



Australian Government

Australian Reinsurance Pool Corporation

Terrorism Insurance Act 2003

Examination of the effects of extending the terrorism insurance scheme established by the Act to mixed use high rise buildings which are not predominantly for commercial use



Contents

Contents	i
Executive summary	1
Recommendations	3
Introduction	4
Overview of the scheme	4
Review of the scheme	6
The 2006 review	6
The 2009 review	7
Background to the treatment of mixed use high rise buildings	9
Exclusion of residential property from the scheme	9
Review of the exclusion of residential high rise buildings	9
Review of the exclusion of mixed use high rise buildings	10
Enquiry strategy.....	10
Outcomes.....	11
Availability of commercial terrorism insurance	11
Recommendation 1	13
Appropriate ratio of commercial to residential use	13
Recommendation 2	14
Appropriate measures to determine the ratio of commercial to residential use	14
Asset values.....	14
Contributions to strata title levies.....	14
Floor area.....	14
Recommendation 3	15



Transitional considerations in the event of changes to the scheme	15
Actuarial analysis	16
Risk profile of mixed use high rise buildings	16
Impact of extending the scheme to mixed use high rise buildings	18
Additional exposure	18
Impact on policy holders' premiums	21
Rate and structure of reinsurance premiums payable to ARPC.....	22
Insurers' retentions	22
Adequacy of reserve for claims	22
Impact on retrocession program	23
Financial risk to the Commonwealth.....	23
Appendix A: Recommendation from the Terrorism Insurance Act Review 2009	24
Appendix B: Consultation with stakeholders.....	25
Appendix C: Report from Finity Consulting Pty Limited.....	26
Appendix D: Insurance Council of Australia General Circular No G1573.....	27

Executive summary

One of the recommendations made during the 2009 review of the need for the Act to continue in operation was that ARPC examine the effects of extending the scheme to mixed use high rise buildings that are not predominantly for commercial use.¹ ARPC was required to have regard to the need to maintain, to the greatest extent possible, private sector provision of terrorism insurance and to allow the re-emergence of commercial markets for terrorism risk cover.

ARPC consulted widely during its enquiry.²

Finity Consulting Limited (Finity) was engaged to assist in estimating the additional risk to ARPC by including mixed use buildings alongside commercial risks already covered by ARPC.³

In conducting its examination ARPC was asked to have regard to the issues outlined below.

The availability of commercial terrorism insurance for mixed use high rise buildings

It became clear that there is a gap in the market for terrorism cover for mixed use high rise buildings.

For mixed use high rise buildings valued at up to \$50 million and up to 20% floor space devoted to commercial use, some companies can offer terrorism coverage within their residential portfolio. Once the floor space devoted to commercial use is greater than 20% the property is insured within the commercial portfolio, which excludes terrorism cover. Consequently, for properties with between 20%-50% of their floor space devoted to commercial use the insurance policy excludes terrorism coverage but (because the building is not predominantly commercial and, consequently, the insurance policy is not an eligible insurance contract) the *Terrorism Insurance Act 2003* will not write back the terrorism exclusion in the event of a declared terrorist incident.

Mixed use high rise buildings valued at more than \$50 million and with less than 50% of floor space devoted to commercial use are insured within insurers' commercial portfolios. Those policies exclude terrorism. Because the policies are not eligible insurance contracts for the purposes of the Act, the Act will not write back the terrorism exclusion in the event of a declared terrorist incident.

The investigation found that facultative cover is available for mixed use high rise buildings, albeit at a very high price and with limited capacity.

An appropriate ratio of commercial to residential use

ARPC and the Insurance Council of Australia developed a protocol to assist insurers to determine whether or not a building is a residential building. (See Appendix D for a copy of Insurance Council of Australia Circular No G1573 dated 26 September 2003.) The protocol recognises that a degree of flexibility is required and allows insurers to have regard to the overall character of the building and the pattern of occupancy. The review considers that the protocol is still appropriate.

¹ See Appendix A for the full text of the recommendation relating to mixed use high rise buildings from the 2009 review.)

² See Appendix B for a full list of stakeholders consulted.

³ See Appendix C for Finity's actuarial report.

Appropriate measures to determine the ratio of commercial to residential use

ARPC examined assets values and contributions to strata title levels as an alternative to the floor area predominance test. However, it appears to ARPC that floor area is the most appropriate test because it is measurable and objective and used by all the insurers consulted during the course of the enquiry.

Risk profile of mixed use high rise buildings

Finity's actuarial analysis concluded that there are no major mixed use buildings located within ARPC's peak exposure zones. Consequently, it is unlikely that the extension of the scheme to include those buildings will have an impact on ARPC's maximum expected losses.

Impact of extending the scheme to mixed use high rise buildings

If the scheme was extended to include mixed use buildings with 20-50% commercial use, ARPC's exposures would increase by 2% in Sydney Tier A postcodes and by 1.8% in Melbourne Tier A postcodes. If mixed use buildings with 10-50% commercial use are included, ARPC's exposure would increase by 4.5% in Sydney Tier A postcodes and by 9.2% in Melbourne Tier A postcodes.

Maximum loss scenarios across Australia will not be affected in a material manner by the inclusion of mixed use high rise buildings in the scheme.

Impact on policy holders' premiums

The impact on policy holders' premiums for mixed use buildings in Tier A locations is likely to be an increase of approximately 15% of their fire or industrial special risks policies.

Rate and structure of reinsurance premiums payable to ARPC

Assuming that the existing rates are applied, the additional premium from all mixed use buildings in all Tier A postcodes would total \$267,000-\$400,000 per annum. This represents an increase in overall Tier A premium of between 1.3%-2%.

Insurers' retentions

Some insurers' retentions would increase slightly if the existing method of applying 4% to their gross fire and industrial special risks premium is applied.

Adequacy of the reserve for claims

The extension of the scheme to include mixed use high rise buildings which are not predominantly commercial would not increase ARPC's maximum loss scenarios. Consequently, there would be no need to seek additional capacity for the scheme in order to extend the scheme to cover those buildings.

Impact on retrocession program

The number of large mixed use buildings is small and these buildings do not impact on ARPC's probable maximum loss scenarios. Consequently, it is unlikely that there would be a significant increase in the cost of ARPC's retrocession program. Both insurers and retrocessionaires would need to be given at least 12 months notice of any changes to ARPC's exposures and risk profile.



Financial risk to the Commonwealth

Finity's view is that the inclusion of mixed use high rise buildings in the scheme would not materially change the Commonwealth's exposure in the event of a declared terrorist incident.

Conclusion

While Finity's actuarial analysis concluded that there were few mixed use high rise buildings in the CBDs of Sydney and Melbourne and their inclusion in the scheme would not have a material effect of ARPC's exposure, ARPC is of the view that including mixed use high rise buildings in the scheme may restrict the introduction of an industry solution to the unavailability of terrorism insurance. This is unlikely to promote the Government's objective of operating the scheme only while terrorism insurance cover is unavailable commercially on reasonable terms.

Recommendations

Recommendation 1

That the existing test of predominance be retained, thus continuing to exclude mixed use buildings in accordance with the existing protocol.

Recommendation 2

That ARPC conduct an education campaign with its cedants to raise awareness of the protocol contained in the Insurance Council of Australia General Circular No G1573.

Recommendation 3

That the existing floor area test be retained.

Introduction

Overview of the scheme

The *Terrorism Insurance Act 2003* (Act) establishes a scheme for replacement terrorism insurance coverage for commercial property and associated business interruption and public liability claims. The Act also establishes ARPC as a statutory authority to administer the scheme. The scheme commenced on 1 July 2003.

The scheme was established in the wake of the withdrawal of commercially available terrorism insurance following terrorist attacks around the world, particularly the events of 11 September 2001 in the United States of America.

Before introducing the scheme, the Government considered the broad economic impacts which could result from a large pool of assets uninsured for terrorism risk. The potential impacts included delaying commencement of investment projects and altering portfolio management decisions as banks and commercial property trusts became concerned about the amount of property without adequate cover. The Government was concerned that lack of comprehensive insurance cover for commercial property or infrastructure would lead to a reduction in financing and investment in the Australian property sector and that this would subsequently have wide economic impacts. These considerations led to the Government to conclude that intervention was necessary.

The Government decided that any intervention should be consistent with the need to:

- maintain, to the greatest extent possible, private sector provision of insurance;
- ensure that risk transferred to the Commonwealth is appropriately priced to minimise the impact on the Commonwealth's financial position;
- ensure that the Commonwealth is being compensated by those benefiting from the assistance;
- allow the commercial insurance and reinsurance markets to re-enter the market when they are able (that is, ensuring an appropriate exit strategy for Government); and
- be compatible with global solutions.⁴

The Act overrides terrorism exclusion clauses in *eligible insurance contracts* to the extent the losses excluded are *eligible terrorism losses* arising from a *declared terrorist incident*. Insurers may reinsure this additional risk with ARPC.

The compulsory application of the scheme to all eligible insurance contracts is essential. It allowed the accumulation of a credible pool of funds within a reasonable time. It also avoids problems associated with undiversified risk (for example, insuring only high risk buildings) and uncertainty as to who will be eligible for compensation in the event of a declared terrorist incident.

⁴ *Terrorism Insurance Bill 2002, Revised Explanatory Memorandum, paragraph 3.15, p 6.*



An *eligible insurance contract* is a contract that provides insurance coverage for:

- loss of, or damage to, eligible property that is owned by the insured;
- business interruption and consequential loss arising from:
 - Ø loss of, or damage to, eligible property that is owned or occupied by the insured, or
 - Ø an inability to use all or part of such property;
- liability of the insured that arises out of the insured being the owner or occupier of eligible property.⁵

Eligible property is the following property that is located in Australia:

- buildings (including fixtures) or other structures or works on, in or under land;
- tangible property that is located in, or on, such property;
- property prescribed by regulation.⁶ Tangible property in, on or under the seabed is prescribed by the *Terrorism Insurance Regulations 2003* (the Regulations).⁷

Cover is also available for all Commonwealth and state and territory public authorities. Farms can also obtain cover if they hold insurance against business interruption.

The scheme does not cover residential property or the contents of residential property.

The Regulations also exclude contracts of insurance which provide cover for, inter alia, workers' compensation insurance, marine insurance, aviation insurance, motor vehicle insurance, life insurance, health insurance, private mortgage insurance, medical indemnity insurance and professional indemnity insurance.⁸

Insurers may, but are not obliged to, reinsure their terrorism risk with ARPC.

The scheme covers eligible terrorism losses for any declared terrorist incident covered by an eligible insurance contract where the insurer has a reinsurance agreement with ARPC. Eligible terrorism losses do not include a loss or liability arising from the hazardous properties of nuclear fuel, material or waste.⁹ They do, however, include loss or liability arising from incidents caused by biological and chemical agents.

Payouts for eligible terrorism losses available to holders of eligible insurance contracts depend on the underlying coverage in the eligible insurance contract. For example, if a terrorist act caused a fire, then a

⁵ *Terrorism Insurance Act 2003*, subsection 7(1).

⁶ Section 3.

⁷ Regulation 4.

⁸ Regulation 5.

⁹ Section 3.



policyholder would be able to claim for subsequent loss if their insurance policy covers damage from fire. Conversely, if a terrorist act involved biological contamination and the underlying insurance policy does not include cover for biological contamination, then the policy would not respond and the reinsurance provided by the scheme would not be triggered.

Review of the scheme

The scheme was established as an interim measure and is intended to operate only while terrorism insurance cover is unavailable commercially on reasonable terms. At the time it was established, the Government also considered that uncertainty in the market made it impossible to stipulate the details or timing of its windup.¹⁰ As a result the Act requires that, at least once every three years after the startup time, the Minister must prepare a report that reviews the need for the Act to continue in operation.¹¹

The first review was completed in June 2006. The second review was completed in June 2009.

The 2006 review

After consulting with stakeholders and considering international experience, the review concluded that there was still a need for the Act to continue in operation, subject to a further review in no more than three years. The review considered that, while the market for terrorism insurance had recovered somewhat since the scheme was introduced, insufficient terrorism insurance was available commercially on reasonable terms.

The review identified a need to encourage private sector involvement, to the greatest extent possible, to avoid crowding out the market and allow the Government to withdraw once terrorism insurance is commercially available on reasonable terms. It noted that it is important for ARPC to develop its exposure modelling capability to encourage greater private sector involvement in terrorism cover. It also concluded that high rise residential property and discretionary mutual funds should not be included in the scheme.

The review recommended that:

- ARPC be required to continue charging premiums for reinsurance at the current rates, subject to further review in no more than three years;
- once the pool reaches \$300 million, ARPC have discretion to determine whether to use premiums to build the pool further, purchase reinsurance for the scheme or undertake a combination of the two;
- insurer retentions under the scheme be increased in three increments (with effect, respectively, from 1 July 2007, 1 July 2008 and 1 July 2009);
- in relation to bundled insurance policies, ARPC be required to only charge reinsurance premiums on those sections of the policy that exclude terrorism risk.¹²

¹⁰ Terrorism Insurance Bill 2002, Revised Explanatory Memorandum, paragraph 1.8, p 2.

¹¹ Section 41.

¹² The report may be viewed at <http://www.treasury.gov.au>.



All recommendations were accepted by Government and all were implemented by ARPC. Reinsurance premiums are unchanged, a reinsurance program was introduced effective from 31 December 2008, insurer retentions were increased in line with the review recommendation and ARPC has amended the way in which premiums on bundled insurance policies are calculated.

The 2009 review

The 2009 review considered the need for the Act to continue in the context of the international terrorism insurance market which had been characterised by improvements in the availability and affordability of terrorism insurance, subject to certain limitations. Despite these improvements, the review found that there was still insufficient commercial capacity to meet demand for terrorism insurance at affordable rates. While global capacity for reinsurance of terrorism risk had improved for national pooled arrangements, there was insufficient capacity at reasonable prices for individual risks.

The review also found that the favourable market and underwriting conditions that had contributed to the improvement in market conditions deteriorated in the second half of 2008. This deterioration was a result of insurers and reinsurers responding to a decline in the value of investment portfolios due to the impact of the global financial crisis, and dealing with a series of significant weather related events.

While the Australian general insurance industry remains relatively financially stable despite the global economic environment and difficult underwriting conditions, it is nonetheless part of the international reinsurance market. Internationally, the underlying shortage of affordable reinsurance for terrorism risk is ongoing and the impact of the global financial crisis on the availability and affordability of reinsurance is as yet unknown.

The review recommended that the Act continue in operation, subject to further review in no more than three years, at which time further examination of the availability of commercial reinsurance on reasonable terms be undertaken.

While concluding that market conditions are not conducive to phasing out or ceasing Australia's terrorism insurance scheme, the review supported maintaining, to the greatest extent possible, private sector provision of terrorism insurance. It noted that permanent government subsidised reinsurance would remove any incentive for the private sector to develop alternative arrangements.

The review then considered refinements to the operation of the scheme. A summary of its recommendations follows.

- **Premiums and the pool** — ARPC continue to collect premiums at current rates and investigate the purchase of further retrocession with funds from the pool, and that the relationship between premiums and the pool, and the impact of retrocession on the pool and the scheme more generally, be further considered in the context of the 2012 review.
- **Retentions** — industry retention levels remain at the levels that took effect on 1 July 2009, noting that the appropriateness of the current levels and structure of retentions should be re-examined in the course of the 2012 review.
- **Line of credit** — ARPC not be required to maintain a line of credit facility for the scheme, guaranteed by the Commonwealth, at the current time but should investigate purchasing additional retrocession capacity for the scheme with the funds that would otherwise have been used to pay the maintenance fee for the line of credit. ARPC should also continue



to monitor its overall liquidity position and the need for a line of credit or other liquidity source in light of market retrocession capacity and pricing and any other relevant factors.

