**Testimony of Sheri L. Scott, FCAS, MAAA**
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**For the NAIC Public Hearing on Private Lender-Placed Insurance**

## Biography

I am an independent consulting actuary specializing in ratemaking and reserving for catastrophe prone and high volatility insurance products, including lender placed insurance (LPI) as well as residential homeowners and residential dwelling fire insurance products (RPI). Prior to becoming a consulting actuary I was senior vice president of Bank of America where I was the chief pricing actuary and led the actuarial pricing department for LPI products underwritten by Balboa Insurance Group. While leading the actuarial pricing department for LPI, I led the development and roll out of new generation multi-variate rating for Balboa's LPI products in 50 states. I am qualified to practice in this area as a Fellow of the Casualty Actuarial Society and a member of the American Academy of Actuaries, and am uniquely positioned to provide comments specific to LPI ratemaking. A brief biography is included in Appendix A. I was engaged by Jorden Burt LLP on behalf of American Security Insurance Company to offer comments at this hearing.

I was assisted in my analysis by Dr. David Appel, Director of Milliman's Economics Consulting Practice, specifically as it relates to the underwriting profit provisions in LPI rates, the impact of imposing a minimum loss ratio on LPI profitability, and the issue of reverse competition. Dr. Appel has more than 30 years of experience in the analysis, evaluation and pricing of insurance risk; his biography is also included in Appendix A.

## Executive Summary

This report provides a broad overview of Lender Placed Insurance ratemaking, highlighting considerations that distinguish LPI from the more common RPI that typically provides protection for real property.

LPI is a property and casualty (P&C) insurance product, and as such its ratemaking is governed by principles established by the Casualty Actuarial Society. These principles require that LPI rates be sufficient to cover all costs associated with the risk transfer contemplated under the insurance policy. LPI is a commercial property insurance coverage because it insures the lender's interest in the collateral standing behind a loan (typically a home or a car). In this report we focus on LPI as it relates to collateral on a home, and highlight the differences between LPI and the related RPI coverages available in the market.

To understand the components included in ratemaking and how they may differ between LPI and RPI, the report first provides a summary of differences in the policy placement and administrative processes. Then it provides a summary of relevant differences between LPI and RPI from a ratemaking perspective and reviews the general ratemaking components of P&C products. The report continues with two additional sections that detail how P&C ratemaking normally incorporates specific characteristics of the insured individual and property along with relevant catastrophe exposure information, and how this relates to LPI. Finally, it concludes with a brief discussion of two propositions that have recently

surfaced in New York State: that LPI might benefit from minimum loss ratio requirements and that there is reverse competition in the LPI marketplace.

The principal conclusion from the analysis described herein is that there are major differences between LPI and RPI which warrant higher rates for LPI than for RPI. Higher rates are required for LPI due to greater exposure, driven by an inability to underwrite and rate at an individual house level, a higher concentration of high risk exposures from catastrophe as well as other hazards, inability to manage catastrophe exposure, and a higher cost to manage non-catastrophe exposures. In addition, the report also concludes that the imposition of a 80% minimum loss ratio would result in LPI insurers earning negative returns on equity, and that there is little evidence demonstrating that "reverse competition" is an issue of concern in the LPI market.

**Summary of difference between RPI and LPI**

Differences in insurance placement and administration process:

| Residential | Lender Placed |
|---|---|
| Insurance broker works with homeowner to determine value of property and coverage limits. | Servicer uses the last known residential coverage amount determined by the borrower's carrier as an estimate of replacement cost. |
| Broker or insurance company creates and maintains system to capture data required to place and underwrite policy. This infrastructure can accommodate many RPI lines and its cost spread across many lines of RPI. | Servicer and LPI carrier utilize or create specialized computer systems to capture data required to not only track exposed loans but also to place coverage and manage portfolio risk. These specialized computer systems feed LPI specific data to insurance company systems. |
| Insurance company underwrites each risk by reviewing the limits and attributes of each house and occupant (i.e.: location, protection class, not vacant, age of roof, in maintained condition, etc.). Some of this underwriting is performed by the agent to determine whether risk meets insurance company underwriting requirements. Insurance company only accepts risks meeting underwriting criteria. | Insurance company does not underwrite individual risks, but manages aggregate risk in each lender portfolio to evaluate exposure. Risk management often includes review of high value home limits to determine what portion of exposure requires additional reinsurance (i.e.: XOL or facultative), and concentration of book by location, among other items. |
| Insurance company often excludes vacant or unoccupied risks and excludes damage intentionally caused by homeowner. | Premium sufficient to cover percent of portfolio that is vacant or unoccupied, and to include coverage for damage intentionally caused by homeowner. |
| Select desired quality of risks, vacancy distribution, etc. Coverage may be cancelled for change in risk. | Often vacant, unmaintained, with a prior loss history, and catastrophe prone risks. Coverage provided even if change in risk (e.g.: property becomes vacant). |
| Able to control gross catastrophe exposure via accumulation limits. | No control over catastrophe exposure and accumulation risk, leading to higher reinsurance and capital costs. |
| Standard expenses to cover commission to brokers, underwriting, policy administration, etc. Policies are typically issued on an annual basis and the expenses spread across a full year's premium or the life time of the policy. | Expenses include similar items as RPI, although commission may be paid to licensed lender insurance agency affiliates instead of brokers and underwriting is done at the portfolio rather than risk level. LPI often incurs higher policy administration costs due to daily portfolio monitoring and certificate issuance instead of annual which is typical of RPI. |
| Premium paid by homeowner or through escrow account. Insurance cancelled for non-payment. | Premium initially paid by lender and coverage provided even if lender cannot recover premiums from homeowner (i.e.: payment or loan default). |
| Deductible borne by homeowner. | Deductible borne by homeowner, or lender if it is not recovered from the homeowner. |

