What's New in Homeowners Insurance Ratemaking?

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Survey background

Survey responses were collected online from 99 insurance professionals representing companies that sell Homeowners coverage in the United States (91%) and Canada (9%).

77% of the survey respondents come from companies with up to $500M of Homeowners insurance Gross Written Premium (GWP), while 23% are from companies writing over $500M in premiums (2013 figures).

Updates from April 2015 webinar and CAS Spring meeting.

Topics

- Predictive modeling

- By peril rating

- Catastrophe modeling

- Risk selection

- Pricing / segmentation

- Pricing challenges

- Emerging trends

Use of predictive analytics by line of business

82% of the survey respondents use predictive analytics in one or more lines of business.

The most common use of predictive analytics is found in Personal Auto (49%), followed by Homeowners (37%), Commercial Auto (32%) and Commercial Property (30%).
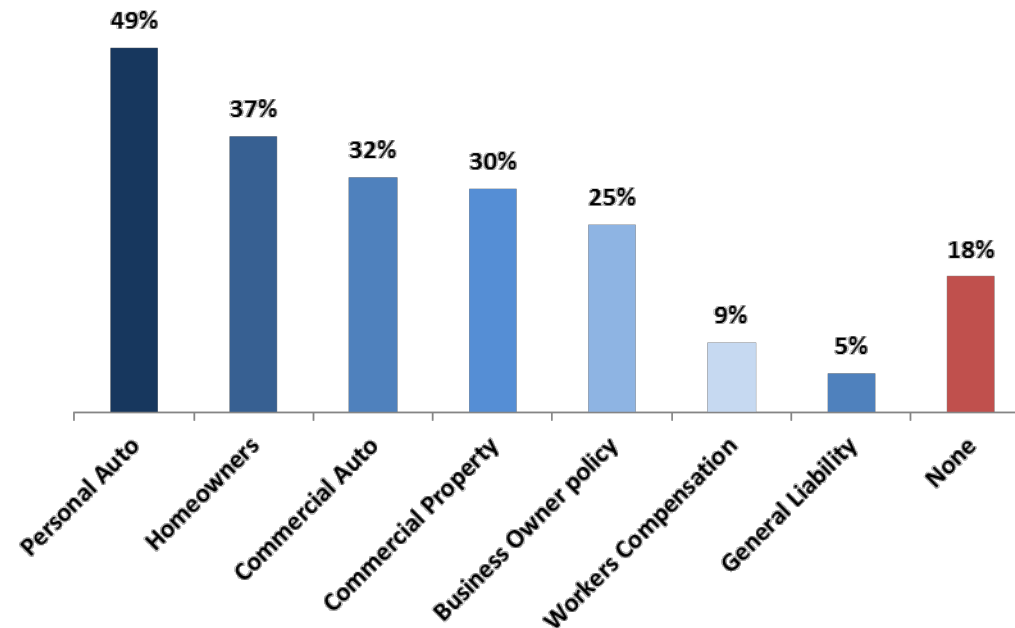
Source: 2013 Insurance Predictive Modeling Survey

Predictive Modeling for Homeowners Loss Cost Development

Over half (57%) of the survey respondents use predictive modeling for Homeowners loss cost development.
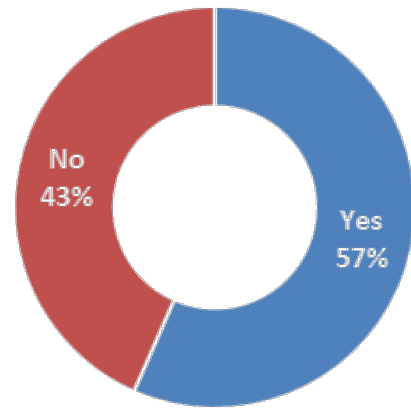

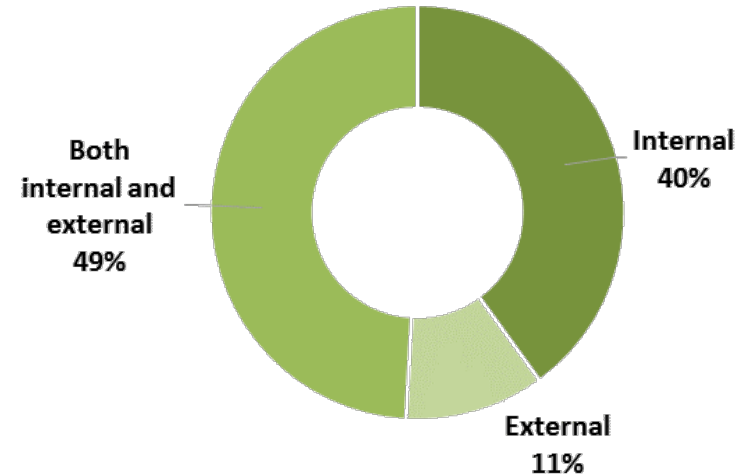*Figure 1: Use predictive modeling for Homeowners loss cost development*

Figure 2: Use internal or external resources for predictive modeling projects

Of the survey respondents that incorporate predictive modeling in projects, 49% use both internal and external resources, 40% use only internal resources, and 11% use only external resources.

By Peril Rating

- **2014 Survey**
  - 50% use by-peril
  - 50% do not

- **April 2014 Webinar (200+ attendees)**
  - 57% use by peril
  - 43% do not

- **CAS Spring meeting (60 respondents)**
  - 81% use by peril
  - 19% do not

Rating Structure

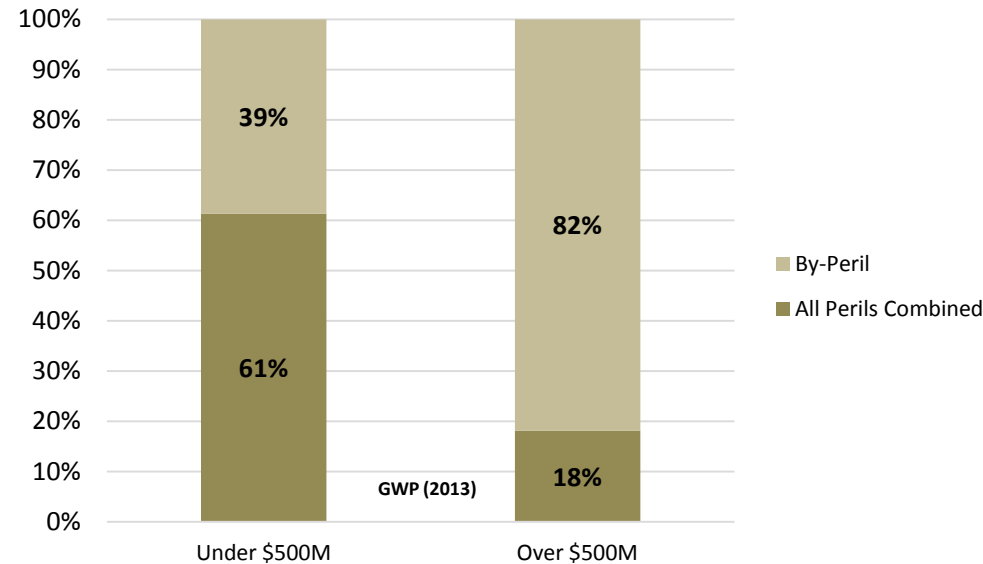Rating structure for Homeowners insurance varies by the company size.

Figure 3: Rating structure by company size

The majority (82%) of the survey respondents representing companies with over $500M GWP use a by-peril rating structure, while most (61%) of the survey respondents from smaller companies combine all perils.

