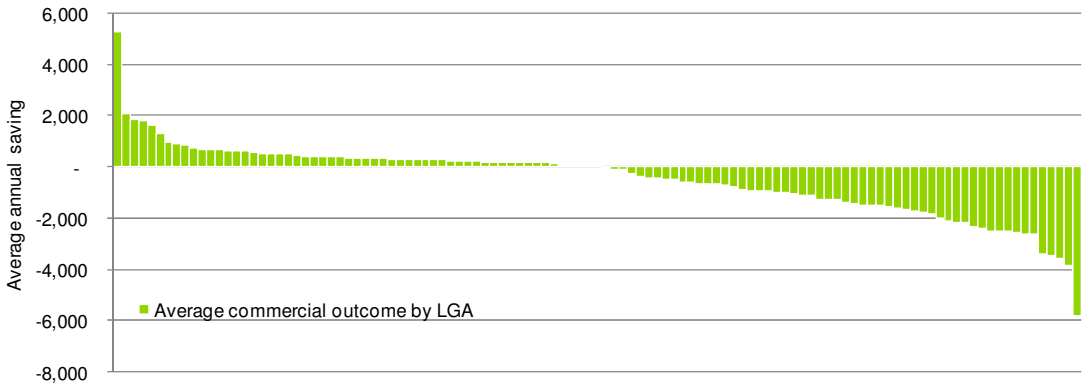
Figure 4.12: Annual saving, residential properties, Sydney, scenario 2a



Commercial outcomes

Overall, the average commercial property in 57 of the 113 LGAs, for which results could be obtained, has a net saving. The distribution of outcomes for the average commercial property in each LGA is shown in the figure below.

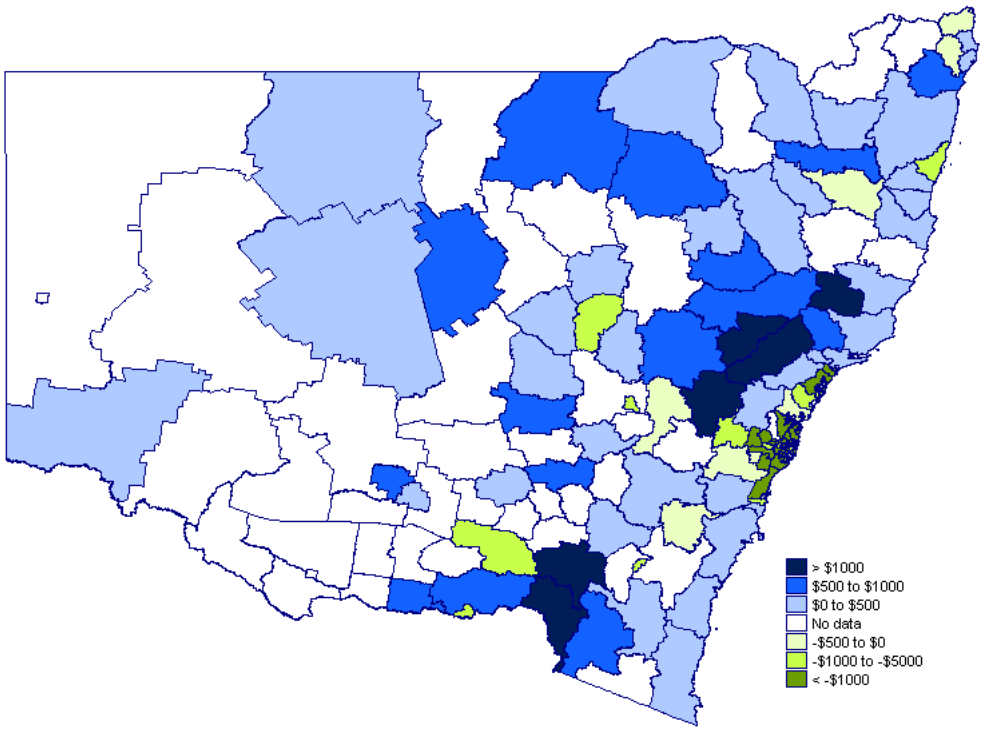
Figure 4.13: Net saving for the average commercial property, by LGA



On average, the average commercial property in each LGA incurs a net cost of $479 per annum, although this outcome varies between the LGAs, reflecting the decision to continue to collect the same proportion of FSL from commercial properties as is currently collected.

The distribution of outcomes is much more variable than for residential properties and a result was obtained for fewer LGAs, however the geographic distribution is similar to residential properties, although there are a larger number of LGAs in and around the Sydney region with higher net cost outcomes.

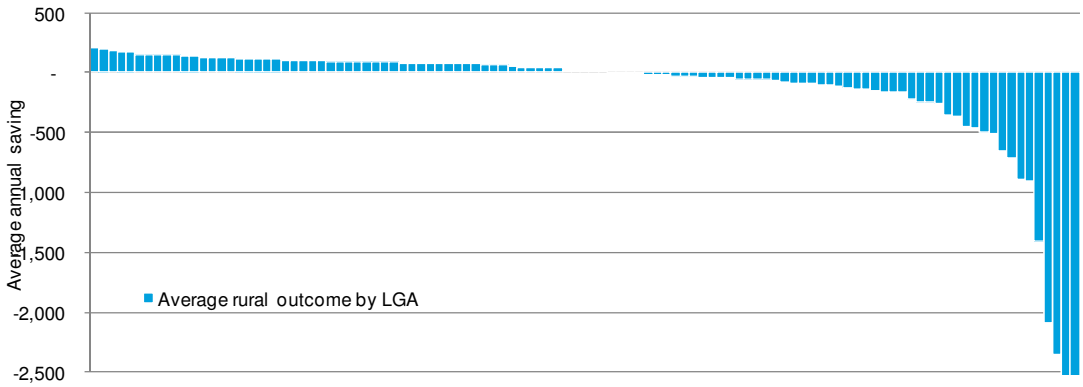
Figure 4.14: Annual saving, commercial properties, NSW, scenario 2a



Rural outcomes

Overall, the average rural property in 57 of the 109 LGAs, for which results could be obtained, has a net saving. The distribution of outcomes for the average rural property in each LGA is shown in the figure below.

