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DRAFT

Challenges with Drawing Conclusions from The Clarity Act Data

A White Paper

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Alabama Department of Insurance

CHALLENGES WITH DRAWING CONCLUSIONS FROM THE CLARITY ACT DATA

The Alabama Legislature charged the Alabama Department of Insurance (ALDOI) with the responsibility of collecting data specified in the Property Insurance Clarity Act of 2012 and providing public access to that data. In November, 2013, the ALDOI published such data on its website, which may be found at the following link:

<http://www.aldoi.gov/Consumers/ClarityActConsumers.aspx>. These additional links are available on the Department's website page:

- Industry Data by Zip Code
- Property Insurance Clarity Act
- Basic Flow Chart of the Homeowners Insurance Ratemaking Process
- Homeowners Ratemaking Process – Executive Summary
- Description of the Homeowners Ratemaking Process permitted by the Alabama Department of Insurance
- Companies Reporting Clarity Act Data
- Companies Not Reporting Clarity Act Data (including exempt companies)

Since its publication, a number of interested parties have been studying the Clarity Act industry data by county and have reached several conclusions, such as:

- Alabama's coastal counties have NOT had higher losses than the rest of the state. **Not true.** HHHI Disagrees. See below.
- Mobile & Baldwin Counties homeowners have been over-charged for their homeowners insurance, and have been subsidizing the Upstate homeowners insurance cost. Therefore, coastal counties are being geographically unfairly discriminated against, should be treated the same as Upstate and charged the same homeowners average premium. **Not true.** HHHI disagrees. See below.

- The ALDOI has allowed draconian rate changes on the Coast despite not having historical loss and premium data by zip code or counties. The ALDOI has *assumed* coastal counties were vastly more costly than the rest of the state. **Not true.** **HIII disagrees.** See below.

The ALDOI has been asked on numerous occasions for its opinion on these conclusions, and has been asked how the Department intends to make use of the Clarity Act data to better evaluate homeowners insurance companies' requests for rate increases.

Let's look at the last bullet statement first. For many years before the Clarity Act was passed, the ALDOI has required insurance companies to include in their homeowners rate filings *5 years of premiums and losses by territory and statewide* to support their requested rate change. Each company defines their rating territories differently across the state; some populous counties are subdivided into multiple rating territories (though not necessarily down to each individual zip code), and some less populous counties are combined with other counties to form a single rating territory so as to give that territory statistical credibility.

Included in this territorial
data that insurers provide
are the *territorial wind*

The commissioner shall regulate rates such that they shall not be excessive, inadequate or unfairly discriminatory.

§27-13-1, Code of Alabama

(hurricane and tornado) loss
estimates, generated by the

hurricane and tornado computer models (and other wind data), that are utilized by all insurers and reinsurers. The models primarily used were developed by AIR and RMS. Generally accepted actuarial ratemaking methodology in the U.S. no longer utilizes actual historical hurricane losses for ratemaking purposes, but replaces actual hurricane results with modeled results. These models indicate that the Coastal counties in Alabama are more susceptible to wind losses than are the Upstate counties (even after considering tornado losses). This was not an *assumption* made by the ALDOI, but rather is the conclusion of the computer models. Consumers may question the validity of the computer models, but the models are the best science available for projecting future wind losses.

DOI *assumptions* about coastal losses compared with the rest of the state are primarily buried in the AIR, RMS and other hurricane catastrophe models. The hurricane catastrophe

models are not “the best science available.” They are computer modelling *theories* that have not proven true.

A view that models (and the modelers’ assumptions) should override contradictory historical data defies understanding of the scientific method.

The State of Florida, a state with significantly greater hurricane loss potential risk than Alabama, established a Commission of experts to analyze the science behind these models. The Commission approved these meteorological/statistical models as reasonable for the purpose of setting rates by territory. As a result of the models, reinsurers charge insurers more in the Coastal counties for their wind protection than they do Upstate. Insurers pass these reinsurance charges on to the consumers in their homeowners insurance premium as a cost of doing business. Therefore, the territorial wind premium charged to consumers is based on science and reinsurance costs, not based on assumptions by the ALDOI. The foregoing implies that if insurers were required to charge the same average premium across all counties, Upstate consumers would actually be subsidizing the Coastal consumers for wind coverage.