Differences in ratemaking:

| Residential | Lender Placed |
|---|---|
| Actuarial Society Statement of Principles Regarding Property and Casualty Insurance Ratemaking states "A rate is an estimate of the expected value of future costs." | The same for all property and casualty insurance ratemaking including LPI. |
| Actuarial Society Statement of Principles Regarding Property and Casualty Insurance Ratemaking states "A rate is reasonable and not excessive, inadequate, or unfairly discriminatory if it is an actuarially sound estimate of the expected value of all future costs associated with an individual risk transfer." | The same for all property and casualty insurance ratemaking including LPI. |
| Historical non-catastrophe loss and expense analyzed. | The same process as RPI. For LPI, non-catastrophe frequency of theft and vandalism, intentional damage (both moral and morale) claims much greater than RPI due to high concentration of vacant homes and default or foreclosure conditions. Fire losses are also increased due to concentrations in areas with poor or no protection, vacant homes, and morale driven losses. |
| Expected future catastrophe loss and expenses estimated. | The same process as RPI. For LPI, expected concentration of future catastrophe loss (catastrophe relative to non-catastrophe loss) is greater than for RPI due to higher distribution in high catastrophe prone areas. (Over the past ten years RPI carriers have reduced exposure in catastrophe prone areas of coastal states, shrinking RPI market supply and increasing LPI policies.) |
| Catastrophe exposure managed through underwriting and reinsurance. Many underwriting guidelines require catastrophe management by the homeowner like hurricane shutters and other wind mitigation building standards, and surcharge or do not accept the risk when wind mitigation building standards are not met. | Variation in expected future costs due to catastrophes much greater in LPI than RPI:<br>• lack of ability to manage catastrophe exposure and accumulation within each lender's portfolio<br>• higher concentration of LPI book located in catastrophe prone areas where RPI market offerings are insufficient<br>• no ability to underwrite individual risks to mitigate catastrophe risk<br>• higher reinsurance costs in LPI than RPI due to lack of individual risk underwriting leading to higher reinsurance retentions and requirement to review cost benefit of reinsurance for high layers of coverage. |
| Expected profit and contingency driven by expected returns by shareholders for personal lines industry. Some states, like Florida, have regulated expected profits leading RPI carriers to withdraw from the market when profits are insufficient to cover cost to hold capital and expected return for risk. | Expected profit and contingency should be higher for LPI due to higher risk and higher volatility of LPI. Should profit and contingency become regulated without appropriate consideration for higher risk and volatility, LPI carriers may decline to provide lenders with the continuous coverage necessary to satisfy secondary market requirements, thereby exacerbating mortgage lending constraints, and potentially driving up interest rates to borrowers. |

**Calculation of actuarially sound rates**

Calculating actuarially sound rates involves use of the following formula.

Insurance Rate = Expected non-catastrophe loss per policy in prospective rate period
+
Expected catastrophe loss per policy in prospective rate period
+
Expected loss adjustment expense in prospective rate period
+
Expected expense during prospective rate period
+
Target profit and contingencies commensurate with exposure and risk.

***Expected non-catastrophe loss per policy in prospective rate period***

Expected non-catastrophe loss per policy in the prospective rate period is typically calculated by reviewing historical non-catastrophe loss per policy and trending the loss forward for inflation and other factors which impact loss. Many actuaries use the most recent three to five years of historic non-catastrophe loss to estimate the expected future non-catastrophe loss, and then apply the most recent observed loss trends to project historical losses to the prospective rate period.

***Expected catastrophe loss per policy in prospective rate period***

Expected catastrophe loss per policy in the prospective rate period may be calculated using the following three methods:

1. Catastrophe models
2. Industry rating organizations
3. Projecting historical catastrophe losses forward to prospective period

The most commonly accepted method of estimating catastrophe loss today is through the use of catastrophe models, for several reasons:

- Catastrophe models take into account the specific insurance provisions and attributes for each house within the insurance company's portfolio, as well as the historical weather records specific to the location of each risk, and simulate up to 100,000 years of future loss experience on the insurance company's actual exposures. This provides the most accurate measure of expected future catastrophe losses for the specific insurer's portfolio.
- Industry rating organization data is typically aggregate information for the entire industry, and as such is not necessarily applicable to the specific insurance company's coverage limits, exposure or individual risk attributes. Should these characteristics differ between individual company and the industry as a whole, the use of industry average losses would be an inferior method of estimating expected future catastrophe costs for an individual insurance company.
- Reviewing and trending historical catastrophe losses forward to the prospective period is likely the least viable option of the three methods presented above as:
    - Historical catastrophe loss data is very limited

- Concentration of housing in coastal areas has increased significantly
- Policy limits and rebuilding costs have increased significantly

Using historical catastrophe experience to project future catastrophe losses without any adjustment is not an actuarially sound method of calculating rates, and can result in severely inadequate estimates, increasing the risk of insurer insolvency in catastrophe prone areas.

Catastrophe models estimate the expected catastrophe cost per policy, called the average annual loss. This average annual loss is added to the estimated non-catastrophe loss per policy, to arrive at the estimated non-catastrophe and catastrophe loss per policy for the prospective period.

It is common for insurance companies to manage the variability of loss by purchasing reinsurance. The most common types of reinsurance seen in LPI are:

- Quota share reinsurance, where a percentage of both the premium and the loss across an entire book of business is shared with the reinsurer.
- Excess of loss reinsurance, which covers exposure on one or multiple houses, for one or multiple events over a retention amount. Excess of loss reinsurance is often used to help reduce exposure to catastrophes. For RPI and LPI alike, excess of loss reinsurance rates are determined by the reinsurance marketplace and availability. Given the greater catastrophic risk inherent in LPI, these carriers can be subject to higher prices, higher retentions, and constraints on available capacity. As a result, LPI carriers must often seek risk transfer through CAT Bonds or other risk transfer mechanisms, all with their additional associated costs. The higher reinsurance cost and lower availability for LPI carriers make it more difficult and expensive to manage LPI's catastrophe exposure through reinsurance.

Reinsurance is often limited to a single catastrophic event, and additional reinsurance premium is required to cover subsequent catastrophes during the reinsurance period.