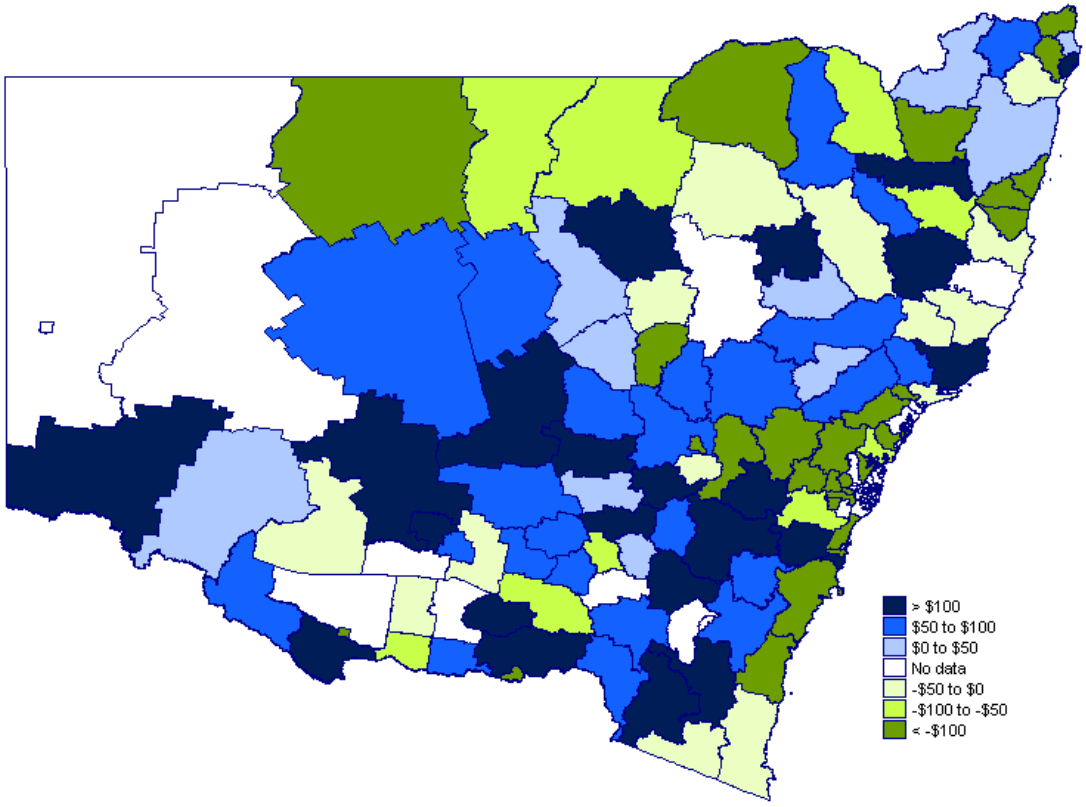
Figure 4.15: Net saving for the average rural property, by LGA



On average, the average rural property in each LGA incurs a net cost of $147 per annum, although this outcome varies between the LGAs, reflecting the decision to continue to collect the same proportion of FSL from rural properties as is currently collected.

It is hard to discern a relationship from the distribution of outcomes for rural properties. There are large number of LGAs where the average properties show a significant increase or decrease in the amount of FSL paid, that is, more than $100 net saving, or more than $100 net cost. It is clear that the proportion of FSL paid by rural LGAs is influencing the result; however care should still be taken in interpreting the distribution of rural results because they typically had fewer observations with which to estimate average outcomes per property.

Figure 4.16: Annual saving, rural properties, NSW, scenario 2a



4.3.2 Other results

For each iteration of Scenario 2, the distribution of the property based tax between the LGAs remains the same. The key difference between Parts B, C, D and E of Scenario 2 compared to Part A is the amount of revenue that needs to be raised from the property based tax.

Effect on the average property, by LGA

The results for residential properties for Scenario 2 are shown in the table below. Like Part A, the other parts of Scenario 2 show that that the average residential property has a net saving in a majority of LGAs. The average amount that the average property saves varies with the total amount of revenue to be raised from the property based tax.

Figure 4.17: Outcomes for residential properties, Scenario 2

Part	Insurance	State Gov.	Local Gov.	Motor vehicle	Number of LGAs where average property has a net saving	Number of LGAs where average property has a net cost	Per cent of LGAs where the average property has a net saving	Average net saving for the average property
a	✓	-	-	-	111	33	77%	$ 33
b	✓	✓	-	-	106	38	74%	$ 16
c	✓	✓	✓	-	103	41	72%	$ 3
d	✓	-	-	✓	118	26	82%	$ 47
e	✓	✓	-	✓	111	33	77%	$ 33

The outcomes for residential and rural properties under Scenario 2 are generally negative, reflecting the decision to continue to collect the same proportion of FSL from rural properties as is currently collected.

Figure 4.18: Outcomes for commercial and rural, Scenario 2

					Commercial		Rural	
Part	Insurance	State Gov.	Local Gov.	Motor vehicle	Per cent of LGAs where the average property has a net saving	Net saving for the average property	Per cent of LGAs where the average property has a net saving	Net saving for the average property
a	✓	-	-	-	50%	-$ 479	52%	-$ 147
b	✓	✓	-	-	46%	-$ 720	47%	-$ 224
c	✓	✓	✓	-	46%	-$ 931	41%	-$ 285
d	✓	-	-	✓	53%	-$ 274	66%	-$ 88
e	✓	✓	-	✓	50%	-$4 74	53%	-$ 146

4.4 Scenario 3

This section presents the results for Scenario 3. Scenario 3 involves replacing the insurance based system with the application of a property based tax, based on the fire risk in each LGA, where fire risk is measured by the number of fires in 2009-10. Like Scenario 2, the proportion of fire contributions currently collected from residential, commercial and rural properties is held constant. To maintain these proportions the rate of FSL per $1000 of rateable land for commercial properties is kept at approximately 6 times the rate for residential land. The rate of FSL per $1000 of rateable land for rural properties is kept at approximately 80 percent of the rate for residential land. These rates are then adjusted for each LGA to match the proportion of revenue required from the LGA.

The two main factors influencing the average impact on properties in each LGA is therefore:

- The proportion of fires NSW fires that occurred in the LGA
- The value of properties in those LGAs

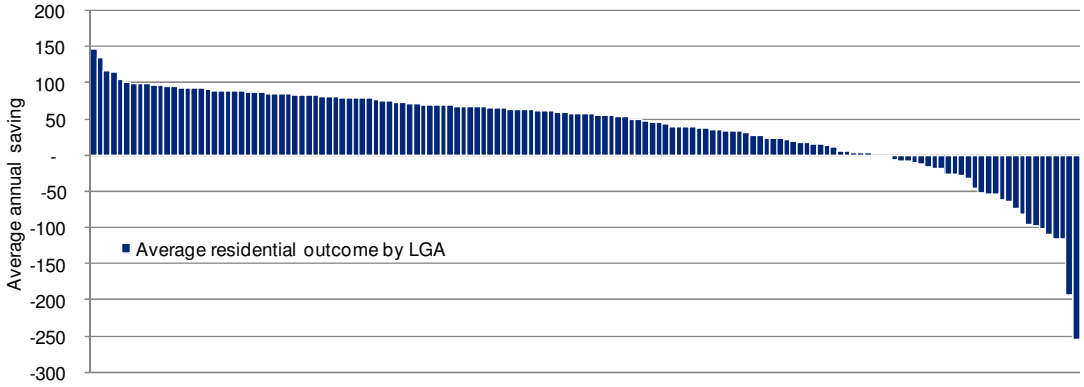
The number of fires in each LGA for 2009-10 is shown in Appendix A.

4.4.1 Part A results

Residential outcomes

Under this scenario there is a net saving to the average insured residential property in most LGAs compared with what they currently pay in insurance based taxes. Overall, the average residential property in 116 of the 147 LGAs, for which results could be obtained, has a net saving. The distribution of outcomes for the average residential property in each LGA is shown in the figure below.