A representative of the State of Florida’s Commission admitted that hurricane models are not “results accurate” during a debate with the inventor of the models that took place at Governor Bentley’s specially appointed Affordable Homeowners Insurance Commission. For a video excerpt of this exchange, go to: <http://youtu.be/lbaPBU2V85Y>

It is misleading to refer to the models as “reasonable” when modelers and the Florida Commission itself acknowledge that they are not accurate.

Indeed, in 2011, RMS, one of the two modelers cited by the DOI above, declared that the models it used in the days when coastal Alabama prices skyrocketed had overstated coastal losses 50 percent.

Alabama statute requires rates to not be excessive, inadequate, or unfairly discriminatory. In order to meet this requirement, an insurer must statistically support their proposed rates in each territory with that territory’s premium and loss experience (including model results). No insurance company is permitted to raise rates in any single territory unless that territory’s premium and loss data statistically justifies that increase. The ALDOI enforces this requirement without exception, to the point of having required companies to reduce rates when a territory’s data (or model results) indicated that the rates were too high. Therefore, since insurance companies are already providing detailed homeowners territorial data to the ALDOI in their rate filings, there is no added value to the ALDOI using the Clarity Act data to evaluate the rate filings.

When one company’s five years of *territorial* data, supplemented by faulty computer models, and artificially lowered upstate tornado data* diverges significantly from a historical database that includes the vast majority of companies, reporting in all the zip codes over a 10 year period, it is the quantitatively smaller database that falls suspect, not the other way around.

Coastal premiums did not turn down in any dramatic way when RMS declared that it overstated coastal losses 50 percent.

(*The DOI claim that the 2011 tornados were a 1-in-250 year event defies estimates by AON -- the DOI tornado modeler -- and history, both of which imagine them as more likely a 1-in-50 year event.)

Though it is not possible to use the Clarity Act data for ratemaking purposes, it is natural to want to study the data by county to compare their historical results. However, the ALDOI has a number of concerns with the usefulness of the Clarity Act data for making such comparisons.

The vast amount of historical Clarity Law data cannot be used for ratemaking purposes by itself. Additional calculations are needful. But it serves as a sobering reality check that clearly demonstrates that 2006 DOI methods using a mere fraction of the data need dramatic recalibration.

Six Key Challenges

There are no less than six key challenges that arise when using the Clarity Act data to draw conclusions about the profitability of individual counties, and the equity between premiums being charged by counties. Four of the six challenges relate to information that is missing from the Clarity act data. It is impossible to get the full picture of the real situation with regard to homeowners premiums in Alabama, be it Coastal or Upstate, without looking at all of the available data, beyond what is provided under the Clarity Act.

1. Missing “Cost of Doing Business” expense data; Clarity Act data only includes losses.

Compiling the Clarity Act data over the 10 years 2003-2012, one finds the loss ratios (ratios of losses paid to premiums collected) for Mobile/Baldwin Counties versus the Rest of State to be

51% versus 92%, respectively. Just looking at these loss ratios certainly could suggest that the Coast is less expensive than Upstate for insurance companies, and that the Coast is subsidizing Upstate. However, these loss ratios are deceiving for the reason that Coastal homeowners pay an average premium that is about four times higher than that paid by Upstate homeowners. If it can be assumed that an average homeowner Upstate pays \$1,000 annual premium and the average Coastal homeowner pays \$4,000 annual premium, then historically over the last 10 years, insurance companies have paid an average loss of \$2,040 (51% of \$4,000) for Coastal homeowners, and an average loss of \$920 (92% of \$1,000) for Upstate homeowners.

	<u>Coastal</u>	<u>Upstate</u>
Loss Ratio Per Clarity Act	51%	92%
Typical Homeowner Premium	\$4,000	\$1,000
Average Loss Per Homeowner	\$2,040	\$920

Clearly the Coastal homeowners have cost the insurance companies much more per homeowner than have the Upstate homeowners.