When reinsurance is purchased, the net cost of reinsurance is added to the rate. The net cost of reinsurance is the premium paid for reinsurance minus the losses the insurer would expect to recover from the reinsurer. For example, if the reinsurance contract cost $100 million in premium and the company is expected to recover $40 million in loss and expense ceded to the reinsurer, then the net cost of reinsurance is $60 million. According to AM Best, for 2009 and 2010, LPI insurers ceded roughly 30% of direct written premium to reinsurers, a reflection of the high amount of risk and volatility found in LPI.

***Expected loss adjustment expense in prospective rate period***

Expected loss adjustment expense covers the cost of reporting, adjusting and settling claims. Often the historical loss adjustment expense as a percent of loss are analyzed and used to apply a loss adjustment factor to the expected future loss, to arrive at estimated future loss and loss adjustment expense per policy. Loss adjustment expenses are often analyzed separately for catastrophe and non-catastrophe claims.

***Expected expense during prospective rate period***

Expected expense during prospective rate period includes the following expenses:

1. Commission and other acquisition costs
2. Underwriting
3. Policy administration and other expenses

1. The table below summarizes commissions as a percent of direct written premium for the past ten years for the LPI and RPI industries. RPI is typically reported under the annual statement line, "Homeowners", and LPI is typically reported under the annual statement line "fire and allied". Since the below data comes from the annual statement insurance expense exhibit and state page 14, the table illustrates both the "Homeowners" and "fire and allied" annual statement lines, as well as the LPI portion of the fire and allied line.

**Commission as % DWP**

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lender Placed Insurance** (Note 1) | | | | | | | | | | |
| NY | 7% | 10% | 10% | 10% | 12% | 16% | 12% | 11% | 6% | 8% |
| FL | 10% | 11% | 11% | 10% | 12% | 12% | 9% | 9% | 5% | 8% |
| LA | 11% | 11% | 10% | 11% | 14% | 15% | 10% | 10% | 7% | 8% |
| All States | 11% | 13% | 13% | 9% | 11% | 13% | 9% | 9% | 6% | 9% |
| **Homeowners - Industry Aggregate** | | | | | | | | | | |
| NY | 15% | 15% | 16% | 15% | 15% | 15% | 15% | 15% | 15% | 15% |
| FL | 13% | 12% | 13% | 14% | 12% | 12% | 12% | 13% | 13% | 12% |
| LA | 12% | 12% | 13% | 13% | 12% | 12% | 12% | 13% | 13% | 13% |
| All States | 14% | 14% | 14% | 14% | 14% | 14% | 13% | 13% | 13% | 13% |
| **Fire and Allied Lines - Industry Aggregate** | | | | | | | | | | |
| NY | 12% | 13% | 13% | 13% | 11% | 12% | 12% | 12% | 12% | 12% |
| FL | 12% | 13% | 13% | 13% | 11% | 11% | 11% | 12% | 11% | 11% |
| LA | 13% | 13% | 15% | 13% | 14% | 12% | 13% | 12% | 12% | 12% |
| All States | 13% | 13% | 14% | 13% | 11% | 12% | 12% | 12% | 12% | 12% |

**Notes:**

1. Lender Placed Insurance (LPI) 2 major carriers are American Security Ins. Co., and Balboa Ins. Co. and its affiliated P&C Insurers. Balboa is affiliated and includes Meritplan Ins. Co, Newport Ins. Co, and Newport E&S Ins. Co. LPI lines of business are fire & allied for all states.
2. Direct Written Premium and Commissions are from Statutory Page 14.

The above table illustrates that LPI commissions have consistently been lower than RPI and fire and allied commissions, and remain lower today. For example, in 2011, the national LPI commission rate was 9%, compared to a RPI national commission rate of 13%, and a national fire and allied commission rate of 12%. Commissions for LPI, RPI, and fire and allied depend on the services provided by the entity receiving the commission. For RPI, the services performed by the insurance broker receiving the commission typically include discussing coverages and limitations with the homeowner and entering the required information into the insurance company's sales or policy administration system to facilitate the issuance and maintenance of the policy. Brokers also usually collect the premium deposit, and sometimes adjust small claims on behalf of the insurance company. In LPI, the lender/servicer determines coverages and limits and creates and maintains specialized computer systems to extract the required information from the lender/servicers' systems, to assist the insurance company with policy issuance and administration.

When RPI brokers individually solicit and take applications to underwrite houses this cost is borne by the RPI broker and is compensated through the commission received on the policy. Although the LPI broker does not solicit individual exposures, the LPI broker manages the program at the portfolio level, which involves analysis using data from the above specialized systems. LPI brokers manage the insurance provider, monitor compliance with insurance requirements, often create necessary disclosures or perform other tasks similar to RPI brokers.

At the request of the homeowner or as required by investors, lenders may create an escrow account to pay for RPI premiums when they become due. In such a situation, the homeowner pays into the escrow account in advance of when the insurance premium will be due. The lender pays the premiums when they become due. Some homeowners choose to pay premiums directly to the insurance company without the use of an escrow account. When RPI premiums are not paid the insurance company begins the process of cancelling coverage for non-payment.

For LPI the lender/servicer pays the premium upfront, and then attempts to collect the premium from the homeowner. This shifts the premium finance risk to the lender/servicer. At times, both the LPI premium and (in the event of a claim) the LPI deductible, are not recoverable by the lender/servicer from the homeowner. For example, should a property be foreclosed upon, the lender may not recover the LPI premium from the homeowner for the period the home was insured prior to foreclosure, and may also not recover an LPI deductible if there was a loss.

Commissions paid to a licensed agency affiliate help cover the cost of numerous services the licensed agency affiliate provides to the servicer, including portfolio management, selection of the LPI insurer, negotiation of contractual agreements detailing servicing standards, advancement of escrow amounts, collection and distribution of premium, management of the LPI insurer, and compliance activities. As the liaison between the LPI insurer and the servicer, these agents, like those in the RPI insurance market, perform essential functions for which compensation is necessary.