Figure 4.19: Net saving for the average residential property, by LGA



On average, the average residential property in each LGA has a net saving of $38 per annum, although this outcome varies between the LGAs.

The distribution of outcomes for the average residential property in each LGA, for NSW and the Sydney metropolitan region, are shown in the figures below. The results highlight the impact that land values have on the amount of FSL paid under this scenario. The average property has a net saving for a majority of LGAs, and typically this saving is between $50 and $100 dollars.

Interestingly the results for Scenario 3 from scenarios 1 and 2 for metropolitan Sydney. For Scenario 3 the average property in the west of Sydney is more likely to incur a net cost than other regions. This is likely to be due to a comparatively high number of fires in this region.

Figure 4.20: Annual saving, residential properties, NSW, scenario 3a

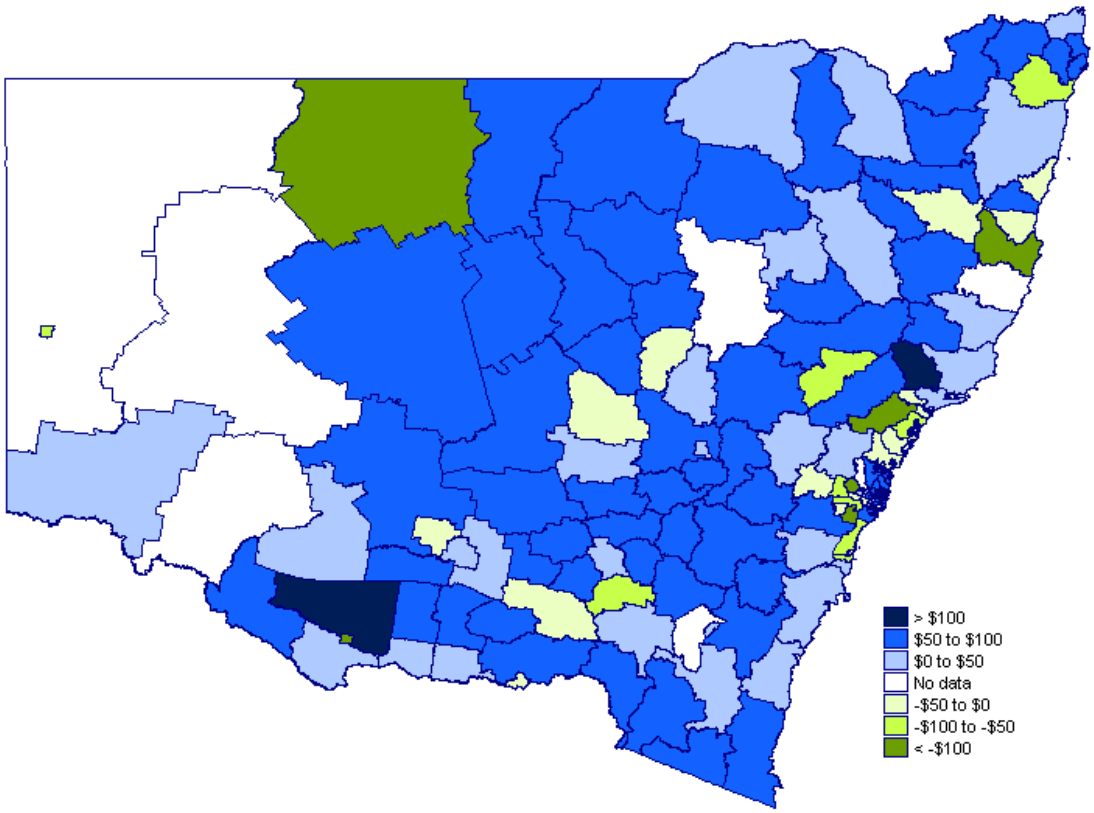
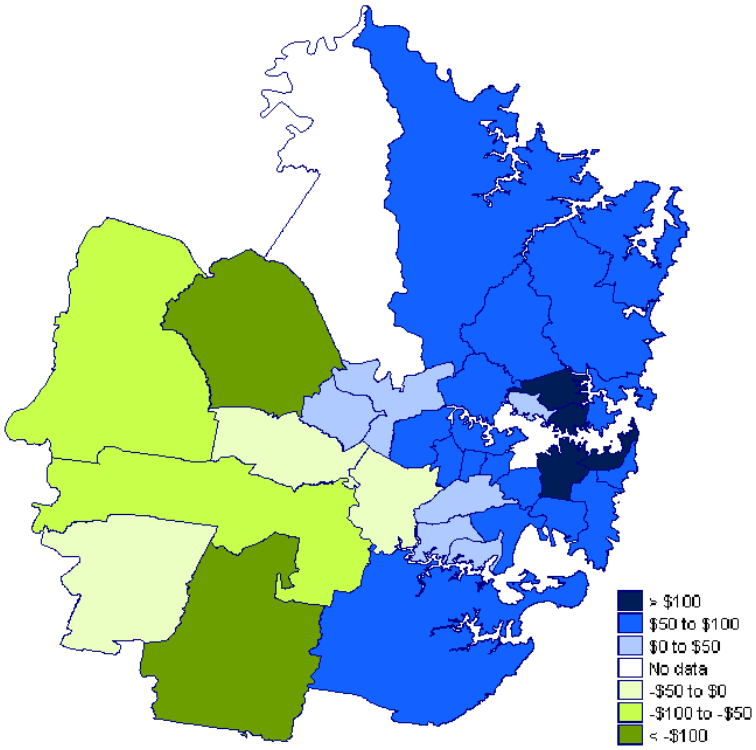


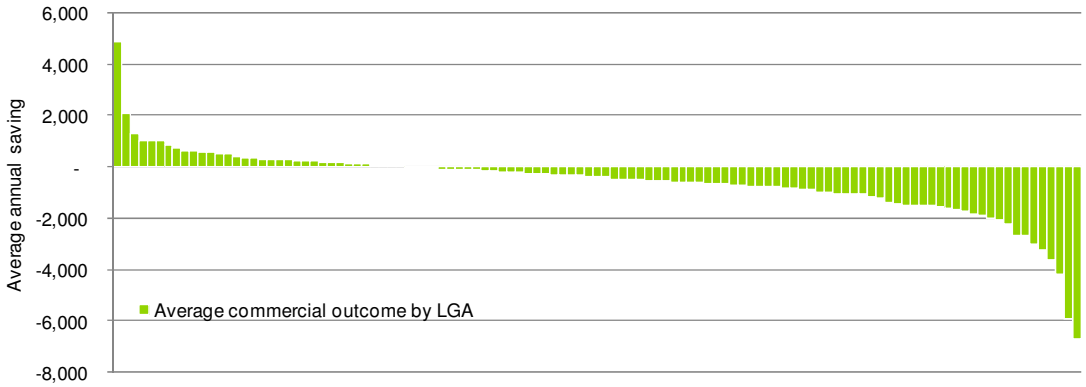
Figure 4.21: Annual saving, residential properties, Sydney, scenario 3a



Commercial outcomes

Overall, the average commercial property in 34 of the 113 LGAs, for which results could be obtained, has a net saving. The distribution of outcomes for the average commercial property in each LGA is shown in the figure below.