To get the complete story, all expenses representing the total cost of doing business must be considered, not just the losses. There are numerous other expenses that insurance companies incur when writing a homeowners insurance policy, such as claims adjusting expense, commissions to agents, internal overhead expense, premium tax, and reinsurance. Insurance companies must also be able to earn a profit over the long-run in order to stay in business. None of these expenses are included in the data reported under the Clarity Act. For there to be accurate information resulting in accurate conclusions, such information must be included.

Most of these expense loads are identical when comparing Coastal homeowners policies and Upstate homeowners policies, but that is not the case for reinsurance expense and for the necessary risk load/cost of capital. Reinsurance (purchased mostly from Bermuda, London and Europe) is more expensive for Coastal policies than for Upstate policies, and is based on the hurricane and tornado models and the reinsurer's cost of capital. The cost of capital is the required investment return necessary to induce someone to invest capital in an insurance company. Since the Coastal wind losses are typically more volatile and less predictable from one year to the next compared to Upstate wind losses, the cost of capital must be greater on the Coast than Upstate in order to attract companies to invest their capital in writing insurance on the Coast. The following chart summarizes the approximate expenses for homeowners insurance on the Coast versus Upstate.

	Coastal	Upstate
Loss Ratio (excluding 2011 tornados)	51%	92% (70%)
Claim Adjustment Expense	10%	10%
Overhead Expense/Reinsurance*	45%	28%
Risk load/Cost of Capital*	9%	3%
Profit Margin	5%	5%
Total (excluding 2011 tornados)	120%	138% (116%)
* Ratios are ALDOI best estimates and not actual industry results.		

Overall, the total cost of reinsurance (not including other overhead expense) and cost of capital on the Coast is almost five times that for Upstate, representing about 23% additional premium to the Coastal homeowner. Combining all of the expenses and profit margin/cost of capital together with the loss ratios cited above, the total results for the Coast versus Upstate become approximately 120% versus 138%, respectively. If we eliminate the losses from the very rare April 2011 Tornado Outbreak, the Upstate result is reduced from 138% to 116%, which is less than the Coastal total.

This reveals that on the Coast over the last 10 years, for every \$100 of premium collected from homeowners, insurance companies have paid out approximately \$106 just for losses and expenses. That means that they have not earned any profit margin or cost of capital as is required on the Coast in order to sustain their company over the long run. Hence, many companies have reduced the amount of Wind coverage that they write on the Coast so as to reduce the amount of capital that they have to dedicate to the Coast. **This clearly demonstrates that over the last 10 years, homeowners on the Coast have been undercharged for their homeowners premium.**

The losses imposed on coastal counties by hurricanes Ivan and Katrina, plus the cost of doing business and profits were paid for in the years leading up to the storms *at the old prices paid for insurance*. Premiums collected in Mobile and Baldwin counties *in the years of the storms themselves* paid *half* the losses of the storms. If the coastal counties paid for their hurricane losses in advance at the old prices, an argument that a 300% increases in premiums remains too little is specious.

The DOI analysis imagines that *70 cents out of every premium dollar from the coast goes to the insurance industry*. It leaves only 30 cents to pay for losses. Something is very wrong when a regulatory body sees no problem with that proportion. The US government manages the flood program better than that.

The DOI analysis expose not only the need for massive reforms but also begins to point whence some reforms lie – reforms, by the way, that should be led by the DOI.

The DOI analysis significantly overstates the coastal loss-ratio. Rather than 51 per cent, it is closer to 25.

Finally, it demonstrates that an inequity in the way the DOI treats coastal and inland counties.

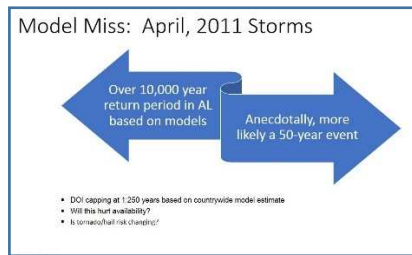
2. Double-counting of Wind-Only Policies. There are many homeowners in Mobile/Baldwin Counties (approximately 15,000 each year for recent years) who purchase two homeowners policies: one for Wind-only, mostly from the Alabama Insurance Underwriting Association (AIUA, or the “Wind Pool” as it is commonly called), and one for all other homeowners coverages from another insurer. Homeowners Upstate are not permitted to purchase separate policies like this. Since both the Wind and non-Wind policies for these homeowners are included in the Clarity Act data for Mobile/Baldwin Counties (resulting in those homeowners being counted twice), the Coastal policy counts are overstated by as much as 10%, thus distorting any comparisons between *losses per policy* on the Coast versus Upstate.