Another service offered by the RPI broker as part of commission is evaluating and monitoring the quality of the business sent to the insurance company in light of the insurer's underwriting requirements. Insurance companies often use commissions to encourage brokers to adequately assess the limits and coverage needs of a home so that the risk is adequately priced and to send a good quality book of business to the insurance company. Similarly, in LPI, lender/servicers are encouraged to adequately report the vacancy and other attributes of their portfolios to assist the insurance company with underwriting the portfolios and more effectively manage its risk. Commission may be paid to the agency affiliate to encourage the lender/servicer to maintain high data quality standards and take other measures to assist the insurance company with portfolio underwriting and improve insurance company profitability.

2. In RPI, underwriting is typically done at the individual risk level before a policy is placed. For LPI, coverage is bound when the master policy is issued and the coverage is automatically placed on the borrower's property by the master policy at the instant there is inadequate insurance on the borrower's property. Once the master policy is issued, the lender's financial interest in the collateral is automatically and continuously insured, even if there are exposures not discovered as requiring LPI and not reported to the insurance company. Therefore the insurance company is on risk for all houses that have inadequate residential insurance coverage, regardless of whether the lender/servicer's tracking has discovered that a property has inadequate coverage and advised the

insurance company to place insurance on it. Exposure management of the entire lender portfolio and determining which of the houses in the lender's portfolio have inadequate insurance, and therefore are exposed to future losses, is the insurance company's responsibility. The exposure management responsibilities are therefore a necessary task for the insurance company to determine its exposure. Determining and rating exposure is part of the insurance process, and therefore should be included in the calculation of the insurance rate.

The information required to recognize exposure in an LPI portfolio is obtained in the LPI insurers' tracking systems. The service performed using these tracking systems is a key risk management tool for the LPI insurer. Failing to use these tracking systems to manage each portfolio severely impedes an insurer's ability to understand its risk, rate the risk, place appropriate reinsurance, maintain adequate capital levels, and manage its profitability and solvency. Also, tracking facilitates the maintenance and renewal of existing RPI. The cost of exposure tracking as it relates to managing risk should therefore be included in the development of actuarially sound rates.

For LPI, exposure management is often more onerous than for RPI because information from the lender, from the servicer, and from the insurance company all need to be reviewed. For example information from the lender's systems needs to feed to the servicer's system, which needs to feed to the insurance company's system to not only issue the policy, but also to perform exposure management. The cost to manage this exposure can be more costly for LPI than for RPI not only because the risk and unknown elements are greater, but also because the systems and processes to obtain the information that is available may be more onerous and costly for the insurance company. For LPI, a large portion of this cost is fixed rather than variable, which means a portion of the cost does not vary with the premium rate or the number of houses insured. The recent increase in LPI volume of business has increased the premium relative to the fixed cost of maintaining these specialized systems. This has contributed to the reduction in total expense as a percent of direct written premium (as shown in the next section below). However, as the real estate and financial markets start to return to more traditional levels, the placement as well as volume of LPI is expected to decrease which will most likely return LPI expense ratios back to more historical levels. In addition, investors, Fannie Mae, Freddie Mac, and regulations are evolving which may require changes to these specialized systems which would have an upward pressure on fixed expenses going forward. The changes from investors, Fannie Mae and Freddie Mac also are related to policy administration expenses which are discussed below.

3. Policy administration and other expenses are also costs of providing insurance coverage to a homeowner which are included in the rate.

   The below table summarizes total expenses, which include commission and other acquisition, underwriting and policy administration and other expenses, as a percent of direct written premium.

**Total Expenses Incurred as % DWP - All States**

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 10yr Avg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lender Placed** (Note 1) | 31.5% | 33.0% | 32.9% | 31.9% | 31.6% | 28.4% | 24.3% | 25.0% | 22.0% | 21.8% | 28.2% |
| **Voluntary Homeowners** (Note 2) | 27.7% | 27.1% | 26.5% | 24.5% | 26.2% | 25.8% | 26.6% | 25.9% | 25.8% | 26.2% | 26.2% |
| **Fire and Allied** | 24.2% | 24.4% | 25.8% | 26.2% | 23.7% | 25.1% | 25.9% | 26.1% | 26.8% | 25.5% | 25.4% |

**Notes:**

1. Lender Placed Insurance (LPI) 2 major carriers are American Security Insurance Company, and Balboa Insurance Company and it's affiliated P&C Insurers. P&C Insurers. Balboa is affiliated and includes Meritplan Ins. Co, Newport Ins. Co, and Newport E&S Ins. Co. LPI lines of business are fire & allied for all states.
2. Voluntary Homeowners inlcude 3 major carriers in NY State, which are State Farm Fire & Casualty Co., Allstate Insurance Co., and Automobile Ins Co. of Hartford, accounting for around 30% of market share in NY.

As illustrated in the above table, total expense ratios historically were higher for LPI compared to RPI, but due to declining LPI expense ratios since 2006 total expense ratios are lower for LPI compared to RPI in the most recent four calendar years. The decrease in LPI expense was a consequence of the mortgage crisis, where expenses for LPI carriers are largely fixed, and premiums in the LPI market increased significantly, decreasing the LPI expense ratios. As the mortgage crisis abates, these conditions are expected to reverse, with expense ratios returning to more historical levels.

***Target profit and contingencies commensurate with exposure and risk***

The insurance rate is then loaded to include the target profit and contingencies commensurate with exposure and risk. As described throughout this testimony, although the individual limits and coverages per house are often lower for LPI than for RPI, the exposure and risk is most often greater for LPI. Therefore the higher exposure, risk, and variability demands a higher profit and contingency be loaded into the rate.

**Rates Specific to a Particular Insured**

Insurance rates and premiums are calculated to cover the estimated future costs associated with an individual risk transfer, using information known at the time the rate is developed and the risk is accepted. Using information that became known after the risk was accepted to develop a rate is not possible, since by definition the information was not available at the time the price was established. This reinforces the fact, already stated, that insurance rate development is a prospective exercise.