By Peril – Number of Perils

- CAS Spring Meeting (totals to 81%)
  - 4 or less   12%
  - 5-6   34%
  - 7-8   22%
  - 9-10   10%
  - 11+   3%

Incorporating By-Peril Rating

Over a quarter (26%) of the survey respondents that use all perils combined intend to incorporate by- peril rating into their rating structure within the next year, and another 40% plan on doing it in 2-3 years
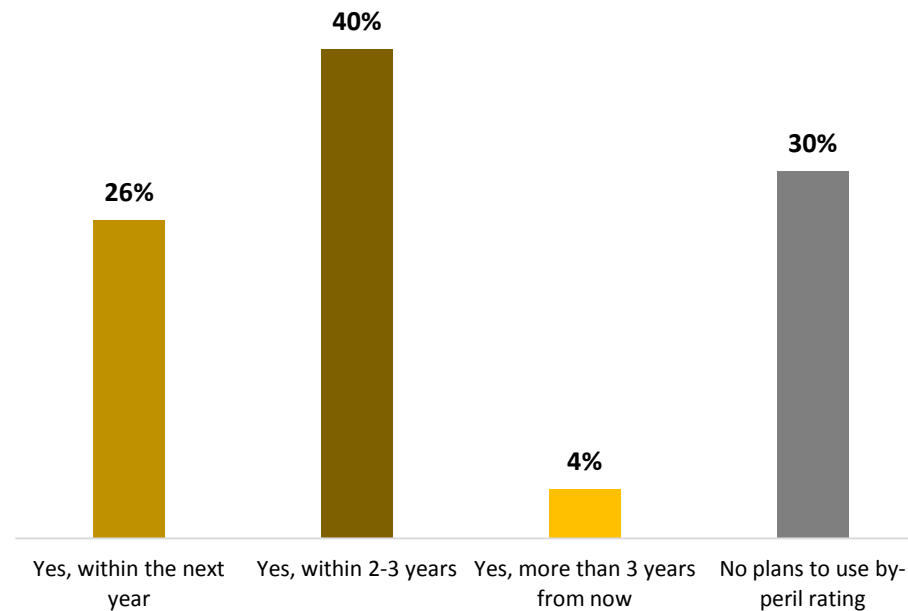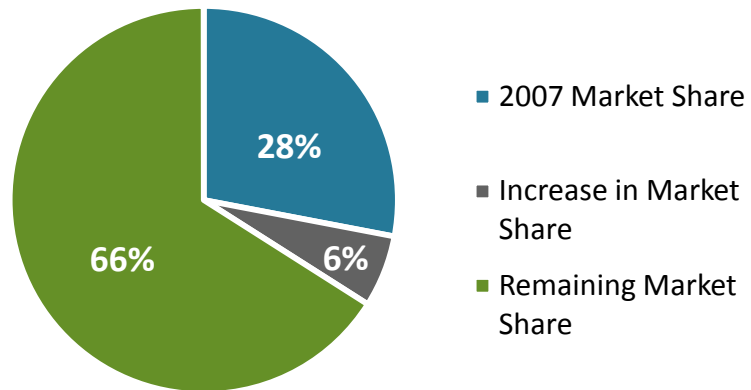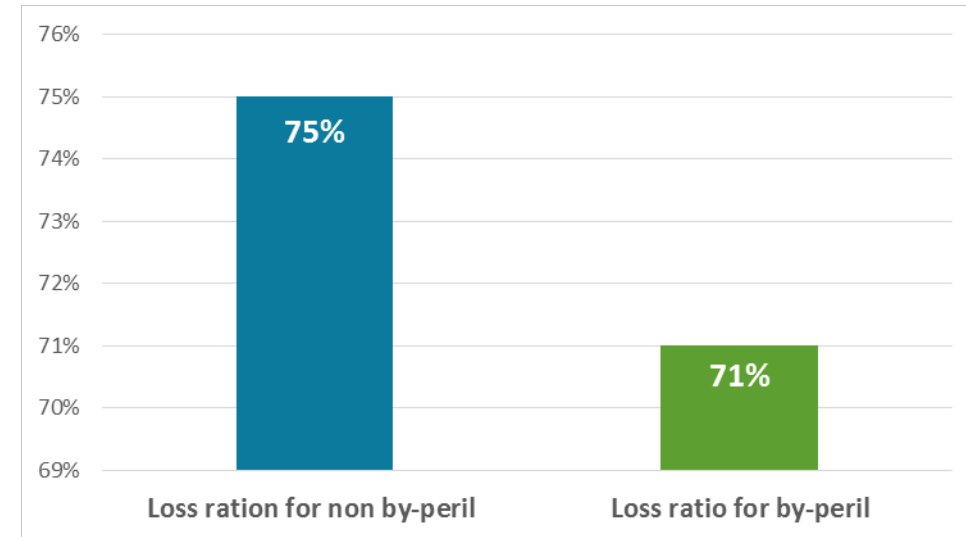

Figure 4: Plans to incorporate by-peril rating into the rating structure

Winning with By-Peril Rating

25 insurers using by-peril plans have increased market share from 28% to 34% in 5 years

Companies rating by-peril have loss ratios 6.6 points lower than their competition 70.8% vs. 75.1%

- 2007 Market Share
- Increase in Market Share
- Remaining Market Share

28%
6%
66%

75%
71%

Loss ration for non by-peril   Loss ratio for by-peril

Source: ISO research using Perr & Knight filings and 2007-2012 AM Best Financials

Using Catastrophe Model Output in Ratemaking

The most common way for using cat models in ratemaking is at the overall rate level (62-71% for the various catastrophes).

Allocation to territory is used by 38-71% of the respondents, while excess/smoothing is used by 3-21%.
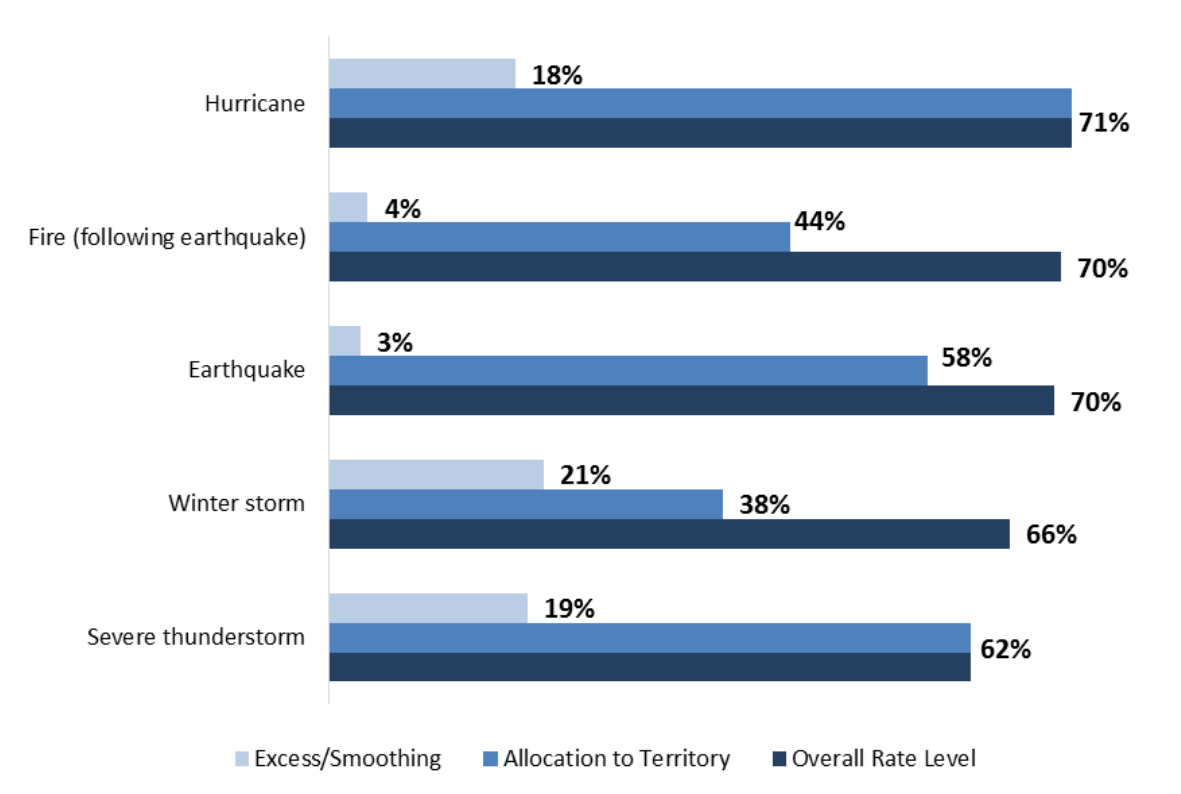