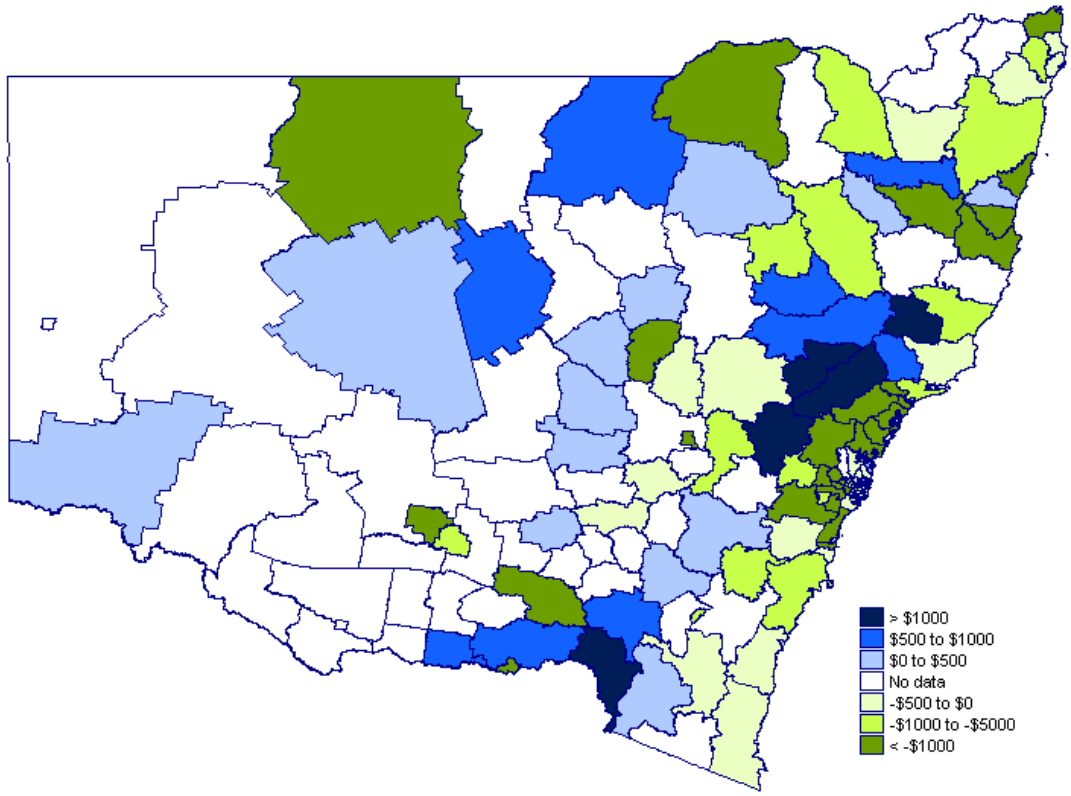
Figure 4.22 Net saving for the average commercial property, by LGA



On average, the average commercial property in each LGA incurs a net cost of $591 per annum, although this outcome varies between the LGAs, reflecting the decision to continue to collect the same proportion of FSL from commercial properties as is currently collected.

The distribution of outcomes is much more variable than for residential properties and a result was obtained for fewer LGAs. It is difficult to identify a pattern in the results, although, like Scenario 2, LGAs close to Sydney generally show high net cost outcomes for the average commercial property.

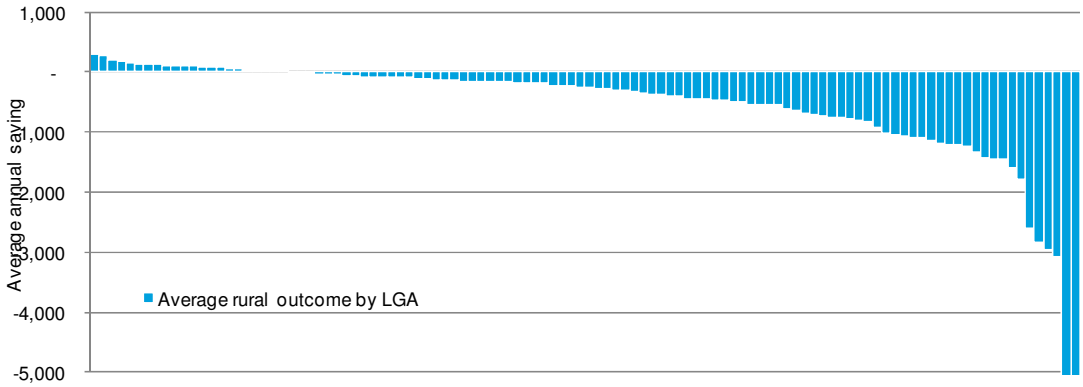
Figure 4.23: Annual saving, commercial properties, NSW, scenario 3a



Rural outcomes

Overall, the average rural property in 22 of the 112 LGAs, for which results could be obtained, have net saving. The distribution of outcomes for the average rural property in each LGA is shown in the figure below.

Figure 4.24 Net saving for the average rural property, by LGA



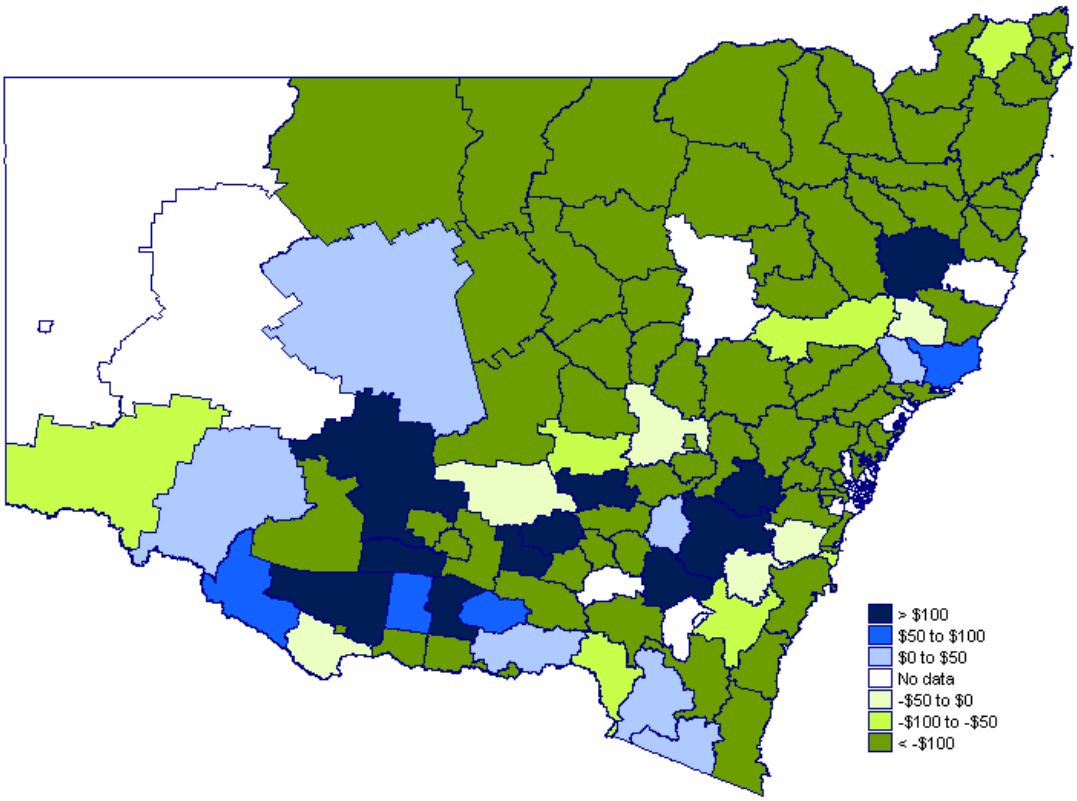
On average, the average rural property in each LGA incurs a net cost of $676 per annum. This outcome is skewed somewhat by several LGAs, where the average rural property has large negative outcomes. In these LGAs it is possible that the outcome for average property is not a good representation of the outcome for most properties. See Section 3.6 for more discussion on the limitation of the model.