In the aggregate, rates are designed to equal the estimated cost of the insured exposure across all insureds accepted by the insurance company. Where insureds differ as to the expected costs or the risk they impose on the insurance company, and the differences are known at the time the rate is developed, insurance companies develop rates that vary by class of insured in an attempt to set prices that are as specific to each risk as can be ascertained at the time it is accepted. RPI collects information specific to each house, person insured, and limits on the policy, for purposes of fine tuning the rate to be specific to the different risk that each policy presents. A small subset of the voluminous information collected to rate a RPI policy are:

- House: location of house, year built, construction material, fire protection class, whether the house is vacant, the age of the roof, etc.
- Person insured: age of each insured, credit score on each insured or payment history (financial responsibility), prior loss history, years insured with current company, prior carrier, etc.
- Limits: replacement cost of house calculation to select dwelling limit, liability limits, etc.

Most RPI insurance companies develop a base rate, as explained in the calculation of actuarially sound rates section above, and then develop rate factors applied to the base rate to individualize the rate so that it considers the different risk and exposure on each policy. Some examples of RPI rating factors applied to base rates include territory factors, construction type factors, fire protection class factors, amount of insurance factor, vacancy factor, financial responsibility factor, and the like.

LPI companies do not have access to the information available to RPI companies for purposes of rating based on specific risk differences within a portfolio. Therefore although the rate across the portfolio of exposures is developed to be commensurate with the risk, the rate for any one house will not be representative of that house's risk if that house is not representative of the average house used in the

development of the rate. LPI portfolios are very different from RPI, since LPI includes a much higher percentage of vacant, coastal, substandard fire protection and sometimes poorly maintained, lower financial responsibility risks. All of these factors increase the risk and expected cost of insurance. As a result, the actuarially sound average rate for LPI across a state will be higher than the average rate for RPI in the same state.

In addition to LPI having more exposure than RPI, LPI does not have an opportunity to independently evaluate whether the prior insurance limit is sufficient to cover replacement cost of the dwelling. This further increases the insurance company's lack of knowledge about the risk and impedes the insurance company's ability to charge a premium specific to the individual risk. Therefore the information available to the LPI carrier to use to develop rating factors specific to each house is extremely limited.

**Expected catastrophe loss per policy considerations**

As discussed above, the expected catastrophe loss loaded into the rates is an average across many years/simulations. As actual experience consists of infrequent large events offset by many years of small or no events, the catastrophe load is more than the actual catastrophe losses in most years, and falls far short of such losses in catastrophe years. As a result, loss ratios will be low in non-catastrophe years, and can be extremely high in years with a severe catastrophe. The below table summarizes the direct loss ratios for several catastrophe exposed states and nationally, for the calendar years 2002 through 2011.

**Table of Direct Loss Ratios**

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Avg | Range |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lender Placed Insurance** (Note 1) | | | | | | | | | | | | |
| NY | 49% | 39% | 30% | 23% | 25% | 19% | 15% | 20% | 19% | 29% | 27% | 33% |
| FL | 24% | 17% | 77% | 103% | 30% | 11% | 11% | 10% | 7% | 10% | 30% | 95% |
| LA | 86% | 37% | 26% | 1038% | 71% | 48% | 135% | 21% | 21% | 31% | 151% | 1017% |
| National | 38% | 31% | 37% | 63% | 29% | 21% | 23% | 18% | 16% | 25% | 30% | 46% |
| **Voluntary Homeowners** (Note 3) | | | | | | | | | | | | |
| NY | 48% | 52% | 48% | 43% | 43% | 41% | 40% | 41% | 48% | 58% | 46% | 18% |
| FL | 39% | 35% | 281% | 150% | 32% | 26% | 34% | 38% | 38% | 36% | 71% | 256% |
| LA | 99% | 43% | 35% | 843% | 19% | 32% | 153% | 13% | 24% | 42% | 130% | 829% |
| National | 66% | 59% | 66% | 77% | 48% | 50% | 71% | 60% | 60% | 76% | 63% | 28% |

**Notes:**
1. Lender Placed Insurance (LPI) 2 major carriers are American Security Insurance Co., and Balboa Insurance Co. and its affiliated P&C Insurers. Balboa is affiliated and includes Meritplan Ins. Co, Newport Ins. Co, and Newport E&S Ins. Co. LPI lines of business are fire & allied for all states.
2. Direct Earned Premium and Direct Losses Incurred are from Statutory Page 14.
3. Voluntary Homeowners include industry aggregate.

The above table illustrates that the range and therefore variability of loss ratios is greater for LPI than for RPI.

Since the catastrophes of 2004 and 2005, LPI insurers' catastrophe exposure has increased significantly due to several factors including:

1. Growth in construction of residential dwellings on the coast and in catastrophe exposed areas;
2. Increase in the average replacement cost value of houses in catastrophe exposed areas;

3. Insurance availability issues in recent years in catastrophe exposed areas, creating significant growth for LPI in catastrophe exposed areas relative to non-catastrophe exposed areas; and
4. Increased catastrophe reinsurance costs for LPI and reduced reinsurance capacity following the multiple hurricanes in 2004 and 2005.

All of the above have contributed to a significant increase in geographic concentration of LPI portfolios in catastrophe exposed areas as well as to an overall increase in catastrophe exposure. Some of this exposure has been managed through reinsurance, for an additional reinsurance cost, but much of it is retained by the LPI insurer, creating additional risk and costs.

**Minimum loss ratio requirements**

There have been suggestions recently to introduce regulations in New York requiring a minimum LPI loss ratio in the range of 80%. These suggestions are ostensibly supported by Section 9 of the written "Testimony of Birny Birnbaum" delivered during a recent public hearing in NYS. In that testimony, Mr. Birnbaum purportedly shows LPI insurers could earn a 12% return on net worth with loss and LAE ratios considerably higher than 80%. This result is inconsistent with an analysis based on generally accepted actuarial and economic principles of insurance ratemaking. More importantly, contemplating a fixed minimum loss ratio on an insurance product subject to LPI's significant loss volatility, without any actuarial analysis of expected future costs, is fundamentally illogical and inconsistent with basic principles of insurance ratemaking.