Figure 9: Ways of using catastrophe model output in ratemaking (Respondents could select more than one option)

Future Use of Catastrophe Model Output in Ratemaking

Most survey respondents that do not currently incorporate catastrophe model output in their ratemaking have no plans for using it in the future.

The most common models that insurers plan to incorporate in the future are for severe thunderstorms (45%), followed by winter storms (32%) and fire (26%).
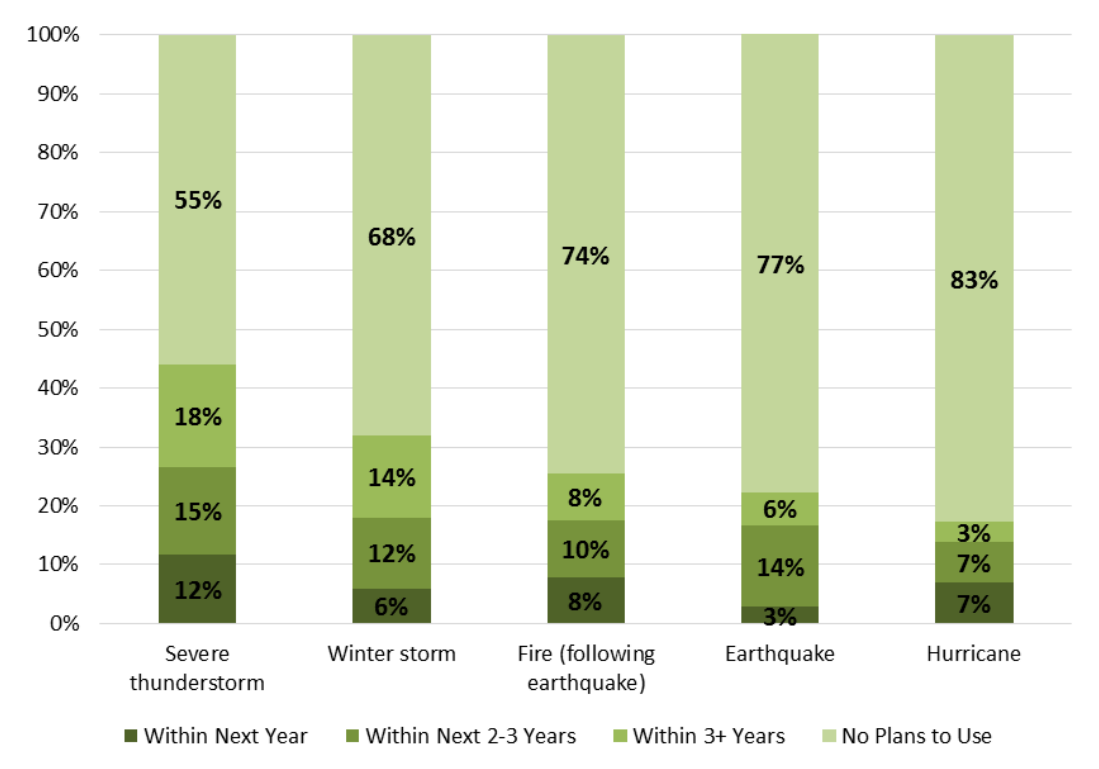

Figure 10: Future use of catastrophe model output in ratemaking

Hurricane Models – Multiple Models

Over half (55%) of the survey respondents from larger companies use more than one hurricane model in ratemaking compared to 28% of the respondents from smaller companies.

Of the respondents from companies who use more than one hurricane model for ratemaking, 55% weigh the models equally, while 29% use weighted average to blend the models.
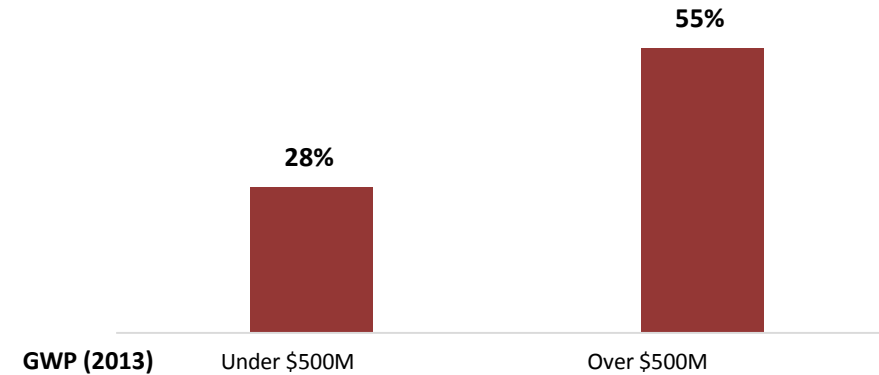
Figure 11: Using more than one hurricane model for ratemaking
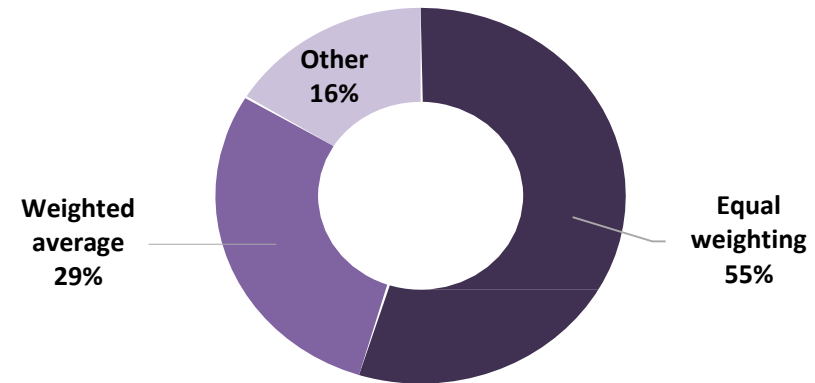
Figure 12: Blending the results of the hurricane models

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New Homes: Inspection

While 28% of the respondents surveyed inspect less than a quarter of new homes, 27% inspect all new homes.