The figure below clearly shows that a greater number of rural LGAs incur a net cost than for Scenario 1 or 2. Although LGAs with fewer than 100 rural properties were excluded from the results, care

should still be taken in interpreting the distribution of rural results because they typically had fewer observations with which to estimate average outcomes per property.

It is also worth considering that the data collected from FRNSW to develop this scenario does not indicate what type of land the fire occurred on. It may not be appropriate, for instance, to recover all of the fire services costs from rural property owners if a majority of fires were occurring on public land, such as national parks.

Figure 4.25 Annual saving, rural properties, NSW, scenario 3a



4.4.2 Other results

Effect on the average property, by LGA

The results for residential properties for Scenario 3 are shown in the table below. Like Part A, the other parts of Scenario 3 show that that the average residential property has a net saving in a majority of LGAs. The average amount that the average property saves varies with the total amount of revenue to be raised from the property based tax.

Figure 4.26: Outcomes for residential properties, Scenario 3

Part	Insurance	State Gov.	Local Gov.	Motor vehicle	Number of LGAs where average property has a net saving	Number of LGAs where average property has a net cost	Per cent of LGAs where the average property has a net saving	Average net saving for the average property
a	✓	-	-	-	116	31	79%	$ 38
b	✓	✓	-	-	108	39	73%	$ 22
c	✓	✓	✓	-	94	53	64%	$ 9

Part	Insurance	State Gov.	Local Gov.	Motor vehicle	Number of LGAs where average property has a net saving	Number of LGAs where average property has a net cost	Per cent of LGAs where the average property has a net saving	Average net saving for the average property
d	✓	-	-	✓	127	20	86%	$ 51
e	✓	✓	-	✓	116	31	79%	$ 38

The outcomes for residential and rural properties under Scenario 3 are generally negative, reflecting the decision to continue to collect the same proportion of FSL from rural properties as is currently collected.

Figure 4.27: Outcomes for commercial and rural, Scenario 3

					Commercial		Rural	
Part	Insurance	State Gov.	Local Gov.	Motor vehicle	Per cent of LGAs where the average property has a net saving	Net saving for the average property	Per cent of LGAs where the average property has a net saving	Net saving for the average property
a	✓	-	-	-	30%	-$ 591	20%	-$ 476
b	✓	✓	-	-	27%	-$ 854	15%	-$ 857
c	✓	✓	✓	-	25%	-$ 1,065	13%	-$ 1,002
d	✓	-	-	✓	37%	-$ 367	23%	-$ 522
e	✓	✓	-	✓	30%	-$ 586	20%	-$ 673

5 Conclusions

This report has estimated the distributional impacts on owners of residential, commercial and rural properties for a switch from an insurance based model of fire services funding to one using a property based charge. The report has considered three broad approaches to estimating the determining the amount of the property based charge:

- **Scenario 1 – flat rate:** This scenario involves replacing the insurance based system with the application of a property based tax, based on land value and property type (residential, commercial or rural), applied evenly across NSW
- **Scenario 2 – service level:** This scenario also involves replacing the insurance based system with the application of a property based tax, based on land value and property type, but varying across NSW so that LGAs continue to contribute the same proportion of FSL funding as they did in 2009-10. LGAs contribute a fixed proportion of fire services funding. Basing the rates on property on the amount contributed by the LGAs is intended to reflect the cost of providing fire services in each LGA as well as the level of service provision
- **Scenario 3 – fire risk:** This scenario also involves replacing the insurance based system with the application of a property based tax, based on land value and property type, but varying across NSW so that properties contribute based on the fire risk of their LGA, estimated from fire incidence data provided by FRNSW.

For each scenario the ICA has asked Deloitte to model several iterations, varying the proportion of fire services to be funded through a property based tax and allowing for the inclusion of a motor vehicle tax.

Taking into account the assumptions made about the share of fire services funding to be collected from residential, commercial and rural property owners, all scenarios suggest that, on average there would be a saving to the average residential property in LGAs across NSW. The magnitude of that saving is dependent on the amount of revenue to be collected from a property based tax. Where a property based tax is used to collect the NSW State Government or local government's proportion of fire services funding, in addition to the insurance contributions, the average savings are smaller.

By contrast the model shows that, the average commercial and rural property owner incurs a net cost under the scenarios modelled. This is partly a function of the decision on what proportion of revenue to collect from each of the three property types. It should also be noted that, while the model can estimate the impact on the average property in each LGA, there is significantly more variation in the value of commercial and rural properties and the outcome for the average property in each LGA may not provide a good indication of the outcome for most properties.

Uninsured property owners, whether residential, commercial or rural, increase their direct contribution to fire services under any of the scenarios modelled. This is because they feel the full effect of increased rates without any offsetting reduction in insurance premiums. However, the increased contribution of uninsured property owners is less than the decreased contribution of insured property owners. These insured property owners are currently charged GST and stamp duty on the FSL levied by insurance companies. Therefore, not only would insured property owners receive savings due to forgone FSL, they would also receive saving due to foregone GST and stamp duty.

Although the model has been able to provide a general indication of the distributional impacts on the average property, by property type in each LGA there is considerable variation in property values within LGAs that has not been captured by this model. Without more detailed modelling it is premature to favour any one of the three scenarios over the others, as they all each have advantages and disadvantages in terms of equity and efficiency.

To further increase understanding of the distributional impacts of replacing insurance based fire services funding with a property based tax it is recommended that individual property data be obtained from insurers and the NSW Valuer General and a more detailed modelling exercise of the distributional impacts on a per-property basis be conducted.

As well as providing a more detailed understanding of the distributional impacts, this type of modelling would allow for the development of more detailed scenarios. This may include the use of price caps and floors, fixed and variable components of the property and motor vehicle charges, or any number of other strategies that might be used to mitigate perceived inequities created under the scenarios modelled.