Basic ratemaking principles determine the appropriate future premium by projecting losses, expenses, and investment income, and determining the required amount of profit as a percent of premium that will produce a fair and reasonable return on insurer equity. Since Section 9 of Mr. Birnbaum's testimony is focused solely on determining the loss ratio that he deems to be appropriate for LPI, he sidesteps the issue of projecting losses entirely. Instead, he essentially takes the following simple rate equation:

Premium = Losses + Expenses + Underwriting Profit,

He converts it to the following:

Premium - Expenses - Underwriting Profit = Losses;

He then divides each value by premium to generate ratios, resulting in the following expression:

100% - expense ratio – underwriting profit ratio = loss ratio

This is the source of Mr. Birnbaum's analysis of the minimum acceptable loss ratio – he sets a target underwriting profit, "estimates" future expenses, and then subtracts them from 100% to derive the target loss ratio he deems appropriate. This analysis is flawed in several respects.

It is universally agreed that the losses, expenses, investment income and insurer equity that are used to develop an insurance rate must be estimates of future costs. Normally (absent significant changes in the underlying conditions driving losses and/or expenses) these estimates begin with a review of historical data for the line of business being analyzed. In the case of LPI historical expense data are available for

analysis, and they can be adjusted appropriately to reflect any changes in expected future market conditions. However, Mr. Birnbaum fails to provide any analysis of LPI data at all – he merely compares certain selected aspects of LPI insurance with voluntary homeowners insurance, and then opines that the expenses for LPI should be lower than for homeowners based on the nature of the coverage and the institutional arrangements surrounding the production and marketing of the business.

Based on this conjecture, Mr. Birnbaum "selects" LPI expense ratios totaling 9% to 15%, and then performs calculations showing that insurers could earn returns on equity of 12% with loss ratios higher than 80%. However, Mr. Birnbaum provides no support for his selected expense ratios, and by way of comparison, the average expense ratio for homeowners insurance in the US over the past 10 years was 26%, while for LPI the expense ratio over the same period was 28%. Mr. Birnbaum's conjectures appear to have no basis in fact, nor any relevance to the making of rates as would be performed by a qualified actuary.

In fact, we performed a rate of return analysis assuming an 80% loss ratio, and using the 10 year industry average for LPI expenses along with projections of future investment income and insurer equity. The result of this analysis was that under the given assumptions the expected return on equity for LPI insurance was negative, an outcome which is not sustainable in the short or long run. Insurers will simply not commit capital to any undertaking that has a negative expected return.

In regard to setting minimum loss ratios, it is noteworthy that in recent years, RPI insurance has been experiencing insurance availability problems in catastrophe prone areas of New York (ie: Long Island, coastal towns, etc). Please refer to a short excerpt of many news articles documenting the RPI carrier shift to reduce exposure in coastal areas in recent years, in Appendix C.

**Reverse Competition**

It has also been suggested that LPI is subject to a phenomenon termed "reverse competition" which refers to a market structure in which sellers do not market directly to consumers, but rather focus their marketing efforts on "middlemen" who provide access to ultimate consumers. In the case of LPI such middlemen are the mortgage lenders or servicers who are responsible for assuring that collateral protection on mortgaged property is maintained. It has been claimed that under such conditions, the ultimate price of the insurance product is increased because excessive costs expended to obtain business are passed through to consumers.

The concept of "reverse competition" is not a standard term of art in the economics profession; it appears it was first cited publicly in a Department of Justice report written in 1977 that, in part, addressed market conditions in the title insurance industry. Since that time, some have attempted to extend the use of this term to other forms of insurance where marketing is directed at intermediaries as opposed to final consumers. However, there has been no empirical evidence presented with respect to LPI insurance (or any other line of insurance) that indicates such arrangements have an inimical effect on competition or raise prices.

It is worth noting that marketing expenses are incurred by virtually all businesses in a competitive economy, and there is nothing unusual about marketing arrangements such as those that prevail in the LPI industry. Many other firms and industries, such as drug companies, garment manufacturers, food product vendors, furniture salesmen and the like also market their products to distributors or intermediaries, because it is simply more efficient to do so. Drug companies market to physicians and

compete for their recommendations to patients, while clothing and food manufacturers market to buyers and compete for space on department store and supermarket shelves. Such examples abound in the real world.

In fact, marketing the LPI product to final consumers is simply infeasible, and even if possible, it is not obvious that resulting costs and ultimate insurance prices would be lower. The nature of LPI itself makes it virtually impossible to target specific segments of the population for marketing activities, since the product is placed only when a consumer allows his or her property insurance coverage to lapse. It is not clear how an LPI insurer could identify this target population, nor whether marketing efforts to such a population would ever be successful.

Another argument related to reverse competition alleges that market prices for LPI are high because entry barriers limit number of firms operating in the market. While it is true that there are only two major providers of LPI currently, there have been over a half dozen lender placed servicers and/or insurance companies that have exited the LPI market over the past fifteen years. While some smaller companies may have left the market due to lack of adequate scale of operations, large carriers that have exited the market include Progressive, Transamerica, CIGNA, Safeco and Zurich. These companies had the infrastructure and systems capability to provide lender placed tracking services and insurance coverage, yet chose to exit the lender placed marketplace nonetheless. It is likely that these exits reflect the very high degree of risk in the LPI exposure, and the inability to earn consistent returns that justify bearing that risk.

In addition to companies exiting the lender placed market entirely, other companies have exited a particular line of lender placed business. For example, prior to 2005, Balboa Insurance Group underwrote lender placed flood insurance, but exited the lender placed flood market after the various catastrophes in 2005. (While Balboa continued to service the flood product, the insurance coverage was outsourced out of the United States and/or to catastrophe bond markets.) Balboa Insurance Group clearly has access to existing lender placed tracking systems, hence that cannot act as a barrier to entry, yet it still chose to exit the market for lender placed flood insurance. This suggests that the withdrawal was due to a business decision to exit a market that was deemed insufficiently profitable given the exposure or risk.

The allegations of excessive LPI rates based on claims of ‘reverse competition’, a comparison to RPI rates, or a review of historical loss ratios, are inconsistent with actuarial and regulatory standards related to insurance ratemaking. The only actuarially sound method for evaluating whether current rates are “excessive, inadequate or unfairly discriminatory” is to conduct a review of existing rates based on the prospective methods outlined in this report. Such a review will facilitate the process of submitting and receiving approval of lender placed insurance rate changes, which is the most constructive and sound approach to addressing concerns about the level of existing LPI rates.