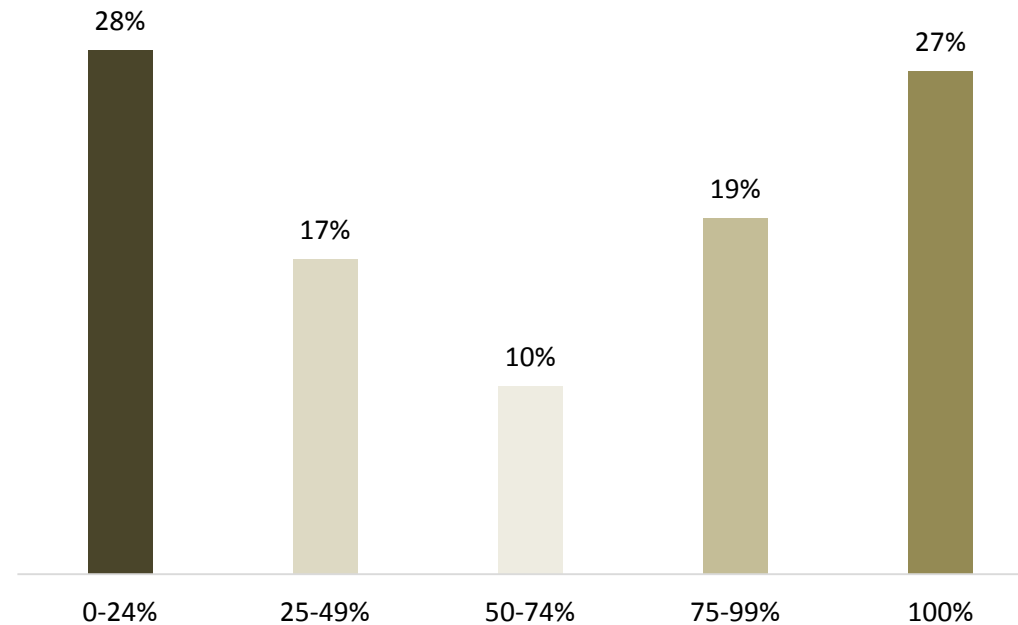*Figure 14: Percent of new homes inspection**

New Homes: Inspection

Inspection Persistency by Company Size

New Homes: Inspection
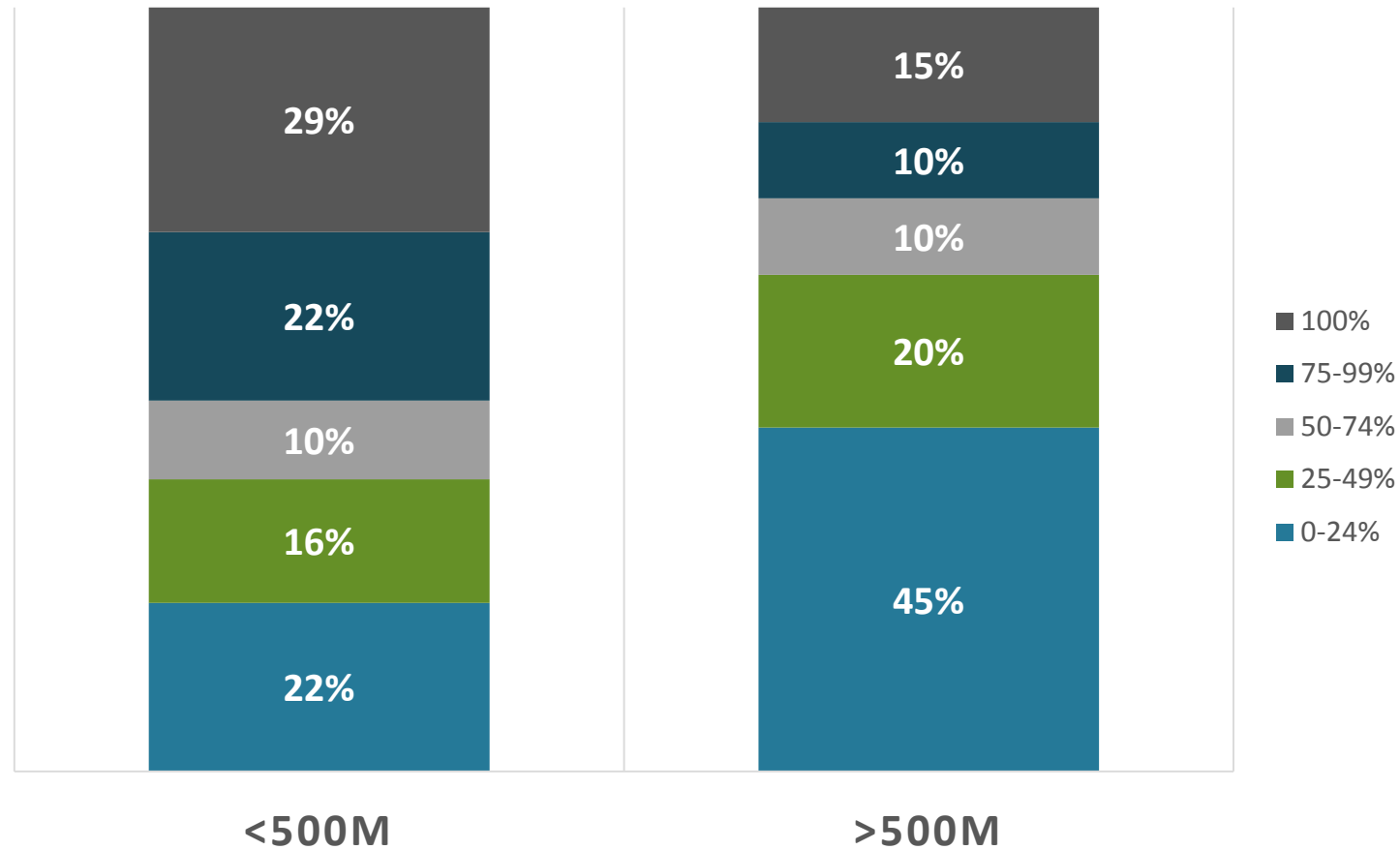
Of those that inspect new homes, close to two-thirds (64%) use only external physical inspections and 57% use both internal and external inspections.

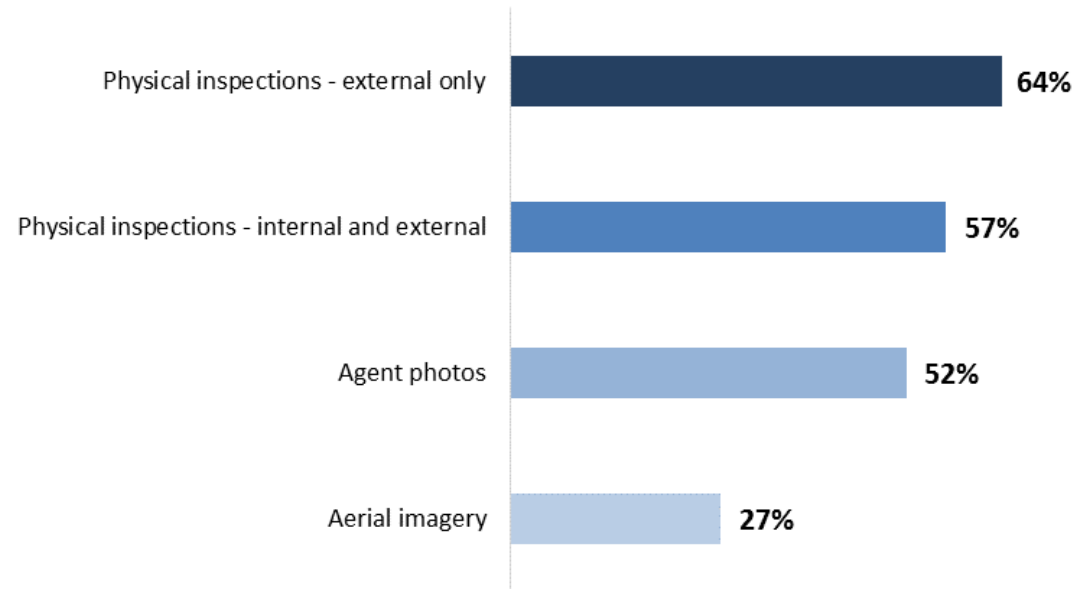52% rely on agent photos and 27% use aerial imagery for new home inspections.