Appendix A - data

A1: Treatment of land zoning in modelling

ZONE MEANING	ZONE REFERENCE	Included as rateable land?	Refined property type	Value
Residential	A	Yes	Residential	597,655,202,313
Business	B	Yes	Commercial	34,184,065,513
Neighbourhood Centre	B1	No		-
Local Centre	B2	No		-
Commercial Core	B3	Yes	Commercial	1,973,496,610
Mixed Use	B4	Yes	Commercial	3,053,551,853
Business Development	B5	Yes	Commercial	191,411,750
Enterprise Corridor	B6	Yes	Commercial	779,934,680
Business Park	B7	Yes	Commercial	879,926,750
Sydney Commercial / Business	C	Yes	Commercial	12,519,296,430
Mixed Use Development	D	Yes	Commercial	234,462,200
Employment	E	Yes	Commercial	2,572,050,920
National Parks & Nature Reserves	E1	No		-
Environmental Conservation	E2	No		-
Environmental Management	E3	No		-
Environmental Living	E4	No		-
Industrial	I	Yes	Commercial	33,000,817,000
General Industrial	IN1	Yes	Commercial	2,750,663,656
Light Industrial	IN2	Yes	Commercial	1,493,289,620
Heavy Industrial	IN3	Yes	Commercial	1,203,623,642
Working Waterfront	IN4	Yes	Commercial	28,250,000
Mixed Residential/Business	M	Yes	Commercial	10,192,530,137
National Parks	N	No		-
Open Space	O	No		-
Protection	P	No		-

ZONE MEANING	ZONE REFERENCE	Included as rateable land?	Refined property type	Value
Non Urban	R	Yes	Rural	99,841,137,990
General Residential	R1	Yes	Residential	10,585,506,294
Low Density Residential	R2	Yes	Residential	61,271,299,547
Medium Density Residential	R3	Yes	Residential	8,115,667,240
High Density Residential	R4	Yes	Residential	4,069,719,070
Large Lot Residential	R5	Yes	Residential	2,710,017,220
Public Recreation	RE1	No		-
Private Recreation	RE2	No		-
Primary Production	RU1	Yes	Rural	6,361,501,391
Rural Landscape	RU2	Yes	Rural	2,339,232,830
Forestry	RU3	Yes	Rural	19,839,260
Rural Small Holdings	RU4	Yes	Rural	2,940,606,400
Village	RU5	Yes	Rural	405,551,561
Transition	RU6	Yes	Rural	26,768,400
Special Uses	S	Yes	Commercial	16,507,616,918
Special Activities	SP1	Yes	Commercial	933,633,523
Infrastructure	SP2	Yes	Commercial	1,620,403,673
Tourist	SP3	Yes	Commercial	137,995,370
North Sydney Commercial / Business	T	Yes	Commercial	708,146,642
Community Uses	U	No		-
Comprehensive Centre	V	No		-
Reserve Open Space	W	No		-
Natural Waterways	W1	No		-
Recreational Waterways	W2	No		-
Working Waterways	W3	No		-
Reserved Roads	X	No		-
Reserved Special Uses	Y	No		-
Undetermined, or Village	Z	Yes	Residential	9,244,163,975

A2: Contribution of NSW LGAs to fire services 2009-10

LGA name	Total FSL contributed in 2009-10	Share of FSL contributed in 2009-10
Albury	$371,759	0.58%
Armidale Dumaresq	$107,839	0.17%
Ashfield	$451,709	0.71%
Auburn	$643,108	1.01%
Ballina	$46,085	0.07%
Balranald	$12,058	0.02%
Bankstown	$1,781,869	2.79%
Bathurst Regional	$185,616	0.29%
Bega Valley	$59,830	0.09%
Bellingen	$41,119	0.06%
Berrigan	$42,407	0.07%
Blacktown	$1,770,763	2.77%
Bland	$17,604	0.03%
Blayney	$16,203	0.03%
Blue Mountains	$622,896	0.97%
Bogan	$16,391	0.03%
Bombala	$19,766	0.03%
Boorowa	$15,138	0.02%
Botany Bay	$520,238	0.81%
Bourke	$27,438	0.04%
Brewarrina	$11,562	0.02%
Broken Hill	$366,130	0.57%
Burwood	$411,969	0.64%
Byron	$70,845	0.11%
Cabonne	$31,914	0.05%
Camden	$321,331	0.50%
Campbelltown	$954,330	1.49%
Canada Bay	$1,171,404	1.83%
Canterbury	$1,206,199	1.89%

LGA name	Total FSL contributed in 2009-10	Share of FSL contributed in 2009-10
Carrathool	$13,689	0.02%
Central Darling		
Cessnock	$235,770	0.37%
City Of Sydney	$2,908,547	4.55%
Clarence Valley	$93,830	0.15%
Cobar	$20,384	0.03%
Coffs Harbour	$395,908	0.62%
Conargo		
Coolamon	$14,094	0.02%
Cooma-Monaro	$26,970	0.04%
Coonamble	$15,232	0.02%
Cootamundra	$24,120	0.04%
Corowa	$31,084	0.05%
Cowra	$26,156	0.04%
Deniliquin	$43,707	0.07%
Dubbo	$279,630	0.44%
Dungog	$13,295	0.02%
Eurobodalla	$55,799	0.09%
Fairfield	$1,391,902	2.18%
Forbes	$17,847	0.03%
Gilgandra	$21,132	0.03%
Glen Innes Severn	$58,257	0.09%
Gloucester	$18,729	0.03%
Gosford	$716,379	1.12%
Goulburn Mulwaree	$91,108	0.14%
Great Lakes	$50,742	0.08%
Greater Hume	$37,131	0.06%
Greater Taree	$91,722	0.14%
Griffith	$78,467	0.12%

LGA name	Total FSL contributed in 2009-10	Share of FSL contributed in 2009-10
Gundagai	$22,259	0.03%
Gunnedah	$22,289	0.03%
Guyra	$11,022	0.02%
Gwydir	$24,411	0.04%
Harden	$14,525	0.02%
Hawkesbury	$126,605	0.20%
Hay	$20,409	0.03%
Holroyd	$870,328	1.36%
Hornsby	$1,660,399	2.60%
Hunters Hill	$352,512	0.55%
Hurstville	$978,041	1.53%
Inverell	$67,123	0.11%
Jerilderie	$15,720	0.02%
Junee	$17,061	0.03%
Kempsey	$72,764	0.11%
Kiama	$29,985	0.05%
Kogarah	$832,039	1.30%
Ku-Ring-Gai	$1,930,547	3.02%
Kyogle	$16,726	0.03%
Lachlan	$27,573	0.04%
Lake Macquarie	$1,683,297	2.63%
Lane Cove	$633,715	0.99%
Leeton	$25,234	0.04%
Leichhardt	$872,015	1.36%
Lismore	$263,997	0.41%
Lithgow	$111,601	0.17%
Liverpool	$1,352,498	2.12%
Liverpool Plains	$28,959	0.05%
Lockhart	$14,441	0.02%