- **Residential property (high rise buildings)** — ARPC examine the effects of extending the scheme to mixed use high rise buildings that are not predominantly for commercial use, having regard to the need to maintain, to the greatest extent possible, private sector provision of terrorism insurance, and allow the re-emergence of commercial markets for terrorism risk cover. ARPC should report to the Minister with findings and recommendations by 30 September 2010.¹³
- **Residential property (defence force and student accommodation)** — property that is wholly for residential use, including defence force and student accommodation involving commercial property financing, continue to be excluded from the scheme.
- **Postcode allocation** — Treasury, with the assistance of an outside contractor, update the allocation of individual postcodes to particular tiers to ensure that all postcodes are allocated to the correct tier. As part of this process, ARPC model the impact of any reallocation of postcodes to different tiers and advise the Government of its findings. Subject to the recommendation being accepted, there should be a sufficient transitional period to allow insurers and policyholders to adjust to any reallocation of postcodes.¹⁴

All recommendations were accepted by Government. Premium and retention levels remain unchanged. The line of credit was not renewed on expiry. Residential property continues to be excluded from the scheme.

This report presents the results of ARPC's examination of the effects of extending the scheme to mixed used high rise buildings that are not predominantly for commercial use. In conducting its enquiry ARPC has had regard to the need to maintain, to the greatest extent possible, private sector provision of terrorism insurance, and allow the re-emergence of commercial markets for terrorism risk cover.

¹³ See Appendix A for the full text of the recommendation relating to mixed use high rise buildings from the 2009 review.

¹⁴ The full report may be viewed at <http://www.treasury.gov.au>.

Background to the treatment of mixed use high rise buildings

Exclusion of residential property from the scheme

As noted above, residential property is excluded from the scheme. The widespread withdrawal of terrorism cover from commercial insurance policies made it difficult for developers to obtain finance for large construction projects. This, in turn, had the potential to cause a decline in construction which would eventually lead to a downturn in the property sector, with negative flow-on effects for the wider economy.

The scheme was designed to protect the commercial property sector and was never intended to protect the residential property sector.

The Regulations exclude home buildings and contents of a residential building within the meaning given to those phrases by regulations 7.1.12 and 7.1.13 of the *Corporations Regulations 2001*. Under regulation 7.1.12 buildings under construction are excluded from the definition of “home building”. Consequently, buildings under construction fall within the scheme regardless of whether the property is ultimately for residential or commercial use.

The structure of the scheme has meant that the withdrawal of terrorism insurance has not affected the availability of finance for the construction of high rise buildings, regardless of their end use.

Review of the exclusion of residential high rise buildings

The reviews of the Act conducted in 2006 and 2009 reconsidered the exclusion of residential property from the scheme.

The 2006 review did not support the extension of the scheme to include predominantly or wholly residential high rise buildings. It concluded that there was no evidence to suggest that either the willingness of lenders to provide finance for residential developments, or sales of residential apartments in high rise buildings, had reduced due to the withdrawal of terrorism insurance. The review also concluded that the increased transfer of cost and risk from property owners to the Government would substantially increase the costs of the scheme while producing limited benefits.

The 2009 review affirmed the findings of the 2006 review in relation to the exclusion of residential high rise buildings from the scheme. It also analysed movements in lending and construction activity. There is data to indicate a downturn in dwelling unit commencements in the March 2009 quarter. The review concluded, however, that the downturn was due the economic slowdown and the reduced availability of credit, not the lack of terrorism insurance.

Including only high rise residential buildings, rather than all residential buildings, would mean that ARPC would not be diversifying the additional risk it was assuming. It is also inconsistent with the scheme’s treatment of commercial property. The report concluded that the inclusion of single use residential high rise buildings would increase the overall risk assumed by the scheme and possibly impact on its sustainability.

The review noted that there was an emerging market for terrorism insurance for residential high rise buildings.

The review also noted that the price of commercially available terrorism insurance and whether some residential high rise property owners choose to purchase terrorism insurance from overseas markets are not necessarily issues for the scheme to address. This is particularly so where these issues are not having a negative impact on the broader Australian economy or placing the Australian financial system at risk.

For these reasons, the review did not support extending the scheme to include single use residential high rise buildings.

Review of the exclusion of mixed use high rise buildings

While the 2009 review did not support extending the scheme to include single use residential high rise buildings, it noted that different considerations might apply to mixed use high rise buildings. During the course of the review representations were made that mixed use high rise buildings are:

- becoming more prevalent, particularly in central business districts;
- perceived as a higher risk than wholly commercial use buildings located outside central business districts.

Some stakeholders also raised the appropriateness of the test ARPC uses to determine whether a mixed use building is commercial or residential. Currently, ARPC uses the “predominance” test to ascertain whether a mixed used high rise building is commercial or residential using the percentage of the floor area devoted to each use. It was suggested that the 50:50 ratio could be relaxed or that alternative methods of measuring the commercial and residential compositions of high rise buildings could be investigated.

The review considered that the extension of the scheme to mixed use high rise buildings that are not predominantly for commercial use could be examined in terms of the perceived anomaly between their exclusion from the scheme compared to similar buildings that are not excluded from the scheme. This examination must have regard to the policy objectives of the scheme.

Enquiry strategy

ARPC consulted with a variety of stakeholders, including industry associations, industry participants (insurers and reinsurers), brokers and legal advisers.¹⁵

ARPC engaged Finity Consulting Limited (a leading firm of actuaries) to assist it in estimating the additional risk to ARPC by including mixed use buildings alongside commercial risks already covered by the scheme. Due to limitations of time and resources, Finity was asked to limit its examination to Tier A postcodes in Sydney and Melbourne.¹⁶

¹⁵ See Appendix B for a full list of stakeholders consulted for the purposes of this enquiry.

¹⁶ See Appendix C for the full actuarial report.

Outcomes

Availability of commercial terrorism insurance

The insurance capacity of commercial insurers is based on the terms of their reinsurance treaties and the underwriting guidelines set by management.

Some Australian insurers have automatic terrorism reinsurance capacity for policies which cover residential strata buildings that are valued at less than \$50 million. Automatic cover is not available where a residential building is valued at more than \$50 million. To obtain cover in these cases, insurers must approach the facultative market for additional reinsurance capacity. Stakeholders advised ARPC that stand alone terrorism cover is available in the market. Few Australian companies offer the product but there is some capacity, particularly from Lloyd's syndicates and foreign owned insurers.

It appears, however, that the capacity is limited and what is available is expensive relative to the price of fire and perils covers. One Australian company advised that it had \$50 million in capacity Australia wide that it offered on a first loss cover basis at a cost of an additional 7% of the fire and perils premium. Other insurers advised that the premium for terrorism cover could be almost as much as the fire and perils premium. It appears that cover is rarely taken up because of the limited capacity, expense and the perception of there being a low risk of loss.

To determine whether a mixed use high rise building is residential or commercial, insurers use a floor area test. The test ranges from 10% to 20% of floor area devoted to commercial use. Two of the largest companies which operate in this area use an 80:20 ratio as the test. That is, if the building is 80% residential and 20% commercial, the building is considered to be residential and is insured through the residential portfolio.

If the building is more than 20% commercial the cover is offered through the commercial portfolio which excludes terrorism cover. The companies then review the building again to determine whether it meets ARPC's predominance test. If it does not, the policy is not an eligible insurance contract for the purposes of the Act and premium is not ceded to ARPC.

As a result:

- mixed used high rise residential buildings valued under \$50 million with up to 20% of floor area devoted to commercial use benefit from the cover offered by the market;
- mixed use high rise buildings valued under \$50 million with between 20%-50% of floor area devoted to commercial use do not benefit from the cover by the market or that offered by ARPC;
- mixed used high rise residential buildings valued over \$50 million with less than 50% of floor area devoted to commercial use do not benefit from the cover offered by the market or that offered by ARPC.

Figure 1 below shows the current availability of terrorism cover by building type and value.

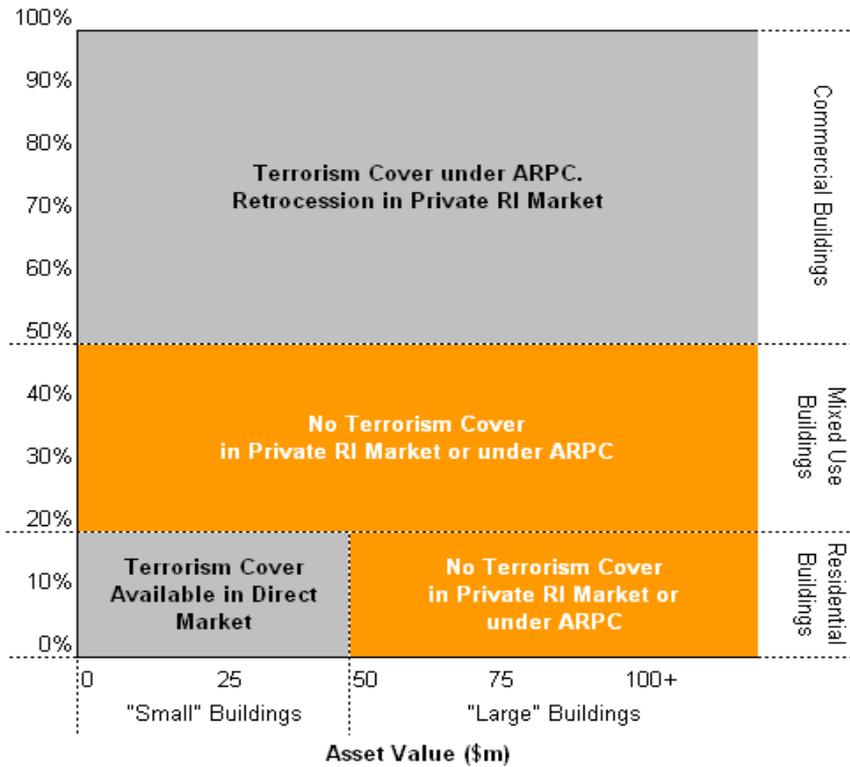


Figure 1 – Current availability of terrorism cover (“Asset Value” vs “% of Commercial Floor Area”)¹⁷

As noted above, many insurance companies can offer terrorism insurance through their residential portfolio provided the value of the building is less than \$50 million. The \$50 million limit on the insurance capacity for residential buildings is driven by the availability of reinsurance. ARPC spoke to two of the largest reinsurers in the Australian market. Neither is contemplating raising the \$50 million limit on the reinsurance cover they offer because:

- most residential buildings with a value above \$50 million are located in CBD areas and are considered to be higher risk; and
- the number of these buildings is small and offering terrorism cover would result in an unbalanced portfolio with higher risk exposures and a small premium pool.

¹⁷ Appendix C, page 5

The terrorism cover offered on high rise residential buildings is not offered as a sub-limit. That is, if the building is valued above \$50 million, no cover is offered. The insured does not have the choice to purchase terrorism insurance up to \$50 million on a building valued at, say, \$75 million.

ARPC understands that this terrorism reinsurance capacity has been available in the market for only two years. It may be appropriate to give the market some time to assess whether this capacity is appropriate or whether additional capacity can be made available.

Another issue raised by insurers is “value creep”. As property values rise, buildings begin to exceed the \$50 million value at which terrorism cover cuts out. One major home unit insurer advised that the percentage of buildings coming within its \$50 million limit is decreasing. If mixed use high rise residential buildings are included in the scheme the increasing valuations would result in more buildings being covered by the scheme, thus increasing ARPC’s accumulations.

Recommendation 1

That the existing test of predominance be retained, thus continuing to exclude mixed use buildings in accordance with the existing protocol.

Appropriate ratio of commercial to residential use

This issue was a matter of some discussion at the time of the scheme’s introduction. ARPC and the Insurance Council of Australia (and their respective legal advisers) developed a protocol to assist insurers to determine whether or not a building is a residential building and, consequently, excluded from the scheme.¹

The protocol recognises that it is difficult to have a hard and fast rule in respect of what is, and is not, a residential building. However, it draws on applicable legal principles and outlines a methodology based on the area of usage or intended usage. If the residential component is more than 50% the building is to be treated as residential unless other factors lead to a contrary conclusion. The protocol then outlines what factors may be considered if further analysis is required to determine whether the building meets the definition of *home building* as defined in Regulation 7.1.12 of *Corporations Regulations 2001*. That is, is the building used, or intended to be used, principally and primarily as a place of residence.

The protocol recognises that a degree of flexibility is required, particularly when the commercial use is closer to 40% than 50%. It also suggests that insurers to have regard to the overall character of the building and the pattern of occupancy.

The Act defines eligible insurance contracts.¹ The Regulations exclude from the definition of that term contracts of insurance providing cover to home building within the meaning given by Regulation 7.1.12 of the *Corporations Regulations 2001*.¹ That regulation defines a home building as a building used, or intended to be used, principally and primarily as a place of residence. The protocol was developed having regard to the meaning given to the phrase “principally and primarily” by case law. By applying a different test, ARPC might be knowingly accepting premium for a contract of insurance which a court could hold is not an eligible insurance contract. Any change to the test currently applied by ARPC would probably require a change to the Regulations.

The current availability of reinsurance for residential mixed use high rise buildings is a direct result of the exclusion of residential buildings from the scheme. Because of the availability of reinsurance, many insurers are including automatic terrorism cover in their residential property portfolio for buildings valued at less than \$50 million, including those with up to 20% commercial usage. Extending the scheme to



other than predominantly commercial property may restrict the introduction of insurance industry solutions to the unavailability of terrorism insurance. This is unlikely to promote the Government's objective of operating the scheme only while terrorism insurance cover is unavailable commercially on reasonable terms.

Recommendation 2

That ARPC conduct an education campaign with its cedants to raise awareness of the protocol contained in the Insurance Council of Australia General Circular No G1573.

Appropriate measures to determine the ratio of commercial to residential use

The review was asked to examine whether there is a more appropriate measure to determine, or assist in determining, the ratio of commercial to residential use in mixed use high rise buildings. Two measures mooted were asset values and contributions to strata title levies.

Asset values

Using asset values as the determinant factor could introduce uncertainty to the scheme. Asset values fluctuate from time to time during the economic cycle. This could mean that an eligible insurance contract one year would not meet that definition the next year because of a change in the value of the asset it is insuring. There is also a difference between the asset value and the insurable value, the latter being largely determined by replacement costs. Introducing uncertainty to the scheme might create difficulty for insurers in managing their exposures.

To use asset values could mean the inclusion in the scheme of purely residential buildings. As mentioned above, the scheme was designed to protect the commercial property sector, not the residential property sector. The 2006 and 2009 reviews did not support the extension of the scheme to predominantly or wholly residential high rise buildings.

Contributions to strata title levies

Contributions levied by an owners' corporation must be levied in respect of each lot in shares proportional to the unit entitlement of the lot.¹ However, if the use to which a lot is put causes an insurance premium for the strata scheme to be greater than it would be if it were not put to that use, the contribution for a particular lot may, with the consent of the owner, be increased to reflect the extra amount of that insurance premium.¹

Depending on the level of the insurance premium, the application of these provisions of the *Strata Schemes Management Act 1996 (NSW)* could result in a higher percentage of levies being attributable to commercial units even though they form a smaller percentage of the overall units.

Floor area

All insurance companies consulted during the course of this enquiry use the ratio of floor area devoted to residential and commercial use to determine whether a building is residential or commercial. No stakeholder consulted during the enquiry suggested there is a more appropriate measure. Floor area is a measurable and objective test which is not easily manipulated.



Recommendation 3

That the existing floor area test be retained.

Transitional considerations in the event of changes to the scheme

Any changes to ARPC's exposures and risk profiles would have to be notified to the market before the changes are introduced. At least 12 months notice would be required to enable insurers to understand their obligations under the reinsurance agreement and retrocessionaires to understand the exposure implications.