# Appendix A

# Milliman Bio

**Sheri Lee Scott**
FCAS, MAAA
Consulting Actuary

## CURRENT RESPONSIBILITY

Sheri is a Consulting Actuary with Milliman's San Francisco office. She joined the firm in 2009.

## EXPERIENCE

Sheri has twenty years of experience in the property and casualty insurance industry and her areas of expertise include:

- Personal lines ratemaking and product development including predictive modeling, developing class plans, pricing hurricane, earthquake, and wildfire and other catastrophe perils;
- Forced placed insurance and other non-traditional insurance ratemaking;
- Incorporating reinsurance costs into rates;
- Pricing and designing reinsurance programs, as well as developing risk management and underwriting guidelines;
- Personal lines and commercial lines reserving for insurers and captives.

In developing rates and class plans, Sheri has experience building and applying generalized linear models and non-linear models; using consumer credit information; pricing property lines using a type-of-loss or by-peril analysis; and creating territory definitions. Sheri has helped several US and non-US insurance companies launch new products using the above ratemaking advancements, and amend existing product ratemaking, underwriting, and marketing to improve profitability.

Sheri also has experience automating insurance processes for underwriting and policy administration. Her experience with optimizing insurance processes is especially useful when assisting clients to develop and roll out product changes.

Prior to joining Milliman, Sheri was SVP of Balboa Insurance Group. Prior to Balboa, she was a consultant at Aon Risk Services in New York City.

## PRESENTATIONS

Sheri has made presentations to Boards of Directors, Senior Management, reinsurers and insurance regulators.

## PROFESSIONAL DESIGNATIONS

- Fellow, Casualty Actuarial Society
- Member, American Academy of Actuaries

## EDUCATION

BSc, Statistics, University of Western Ontario, Canada

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**David Appel**
PhD
Director, Economics Consulting

## CURRENT RESPONSIBILITY

David is a principal with the New York office of Milliman. He joined the firm in 1989, when he founded Milliman's economics consulting practice, and is currently responsible for the management of that practice.

## EXPERIENCE

David has worked extensively in the application of economic and financial models to property and casualty insurance issues. His assignments have spanned a wide variety of subject areas and lines of business, including the development of cash-flow models to estimate the rate of return on insurance transactions, dynamic financial models of the insurance enterprise, econometric methods to forecast insurance loss experience, statistical models to estimate loss severity distributions, and cost-of-capital analyses for property casualty insurers. He has applied these models and methodologies to both personal and commercial lines of coverage, including lines with catastrophe and mass tort exposures. David has also testified frequently on rate-of-return and regulatory issues and in civil litigation relating to insurance matters.

David served on the graduate faculty of Rutgers University as an adjunct professor of economics for 12 years and has taught examination courses for several regional actuarial societies.

David has bachelor's, master's, and doctoral degrees in economics. He is also an elected fellow of the National Academy of Social Insurance, a certified arbitrator and umpire with ARIAS (the AIDA Reinsurance and Insurance Arbitration Society), and a member of the panel of neutrals of the American Arbitration Association. David also serves on the board of directors of the American Risk and Insurance Association and the editorial boards of several economics/insurance journals, and is a past member of the board of directors of Milliman, Inc.

## PRESENTATIONS AND PUBLICATIONS

David has spoken widely on insurance issues before many industry and professional groups. A frequent contributor to scholarly journals, he has published more than 15 articles and is the coeditor of three volumes of collected papers on economic issues in insurance.

## AFFILIATIONS

- Editorial board, Journal of Insurance Regulation
- Editorial board, *Benefits Quarterly*
- Member, American Risk & Insurance Association

## EDUCATION

- BA, Economics, Brooklyn College, CUNY
- MA, Economics, Rutgers University
- PhD, Economics, Rutgers University

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# Appendix B

# Lender Placed and Voluntary Homeowners Insurance

## Homeowners Insurance Statistics for the Past Ten Years (Note 1)

**Direct Earned Premium (thousands)**

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lender Placed Insurance** (Note 1) | | | | | | | | | | |
| NY | $22,780 | $27,666 | $28,427 | $29,622 | $41,508 | $60,935 | $87,290 | $122,602 | $145,424 | $157,812 |
| FL | 60,757 | 80,269 | 83,932 | 91,546 | 144,993 | 271,774 | 560,384 | 831,200 | 983,915 | 977,840 |
| LA | 6,983 | 9,890 | 10,945 | 12,827 | 15,018 | 17,230 | 22,723 | 29,492 | 39,740 | 43,582 |
| National | 459,827 | 633,801 | 686,713 | 748,315 | 954,282 | 1,489,363 | 2,462,324 | 2,873,978 | 3,189,073 | 3,085,337 |
| **Homeowners - Industry Aggregate** | | | | | | | | | | |
| NY | $2,563,116 | $2,775,125 | $3,044,453 | $3,314,919 | $3,539,395 | $3,751,251 | $4,025,404 | $4,164,479 | $4,288,969 | $4,432,034 |
| FL | 3,399,201 | 3,998,007 | 4,627,164 | 5,526,032 | 6,779,039 | 8,612,764 | 7,749,506 | 7,023,611 | 7,285,444 | 7,635,575 |
| LA | 717,268 | 822,591 | 902,654 | 1,042,274 | 1,148,686 | 1,295,638 | 1,378,836 | 1,465,255 | 1,531,838 | 1,569,842 |
| National | 40,173,086 | 46,168,239 | 51,712,303 | 56,397,133 | 60,006,490 | 64,385,905 | 65,291,211 | 66,711,351 | 69,930,084 | 72,905,255 |

**Notes:**

1. Lender Placed Insurance (LPI) 2 major carriers are American Security Insurance Co., and Balboa Insurance Co. and its affiliated P&C Insurers. Balboa is affiliated and includes Meritplan Ins. Co, Newport Ins. Co, and Newport E&S Ins. Co. LPI lines of business are fire & allied for all states.
2. Direct Earned Premium are from Statutory Page 14.