Though the number is probably lower than 10 per cent, this statement is true.

Clarity Law data demonstrates that coastal loss-per-policy compared with the rest of the state is \$622 to \$722. Adding 10 percent to the coastal loss-per-policy brings the coastal average to \$684, still lower than the rest of the state.

3. Hurricane vs. Tornado losses: The Clarity Act data currently covers 2003-2012. This data for Mobile/Baldwin Counties includes hurricane losses from 2004 and 2005. These hurricanes were not atypical of hurricanes that we can expect to occur every 15-25 years on our Coast. The Upstate data includes numerous tornado losses, but especially includes the losses from the April 2011 Tornado Outbreak. Tornado computer models developed by meteorologists and statisticians suggest that this Outbreak has a chance of recurring in Alabama once every 250 Years. Comparing results on the Coast that include a few *typical* hurricanes to results Upstate that include a very *large and rare* tornado outbreak is not appropriate.

The DOI claim that the 2011 tornados were a 1-in-250 year event defies estimates by AON -- the DOI tornado modeler -- and history, both of which imagine them as more likely a 1-in-50 year event. The slide below was presented at Governor Bentley’s Affordable Homeowner’s Insurance Commission by the tornado modelling company that gave the DOI a 1-in-250 year estimate.



Historically upstate Alabama suffered the Super Tornado Outbreak of 1974, a mere 37 years earlier. Meteorologists identify it as equal to or more devastating than the 2011 outbreak.

The coastal counties went 50 consecutive years without a direct hit by Hurricane Frederic, and then 25 years without a direct hit by another Cat 3.

The fact that the DOI persists in minimizing tornado damage while enforcing draconian hurricane models, demonstrates its bias against the coastal counties.

If we exclude the rare April 2011 Tornado Outbreak losses from the Upstate data, and reduce the Coastal policy counts for the double-counting of wind-only policies, we find that the Coastal 10-year average *losses per policy* are about 20% greater than the Upstate 10-year average *losses per policy*. This calculation does not take into account the effect of inflation over the years. Coastal losses in 2004-2005 represent 61% of the losses over the 10-year period, while Upstate losses in 2004-2005 represent only 20% of the losses over the 10-year period. This means that an adjustment for inflation would have a greater impact on the Coastal losses than on the Upstate losses since a greater portion of the Coastal losses are from the older years. If one multiplies the Coastal losses and the Upstate losses from each year by appropriate factors to represent inflation from those years to 2012, the Coastal average 10-year *losses per policy* now is about 30% greater than for Upstate.

Therefore, the statement that Coastal homeowners losses are less expensive than Upstate losses is not correct once you adjust the data to provide a more apples-to-apples comparison. One must be careful, however, not to then suggest that rates on the Coast should only be 30% higher than Upstate given the previous discussion about reinsurance costs and the cost of capital. Also, there are many other variables taken into consideration by the hurricane models, including the change in the housing stock over the past 10 years, that indicate the wind rates on the Coast must be much higher than Upstate.

The DOI increased coastal losses 10 per cent because some coastal policies are double-counted by Clarity Law data. HHII accepts this estimate, and adjusted coastal losses to \$684. The DOI further increased coastal losses because of the effects of inflation. HHII allows 8 per cent for this, increasing estimated coastal loss per policy to \$739 per policy.

The DOI increased its estimate of coastal losses dramatically by dropping the 2011 tornadoes, a proposition HHII does not accept.

(Accounting for these will also increase the premium-per-policy average.)