Consideration should be given to those insurance contracts in force at the time of the implementation of any decision to include in the scheme mixed use residential high rise buildings. Currently, those insurance contracts are not eligible insurance contracts for the purposes of the Act and insurance companies are neither collecting nor ceding terrorism insurance premiums in respect of those contracts. There may be a need to include transitional provisions so that there is no imposition of a terrorism liability and associated claims management costs on insurance companies for which they have not had the opportunity to collect appropriate premium from the insured.

Actuarial analysis

Risk profile of mixed use high rise buildings

In its review, Finity mapped the location of all residential and mixed use buildings. This mapping shows that the buildings are evenly spread throughout the Sydney and Melbourne CBDs. The only discernible increase in concentration is located in the Pyrmont area of Sydney and the Docklands area in Melbourne. There are no major mixed use buildings located within ARPC's peak exposure zones. Consequently, Finity's analysis concludes that it is unlikely that the extension of the scheme to include mixed use high rise buildings will have an impact on ARPC's maximum expected losses.

Finity's analysis shows that the largest loss that would be incurred by extending the scheme to include mixed use high rise buildings with between 10-20% commercial area would occur at the World Square Centre in Sydney's southern CBD region and would result in a \$6.8 billion loss, which is lower than the \$8.95 billion exposure at the corner Phillip and Bent Streets. In Melbourne the maximum loss scenario increases by 30% to \$4.6 billion when mixed use high rise buildings are included. While the percentage increase is greater, the total exposure is still much lower than the Sydney scenario.

The tables below illustrate the increases in estimated losses in Sydney and Melbourne.

Cluster analysis

Sydney

Cluster	Address	Predominantly Commercial	20% to 50% Commercial			10% to 20% Commercial		
			Building Sum Insured	Total	Increase	Building Sum Insured	Total	Increase
		\$m	\$m	\$m	%	\$m	\$m	%
1	Bent St / Phillip St	8,951	0	8,951	0%	0	8,951	0%
2	York St / Jamison St	4,331	0	4,331	0%	0	4,331	0%
3	George St / Bathurst St	2,980	0	2,980	0%	0	2,980	0%
4	Goulburn St / Pitt St	4,489	1,623	6,112	36%	663	6,776	15%
5	Pyrmont St / Jones Bay Rd	2,233	0	2,233	0%	173	2,406	8%

Table 1 - Increase in estimated loss at Sydney peak zones

Cluster analysis

Melbourne

Cluster	Address	Predominantly Commercial	20% to 50% Commercial			10% to 20% Commercial		
			Building Sum Insured	Total	Increase	Building Sum Insured	Total	Increase
		\$m	\$m	\$m	%	\$m	\$m	%
1	Russell St / Little Collins St	1,907	32	1,939	2%	36	1,974	2%
2	Queen St / Bourke St	1,258	87	1,345	7%	13	1,358	1%
3	Block enclosed by Kings Way / Queensbridge St / Whiteman St	3,596	0	3,596	0%	250	3,846	7%
4	Southbank Blvd / Freshwater Pl	2,367	0	2,367	0%	2,282	4,648	96%

Table 2 - Increase in estimated loss at Melbourne peak zones



Australian Government

Australian Reinsurance Pool Corporation



Impact of extending the scheme to mixed use high rise buildings

Additional exposure

Sydney

In its review Finity identified land parcels containing mixed use buildings with between 10-50% commercial usage. It identified 31 such parcels within Sydney's CBD, 7 at Pyrmont and 4 at North Sydney, making a total of 42 in Sydney's Tier A postcodes.

Sydney Building Classifications

Classification	Land Parcels
10-20% Commercial Usage	8
20-50% Commercial Usage	23
Total Sydney CBD	31
Pyrmont ¹	7
North Sydney ¹	4
Total Sydney (Tier A)	42

Source: RPData and Finity Consulting

¹ Assumed 15% Commercial Usage

**Table 3 – Number of mixed use buildings in Sydney CBD
(10%-50% commercial floor area)**

Finity then analysed this information to produce a split by building usage and sum insured.

Sydney Building Sum Insured

Sum Insured Band (\$ millions)	Number of Buildings		Combined
	10% - 20% Commercial	20% - 50% Commercial	
0 - 10		12	12
10 - 20		1	1
20 - 30		0	0
30 - 50		2	2
50 - 100	10	3	13
100 - 500	9	4	13
500+	0	1	1
Total	19	23	42
Commercial exposure	1935	1935	1935
Increased exposure	1954	1958	1977
Increased exposure (%)	1.0%	1.2%	2.2%

Source: RPData and Finity Consulting

Table 4 – Sum insured profile split by number of buildings and commercial floor area in Sydney CBD

Sydney Building Sum Insured

Sum Insured Band (\$ millions)	Aggregated Sums Insured (\$ million)		Combined	%
	10% - 20% Commercial	20% - 50% Commercial		
0 - 10		42	42	1%
10 - 20		14	14	0%
20 - 30		0	0	0%
30 - 50		72	72	1%
50 - 100	698	170	868	17%
100 - 500	2,099	771	2,870	56%
500+	0	1,295	1,295	25%
Total	2,797	2,364	5,161	
Commercial exposure	115,668	115,668	115,668	
Increased exposure	118,466	118,032	120,829	
Increased exposure (%)	2.4%	2.0%	4.5%	

Source: RPData and Finity Consulting

Table 5 – Sum insured profile split by aggregate sum insured and commercial floor area in Sydney CBD

Melbourne

Finity conducted the same identification and analysis for Melbourne's Tier A postcodes. It identified 51 such land parcels in Melbourne – 38 in the CBD, 8 in Southbank and 5 in Docklands.

Melbourne Building Classifications

Classification	Land Parcels
10-20% Commercial Usage	6
20-50% Commercial Usage	32
Total Melbourne CBD	38
Southbank ¹	8
Docklands ¹	5
Total Melbourne (Tier A)	51

Source: RPData and Finity Consulting

¹ Assumed 15% Commercial Usage

**Table 6 – Number of mixed use buildings in Melbourne CBD
(10%-50% commercial floor area)**

Again, Finity analysed this information to produce a split by building usage and sum insured.

Melbourne Building Sum Insured

Sum Insured Band (\$ millions)	Number of Buildings		Combined
	10% - 20% Commercial	20% - 50% Commercial	
0 - 10		23	23
10 - 20		3	3
20 - 30		2	2
30 - 50		0	0
50 - 100	8	3	11
100 - 500	9	0	9
500+	2	1	3
Total	19	32	51
Commercial exposure	1865	1865	1865
Increased exposure	1884	1897	1916
Increased exposure (%)	1.0%	1.7%	2.7%

Source: RPData and Finity Consulting

Table 7 – Sum insured profile split by number of buildings and commercial floor area in Melbourne CBD

Melbourne Building Sum Insured

Sum Insured Band (\$ millions)	Aggregated Sums Insured (\$ million)		Combined	%
	10% - 20% Commercial	20% - 50% Commercial		
0 - 10		140	140	2%
10 - 20		37	37	1%
20 - 30		52	52	1%
30 - 50		0	0	0%
50 - 100	594	216	810	13%
100 - 500	2,004	0	2,004	33%
500+	2,282	698	2,980	49%
Total	4,880	1,143	6,023	
Commercial exposure	65,206	65,206	65,206	
Increased exposure	70,086	66,349	71,229	
Increased exposure (%)	7.5%	1.8%	9.2%	

Source: RPData and Finity Consulting

Table 8 – Sum insured profile split by aggregate sum insured and commercial floor area in Melbourne CBD

Analysis of the Sydney and Melbourne building profile by number indicates that 90% of residential buildings have at least 5% commercial floor area. The profiles also indicate that 87% of all CBD high rise buildings have at least 10% commercial floor area.

If the scheme was extended to include mixed use buildings with 20-50% commercial use, ARPC's exposures would increase by 2% in Sydney Tier A postcodes and by 1.8% in Melbourne Tier A postcodes. If mixed use buildings with 10-50% commercial use are included, ARPC's exposure would increase by 4.5% in Sydney Tier A postcodes and by 9.2% in Melbourne Tier A postcodes.

In explaining the greater increase for Melbourne, Finity notes that there is a smaller sum insured for Melbourne's commercial risks and that two Melbourne buildings with 10-20% commercial use (Eureka and Freshwater Place) both have sums insured of more than \$1 billion. Building height limits have not allowed similar developments in Sydney.¹⁸ Building height limits in Sydney are unlikely to change because of the proximity of Sydney Airport.

Impact on policy holders' premiums

Currently ARPC's cedants pass on to policy holders the entire reinsurance premium charged by ARPC, together with a loading to fund their retentions and cover administrative costs (typically around 3%). It is

¹⁸ Appendix C, pages 9 & 10.

likely that the same approach would be adopted for premiums charged in respect of mixed use residential high rise buildings which are not predominantly commercial.

Consequently, the impact on policy holders' premiums is likely to be an increase of approximately 15% of their fire and industrial special risks policies covering properties located in Tier A postcodes.

Rate and structure of reinsurance premiums payable to ARPC

There is no evidence that the perceived threat to mixed use buildings is higher than for commercial buildings in the CBDs of Australian's capital cities. Consequently, if the scheme were to be extended to mixed use buildings which are not predominantly commercial, there is no reason to apply a rate other than the existing tier rates of 12%, 4% and 2%.

Assuming that the existing rates are applied, Finity estimates that the additional premium from all mixed use buildings in all Tier A postcodes would total between \$267,000 and \$400,000 per annum.¹⁹ This represents an increase in overall Tier A premium of between 1.3%-2%.

Insurers' retentions

Finity's analysis suggests that the inclusion of mixed used buildings which are not predominantly for commercial use would result in an increase in ARPC's overall exposure. However, the analysis also concludes that maximum loss scenarios across Australia will not be affected in a material manner.²⁰

Insurers' retentions would increase slightly if the existing method of applying 4% to their gross fire and industrial special risk premium is applied.

Adequacy of reserve for claims

ARPC has collected just over \$600 million in premium since 2003. The resulting reserve for claims of \$551.26 million (as at 30 June 2009) would cover losses from localised terrorist incidents only. The reserve for claims would not cover ARPC's maximum exposure from a major event such as a large blast in Sydney's CBD. However, the reserve for claims is supplemented by ARPC's retrocession program and the Commonwealth guarantee, which together currently provide a capacity of \$12.9 billion for the scheme.

This enquiry has found that the mixed use high rise buildings portfolio is relatively small and there are no concentrations of these risks located within ARPC's existing major commercial loss footprints. Finity's analysis indicates that the extension of the scheme to include mixed use high rise buildings which are not predominantly commercial would not increase ARPC's maximum loss scenarios.²¹ Consequently there would be no need to seek additional capacity for the scheme in order to extend the scheme to cover those buildings. It should be noted, however, that the scheme's funds could be exhausted more quickly if losses from mixed use high rise buildings are covered by the scheme.

Table 1 on page 2 of this report shows a cluster analysis for Sydney that identifies the corner Goulbourn and Pitt Streets as the location with the highest impact on major losses in a CBD region.

¹⁹ Appendix C, page 12.

²⁰ Appendix C, page 11.

²¹ Appendix C, page 13.



Impact on retrocession program

At present, ARPC's pays an annual premium of \$80.098 million for its retrocession program of \$2.6 billion excess of \$300 million. Any inclusion of mixed use buildings in ARPC's portfolio will increase its aggregate exposure. It is expected that this increased exposure will be reflected in the premium ARPC pays for its retrocession program. However, the number of large mixed use buildings is small and these buildings do not impact on ARPC's probable maximum loss scenarios. Consequently, it is unlikely that there will be a significant increase in the cost of ARPC's retrocession program. ARPC's reinsurance broker, Guy Carpenter, estimates that any increase is unlikely to exceed 5% of current retrocession premiums.

Financial risk to the Commonwealth

The Commonwealth, and consequently the Australian taxpayers, is on risk when losses from a declared terrorist incident exceed \$2.9 billion.

Our analysis indicates that the mixed use buildings in CBD areas are located mostly outside the blast footprints for ARPC's maximum probable loss scenarios. The only location in Sydney where a mixed use building is within a major loss footprint is at the corner Goulburn and Pitt Streets (Sydney World Trade Centre) where the expected loss increases from \$4.5 billion to \$6.8 billion. This is materially less than ARPC's probable maximum loss scenario for Sydney which is just under \$9 billion at the corner of Phillip and Bent Streets.

Finity's view is that the inclusion of mixed use high rise buildings in the scheme would not materially increase the Commonwealth's exposure in the event of a declared terrorist incident.²²

²² Appendix C, page 13



Appendix A: Recommendation from the Terrorism Insurance Act Review 2009

The recommendation from the 2009 review of the need for the Act to continue in operation which is relevant to this report is contained in chapter 3 of the review report.²³ That recommendation is:

That:

- *the ARPC examine the effects of extending the scheme to mixed use high rise buildings that are not predominantly for commercial use, having regard to the need to maintain, to the greatest extent possible, private sector provision of terrorism insurance, and allow the re-emergence of commercial markets for terrorism risk cover;*
- *the ARPC consult with relevant stakeholders to examine the issues, collect data and assess the impact of extending the scheme in this way, and have regard to:*
 - Ø *the availability of commercial terrorism insurance for mixed use high rise buildings that are not covered by an 'eligible insurance contract';*
 - Ø *an appropriate ratio of commercial to residential use in mixed use high rise buildings where residential use is greater than 50 per cent, subject to the availability and quality of data;*
 - Ø *appropriate measures to determine or assist in determining the ratio of commercial to residential use in mixed use high rise buildings, for example, asset valuations or contributions to strata title levies; and*
 - Ø *the risk profile of mixed use high rise buildings that are not predominantly for commercial use, including their location, concentration and proximity to buildings covered by an 'eligible insurance contract';*
- *in assessing the impact of extending the scheme to mixed use high rise buildings that are not predominantly for commercial use, the ARPC examine the likely impacts on policy holders' insurance premiums, the rate and structure of reinsurance premiums payable to the ARPC, insurers' retentions, the adequacy and structure of the reserve for claims, the ARPC's current and future retrocession purchases, the financial risk to the Commonwealth and consequently Australian taxpayers;*
- *the ARPC consult with Treasury throughout the process of examining this issue; and*
- *the ARPC report to the Minister with findings and recommendations by 30 September 2010.*

²³ *Terrorism Insurance Act Review 2009, chapter 3, pp 64 & 65.*



Appendix B: Consultation with stakeholders

In conducting this enquiry ARPC consulted the following stakeholders:

Allens Arthur Robinson
Australian Bankers Association
Catlin Insurance
CGU (including Insurance Australia Group)
Chartis Insurance
CHU (including QBE Insurance)
Chubb Insurance
Clayton Utz
Finity Consulting Limited
Guy Carpenter
Insurance Council of Australia
Lloyds Australia
Munich Reinsurance
Property Council of Australia
Risk Frontiers
Strata Unit Underwriting
Swiss Re
Willis Re



Appendix C: Report from Finity Consulting Pty Limited



**Appendix D: Insurance Council of Australia General Circular
No G1573**

9 August 2010

Mr Michael Pennell
Manager – Client Service and Reinsurance
Australian Reinsurance Pool Corporation
PO Box R1798
Royal Exchange NSW 2600

Dear Michael

Review of Extending the Scheme to Mixed Use High Rise Buildings

During 2009 The Treasury conducted a review of the terrorism insurance scheme established by the *Terrorism Insurance Act 2003* (the Review). The Review recommended that Australian Reinsurance Pool Corporation (ARPC) examine the effects of extending the scheme to mixed use high rise buildings that are not predominantly for commercial use.

Insurers may reinsure the terrorism risk on eligible commercial insurance policies with the ARPC. We have been advised that current industry practice is for insurers to issue a commercial insurance policy where the commercial floor space is more than 20% of the total. However, under ARPC's "predominance test", buildings with less than 50% of the floor space utilized for commercial purposes are excluded from participation in ARPC's terrorism cover. Since the private sector reinsurers do not offer terrorism for these risks, this mismatch between ARPC and industry practice creates a gap in terrorism reinsurance for buildings with between 20% and 50% floor space for commercial use.

