



CT Homeowners MAPS Rate Rule Filing eff 08/18/2025

SERFF#: AMEC-134363726

Objection Dated: 02/13/2025

Preliminary Objections - Public

**Objection 1:** Please provide qualifications for the actuaries involved in developing the model, and the peer review and sign-off from your Chief Actuary and/or Chief Data Analytics Officer regarding the data governance and modeling per ASOP 23, ASOP 25, ASOP 38 and ASOP 56. Specifically, the rating variables in the models with potential unintentional bias and unfair discriminatory consequences.

**Response:**

What follows are the Actuarial qualifications for the actuaries involved in developing the models and data.

**David Klemish: Senior Manager: Modeling Team**

Fellow of the Casualty Actuarial Society, (2006)

Member of the American Academy of Actuaries, (2006)

B.S. Mathematics, University of Delaware (2001)

B.S. Computer Science, University of Delaware (2001)

M.S. Statistical and Economic Modeling, Duke University (2014)

M.S. Statistics, Duke University (2018)

David started his actuarial career at Insurance Services Office in 2002 and joined MAPFRE in 2024. He has worked in personal and commercial lines pricing at various times during this period. His modeling experience began in 2008 supporting ISO's personal auto vehicle symbolling and has continued at other jobs and in academia. David oversaw the modeling process for CT MAPS Homeowners.

**Samuel Hanig: Actuary III, Modeler**

Associate of the Casualty Actuarial Society, (2014)

B.S. Applied Mathematics, University of California, Los Angeles, (2002)

Samuel began his career at Swiss Re helping to assess structured reinsurance transactions through cashflow simulation. He has worked in pricing capacities at Nationwide, Esurance, and CIG on Auto, Commercial Auto, Umbrella, and Business Owner's Policies, while also performing quarterly reserving at CIG. Sam was an Industry Analyst at AM Best publishing articles on Property and Casualty lines of business and has been an actuary with MAPFRE for almost 2 years and has a combined 2 and a half years modeling experience spanning his current role at MAPFRE and prior roles. Most recent modeling experience includes being a part of the MA MAPS modeling team, being the primary CT MAPS modeler, and the sole RI modeler(in progress).

**Jenny Tam: Actuary III, Modeler**

Fellow of the Casualty Actuarial Society, (2021)

B.S. Mathematical Science, Bentley University (2010)

M.S. Actuarial Science, Boston University (2013)

Jenny has been employed at MAPFRE since 2013. She has been on the Modeling Team since 2024, working on MAPS GLM models for MA, CT, and WA. Prior to joining the Modeling Team, she worked in a variety of roles related to pricing, state management, ratings systems, and other modeling projects.

As can be seen, there were multiple credentialed actuaries involved, committed to following the Actuarial Standards of Practice. With respect to the cited Actuarial Standards of Practice, please see the following. For additional details, please refer to the Modeling Memorandum and the GLM Checklist.

**ASOP 23 (Data Quality):** The data team works collaboratively with our Data Governance department to ensure data quality. The dataset is reconciled to multiple sources including reserving data and corporate earned premium, earned exposure and loss reports. This data is reconciled at an aggregate level as well as by state, year, line of business, and coverage and/or peril basis. This data is also peer reviewed by the modeling team. If there are items that exceed a given tolerance, they are investigated and rectified.

**ASOP 25 (Credibility Procedures):** Within the model building process, explicit credibility procedures were not applied. The model building process included consideration of model metrics (such as p-values, AIC, BIC and deviance) when including, binning and transforming variables.

**ASOP 38 (Catastrophe Models):** Catastrophe losses were excluded from the modeling dataset.

**ASOP 56 (Modeling):** Models were built and validated using data appropriate for predicting loss costs for the state of Connecticut. The modeling process included validating the reasonableness of the predictions on a dataset of Connecticut policies and peer review of results.

MAPFRE strives to ensure that our models are free from all intentional and unintentional bias and unfair discrimination, but we have no way of explicitly testing this, as we do not collect data on race, creed, color, national origin, or other protected groups.

Data, modeling and state pricing teams all report directly to the VP of Market Pricing (Christopher Harris, FCAS). The data goes through a reconciliation process as outlined above. The model process, also outlined above, includes peer review and signoff by the modeling manager, as well as validation through state specific datasets vetted by the modeling, state pricing and state product teams. As a final measure, all rate filings are signed off on by an officer of the company, in this case the VP of Market Pricing.