4. Missing data from Surplus Lines Insurers. Surplus lines insurers (non-admitted insurers that write hard-to-insure properties) are not regulated for the most part by the ALDOI; therefore they were not subject to the Clarity Act and did not report their data to the ALDOI. In Mobile/Baldwin Counties, the surplus lines insurers write approximately 30% of the homeowners policies (and their policies are most likely closer to the beach, and thus more subject to wind losses), while Upstate surplus lines insurers write less than 2% of the policies. With such a large percentage of the premiums and losses excluded from the Coastal data, one should be concerned that comparisons between the Coastal data and the Upstate data might be misleading.

The surplus line market share in coastal Alabama was no different than the rest of the state during the years of the hurricanes. Only since Katrina have insurance companies dumped more than 70,000 Mobile and Baldwin policyholders, and surplus lines took a significant market position.

There have been no hurricanes since they moved in.

Consequently, if surplus lines were added to the data, the total number of coastal policies would increase perhaps as much as the DOI 30 percent estimate. Because we've had no hurricanes, though, losses would not increase 30 percent. The resulting surplus line loss-per-policy on the coast would be dramatically lower than the admitted company average.

Adding surplus lines would, therefore, *lower* the average coastal loss-per-policy.

This would likely reduce the coastal average about 10%, taking coastal loss per policy back down to about \$677.

(Surplus lines were required to report in the bill crafted by HHII. The insurance cosmos removed them from the bill before it became law.)

(Adding surplus lines into the data base would dramatically increase the premium average per policy *and* significantly reduce the coastal loss ratio.)

5. Missing data from insurers no longer in business or which did not voluntarily report data for years prior to 2007. The Clarity Act required insurers to report data for 2007-2012. The ALDOI requested insurers to voluntarily report data back to 2003 so as to better capture the losses from the 2004-2005 hurricane seasons. Over 20% of the homeowners business written in 2004 was with insurers that did not report data under the Clarity Act for years prior to 2007. Though it is not possible to determine the geographical mix of that missing data between Coastal and Upstate, one could be concerned that comparisons between the Coastal data and the Upstate data might be misleading.

Though 20 per cent of the companies did not report data between 2003 and 2007, they do not represent 20 per cent of the market. All of the large insurance companies reported, including AIUA.

Two-thirds of the claims made following the hurricanes were made in upstate counties. Four inland counties had greater losses-per-policy than Baldwin County, and 12 had more than Mobile. Were the hurricane data from these companies added, it would increase the coastal loss-per-policy, but it would also increase the inland losses.

The loss-per-policy would increase in both cases, but the increase would be muted by two non-hurricane years.

On balance the increases might add 35 per cent to coastal losses and only 10 per cent to inland. (Perhaps this difference could be reasonably estimated by comparing loss per policy differences during the hurricane years) Adjusting the average to account for the missing companies would change the coastal loss-per-policy to \$846 (\$677 X 25%)

6. Missing data from homeowners no longer purchasing Wind coverage. Wind coverage on the Coast represents approximately 75% of the total homeowners policy premium. Many homeowners, facing tightened budgets, have selected to “go bare” and not purchase Wind coverage any longer, but only purchase a policy for all other coverages excluding Wind. Homeowners Upstate do not have this option. Therefore, the *losses per policy* on the Coast would be under-stated since they do not include any Wind losses for these homeowners, while all Wind losses for all homeowners Upstate are included. This clearly distorts any comparison between the Coast and Upstate. The ALDOI has no means to estimate how many Coastal homeowners choose to forego Wind coverage.

An informal HHII survey suggests about 10 per cent of coastal families have dropped their wind insurance. A small percentage have dropped all insurance.

The vast majority can do so only because they have no mortgage on their house. They are, thus, senior citizens, people generally considered responsible homeowners.

Some have probably experienced losses, but the number would be very small and would hardly increase the total coastal loss-per-policy 5 per cent to \$888 (\$846 X 5%)

Accurate Conclusions

While the Clarity Act may provide good information for the public arena, it’s important to note that there are many challenges that arise when attempting to analyze the information to evaluate homeowners insurance rates. It becomes even more complicated and difficult when attempting to use the information to compare Coastal versus Upstate insurance rates. Therefore, when considering all of the above, the Clarity Act simply is not useful for determining what rates an insurance company should be permitted to charge for homeowners insurance. Analysis using incomplete and insufficient data can too often lead to inaccurate and misleading conclusions.