Recommendations from the Review specific to mixed use high rise buildings were for an investigation into:

- the implications of including mixed use buildings in the scheme, while maintaining private sector provision to the greatest extent possible
- the extent to which mixed use buildings are not covered by the private sector
- how mixed use buildings are to be defined and measured
- the risk profile of mixed use buildings.



1 Scope and Purpose

ARPC has engaged Finity Consulting Pty Limited (Finity) to assist with a review into the additional exposure, including concentration of exposure around existing areas containing large commercial sums insured, if mixed use buildings were to be incorporated in the scheme.

ARPC has sought assistance from Finity in estimating the additional risk to ARPC contributed by including Mixed Use Buildings alongside commercial risks already covered by ARPC. Our review was limited to an examination of Tier A postcodes in Sydney and Melbourne.

The purpose of our review is to provide information to assist ARPC's assessment of the consequences of including mixed use buildings in addition to predominantly commercial risks. We have not been asked to recommend any particular response to the results described in this letter.

2 Key Findings

Our review of current market practice is that:

- 20% commercial usage is a standard point for identifying Mixed Use Buildings as “commercial” in that a commercial insurance policy would normally be issued
- ARPC regulations define excluded risks as including those not predominantly for commercial use. ARPC has effectively excluded risks where commercial use is less than 50% of the total building
- There is a “gap” in the reinsurance coverage available on commercial buildings insurance policies where the extent of commercial use lies between 20% and 50%

Our assessment of the additional exposure represented by inclusion of Mixed Use Buildings (Tier A postcodes only) in the current terrorism scheme is:

- The inclusion of Mixed Use Buildings will increase the number of Tier A risks covered by ARPC by around 1.5%.
- Tier A sums insured increase by around 2% with the inclusion of Mixed Use Buildings.
- The maximum loss scenarios due to geographic risk aggregation are unlikely to increase materially with the inclusion of Mixed Use Buildings.

As a result of the additional exposure, there may be flow on impacts to ARPC's premiums, retrocession etc.:

- The small increase in exposure in Tier A postcodes may result in an increase to ARPC's reinsurance premium revenue in the order of \$300,000 to \$400,000 per

annum. It is difficult to determine the impact by including Tiers B and C postcodes. However, it would be very unlikely that the additional premium would approach 2% of the total annual premium pool.

- Retrocession premium may be impacted, although the probable maximum loss is not materially different. We would expect this to be a consideration limiting any increase in premium.
- For similar reasons, we do not expect the inclusion of Mixed Use Buildings in the scheme to materially change the Australian Government's exposure.

The remainder of this letter documents:

- Section 3 - Our approach to the analysis performed
- Section 4 - Data and analysis relating to the commercial/residential split, location, value and extent of current terrorism cover for Mixed Use Buildings (Tier A in Sydney and Melbourne)
- Section 5 - Resulting additional exposure for Sydney and Melbourne
- Section 6 - An assessment of aggregation risk due to the additional exposure
- Section 7 - Broader implications for the scheme
- Section 8 - Important reliances and limitations to our advice

Attachments provide further detail.

3 General Approach

Our approach for this assignment was to:

1. Identify land parcels which contain buildings that are not predominantly for commercial use (less than 50% commercial) but where those buildings do contain a mixture of commercial and residential usage ("Mixed Use Buildings").
2. Having established the proportion of commercial use is less than 50%, estimate the actual proportion of commercial use for these Mixed Use Buildings. Typically this letter uses a definition of mixed use as between 20% and 50% commercial usage. Other definitions are possible and detail by quintile of commercial usage is included in attachments.
3. Estimate the additional Building and Contents sums insured associated with extending the scheme to Mixed Use Buildings.
4. Determine the extent of risk aggregation of Mixed Use Buildings or significance of increased sums insured in areas where commercial risks are currently highly concentrated.

4 Mixed Use Buildings Location, Value and Cover

The following describe the data and analysis used to identify and quantify the proportionate split of residential/commercial occupancy and sum insured of Mixed Use Buildings.

Building Identification

At the request of ARPC, Finity engaged RP Data Limited (RP Data) to provide the location and relevant commercial/residential composition splits of buildings within Sydney and Melbourne CBD areas. The information attaching to each building included the number of residential or commercial occupants and in some cases the floor areas of each (attachment O provides the detail of RP Data's information). We have used this information to identify the land parcels containing mixed use buildings and to estimate the proportional split of the building (by floor area) used for commercial and residential purposes.

Previous analysis undertaken for ARPC identified land parcels containing buildings with both commercial and residential occupancy. We have used this previous analysis as a secondary source of information where the RP Data information was not available. For the majority of these buildings we have assumed 15% commercial usage (overall average), however, we have varied this on a case by case basis for key buildings.

Buildings Sum Insured

Finity has estimated the sum insured for each location based on building footprint and height. Sums insured have been inflated to 2010 values. This estimate relies heavily on previous analysis undertaken by Finity for ARPC on commercial buildings sums insured. We refer the reader to previous reports for the detail on estimates of sum insured per volume of building.

For an equivalent floor area, we have assumed that an average Buildings Sum Insured for the residential component of the building is 10% higher than an average sum insured for commercial risks. The average sum insured for a commercial building is sourced from previous analysis undertaken by Finity for ARPC for inclusion in current "Loss Model" projections of insured losses. The increased average Buildings Sum Insured for Mixed Use Buildings allows for a higher concentration of building infrastructure in the residential component of the premises (e.g. plumbing, walls, etc).

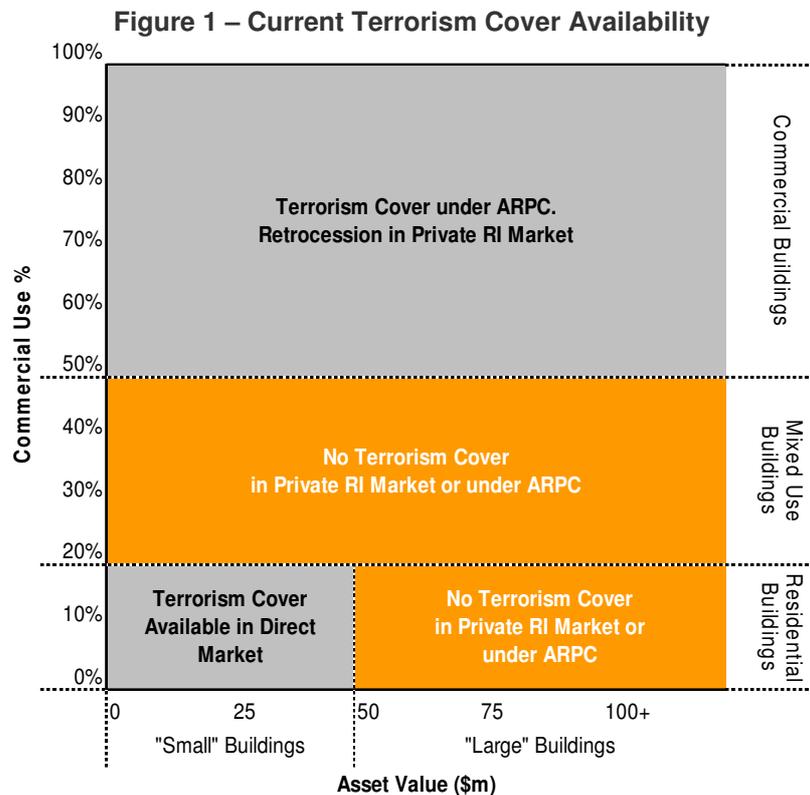
We assume that Contents Sum Insured adds 25% to the Buildings Sum Insured for both residential and commercial risks, consistent with our previous work with ARPC on the Loss Models.

Terrorism Cover Currently Provided

ARPC has indicated that terrorism cover for “small buildings” (under \$50 million) with less than 20% commercial usage is currently offered by the direct insurance industry, and there is therefore no need for cover to be offered by ARPC. However, there is a lack of appetite in the private sector reinsurance market to offer terrorism cover for residential strata buildings and buildings which are predominantly residential (less than 20% commercial usage) with sums insured greater than \$50 million.

All buildings with greater than 50% commercial usage, regardless of value, are already covered by ARPC.

Figure 1 below shows the current availability of terrorism cover by building type and asset value.



The Treasury’s Review recommended that ARPC examine the effects of extending the scheme to mixed use but not to residential buildings. We have selected a cut off of 20% commercial as the boundary between mixed use and ‘purely’ residential, consistent with market practice of where commercial insurance policies are issued.

Finity has quantified the additional exposure to ARPC created by extending the scheme to including Mixed Use Buildings. We have also examined whether the inclusion of Mixed Use Buildings creates new areas of significant risk aggregation.

Our results have been documented in the form of risk profile maps of mixed use buildings by sum insured bands and by commercial floor area percentage.

We have also documented results for selected buildings with 10% to 20% commercial usage. This may provide the reader useful information relating to threshold or boundary sensitivity to including additional exposure below 20% commercial use. Analysis on buildings with less than 20% commercial usage is shown in the attachments to this letter.

Attachments provide the detail and also contain “heat maps” of added Mixed Use Buildings exposure.

5 Additional Exposure

Sydney

Table 1 below shows the additional number of land parcels within Tier A postcodes of Sydney which may potentially be covered by an expanded ARPC scheme covering Mixed Use Buildings.

Table 1 – Mixed Use Building Land Parcels for Sydney (Tier A)

Classification	Land Parcels
10-20% Commercial Usage	8
20-50% Commercial Usage	23
Total Sydney CBD	31
Pymont ¹	7
North Sydney ¹	4
Total Sydney (Tier A)	42

Source: RPData and Finity Consulting

¹ Assumed 15% Commercial Usage

We have identified 23 land parcels containing Mixed Use Buildings within Tier A Sydney postcodes. A further eight large buildings in the CBD and 11 large buildings in Pymont and North Sydney have 10% to 20% commercial use. For Pymont and North Sydney, we did not have data identifying the proportion splits between residential and commercial use, and have assumed these buildings to be 15% commercial.

Tier A Sydney postcodes contain 1,935 land parcels identified as solely commercial and covered by ARPC reinsurance arrangements. Adding Mixed Use Buildings to the current cover provided by ARPC would increase the number of land parcels covered by 23, or 1.2%. Inclusion of the buildings identified with 10% to 20% commercial usage increases this by a further 19 land parcels.

Table 2 shows the number of mixed use land parcels, split by building usage and the sum insured of the land parcel for Tier A postcodes in Sydney.

Table 2 – Number of Mixed Used Buildings by Usage and Size Bands – Sydney (Tier A)

Sum Insured Band (\$ millions)	Number of Buildings		Combined
	10% - 20% Commercial	20% - 50% Commercial	
0 - 10		12	12
10 - 20		1	1
20 - 30		0	0
30 - 50		2	2
50 - 100	10	3	13
100 - 500	9	4	13
500+	0	1	1
Total	19	23	42
Commercial exposure	1935	1935	1935
Increased exposure	1954	1958	1977
Increased exposure (%)	1.0%	1.2%	2.2%

Source: RPData and Finity Consulting

A more detailed version of this table is attached (Attachment E).

Table 3 shows the total sum insured detail associated with the buildings on mixed use land parcels, split by building usage and sum insured band for Tier A postcodes in Sydney.

Table 3 – Total Sum Insured of Mixed Used Buildings by Usage and Size Bands – Sydney (Tier A)

Sum Insured Band (\$ millions)	Aggregated Sums Insured (\$ million)		Combined	%
	10% - 20% Commercial	20% - 50% Commercial		
0 - 10		42	42	1%
10 - 20		14	14	0%
20 - 30		0	0	0%
30 - 50		72	72	1%
50 - 100	698	170	868	17%
100 - 500	2,099	771	2,870	56%
500+	0	1,295	1,295	25%
Total	2,797	2,364	5,161	
Commercial exposure	115,668	115,668	115,668	
Increased exposure	118,466	118,032	120,829	
Increased exposure (%)	2.4%	2.0%	4.5%	

Source: RPData and Finity Consulting

A more detailed version of this table is attached (Attachment F).

The increase in sum insured covered by ARPC if cover was to be extended to Mixed Use Buildings would be \$2.4 billion, or by 2.0%. If large buildings with 10% to 20% commercial usage are included also, the total increase would be \$5.2 billion in all Tier A postcodes in Sydney. This increases the total sum insured for ARPC from \$115.7 billion to \$120.8 billion, or by 4.5%.

By including Mixed Use Buildings within the CBD, sum insured increases to a greater degree than the number of land parcels covered by ARPC indicating that the additional buildings are larger on average than the average of commercial only buildings within the CBD.

Attachments A, B, C, and D contain maps of the sums insured of residential and Mixed Use Buildings for the Tier A postcodes of Sydney.

Melbourne

Table 4 below shows the additional number of land parcels within Tier A postcodes of Melbourne which may potentially be covered by an expanded ARPC scheme.

Table 4 – Mixed Use Building Land Parcels Counts for Melbourne (Tier A)

Classification	Land Parcels
10-20% Commercial Usage	6
20-50% Commercial Usage	32
Total Melbourne CBD	38
Southbank ¹	8
Docklands ¹	5
Total Melbourne (Tier A)	51

Source: RPData and Finity Consulting

¹ Assumed 15% Commercial Usage

We have identified 32 land parcels containing Mixed Use Buildings within Tier A Melbourne postcodes. A further six large buildings in the CBD and 13 large buildings in Southbank and Docklands have 10% to 20% commercial use. For Southbank and Docklands, we did not have data identifying the proportion splits between residential and commercial use, and have assumed these buildings to be 15% commercial.

Tier A Melbourne postcodes contain 1,865 land parcels identified as solely commercial and covered by ARPC reinsurance arrangements. Adding Mixed Use Buildings to the current cover provided by ARPC would increase the number of land parcels covered by 32, or 1.7%. Inclusion of the buildings identified with 10% to 20% commercial usage increases this by a further 19 land parcels.

Table 5 shows the number of mixed use land parcels, split by building usage and the sum insured of the land parcel for Tier A postcodes in Melbourne.

Table 5 – Number of Mixed Used Buildings by Usage and Size – Melbourne (Tier A)

Sum Insured Band (\$ millions)	Number of Buildings		Combined
	10% - 20% Commercial	20% - 50% Commercial	
0 - 10		23	23
10 - 20		3	3
20 - 30		2	2
30 - 50		0	0
50 - 100	8	3	11
100 - 500	9	0	9
500+	2	1	3
Total	19	32	51
Commercial exposure	1865	1865	1865
Increased exposure	1884	1897	1916
Increased exposure (%)	1.0%	1.7%	2.7%

Source: RPData and Finity Consulting

A more detailed version of this table is attached (Attachment L).

Table 6 shows the total sum insured of mixed use land parcels, split by building usage and the sum insured of the land parcel for Tier A postcodes in Melbourne.

Table 6 – Total Sum Insured of Mixed Used Buildings by Usage and Size Bands – Melbourne (Tier A)

Sum Insured Band (\$ millions)	Aggregated Sums Insured (\$ million)		Combined	%
	10% - 20% Commercial	20% - 50% Commercial		
0 - 10		140	140	2%
10 - 20		37	37	1%
20 - 30		52	52	1%
30 - 50		0	0	0%
50 - 100	594	216	810	13%
100 - 500	2,004	0	2,004	33%
500+	2,282	698	2,980	49%
Total	4,880	1,143	6,023	
Commercial exposure	65,206	65,206	65,206	
Increased exposure	70,086	66,349	71,229	
Increased exposure (%)	7.5%	1.8%	9.2%	

Source: RPData and Finity Consulting

A more detailed version of this table is attached (Attachment M).