Figure 15: Inspecting new homes
(Respondents could select more than one option)

Other Price Setting Considerations

The vast majority (83%) of insurers that participated in the survey consider competitors' prices in their rate setting process.

Other considerations include estimates of retention and business conversion (55%), value of other policies in the customer's portfolio (37%), and policy lifetime value (27%).

Consideration	%
Competitors' prices	83%
Estimates of retention and new business conversion	55%
Value of other policies in the customer's portfolio	37%
Policy lifetime value	27%
Other	3%

Figure 18: Include Figure 31: Considerations included in price calculation (Respondents could select more than one option)advance quote discount*

Live Poll #3 (results from 4/27 webinar)

How, if at all, does competitive information inform your rate setting processes? (check all that apply)	
Inform product design (i.e. rollout new discount)	76%
Inform factor selection for low credibility segments	60%
Territory factor adjustments	69%
Determine overall rate level	48%
Input for customer demand models	19%
Other considerations (not listed above)	20%
It does not	3%

Other Price Setting Considerations

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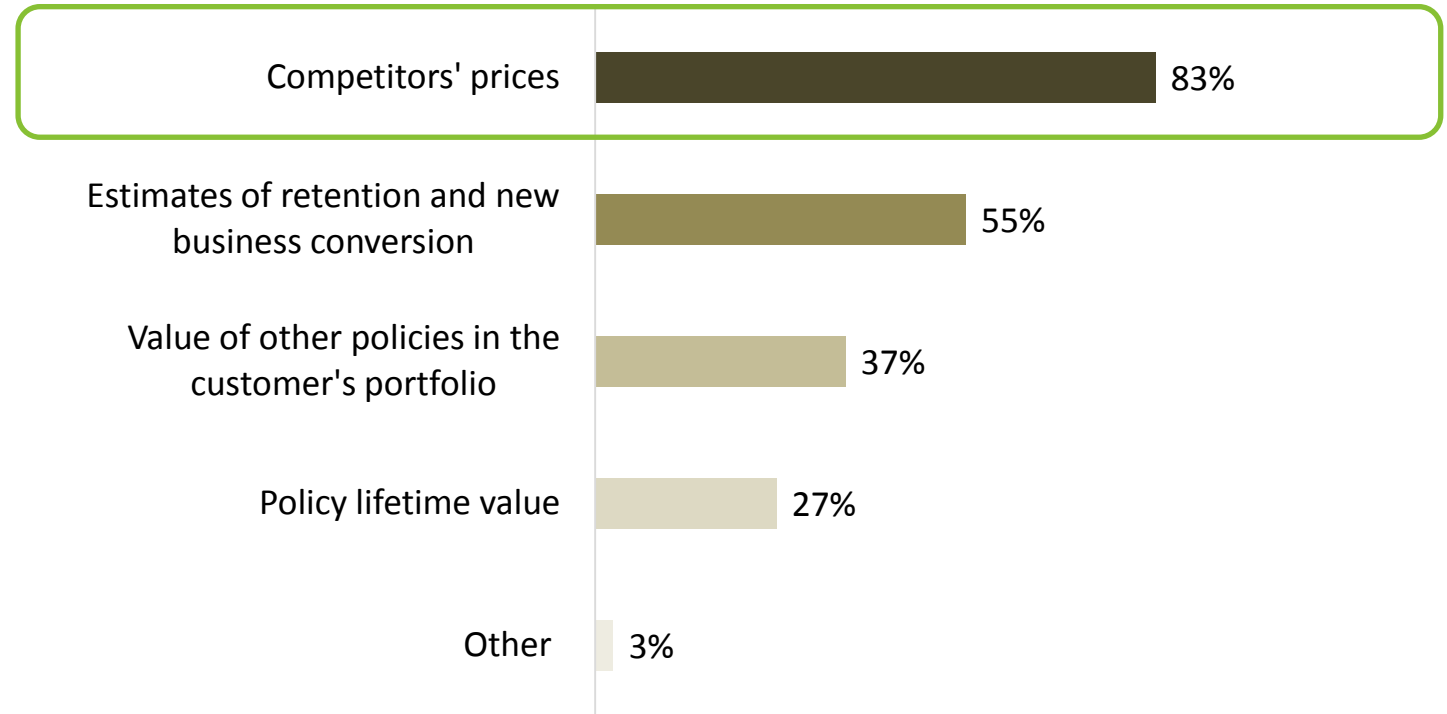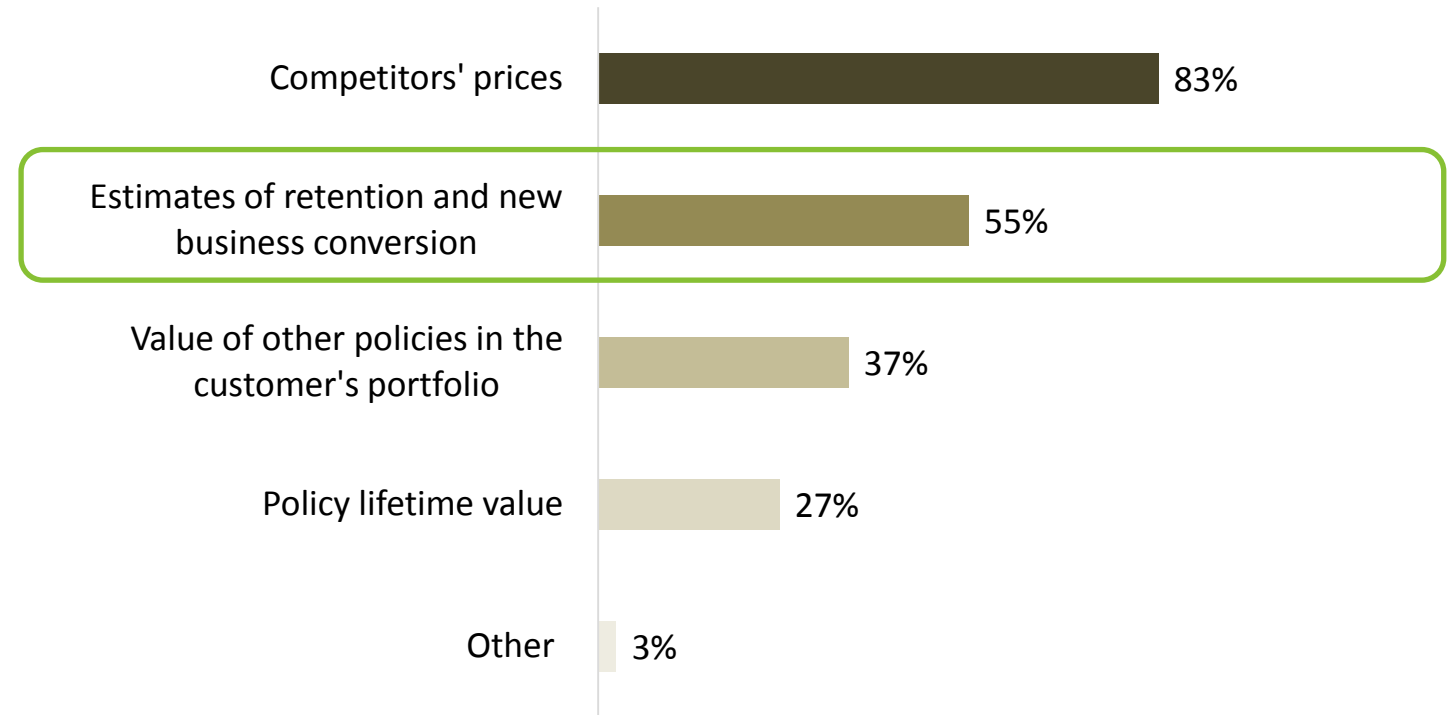