Anyone analyzing the Clarity Act data should keep in mind the following:

- For years, the ALDOI has been receiving sufficient territorial and statewide premium and loss data from each insurance company to statistically support requested homeowners rate increases. Clarity Act data does not provide the ALDOI with any new information that can be used in evaluating homeowners territorial insurance rates.

With 100% of the admitted companies reporting loss and premium data in 100% of the state's zip codes going back seven years, and 80% reporting the hurricane years, the Clarity Law data is vastly superior to territorial reports that go back five years and combine with experimental computer models that the modelers themselves have declared wrong. Because historical data trumps models in every instance, and the historical data portrays a significantly different picture than territorial, one-company data and models, the DOI errs in concluding that it delivers absolutely no useful, corrective insights.

- The Clarity Act loss ratios can be misleading because of the difference in average premiums charged on the Coast versus Upstate, but the data demonstrates that Coastal homeowners' losses have cost insurance companies 2 to 3 times as much as have Upstate homeowners.

Taking the objections raised by the DOI into account, the coastal loss-per-policy is \$888 compared to the rest of the state at \$722+*. This is a 22 per cent difference, not a 200-to 300% difference.

- The Clarity Act includes only company loss data. Some of the important information missing in the Clarity Act data includes, but is not limited to, expenses incurred by insurance companies as a cost of doing business; surplus lines policies which represent more than 30% of homeowner policies in Coastal areas; homeowners who purchase more than one policy; and, homeowners who have dropped their Wind coverage from their policies.
- After thoroughly reviewing the data received under the Clarity Act, the ALDOI's conclusion is that the premium collected over the past 10 years in the Coastal area was inadequate when considering losses, expenses, and the necessary profit/cost of capital.

The Clarity Law does not strive to discern company profitability. It strives to expose the inaccuracy of claims that coastal counties have 300% higher losses than the rest of the state. The data *overwhelmingly* demonstrates the inaccuracy.

Unexpectedly, the data demonstrated that the coastal 2004 & 5 hurricane losses, plus the cost of business and profits were paid for *in advance*, and that companies made money in the coastal business *when charging prices at the old levels*.

To restate, Alabama statute says that rates must not be excessive, inadequate, or unfairly discriminatory. Is the difference in homeowners rates on the Coast versus Upstate unfair geographical discrimination, and should the ALDOI require greater equality between these rates? The loss and expense analysis discussed above demonstrates that the Coastal premiums collected were not excessive, but were actually inadequate. Therefore, the ALDOI has permitted insurance companies to raise their rates these past few years in order to achieve adequate rate levels. If the ALDOI were to now force insurance companies to lower their Coastal rates, those rates would be inadequate again, and the ALDOI does not have the authority to require a company to charge inadequate rates.

Some analyzing the Clarity Act data have concluded that the Coastal areas are subsidizing Upstate homeowners, allowing insurers to undercharge Upstate customers in order to remain competitive. Subsidizing generally implies that one person is overcharged in order for another person to be undercharged. Since Coastal homeowners have not been overcharged, one could not say that they are subsidizing the premiums for homeowners Upstate.

So are the Upstate rates inadequate? Yes, technically they are statistically inadequate. Upstate homeowners are being undercharged by insurance companies for their insurance. The ALDOI has acknowledged this fact for several years. Companies have chosen to be more competitive in their pricing of insurance Upstate because the losses Upstate have generally shown to be more stable and predictable, the April 2011 Tornado Outbreak being a *very rare* deviation. As long as a company is deemed to be financially viable and able to sustain charging those lower rates, the ALDOI does not consider it to be in the public's interest to force the company to charge homeowners a higher premium than the insurance companies desire to charge. It is a completely different thing to force a company to undercharge consumers as opposed to allowing a financially viable company to choose to undercharge a specific market, making its own business decision to do so in order to remain competitive.

So is this unfair geographical discrimination? It would be unfair if the Coast were being overcharged, but since that is not the case, it is not unfair, but is a demonstration of the free market at work.

The Clarity Law dramatically, *overwhelmingly* demonstrates that coastal counties' losses are not 300% higher than the rest of the state and that the 300% increases are both geographical discrimination *and* excessive.

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