The increase in sum insured covered by ARPC if cover was to be extended to Mixed Use Buildings would be \$1.1 billion, or by 1.8%. If large buildings with 10% to 20% commercial usage are included also, the total increase would be \$6.0 billion in all Tier A postcodes in Melbourne. This increases the total sum insured for ARPC from \$65.2 billion to \$71.2 billion, or by 9.2%.

The increase in sum insured is greater for Melbourne than for Sydney. We note that this is due to the smaller total sum insured for Melbourne's commercial risks, and that Melbourne (South Bank) has two large buildings with between 10% to 20% commercial

use (Eureka and Freshwater Place), both with sums insured greater than \$1 billion. Building height limits have blocked any similar developments within Sydney.

Attachments H, I, J, and K contain maps of the sums insured of residential and Mixed Use Buildings for the Tier A postcodes of Melbourne.

6 Aggregation of Risks

We have identified some key areas in Sydney and Melbourne where the inclusion of Mixed Use Buildings may significantly increase the aggregate risk in geographically concentrated pockets with the respective Tier A postcodes.

Attachments G and N show the location of the key risk areas selected for Sydney and Melbourne.

In the analysis below, we have estimated the increase in sum insured at a 150 metre radius from various locations in Sydney and Melbourne. A 2,000kg TNT equivalent blast is expected to cause 10% to 20% damage to buildings at the 150 metre radius distance, and by looking at the increase in total sum insured our estimates would give a conservative estimate of the increase in maximum loss potential for a blast this size.

Sydney

Table 7 shows the increase in sum insured within a 150 metre radius of key locations within Sydney. Note that the following table shows the total building sum insured within the radius, not the estimated losses from a blast attack.

Table 7 – Buildings Sum Insured with Mixed Use Buildings Included - Sydney

Cluster	Address	Predominantly Commercial	20% to 50% Commercial			10% to 20% Commercial		
			Building Sum Insured	Total	Increase	Building Sum Insured	Total	Increase
		\$m	\$m	\$m	%	\$m	\$m	%
1	Bent St / Phillip St	8,951	0	8,951	0%	0	8,951	0%
2	York St / Jamison St	4,331	0	4,331	0%	0	4,331	0%
3	George St / Bathurst St	2,980	0	2,980	0%	0	2,980	0%
4	Goulburn St / Pitt St	4,489	1,623	6,112	36%	663	6,776	15%
5	Pyrmont St / Jones Bay Rd	2,233	0	2,233	0%	173	2,406	8%

From previous work we have completed with ARPC, we identified the corner of Philip St and Bent St to be the area of largest risk aggregation. The inclusion of Mixed Use Buildings in the vicinity of Bond St and Philip St does not increase the building sum insured. We have not identified any mixed use buildings near this location. There is one large residential building valued at \$145 million, however we estimate that less than 10% of this building is commercial usage.

We have estimated the largest increase in sum insured to relate to the buildings surrounding the corner of Goulburn St and Pitt St, where the total building sum insured increases from \$4.5 billion to \$6.1 billion (36% increase), largely from the World Square development. If large buildings with 10% to 20% commercial usage are included, this

would increase to \$6.8 billion, still lower than the \$9.0 billion total building sum insured at the corner of Philip St and Bent St.

From a review of the additional risk associated with Mixed Use Buildings, and as represented by results documented for selected locations, we have found the inclusion of Mixed Use Buildings does not change ARPC's maximum loss scenarios in a material manner for Sydney. While we have not looked at all locations within Sydney, we have no reason to believe that this does not apply across all Tier A Sydney postcodes.

Melbourne

Table 8 shows the increase in sum insured within a 150 metre radius of key locations within Melbourne. Note that the following table shows the total building sum insured within the radius, not the estimated losses from a blast attack.

Table 8 – Buildings Sum Insured with Mixed Use Buildings Included - Melbourne

Cluster	Address	Predominantly Commercial	20% to 50% Commercial			10% to 20% Commercial		
			Building Sum Insured	Total	Increase	Building Sum Insured	Total	Increase
			\$m	\$m	%	\$m	\$m	%
1	Russell St / Little Collins St	1,907	32	1,939	2%	36	1,974	2%
2	Queen St / Bourke St	1,258	87	1,345	7%	13	1,358	1%
3	Block enclosed by Kings Way / Queensbridge St / Whiteman St	3,596	0	3,596	0%	250	3,846	7%
4	Southbank Blvd / Freshwater Pl	2,367	0	2,367	0%	2,282	4,648	96%

Key buildings in Melbourne are more evenly spaced across the CBD area, resulting in lower risk aggregation compared with Sydney. Even with the inclusion of Mixed Use Buildings, the maximum loss scenarios for Melbourne are not expected to approach those in Sydney.

If large buildings with 10% to 20% commercial usage are included, the biggest increase we observe is at the corner of Southbank Boulevard and Freshwater Place, with the total building sum insured increasing from \$2.4 billion to \$4.6 billion (96% increase) as a result of two large residential developments. However, even at \$4.6 billion, this is only around 50% of the \$9.0 billion sum insured observed estimated to fall within 150m of the corner of Philip St and Bent St in Sydney.

From the locations we selected, we have not found that the inclusion of Mixed Use Buildings changes ARPC's maximum loss scenarios across Australia in a material manner. For Melbourne however, the maximum loss scenario increases perhaps in the order of 30% as illustrated by the maximum aggregate sum insured increasing from \$3.6 billion to \$4.6 billion in Table 8 above.

7 Implication for the ARPC Terrorism Scheme

This letter details our analysis of the exposure to Mixed Use Buildings in Tier A postcodes of Sydney and Melbourne. While we have only shown our analysis for those buildings with commercial usage between 20% and 50% and selected large risks with commercial use between 10% and 20%, more granular commercial usage band data are contained in the attachments. This data may provide sufficient information to estimate the materiality that varying the attachment point (based on proportion commercial usage and building sum insured) has on risk exposure to the scheme.

Premiums Collected by ARPC

Table 9 shows our estimate of the additional premium collected by ARPC by including Mixed Use Buildings into the scheme.

Table 9 – Estimated Premium Collected by ARPC

Tier A Area	Commercial	Mixed Use Buildings		Estimated Premium ¹	
	BSI	Proportion	BSI	Low	High
	\$m		\$m	\$'000	\$'000
Sydney	115,668	2.04%	2,364	142	213
Melbourne	65,206	1.75%	1,143	69	103
Brisbane	19,095	2.00%	382	23	34
Adelaide	13,089	2.00%	262	16	24
Perth	14,574	2.00%	291	17	26
Total	227,633	1.95%	4,442	267	400

¹ Assuming 12% loading for Tier A postcodes apply to mixed use buildings, and average premium rates of \$0.05 (low estimate) and \$0.075 (high estimate) per \$100 sum insured apply to Mixed Use Buildings.

Assuming that Tier A Mixed Use Buildings attract the same 12% loading as commercial Tier A Buildings, ARPC would expect to collect an additional \$270,000 to \$400,000 of premium per annum of premium from Mixed Use Buildings.

We have not reviewed the appropriateness of the 12% loading and its application to Mixed Use Buildings. However, based on our understanding that insurers are already issuing commercial policies for Mixed Use Buildings, then we expect that applying the same loading for Mixed Use Buildings and predominantly commercial buildings should be equitable and appropriate.

Impact on ARPC's Retrocession

ARPC currently place \$2.6 billion of cover in excess of \$300 million with retrocessionaires, at a cost of around \$77 million per annum. The inclusion of Mixed Use Buildings may increase the cost of this cover as result of the increased exposure.

While the inclusion of Mixed Use Buildings creates a small number of key risk areas, it does not change the likely maximum loss scenarios. We would expect these considerations may limit any increase in premium.

Australian Government Exposure

The Australian Government is exposed to Declared Terrorists Incident (DTIs) resulting in insured losses above \$2.9 billion.

Our analysis of key risk locations within Sydney and Melbourne above identified only one location in Sydney where including Mixed Use Buildings would increase the exposure materially. Sum insured within 150m around Goulburn and Pitt increases from \$4.5 billion to \$6.1 billion, or an increase in the Australian Government's exposure by \$1.6 billion.

Our view is that including Mixed Used Buildings into the ARPC Scheme does not materially change the Australian Government's exposure in the event of a terrorist blast as the location of Mixed Use Buildings are generally not in the vicinity of high loss areas.

Implications for ARPC in the Event of a DTI

The reinsurance recoveries required to be met by ARPC may increase in the event of a DTI, with the extent of the increase varying by the location of the DTI. For the key locations we have reviewed above, our estimate of the increase varies between nil and \$1.6 billion (up to a 36%). While we may expect larger percentage increases in cases where a DTI occurs in an area densely populated with Mixed Use Buildings, we would not expect a similarly large increase in dollar terms.

In our key location scenarios, the inclusion of Mixed Use Buildings does not increase ARPC's maximum loss scenario. While we have not tested this for all locations, we believe the key locations identified are a good representation of a "worst case" blast scenario in a Tier A location.

8 Reliances and Limitations

Distribution and Use

This letter is being provided for the sole use of the Australian Reinsurance Pool Corporation (ARPC) for the purposes stated above in this letter. It is not intended, nor necessarily suitable, for any other purpose. This letter should only be relied on by ARPC for the purpose for which it is intended.

We understand that ARPC may wish to:

- provide a copy of this letter to the Minister as an attachment to their report on extending the scheme to Mixed Use Buildings
- as a result of making their report public, release this letter into the public domain

Permission is hereby granted for such distribution of this letter on the condition that the entire report, rather than any excerpt, be distributed. No other distribution, use of or reference to this letter (or any part thereof) is permitted without our prior written consent.

Third parties, whether authorised or not to receive this letter, should recognise that the furnishing of this letter is not a substitute for their own due diligence and should place no reliance on this letter or the data contained herein which would result in the creation of any duty or liability by Finity to the third party.

Any reference to Finity in reference to this analysis in any letter, accounts or any other published document or any other verbal report is not authorised without our prior written consent.

Finity has performed the work assigned and has prepared this letter in conformity with its intended utilisation by a person technically competent in the areas addressed and for the stated purposes only. Judgements about the conclusions drawn in this report should be made only after considering the letter in its entirety, as the conclusions reached by a review of a section or sections on an isolated basis may be incorrect.

The letter should be considered as a whole. Members of Finity staff are available to answer any queries, and the reader should seek that advice before drawing conclusions on any issue in doubt.

Data and Other Information

We have relied on the accuracy and completeness of all data and other information (qualitative, quantitative, written and verbal) provided to us for the purpose of this report. We have not independently verified or audited the data but we have reviewed it for reasonableness and consistency.

Nature of the Review

The review provides a guide to the effects of extending the terrorism insurance scheme to mixed use high rise buildings currently assessed as not predominantly for commercial use (and therefore currently not covered). The primary effect will be to increase the sums insured covered by the scheme and to potentially change the extent and location of sights of significant aggregation of risk. There is uncertainty associated with the results of our review. In the context of estimating total insured losses, it is not possible to quantify the uncertainty associated with the additional total insurance losses resulting from inclusion

of mixed use buildings. While our review may serve to increase the confidence in understanding the effects of introducing mixed use buildings, how the results of this letter are used and communicated should be mindful of the uncertainty in our results.

Should you have any questions regarding these results, please do not hesitate to contact Aaron Cutter on (02) 8252 3300 or Stephen Lee on (02) 8252 3333.

Yours sincerely

A handwritten signature in black ink, appearing to read 'A Cutter', with a long horizontal flourish extending to the right.

Aaron Cutter

A handwritten signature in black ink, appearing to read 'Stephen Lee', with a long horizontal flourish extending to the right.

Stephen Lee

Fellows of the Institute of Actuaries of Australia



ATTACHMENTS

A – Sydney All Residential and Mixed Use Buildings (Buildings Sum Insured)

B – Sydney Residential Only Buildings (Buildings Sum Insured)

C – Sydney 0%-20% Mixed Use Buildings (Buildings Sum Insured)

D – Sydney 20%-50% Mixed Use Buildings (Buildings Sum Insured)

E – Sydney Detailed Table of Proportional Building Use (Count)

F – Sydney Detailed Table of Proportional Building Use (Sum Insured)

G – Sydney Key Risk Locations

H – Melbourne All Residential and Mixed Use Buildings (Buildings Sum Insured)

I – Melbourne Residential Only Buildings (Buildings Sum Insured)

J – Melbourne 0%-20% Mixed Use Buildings (Buildings Sum Insured)

K – Melbourne 20%-50% Mixed Use Buildings (Buildings Sum Insured)

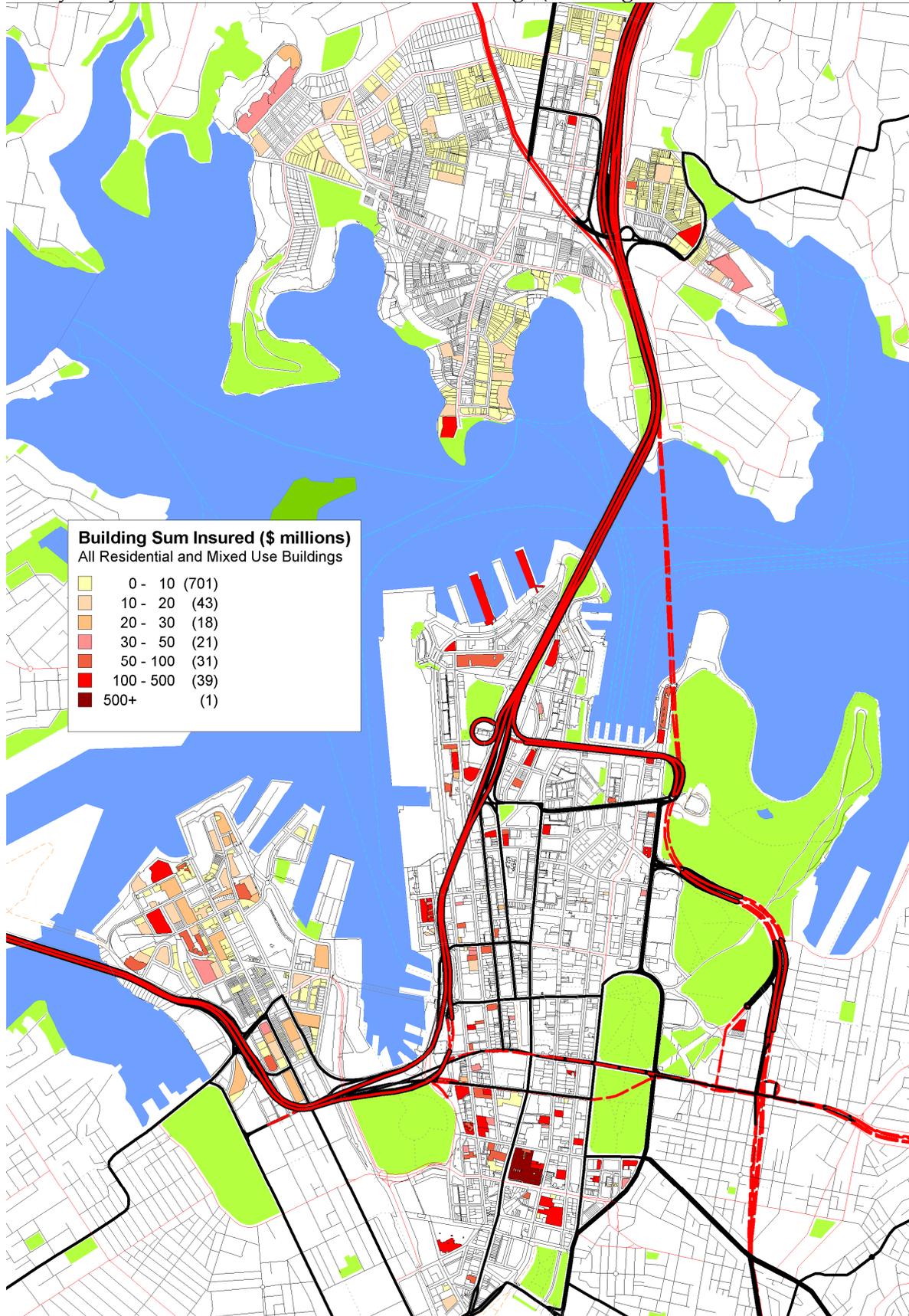
L – Melbourne Detailed Table of Proportional Building Use (Count)

