



11 February 2015

Mr Ian Simpson
Chief Executive Officer
Earthquake Commission
PO Box 790
WELLINGTON

Dear Ian

EQC – Supplementary information: 31 December 2014

The Insurance Liability Valuation report for EQC as at 31 December 2014 provides a great deal of information on the valuation that we undertook. Despite this, it cannot contain all of the detail in the report or it would become unwieldy.

We recognise that the executive and Board of EQC have been interested in a number of features of the land model and the building model and this letter sets out some supplementary analysis on these two models.

EQC land claims costs

We have estimated a split of EQC land claims costs by damage category. Some properties may be eligible for more than one of the damage categories; Category 1-7, ILV or IFV. In these cases, some judgement needs to be applied to determine an appropriate split of EQC's liability.

The issue is further complicated when the total damage for a property exceeds the minimum lot valuation and the property is then 'capped out'.

This spreading of EQC liability has been calculated by MJW and should be taken as being indicative only.

Split by land damage category

The undiscounted gross claims costs are shown below.

The land liability for ILV and IFV properties has been estimated by MJW. These figures have been determined by pro-rating the capped claims costs per event applicable to both ILV and IFV in the same ratio as estimated damage to the property.

9(2)(j)



Key points to take from this table:

- 9(2)(j)
- Category 1-7 damage is a small portion of the overall land liability
- The estimated ultimate claims costs for ILV and IFV have increased since 30 June 2014.

EQC building claims costs

The estimated building ultimate claims costs are determined from a combination of two models; the ACE model and the SAS model.

SAS model

The SAS model was derived by reference to a sample of 2,000 manually assessed properties. This assessment was carried out in December 2011. As the sample of 2,000 properties will not change, the result from this model will not change. As a consequence, it may not reflect the actual experience of the building claims. It is believed that the SAS result is higher than what will be borne out in practice.

ACE model

The ACE model was developed to address the deficiency of the SAS model and uses the actual experience of the properties that have been settled to estimate the remaining properties. The ultimate claims estimated using the ACE model will tend towards the true (currently unknown) ultimate as more claims are settled.

One feature of the building claims process is that the more difficult claims take longer to settle and will therefore dominate the tail of the programme. As such there is an element of cost escalation inherent in these properties which may not be fully captured in the ACE model.

Without appropriate allowance for this, these properties may cause the ACE model to underestimate the ultimate claims costs.

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Credibility weighting

As a consequence of this, it is appropriate to weight the two models to achieve an overall ultimate claims cost. The credibility weighting used for this valuation was 70% ACE, 30% SAS. The table below illustrates the results of the two models and the weighted result.

Canterbury earthquakes only**EQC building claims - Undiscounted gross claims costs**

	EQ1 \$m	EQ2 \$m	EQ3 \$m	EQ4 \$m	AS \$m	Total \$m
SAS	2,317	4,805	656	282	248	8,307
ACE	2,244	4,297	388	125	198	7,253
Weighted	2,266	4,449	468	172	213	7,568

EQC gross incurred claims costs

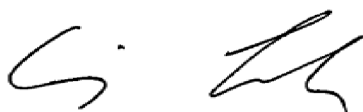
The gross ultimate incurred land and building claims costs can be seen in the overall ultimate claims cost table from the 31 December 2014 ILVR.

Canterbury earthquakes only**Estimated ultimate claims costs (undiscounted, excluding CHE) - 31 December 2014 valuation**

	EQ1 \$m	EQ2 \$m	EQ3 \$m	EQ4 \$m	AS \$m	Total \$m
Gross ultimate incurred claims cost - central estimate						
Land	434	1,445	212	27	1	2,120
Building	2,266	4,449	468	172	213	7,568
Contents	123	285	27	12	8	456
Total	2,824	6,179	707	212	222	10,143

I trust that this analysis is found useful but please let me know if you should require further information.

Yours sincerely



Craig Lough

Fellow of the NZ Society of Actuaries

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