LGA name	Total FSL contributed in 2009-10	Share of FSL contributed in 2009-10
Maitland	$418,189	0.65%
Manly	$879,660	1.38%
Marrickville	$848,902	1.33%
Mid Western Regional	$46,443	0.07%
Moree Plains	$104,569	0.16%
Mosman	$904,517	1.42%
Murray	$11,058	0.02%
Murrumbidgee		
Muswellbrook	$35,166	0.06%
Nambucca	$53,197	0.08%
Narrabri	$67,951	0.11%
Narrandera	$31,782	0.05%
Narromine	$26,805	0.04%
Newcastle	$2,633,807	4.12%
North Sydney	$1,153,260	1.81%
Oberon	$14,141	0.02%
Orange	$293,524	0.46%
Palerang	$16,632	0.03%
Parkes	$32,741	0.05%
Parramatta	$1,498,998	2.35%
Penrith	$1,105,404	1.73%
Pittwater	$1,360,691	2.13%
Port Macquarie-Hastings	$286,202	0.45%
Port Stephens	$80,786	0.13%
Queanbeyan City	$308,768	0.48%
Randwick	$1,943,915	3.04%
Richmond Valley	$86,608	0.14%
Rockdale	$1,166,972	1.83%
Ryde	$1,389,440	2.17%

LGA name	Total FSL contributed in 2009-10	Share of FSL contributed in 2009-10
Shellharbour	$320,011	0.50%
Shoalhaven	$205,015	0.32%
Singleton	$50,371	0.08%
Snowy River	$18,153	0.03%
Strathfield	$490,493	0.77%
Sutherland	$2,797,422	4.38%
Tamworth Regional	$231,105	0.36%
Temora	$28,505	0.04%
Tenterfield	$21,099	0.03%
The Hills Shire	$1,578,564	2.47%
Tumbarumba	$14,709	0.02%
Tumut	$30,443	0.05%
Tweed	$326,652	0.51%
Upper Hunter	$57,016	0.09%
Upper Lachlan	$25,355	0.04%
Uralla	$16,412	0.03%
Urana		
Wagga Wagga	$383,906	0.60%
Wakool	$13,746	0.02%
Walcha	$11,521	0.02%
Walgett	$34,024	0.05%
Warren	$17,255	0.03%
Warringah	$1,977,846	3.10%
Warrumbungle	$38,494	0.06%
Waverley	$1,213,974	1.90%
Weddin	$20,728	0.03%
Wellington	$23,609	0.04%
Wentworth	$19,330	0.03%
Willoughby	$1,205,660	1.89%

LGA name	Total FSL contributed in 2009-10	Share of FSL contributed in 2009-10
Wingecarribee	$104,637	0.16%
Wollondilly	$40,456	0.06%
Wollongong	$2,391,123	3.74%
Woollahra	$2,053,452	3.21%
Wyong	$1,083,081	1.70%
Yass Valley	$34,007	0.05%
Young	$28,106	0.04%

A3: Distributions of fires, by LGA 2009-10

LGA Name	Fires in 2009-10	Share of fires
Albury	264	0.85%
Armidale Dumaresq	206	0.67%
Ashfield	97	0.31%
Auburn	282	0.91%
Ballina	85	0.27%
Balranald	6	0.02%
Bankstown	826	2.67%
Bathurst Regional	179	0.58%
Bega Valley	77	0.25%
Bellingen	36	0.12%
Berrigan	32	0.10%
Blacktown	2,488	8.04%
Bland	19	0.06%
Blayney	13	0.04%
Blue Mountains	309	1.00%
Bogan	19	0.06%
Bombala	7	0.02%
Boorowa	10	0.03%
Botany Bay	160	0.52%
Bourke	162	0.52%

LGA Name	Fires in 2009-10	Share of fires
Brewarrina	97	0.31%
Broken Hill	97	0.31%
Burwood	91	0.29%
Byron	119	0.38%
Cabonne	25	0.08%
Camden	223	0.72%
Campbelltown	1,727	5.58%
Canada Bay	115	0.37%
Canterbury	430	1.39%
Carrathool	9	0.03%
Central Darling	-	0.00%
Cessnock	515	1.67%
City Of Sydney	887	2.87%
Clarence Valley	182	0.59%
Cobar	12	0.04%
Coffs Harbour	406	1.31%
Conargo	4	0.01%
Coolamon	2	0.01%
Cooma-Monaro	54	0.17%
Coonamble	56	0.18%
Cootamundra	38	0.12%
Corowa	41	0.13%
Cowra	63	0.20%
Deniliquin	41	0.13%
Dubbo	285	0.92%
Dungog	11	0.04%
Eurobodalla	119	0.38%
Fairfield	852	2.75%
Forbes	42	0.14%
Gilgandra	23	0.07%

LGA Name	Fires in 2009-10	Share of fires
Glen Innes Severn	50	0.16%
Gloucester	10	0.03%
Gosford	691	2.23%
Goulburn Mulwaree	81	0.26%
Great Lakes	110	0.36%
Greater Hume	36	0.12%
Greater Taree	219	0.71%
Griffith	201	0.65%
Gundagai	10	0.03%
Gunnedah	78	0.25%
Guyra	17	0.05%
Gwydir	33	0.11%
Harden	12	0.04%
Hawkesbury	289	0.93%
Hay	13	0.04%
Holroyd	399	1.29%
Hornsby	274	0.89%
Hunters Hill	42	0.14%
Hurstville	219	0.71%
Inverell	114	0.37%
Jerilderie	4	0.01%
Junee	18	0.06%
Kempsey	344	1.11%
Kiama	51	0.16%
Kogarah	132	0.43%
Ku-Ring-Gai	153	0.49%
Kyogle	26	0.08%
Lachlan	46	0.15%
Lake Macquarie	1,211	3.92%
Lane Cove	90	0.29%

LGA Name	Fires in 2009-10	Share of fires
Leeton	60	0.19%
Leichhardt	129	0.42%
Lismore	171	0.55%
Lithgow	99	0.32%
Liverpool	1,227	3.97%
Liverpool Plains	22	0.07%
Lockhart	8	0.03%
Maitland	395	1.28%
Manly	92	0.30%
Marrickville	253	0.82%
Mid Western Regional	79	0.26%
Moree Plains	332	1.07%
Mosman	62	0.20%
Murray	18	0.06%
Murrumbidgee	-	0.00%
Muswellbrook	98	0.32%
Nambucca	125	0.40%
Narrabri	52	0.17%
Narrandera	40	0.13%
Narromine	39	0.13%
Newcastle	933	3.02%
North Sydney	122	0.39%
Oberon	7	0.02%
Orange	197	0.64%
Palerang	19	0.06%
Parkes	86	0.28%
Parramatta	603	1.95%
Penrith	1,261	4.08%
Pittwater	116	0.38%
Port Macquarie-Hastings	226	0.73%

LGA Name	Fires in 2009-10	Share of fires
Port Stephens	209	0.68%
Queanbeyan City	117	0.38%
Randwick	281	0.91%
Richmond Valley	184	0.59%
Rockdale	191	0.62%
Ryde	194	0.63%
Shellharbour	303	0.98%
Shoalhaven	359	1.16%
Singleton	100	0.32%
Snowy River	24	0.08%
Strathfield	141	0.46%
Sutherland	415	1.34%
Tamworth Regional	307	0.99%
Temora	8	0.03%
Tenterfield	32	0.10%
The Hills Shire	374	1.21%
Tumbarumba	14	0.05%
Tumut	51	0.16%
Tweed	321	1.04%
Upper Hunter	44	0.14%
Upper Lachlan	8	0.03%
Uralla	16	0.05%
Urana	1	0.00%
Wagga Wagga	351	1.13%
Wakool	5	0.02%
Walcha	7	0.02%
Walgett	84	0.27%
Warren	15	0.05%
Warringah	294	0.95%
Warrumbungle	23	0.07%