M – Melbourne Detailed Table of Proportional Building Use (Sum Insured)

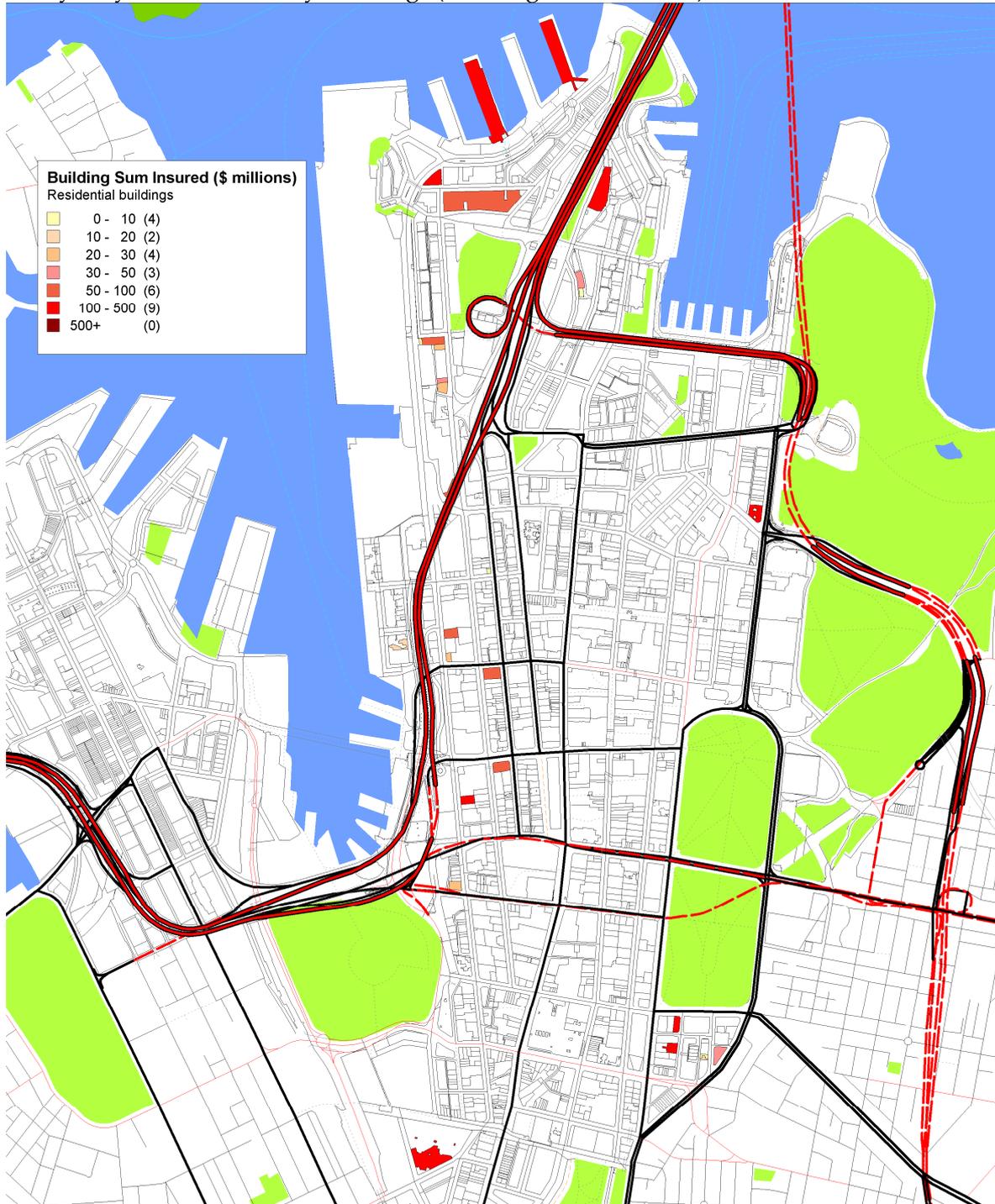
N – Melbourne Key Risk Locations

O – Description of data fields provided by RP Data

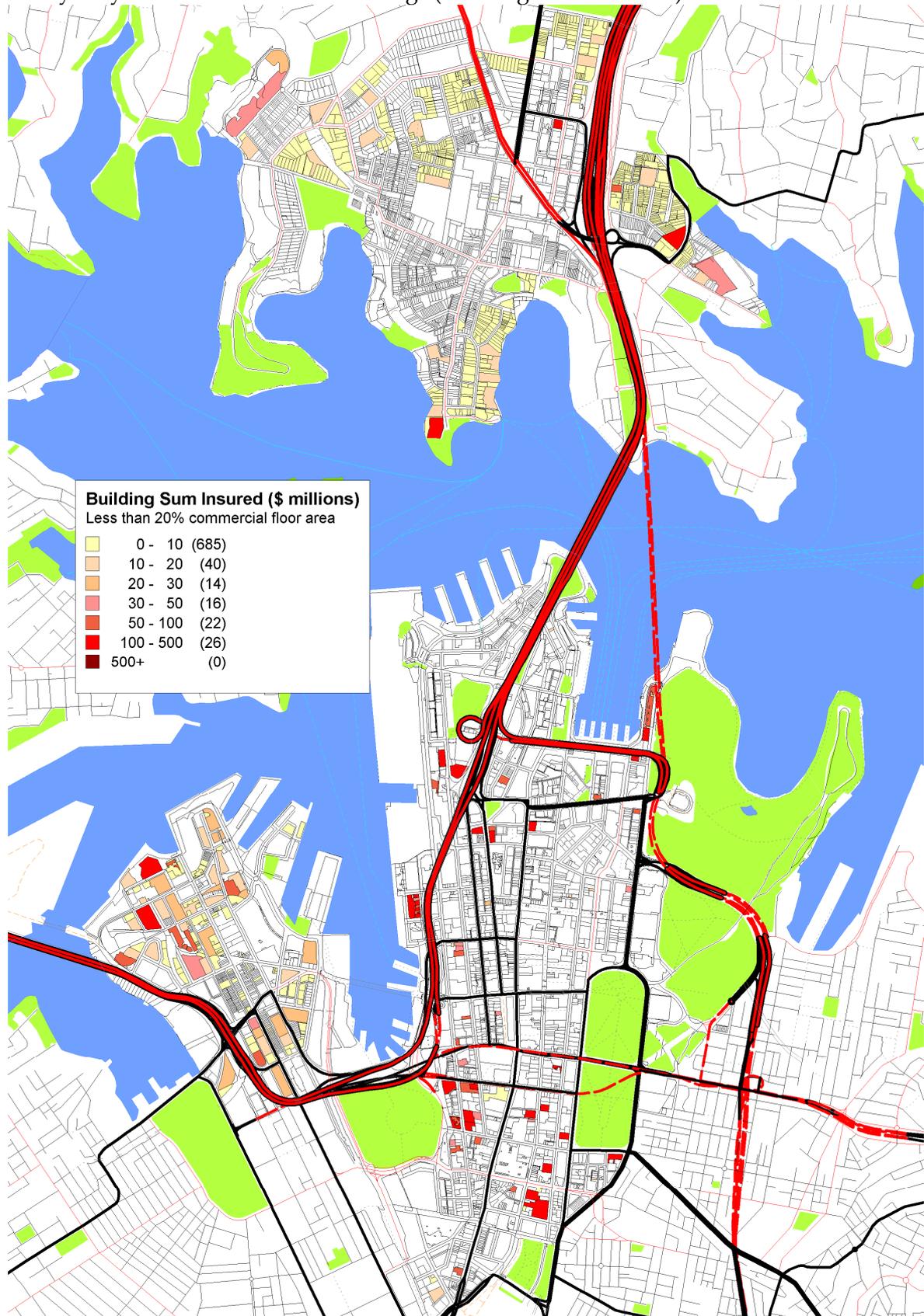
A – Sydney All Residential and Mixed Use Buildings (Buildings Sum Insured)



B – Sydney Residential Only Buildings (Buildings Sum Insured)



C – Sydney 0%-20% Mixed Use Buildings (Buildings Sum Insured)



D – Sydney 20%-50% Mixed Use Buildings (Buildings Sum Insured)



E – Sydney Detailed Table of Proportional Building Use (Count)

Sum Insured (\$ millions)	Residential buildings	0% - 5% Commercial	5% - 10% Commercial	10% - 15% Commercial	15% - 20% Commercial	20% - 30% Commercial	30% - 40% Commercial	40% - 50% Commercial	Other ¹ (assumed 15%)	All	%	
0 - 10	4	0	2	6	1	2	10	0	676	701	82%	
10 - 20	2	2	2	2	1	1	0	0	33	43	5%	
20 - 30	4	1	0	0	0	0	0	0	13	18	2%	
30 - 50	2	5	1	4	1	1	1	0	5	21	2%	
50 - 100	6	5	7	4	0	0	3	0	6	31	4%	
100 - 500	9	10	7	2	3	0	4	0	4	39	5%	
500+	0	0	0	0	0	0	1	0	0	1	0%	
Total Sydney	28	23	19	18	6	4	19	0	737	854	100%	
Total of interest (shaded)	15	15	14	6	3	4	19	0	10	86		
Proportion represented	54%	65%	74%	33%	50%	100%	100%		1%	10%		
Previous (2008) Buildings exposure											1935	
Total exposure (including mixed use buildings)											2021	(104%)

¹ These are land parcels that did not appear in RPData.

Source: RPData and Finity Consulting



F – Sydney Detailed Table of Proportional Building Use (Sum Insured)

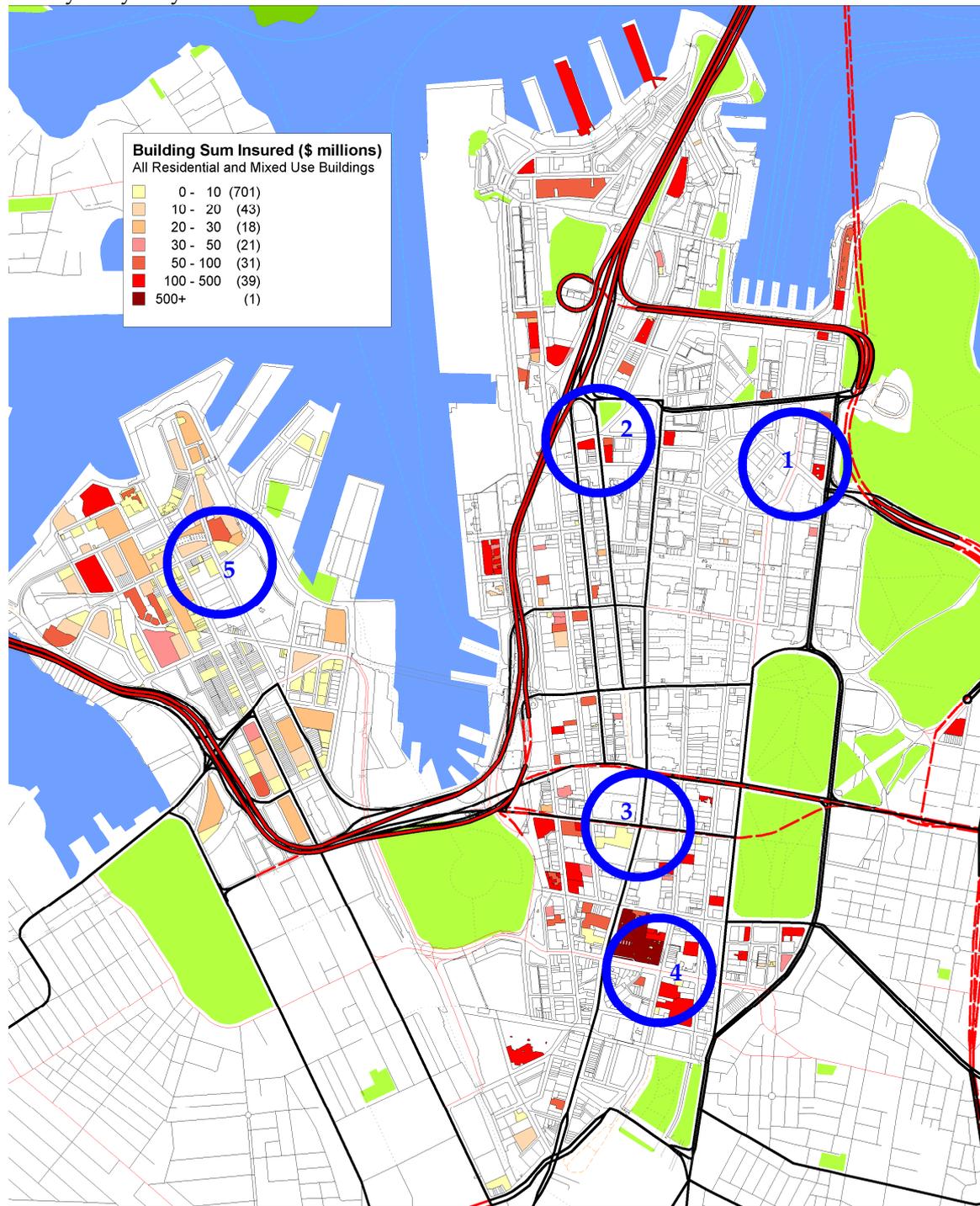
Sum Insured (\$ millions)	Residential buildings	0% - 5% Commercial	5% - 10% Commercial	10% - 15% Commercial	15% - 20% Commercial	20% - 30% Commercial	30% - 40% Commercial	40% - 50% Commercial	Other ¹ (assumed 15%)	All	%
0 - 10	23	-	10	31	9	4	38	-	1,389	1,503	10%
10 - 20	32	28	22	27	15	14	-	-	443	581	4%
20 - 30	89	23	-	-	-	-	-	-	326	438	3%
30 - 50	131	192	47	134	41	33	39	-	195	803	5%
50 - 100	500	357	490	270	-	-	170	-	428	2,215	15%
100 - 500	1,978	2,078	1,279	782	482	-	771	-	835	8,205	55%
500+	-	-	-	-	-	-	1,295	-	-	1,295	9%
Total Sydney	2,754	2,678	1,848	1,245	547	51	2,313	3,604	3,604	15,040	100%
Total of interest (shaded)	2,478	2,435	1,769	1,053	482	51	2,313	1,263	1,263	11,843	
Proportion represented	90%	91%	96%	85%	88%	100%	100%	35%	35%	79%	
Previous (2008) Buildings exposure										115,668	
Total exposure (including mixed use buildings)										127,511	(110%)

¹ These are land parcels that did not appear in RPData.