Figure 18: Include Figure 31: Considerations included in price calculation (Respondents could select more than one option)advance quote discount*

Ratemaking Process Challenges

When asked to rate the top challenges in their ratemaking processes, respondents pointed to the following as the top challenges (in order of rating):

1. Time lag for implementing new rates or product versions in IT systems

2. Effectively utilizing new data sources in the rate setting and underwriting processes
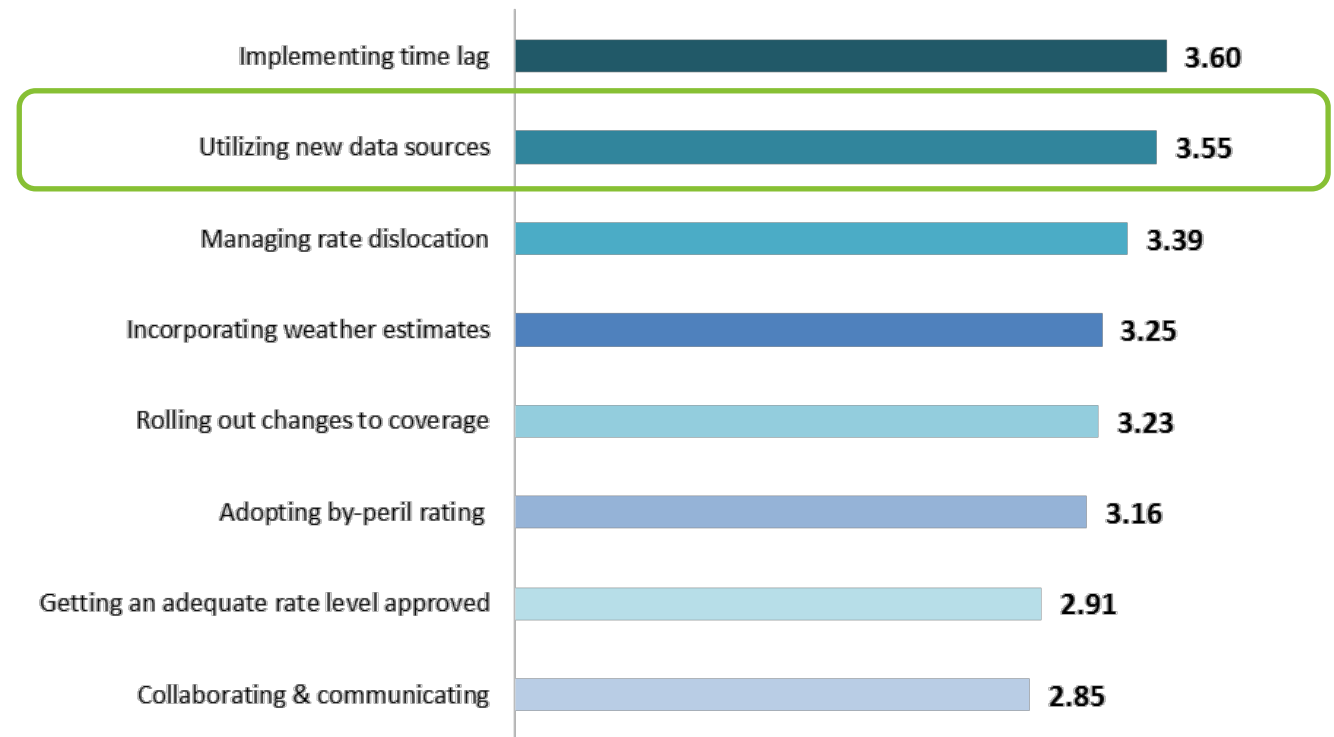
3. Managing rate dislocation

Implementing time lag	3.60
Utilizing new data sources	3.55
Managing rate dislocation	3.39
Incorporating weather estimates	3.25
Rolling out changes to coverage	3.23
Adopting by-peril rating	3.16
Getting an adequate rate level approved	2.91
Collaborating & communicating	2.85

Figure 32: Ratemaking process challenges (1-5 scale)

Live Poll #4 (results from 4/27 webinar)

Utilizing new data sources: barriers to leveraging new data (mark all that apply)	
Limited analytics resources within the company	69%
Cost associated with evaluating new data	48%
Cost associated with licensing new data	54%
Difficulties merging 3rd party data	43%
Not aware when new data resources become available	36%
Difficult to assess value of new data	50%

Incorporating Information Typically Used in Auto Insurance

Information typically used in pricing Auto insurance may also be useful in rating Homeowners insurance.

The two most useful items are age of all individuals in the household and number of individuals in the household, each mentioned by 46% of the respondents.
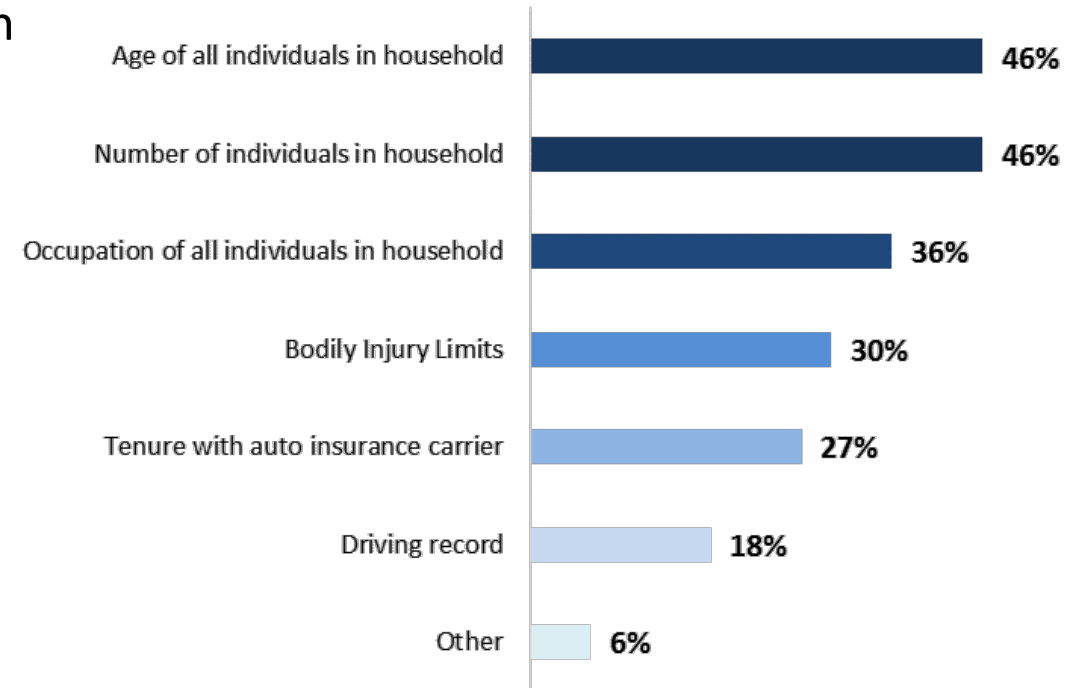

Age of all individuals in household	46%
Number of individuals in household	46%
Occupation of all individuals in household	36%
Bodily Injury Limits	30%
Tenure with auto insurance carrier	27%
Driving record	18%
Other	6%

Figure 17: Incorporating information typically used to price Auto insurance (Respondents could select more than one option)

Emerging Issues in Homeowners Insurance: Concerns

The top concern for Homeowners insurers is roof losses.