LGA Name	Fires in 2009-10	Share of fires
Waverley	149	0.48%
Weddin	4	0.01%
Wellington	67	0.22%
Wentworth	27	0.09%
Willoughby	105	0.34%
Wingecarribee	163	0.53%
Wollondilly	87	0.28%
Wollongong	1,346	4.35%
Woollahra	96	0.31%
Wyong	648	2.10%
Yass Valley	18	0.06%
Young	57	0.18%

Appendix B – references

Legislation

- *Country Fire Authority Act 1958 (Vic)*
- *Emergency Services Funding Act 1998 (SA)*
- *Emergency Services Levy Act 2002 (WA)*
- *Fire and Emergency Services Authority of Western Australia Act 1998 (WA)*
- *Fire and Rescue Service Act 1990 (Qld)*
- *Fire Brigades Act 1989*
- *Fire Services Act 1979 (Tas.)*
- *Metropolitan Fire Brigade Act 1958 (Vic)*
- *Rural Fires Act 1997*
- *State Emergency Service Act 1989*

Data sources

Data	Source
Advisory insurance levy rates	ICA
Insurance and FSL data	Collected by the ICA from NSW insurers, provided to Deloitte, provided to Deloitte by the ICA
Land values	Purchased by the ICA from the NSW Valuer General, provided to Deloitte by the ICA
Fire services funding contributions	ICA
Insurance contribution to fire services	ICA
Motor vehicle related incidents	2009-10 annual reports for FRNSW, the RFS and the SES
Motor vehicles data	Road and Traffic Authority (NSW)
Fire data	Provided to the ICA by FRNSW

Other references

- Andrew Refshuage, (then) Treasurer, *The Government's response to the recommendations arising from the final report of the Public Accounts Committee Review of Fire Services Funding*, 2 September 2005
- Fire and Rescue NSW, *2009-10 Annual Report*
- IPART, *Review of State Taxation,* Final Report October 2008
- NSW State Emergency Service, *2009-10 Annual Report*

- NSW Department of Treasury*, Budget 2010-11 – Budget Paper 3, Police and Emergency Services*
- NSW Rural Fire Services, *2009-10 Annual Report*
- Parliament of NSW, Legislative Assembly, *Public Accounts Committee – Review of Fire Services Funding, September 2004*
- *Professional Financial Services,* report to the NSW Public Accounts Committee, *For Quantitative Modelling of NSW FSL Funding Methods*
- Victorian Bushfire Royal Commission, *Final Report Recommendations – Recommendation 64, July 2010*

Appendix C – results

Table C1: Residential results

	Insurance	State Gov.	Local Gov.	Motor vehicle	Estimated rate of tax per $1000 of rateable land	Number of LGAs where average property has a net saving	Number of LGAs where average property has a net cost	Per cent of LGAs where the average property has a net saving	Average net saving for the average property
Scenario 1									
Part A	✓	-	-	-	$0.44	120	28	81%	$41
Part B	✓	✓	-	-	$0.52	112	36	76%	$26
Part C	✓	✓	✓	-	$0.59	103	45	70%	$14
Part D	✓	-	-	✓	$0.36	129	19	87%	$54
Part E	✓	✓	-	✓	$0.44	120	28	81%	$42
Scenario 2									
Part A	✓	-	-	-	NA	111	33	77%	$33
Part B	✓	✓	-	-	NA	106	38	74%	$16
Part C	✓	✓	✓	-	NA	103	41	72%	$3
Part D	✓	-	-	✓	NA	118	26	82%	$47
Part E	✓	✓	-	✓	NA	111	33	77%	$33
Scenario 3									
Part A	✓	-	-	-	NA	116	31	79%	$38
Part B	✓	✓	-	-	NA	108	39	73%	$22
Part C	✓	✓	✓	-	NA	94	53	64%	$9
Part D	✓	-	-	✓	NA	127	20	86%	$51
Part E	✓	✓	-	✓	NA	116	31	79%	$38

Table C2: Commercial results

	Insurance	State Gov.	Local Gov.	Motor vehicle	Estimated rate of tax per $1000 of rateable land	Number of LGAs where average property has a net saving	Number of LGAs where average property has a net cost	Per cent of LGAs where the average property has a net saving	Average net saving for the average property
Scenario 1									
Part A	✓	-	-	-	$2.63	43	70	38%	-$502
Part B	✓	✓	-	-	$3.15	39	74	35%	-$748
Part C	✓	✓	✓	-	$3.57	38	75	34%	-$945
Part D	✓	-	-	✓	$2.19	48	65	42%	-$293
Part E	✓	✓	-	✓	$2.62	43	70	38%	-$498
Scenario 2									
Part A	✓	-	-	-	NA	57	56	50%	-$479
Part B	✓	✓	-	-	NA	52	61	46%	-$720
Part C	✓	✓	✓	-	NA	52	61	46%	-$931
Part D	✓	-	-	✓	NA	60	53	53%	-$274
Part E	✓	✓	-	✓	NA	57	56	50%	-$474
Scenario 3									
Part A	✓	-	-	-	NA	34	79	30%	-$591
Part B	✓	✓	-	-	NA	31	82	27%	-$854
Part C	✓	✓	✓	-	NA	28	85	25%	-$1,065
Part D	✓	-	-	✓	NA	42	71	37%	-$367
Part E	✓	✓	-	✓	NA	34	79	30%	-$586

Table C3: Rural results

	Insurance	State Gov.	Local Gov.	Motor vehicle	Estimated rate of tax per $1000 of rateable land	Number of LGAs where average property has a net saving	Number of LGAs where average property has a net cost	Per cent of LGAs where the average property has a net saving	Average net saving for the average property
Scenario 1									
Part A	✓	-	-	-	$0.36	47	65	42%	-$219
Part B	✓	✓	-	-	$0.43	38	74	34%	-$310
Part C	✓	✓	✓	-	$0.48	30	82	27%	-$387
Part D	✓	-	-	✓	$0.30	58	54	52%	-$142
Part E	✓	✓	-	✓	$0.35	48	64	43%	-$217
Scenario 2									
Part A	✓	-	-	-	NA	57	52	52%	-$147
Part B	✓	✓	-	-	NA	51	58	47%	-$224
Part C	✓	✓	✓	-	NA	45	64	41%	-$285
Part D	✓	-	-	✓	NA	72	37	66%	-$88
Part E	✓	✓	-	✓	NA	58	51	53%	-$146
Scenario 3									
Part A	✓	-	-	-	NA	22	90	20%	-$476
Part B	✓	✓	-	-	NA	17	95	15%	-$857
Part C	✓	✓	✓	-	NA	15	97	13%	-$1,002
Part D	✓	-	-	✓	NA	26	86	23%	-$522
Part E	✓	✓	-	✓	NA	22	90	20%	-$673