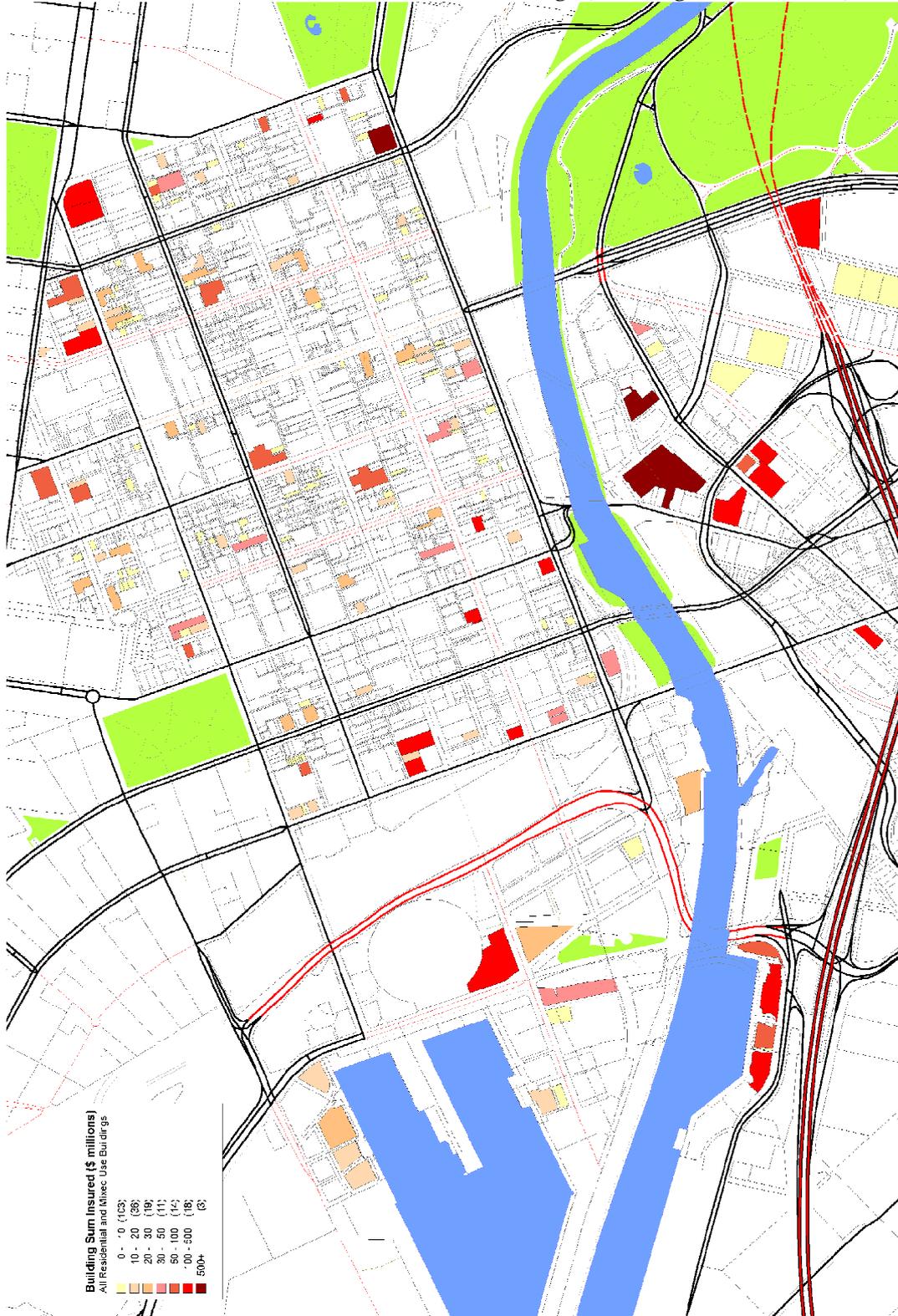
Source: RPData and Finity Consulting



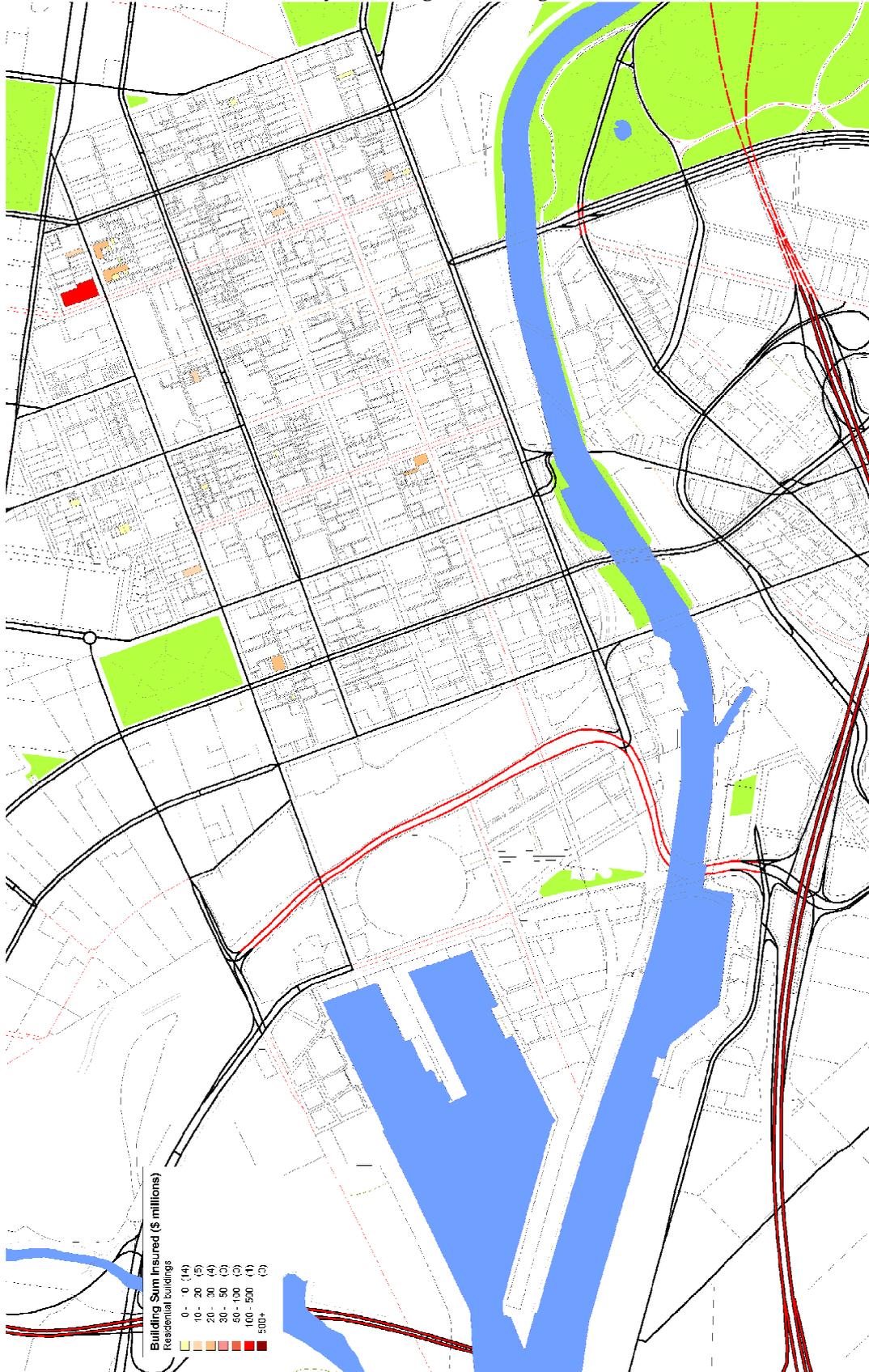
G – Sydney Key Risk Locations



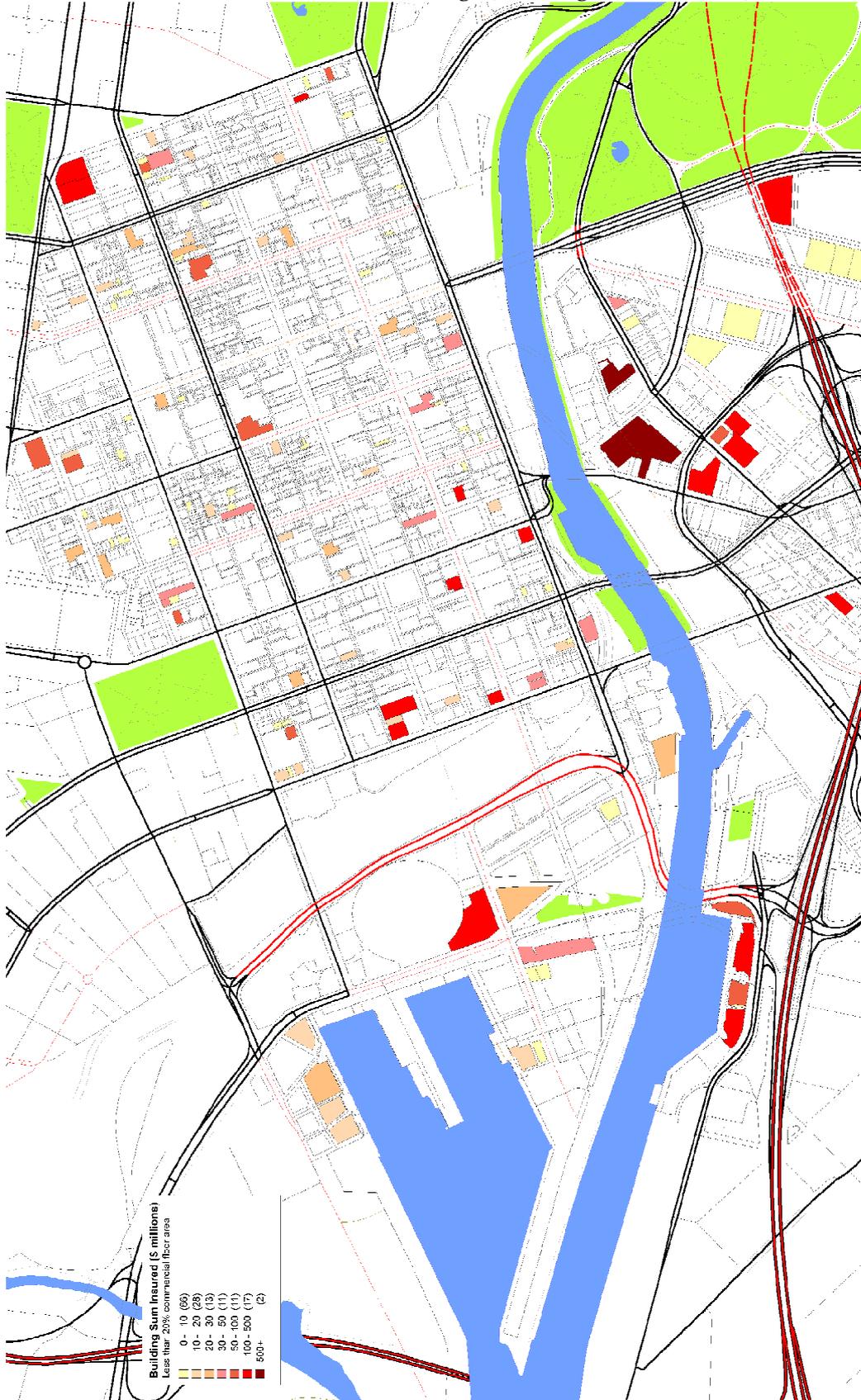
H – Melbourne All Residential and Mixed Use Buildings (Buildings Sum Insured)



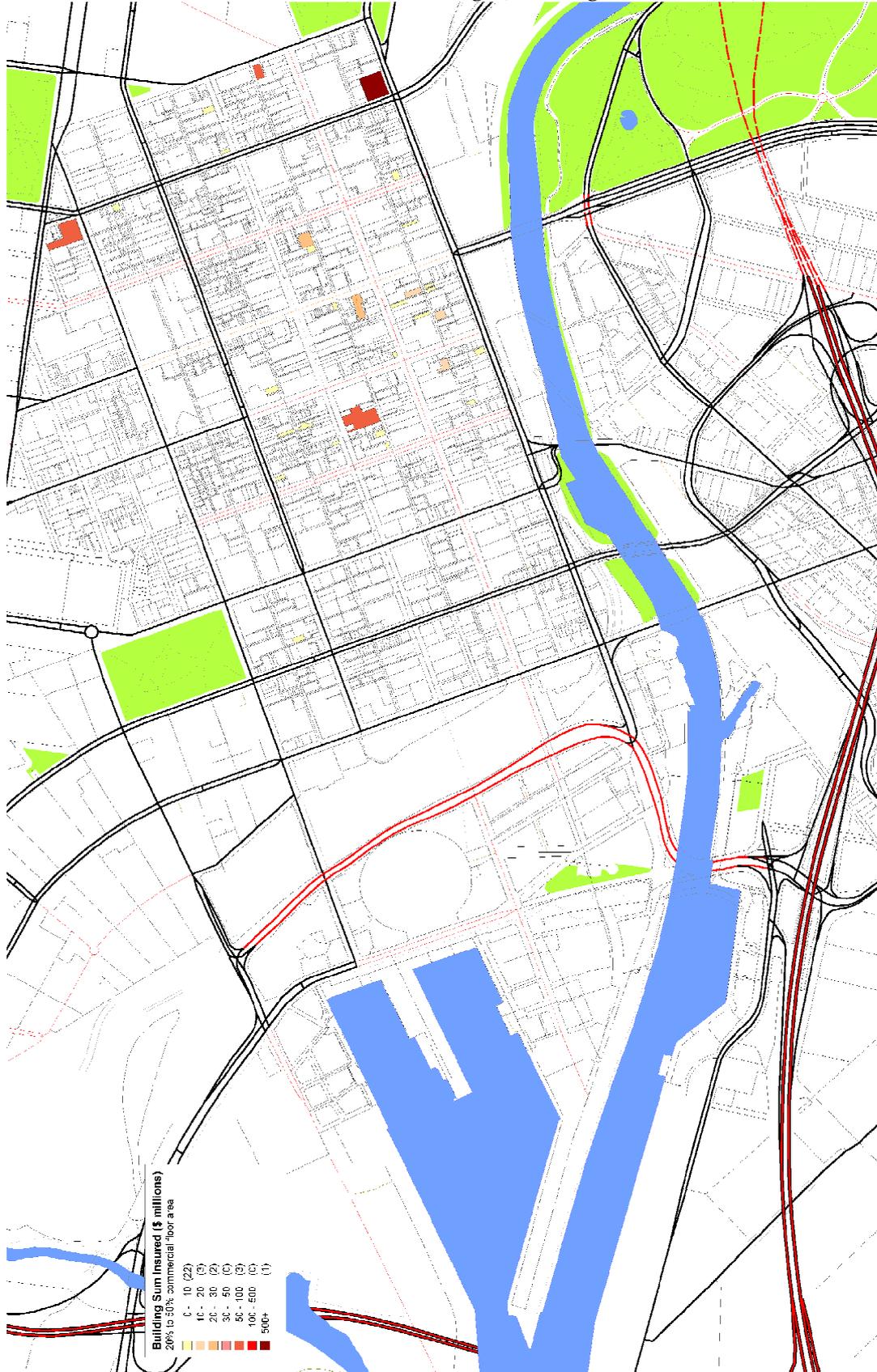
I – Melbourne Residential Only Buildings (Buildings Sum Insured)



J – Melbourne 0%-20% Mixed Use Buildings (Buildings Sum Insured)



K – Melbourne 20%-50% Mixed Use Buildings (Buildings Sum Insured)



L – Melbourne Detailed Table of Proportional Building Use (Count)

Sum Insured (\$ millions)	Residential buildings	0% - 5% Commercial	5% - 10% Commercial	10% - 15% Commercial	15% - 20% Commercial	20% - 30% Commercial	30% - 40% Commercial	40% - 50% Commercial	Other ¹ (assumed 15%)	All	%
0 - 10	14	5	6	7	4	11	4	8	44	103	50%
10 - 20	5	7	7	5	2	2	1	0	7	36	18%
20 - 30	4	4	0	2	3	1	0	1	4	19	9%
30 - 50	0	4	2	2	0	0	0	0	3	11	5%
50 - 100	0	2	1	2	0	0	0	3	6	14	7%
100 - 500	1	5	3	0	1	0	0	0	8	18	9%
500+	0	0	0	0	0	0	0	1	2	3	1%
Total Melbourne	24	27	19	18	10	14	5	13	74	204	100%
Total of interest (shaded)	1	7	4	2	1	14	5	13	16	63	
Proportion represented	4%	26%	21%	11%	10%	100%	100%	100%	22%	31%	
Previous (2008) Buildings exposure										1865	
Total exposure (including mixed use buildings)										1928	(103%)

¹ These are land parcels that did not appear in RPData.