Other concerns include (in order of rating):

1. Increase in non-weather water losses

2. Homeowners policy encouraging deferred maintenance

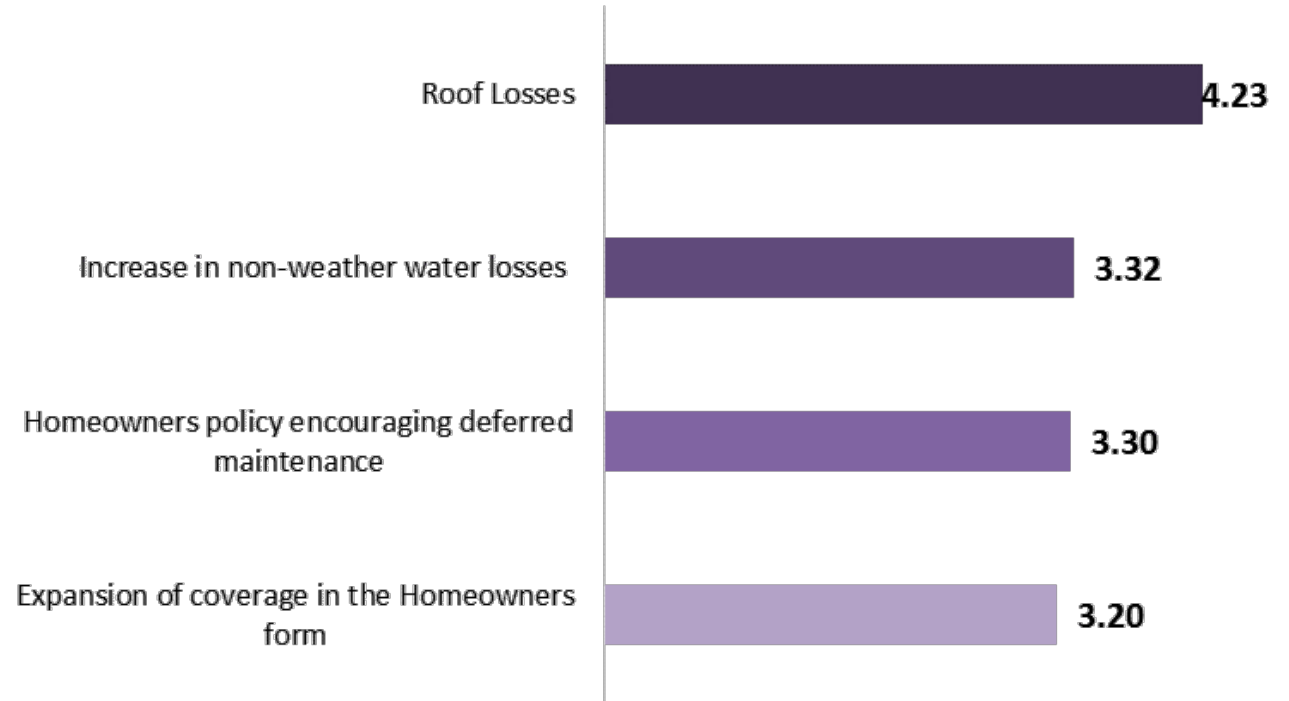3. Expansion of coverage in the Homeowners form

Webinar
1 –Roofs
2 - Non-weather water,
3- Price optimization pushback
CAS Meeting
1– Non-weather water,
2 (tie) Roof and Price optimization pushback

Figure 34: Concerns about emerging issues in Homeowners insurance (1-5 scale)

Optional Flood Insurance Programs

Survey respondents are almost equally divided on whether there is an appetite in the voluntary insurance market for an optional flood insurance program:
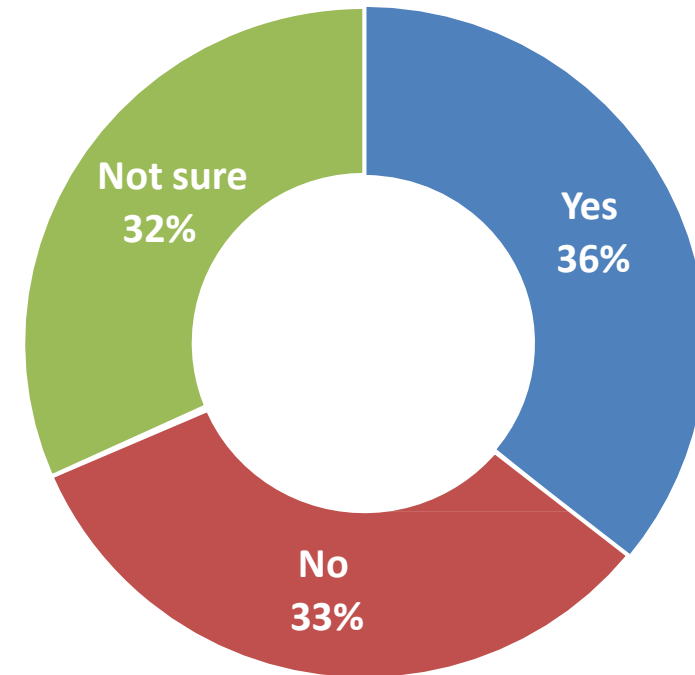
36% believe there is, 33% think there isn't and 32% aren't sure.

CAS Meeting
Yes – 57%
No -32%
Not sure – 11%

Figure 37: Appetite for an optional flood insurance program*

Appetite for an Optional Flood Insurance Program: Large vs. Small Companies

Respondents from larger companies believe there is an appetite for an optional flood insurance program more than the respondents from smaller companies.