**Table of Direct Loss Ratios**

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Avg | Range |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lender Placed Insurance** (Note 1) | | | | | | | | | | | | |
| NY | 49% | 39% | 30% | 23% | 25% | 19% | 15% | 20% | 19% | 29% | 27% | 33% |
| FL | 24% | 17% | 77% | 103% | 30% | 11% | 11% | 10% | 7% | 10% | 30% | 95% |
| LA | 86% | 37% | 26% | 1038% | 71% | 48% | 135% | 21% | 21% | 31% | 151% | 1017% |
| National | 38% | 31% | 37% | 63% | 29% | 21% | 23% | 18% | 16% | 25% | 30% | 46% |
| **Homeowners - Industry Aggregate** | | | | | | | | | | | | |
| NY | 48% | 52% | 48% | 43% | 43% | 41% | 40% | 41% | 48% | 58% | 46% | 18% |
| FL | 39% | 35% | 281% | 150% | 32% | 26% | 34% | 38% | 38% | 36% | 71% | 256% |
| LA | 99% | 43% | 35% | 843% | 19% | 32% | 153% | 13% | 24% | 42% | 130% | 829% |
| National | 66% | 59% | 66% | 77% | 48% | 50% | 71% | 60% | 60% | 76% | 63% | 28% |

**Notes:**

1. Lender Placed Insurance (LPI) 2 major carriers are American Security Insurance Co., and Balboa Insurance Co. and its affiliatedP&C Insurers. Balboa is affiliated and includes Meritplan Ins. Co, Newport Ins. Co, and Newport E&S Ins. Co. LPI lines of business are fire & allied for all states.
2. Direct Earned Premium and Direct Losses Incurred are from Statutory Page 14.

# Lender Placed and Voluntary Homeowners Insurance

## Homeowners Insurance Statistics for the Past Ten Years (Note 1)

**Commission as % DWP**

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lender Placed Insurance** (Note 1) | | | | | | | | | | |
| NY | 7% | 10% | 10% | 10% | 12% | 16% | 12% | 11% | 6% | 8% |
| FL | 10% | 11% | 11% | 10% | 12% | 12% | 9% | 9% | 5% | 8% |
| LA | 11% | 11% | 10% | 11% | 14% | 15% | 10% | 10% | 7% | 8% |
| All States | 11% | 13% | 13% | 9% | 11% | 13% | 9% | 9% | 6% | 9% |
| **Homeowners - Industry Aggregate** | | | | | | | | | | |
| NY | 15% | 15% | 16% | 15% | 15% | 15% | 15% | 15% | 15% | 15% |
| FL | 13% | 12% | 13% | 14% | 12% | 12% | 12% | 13% | 13% | 12% |
| LA | 12% | 12% | 13% | 13% | 12% | 12% | 12% | 13% | 13% | 13% |
| All States | 14% | 14% | 14% | 14% | 14% | 14% | 13% | 13% | 13% | 13% |
| **Fire and Allied Lines - Industry Aggregate** | | | | | | | | | | |
| NY | 12% | 13% | 13% | 13% | 11% | 12% | 12% | 12% | 12% | 12% |
| FL | 12% | 13% | 13% | 13% | 11% | 11% | 11% | 12% | 11% | 11% |
| LA | 13% | 13% | 15% | 13% | 14% | 12% | 13% | 12% | 12% | 12% |
| All States | 13% | 13% | 14% | 13% | 11% | 12% | 12% | 12% | 12% | 12% |

**Notes:**

1. Lender Placed Insurance (LPI) 2 major carriers are American Security Ins. Co., and Balboa Ins. Co. and its affiliated P&C Insurers. Balboa is affiliated and includes Meritplan Ins. Co, Newport Ins. Co, and Newport E&S Ins. Co. LPI lines of business are fire & allied for all states.
2. Direct Written Premium and Commissions are from Statutory Page 14.

**Total Expenses Incurred as % DWP - All States**

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 10yr Avg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lender Placed** (Note 1) | 31.5% | 33.0% | 32.9% | 31.9% | 31.6% | 28.4% | 24.3% | 25.0% | 22.0% | 21.8% | 28.2% |
| **Voluntary Homeowners** (Note 2) | 27.7% | 27.1% | 26.5% | 24.5% | 26.2% | 25.8% | 26.6% | 25.9% | 25.8% | 26.2% | 26.2% |
| **Fire and Allied** | 24.2% | 24.4% | 25.8% | 26.2% | 23.7% | 25.1% | 25.9% | 26.1% | 26.8% | 25.5% | 25.4% |

**Notes:**

1. Lender Placed Insurance (LPI) 2 major carriers are American Security Insurance Company, and Balboa Insurance Company and it's affiliated P&C Insurers. P&C Insurers. Balboa is affiliated and includes Meritplan Ins. Co, Newport Ins. Co, and Newport E&S Ins. Co. LPI lines of business are fire & allied for all states.
2. Voluntary Homeowners inlcude 3 major carriers in NY State, which are State Farm Fire & Casualty Co., Allstate Insurance Co., and Automobile Ins Co. of Hartford, accounting for around 30% of market share in NY.

# Appendix C

Appendix C

Sample news articles and statements from major RPI carriers regarding RPI carrier shift to reduce exposure in coastal areas in recent years:

"State Farm to end some policies on coast" on September 15, 2006 at
http://www.chron.com/business/article/State-Farm-to-end-some-policies-on-coast-1889806.php

"Allstate has hands-off policy near coast" on February 25, 2006 at
http://www.chron.com/news/hurricanes/article/Allstate-has-hands-off-policy-near-coast-1575277.php

"Allstate to comply with N.Y. anti-typing rule on home nonrenewals" on September 12, 2007 at
http://www.insurancejournal.com/news/east/2007/09/12/83436.htm

"New York Cancels 113 State Farm Non-Renewals on Long Island" on December 16, 2009 at
http://www.insurancejournal.com/news/east/2009/12/16/106025.htm

"State Farm to start sending out policy nonrenewal letters" on February 4, 2010 at
http://www.tcpalm.com/news/2010/feb/04/state-farm-start-sending-out-policy-nonrenewal-let/