Source: RPData and Finity Consulting



M – Melbourne Detailed Table of Proportional Building Use (Sum Insured)

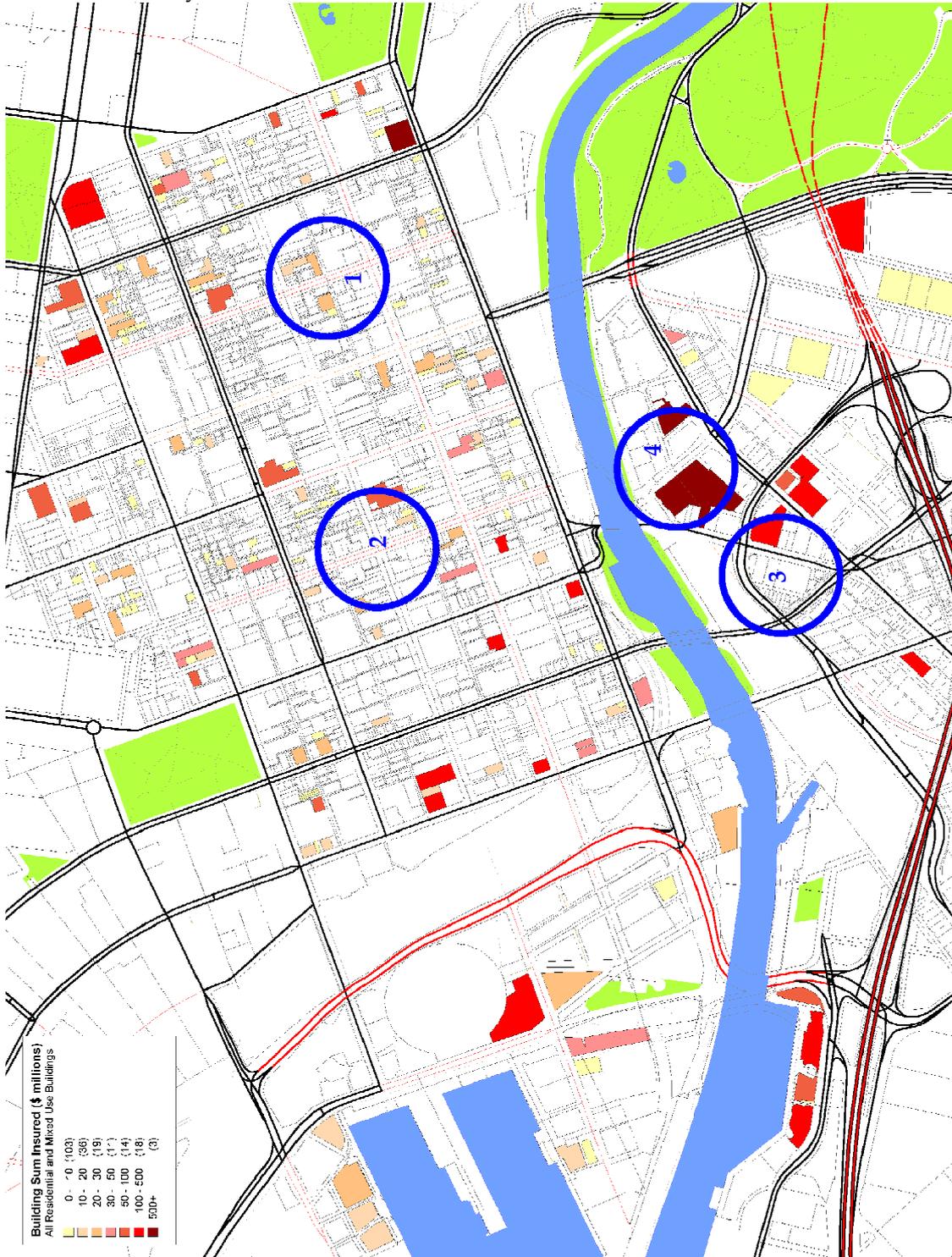
Sum Insured (\$ millions)	Residential buildings	0% - 5% Commercial	5% - 10% Commercial	10% - 15% Commercial	15% - 20% Commercial	20% - 30% Commercial	30% - 40% Commercial	40% - 50% Commercial	Other ¹ (assumed 15%)	All	%	
0 - 10	64	34	39	41	28	71	18	51	141	488	5%	
10 - 20	62	112	104	76	28	25	12	-	98	518	5%	
20 - 30	97	103	-	46	78	24	-	27	105	480	5%	
30 - 50	-	151	70	81	-	-	-	-	106	408	4%	
50 - 100	-	153	69	144	-	-	-	216	450	1,031	10%	
100 - 500	459	1,389	361	-	121	-	-	-	1,883	4,212	42%	
500+	-	-	-	-	-	-	-	698	2,282	2,980	29%	
Total Melbourne	681	1,942	643	388	256	120	31	993	5,064	10,117	100%	
Total of interest (shaded)	459	1,542	429	144	121	120	31	993	4,615	8,453		
Proportion represented	67%	79%	67%	37%	47%	100%	100%	100%	91%	84%		
Previous (2008) Buildings exposure											65,206	
Total exposure (including mixed use buildings)											73,659	(113%)

¹ These are land parcels that did not appear in RPData.

Source: RPData and Finity Consulting



N – Melbourne Key Risk Locations



O – Attributes of data provided by RP Data Limited

Where available, for Sydney and Melbourne CBD commercial properties as defined in RP Data's Cityscope product geographic data:

- (i) address of building
- (ii) number of commercial tenants
- (iii) number of residential units
- (iv) commercial lettable area
- (v) residential unit area
- (vi) total building area
- (vii) last sale price (for entire building)
- (viii) date of last sale
- (ix) Geocode National Address File (GNAF) code with each record

General Circular



Insurance Council of Australia Limited ABN 50 005 617 318 Level 3 56 Pitt Street Sydney NSW 2000 Australia
Telephone: 61 2 9253 5100 Outside Metro Area: 1300 728 228 Facsimile: 61 2 9253 5111

Circular No: G1573
Date: 26 September 2003
Subject: Terrorism Insurance Act – Residential Buildings
Enquiries: Peter Anderson
(02) 9253 5135 or panderson@ica.com.au

ICA is conscious of its obligations under the Trade Practices Act and hence may only recommend a course of action for members to consider. It is entirely a domestic matter for individual members to determine whether or not they agree with any recommendations advanced by ICA and to decide what course they wish to adopt as an insurer.

The ICA has had discussions with the Australian Reinsurance Pool Corporation (**ARPC**) concerning the development of a protocol to assist insurers to determine whether or not a building is a residential building and, as a consequence, whether it is excluded under Item 2 of Schedule 1 of the Terrorism Insurance Regulations. A copy of Item 2 of Schedule 1 and of Regulation 7.1.12 and 7.1.13 of the Corporations Regulations is attached.

We have agreed a protocol with ARPC as to the approach to be taken by an insurer and if taken, would be acceptable to ARPC in determining whether or not a building is residential and whether or not the policy of insurance in relation to that building is reinsured under the reinsurance arrangements with ARPC. The protocol is based on applicable legal principles and has regard to the decision of the South Australian Full Court in *Gray v Mercantile Mutual Insurance (Australia) Ltd* which considered similar issues under the Insurance Contracts Regulations.

It is noted that, ultimately, if an event occurred the determination as to whether or not a policy of insurance was covered by the Terrorism Insurance Act may be a matter for determination by the Courts and that a court may take a view different from the conclusions reached in the utilisation of this protocol. However, it is believed that except in unusual cases, the protocol will lead to the correct outcome. If a policy of insurance is issued and a reinsurance premium is not paid to ARPC and it is subsequently found that the building was not a residential building and should have been covered, then ARPC will provide that cover on the basis of the terms of the Reinsurance Agreement, that is that the premium that ought to have been paid is then paid.

The methodology for determining whether a building is residential or not under the protocol is as follows:

- (a) Is the area of usage or intended usage for residential purposes more than 50%? If so, the building is treated as residential unless one or more of the factors below lead to a contrary conclusion;
- (b) Consideration of the other factors should be given particularly where the residential percentage use factor is in the range of 40% to 60%.

- (c) The other factors are also relevant where a significant portion of the building is unoccupied and is likely to remain unoccupied even though it may ultimately be intended for a particular use.
- (d) A residential building does not include a hotel, motel, boarding house, a building under construction, a temporary building or structure or a demountable or moveable structure or a caravan. If the overall character of the building falls within one of these categories, then it is non-residential.
- (e) Where further analysis is required, then that analysis should focus upon the degree, extent and intensity of use or intended use of the building for its various purposes. This analysis should be by reference to objectable objective or observable factors. These factors may include the following:
 - (i) the design and structure of the building;
 - (ii) the manner in which the building is represented or promoted;
 - (iii) whether or not any component of the building is in full-time or part-time use;
 - (iv) the manner in which the building is fitted out and furnished;

Judgment will be required to weigh these factors. However, there must be a reasonable and logical approach to the judgment process.

- (f) The insurer shall bring to the attention of an insured a decision to treat the policy as covered by the Terrorism Insurance Act and that it has determined that the building is not principally or primarily a residence.
- (g) As the Corporations Regulations are also relevant to the determination of whether a contract of insurance is provided to a retail or wholesale client under the Financial Service Reform Act (Chapter 7 of the Corporations Act) then there should be a reasonable and logical connection between the treatment of the contract for that purpose and under the Terrorism Act.
- (h) In relation to particular issues which have been raised, the following guidance is given:
 - (i) where a building is not a hotel, motel or boarding house but the units or the building is let on a temporary basis, eg. holiday lettings, that fact will not lead to the conclusion that the building is not a residence;
 - (ii) where a single policy covers more than one building (multiple building scenario):
 - (A) first, it is necessary to determine whether the policy (considered as a whole) meets the description of any of the classes of insurance excluded under Item 2 of Schedule 1 of the Terrorism Insurance Regulations. Where a single policy provides cover for several buildings, some of which meet the description of "home building" or "residential building" and others which do not meet these descriptions, it is not open under the Regulations to treat each building individually such that to the extent that the policy covers buildings which are home buildings, the policy is ineligible and to the extent that the policy covers buildings that are not home buildings, the policy is eligible. The effect of Item 2 of Schedule 1 is that either the contract of insurance as a whole is ineligible (because the policy meets one of the classes prescribed therein) or the policy as a whole is eligible;
 - (B) second, where a policy covers more than one building, the insurer must determine whether or not the policy mainly covers *home buildings* (or the contents of *residential buildings*). Accordingly, the insurer must analyse each building covered by the contract in accordance with this protocol and

- (C) determine whether or not each building is a home building. Then (taking Item 2(a) of Schedule 1 as an example) if the policy mainly covers home buildings, then that policy is not an eligible insurance contract for the purposes of the Terrorism Insurance Act. On the other hand, if the policy mainly covers buildings which are not *home buildings* then prima facie that policy will be an eligible contract for the purposes of the Act (provided that it does meet the description in section 7(1) of the Act and is not otherwise excluded).



Alan Mason
Executive Director

Schedule 1 Exclusions

(regulation 5)

- 1 A contract that includes provisions of insurance, although the contract would not ordinarily be regarded as a contract of insurance.
- 2 A contract of insurance that provides cover (whether or not the cover is restricted) for:
 - (a) the destruction of, or damage to, a home building within the meaning given by regulation 7.1.12 of the *Corporations Regulations 2001*; or
 - (b) the loss of, or damage to, the contents of a residential building within the meaning given by regulation 7.1.13 of the *Corporations Regulations 2001*; or
 - (c) any of the following:
 - (i) financial loss for fares for any form of transport or accommodation to be used in the course of a specified journey if the insured person does not start or complete the journey;
 - (ii) loss or damage to personal belongings while the insured person is on a specified journey;
 - (iii) a sickness or disease contracted, or injury sustained, by the insured person on a specified journey;
 - (iv) loss, damage or compensation for an event affecting the insured person on a specified journey that ordinarily forms a part of insurance commonly regarded as travel insurance, including loss of cash or credit cards, legal liability, hijack, kidnap or ransom; or
 - (d) loss or damage to property that is:
 - (i) wholly or predominantly used for personal, domestic or household purposes by the insured, a relative of the insured or a person who resides with the insured; and
 - (ii) ordinarily used for that purpose.

7.1.12 Meaning of *retail client* and *wholesale client*: home building insurance product

- (1) For subparagraph 761G (5) (b) (ii) of the Act, a *home building insurance product* is a contract or part of a contract that provides insurance cover (whether or not the cover is limited or restricted in any way) in respect of destruction of or damage to a home building.
- (2) A home building insurance product does not include insurance entered into, or proposed to be entered into, for the purposes of a law (including a law of a State or Territory) that relates to building or construction work in relation to a home building.
- (3) In this regulation:

home building means:

 - (a) a building used, or intended to be used, principally and primarily as a place of residence; and
 - (b) out-buildings, fixtures and structural improvements used for domestic purposes, being purposes related to the use of the principal residence;

on the site and, without limiting the generality of the expression, includes:

 - (c) fixed wall coverings, fixed ceiling coverings and fixed floor coverings (other than carpets); and
 - (d) services (whether underground or not) that are the property of the insured or that the insured is liable to repair or replace or pay the cost of repairing and replacing; and
 - (e) fences and gates wholly or partly on the site.

site, in relation to a building, means the site specified in the relevant contract of insurance as the site on which the building is situated.
- (4) A home building does not include:
 - (a) a hotel; or
 - (b) a motel; or
 - (c) a boarding house; or

- (d) a building that:
 - (i) is in the course of construction; and
 - (ii) is being constructed by the insured, or an intending insured, in the course of a construction business; or
- (e) a temporary building or structure or a demountable or moveable structure; or
- (f) a caravan (whether fixed to the site or not).

7.1.13 Meaning of *retail client* and *wholesale client*: home contents insurance product

- (1) For subparagraph 761G (5) (b) (iii) of the Act, a *home contents insurance product* is a contract or part of a contract that provides insurance cover (whether or not the cover is limited or restricted in any way) in respect of loss of or damage to the contents of a residential building.
- (2) A home contents insurance product does not include:
 - (a) insurance to or in relation to which the *Marine Insurance Act 1909* applies; or
 - (b) insurance entered into, or proposed to be entered into, for the purposes of a law (including a law of a State or Territory) that relates to:
 - (i) workers' compensation; or
 - (ii) compulsory third party compensation.
- (3) In this regulation:

contents, in relation to a residential building, means any of the following items:

 - (a) furniture, furnishings and carpets (whether fixed or unfixed);
 - (b) household goods;
 - (c) clothing and other personal effects;
 - (d) a picture;
 - (e) a work of art;
 - (f) a fur;
 - (g) a piece of jewellery;
 - (h) a gold or silver article;
 - (i) a document of any kind;
 - (j) a collection of any kind;
 - (k) swimming pools that:
 - (i) are not fixtures; and
 - (ii) are owned by the insured or by a member of the insured's family ordinarily residing with the insured;

but does not include an article or thing to which the definition of *residential building* applies.

residential building means:

- (a) a building used principally and primarily as a place of residence on the site; and
 - (b) out-buildings used for domestic purposes, being purposes related to the use of the principal residence on the site.
- (4) A residential building does not include:
- (a) a hotel; or
 - (b) a motel; or
 - (c) a boarding house; or
 - (d) a building that is in the course of construction; or
 - (e) a temporary building or structure or a demountable or moveable structure.