While 56% of respondents from companies with over $500M GWP think there is a desire in the Homeowners voluntary insurance market for an optional flood insurance program, only 30% of respondents from the companies with under $500M think the same.
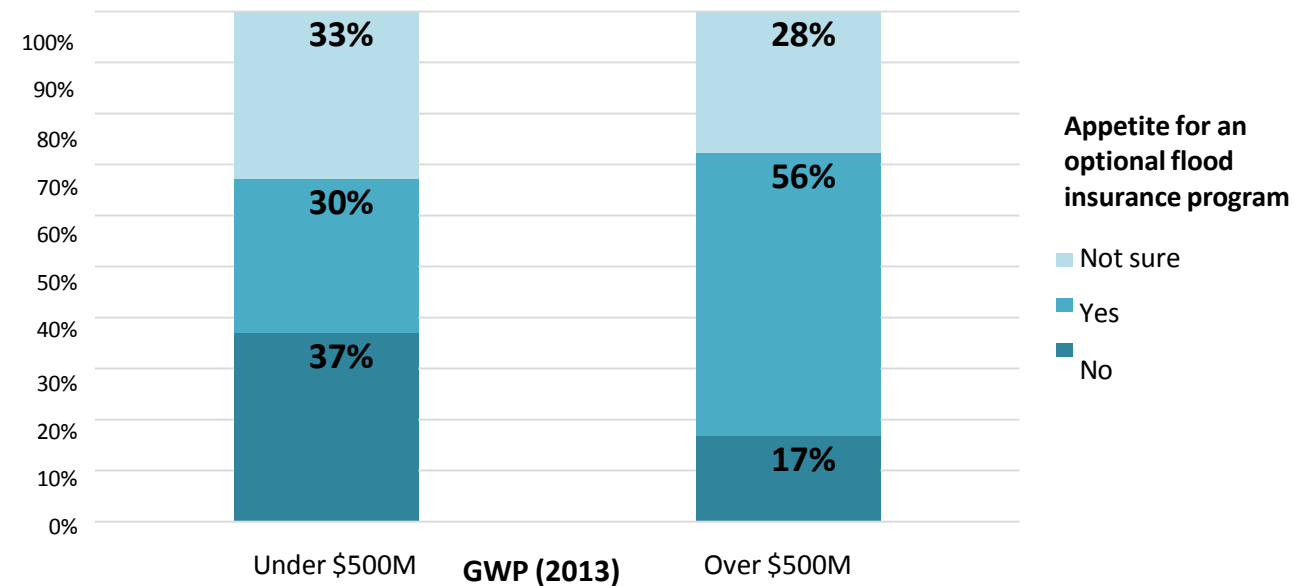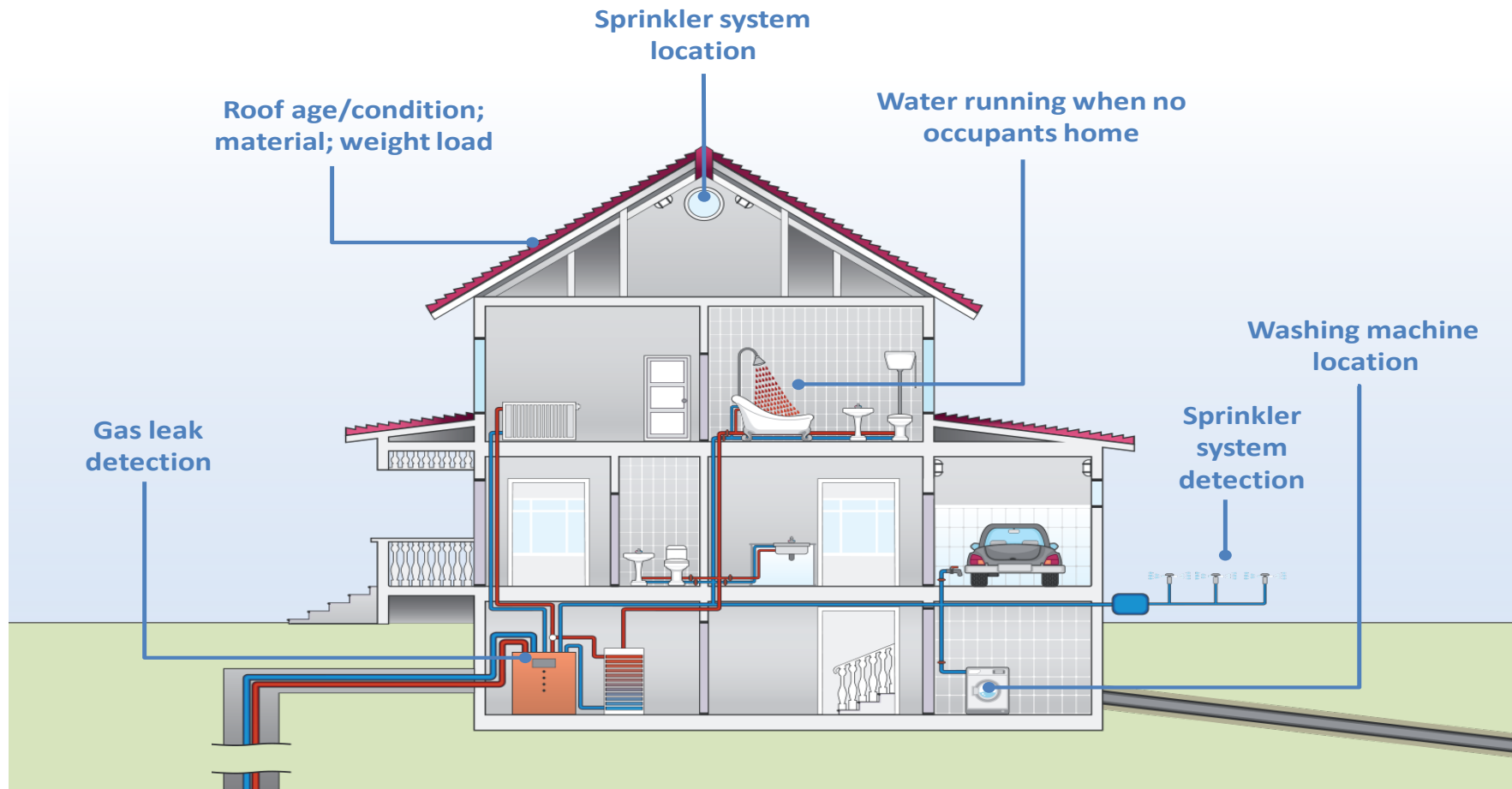

Figure 38: Appetite for an optional flood insurance program by company size

Homeowners Usage-Based Insurance

Sprinkler system location

Water running when no occupants home

Roof age/condition; material; weight load

Washing machine location

Sprinkler system detection

Gas leak detection

Emerging Issues in Homeowners Insurance: Usage-Based Rating

According to survey respondents, usage-based rating will not be widely used for Homeowners rating in the near future.

Only 10% think it will be widely used within the next three years. 52% think it will take more than three years to be widely used, and 38% think it will never be widely used.

Accordingly, only 5% are currently working on a usage-based rating plan for Homeowners insurance.
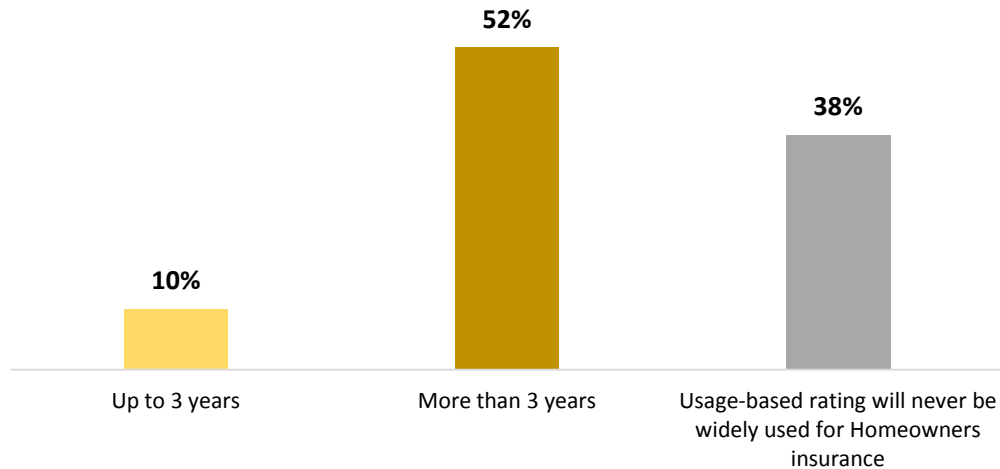
CAS Meeting
Less than 3 yrs – 19%
More than 3 yrs – 74%
Never – 7%

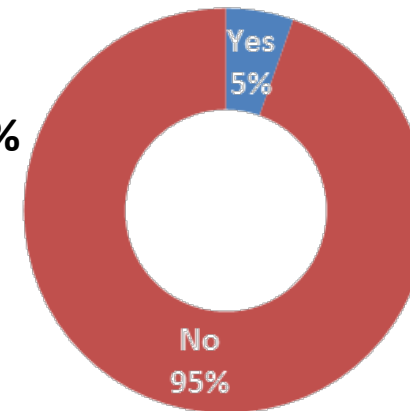*Figure 35: Use of usage-based rating in Homeowners insurance*

Figure 36: Working on a usage-based rating plan for Homeowners insurance

Questions?