**Objection 2:** Confidentiality – Your actuarial memo confidentiality request discussed Exhibits IV – IX. We did not find Exhibits VIII or Exhibit IX. Were these intended to be filed? We do see your Note to Reviewer that the request should only include Exhibits IV – VII. Please update your Actuarial memo to this effect as well.

**Response:** Please see the updated memo

**Objection 3:** Please explain which of your two programs this program will go into your legacy program; the \$33M book of business or the \$2M Premier Living book. Please provide SERFF tracking numbers for the most recent rule/rate manuals for the book that this will replace. Please comment on if you will continue to do separate filings for each program in the future; would that then be three.

**Response:** Premier Living is our high-value home product and was last approved under SERFF Tracking number AMEC-134330597. We will not be moving these policies into our new home product and agents can continue to write new business in this product. Our legacy home product, last approved under SERFF Tracking Number AMEC-134330580 will be closed for new business as of the effective date of this MAPS Homeowner product. All existing business in our legacy home product will remain under that product for all future renewals. All new business effective on or after the effective date of this filing will be written into this MAPS Homeowner product and remain in the MAPS product for future renewals. We will continue to do separate filings for each of these three programs in the future.

**Objection 4:** *Red-lines – In your actuarial memo you discuss 10 rating variables that will be added to your program and the move into multi-perils rating. The Department does expect to see Red-line from your CURRENT program for Rates, Rules and Rate Order of Calculation. Please provide with more narrative as necessary to better explain.*

**Response:** We have attached two red-lined documents. This first is called Red Line ROC which outlines the changes to our Rate Order Calculation. This will identify the new variables, as well as the expansion of our new product to apply rating factors to individual perils rather than the prior structure that combined perils into 1 of 2 groups. We have also attached a red-lined version of the Rules Manual where we have marked up the Legacy Rule Manual, that was last approved in SERFF Tracking Number AMEC-133886956, into a new rule manual for our MAPS Homeowner product.

**Objection 5:** Missing Specifically from Actuarial Checklist Section B, item 7: We consider this to be questions 5, 6, 7, 8 and 9. *Filing Memo/Road map - We note your 10 pages of exhibits for in Filing support with no narrative is NOT sufficient for a Rate Page manual of 252 pages.*

*Please provide a road map in either chart/ word document to show for each table in the Rate Manual, where the source of the factors can be found. Literally, this would be for every rate table in your rate manual.*

- *If a table/rates are from one of your previous programs, please provide the SERFF tracking number.*
- *If from a competitor filing, please provide the SERFF tracking number for a CT filing. If your rates/factors are not exactly from one source, please provide an exhibit to show the selected factors, your competitors with SERFF tracking number and any calculations to arrive at your selected factors*
- *If the factors are from the GLM, please provide exhibits showing the indicated, current (if applicable), proposed factor and % change from current (if applicable); this is requested in the Actuarial Checklist Section B, item 5a.*

**Response:** Please see the new Filing Road Map exhibit which lists sources, and exhibits if applicable, for each factor.

**Objection 6:** *For your rate pages you stated that “Final selections can be found in the rate pages. The only deviation is for the THEFT peril at the highest limits of the deductible / AOI curve to account for a reversal. Please see Exhibit II.” And we do see this.*

However, we see many items in the Rate Pages that are not listed as variables in the GLM Data Dictionary. We do need to see GLM model output for the items in the Rate Tables with current and selected.; and details on how they were created. See below:

For Exhibit 3 Policy Type - is this from the GLM or other source?

For Exhibit 4 table by Form by Coverage A and Deductible table constructed as we see single variables in the Data Dictionary for Coverage and Deductible and in addition you have provided increased limit factor tables. And similarly, for Exhibit 5 by Form by Coverage C and Deductible. Same for Exhibit 6 and Exhibit 7 with Hurricane Deductible \$ and % ; and Coverage A respectively.

**Response:** For exhibits 4 (HO3 Coverage A and Deductible), 6 (Hurricane deductible) and 7 (Wind/Hail deductible), please refer to objection exhibits 4 and 5 for details on the connection between GLM outputs and selected factors in these tables.

**Objection 7:** There are other tables we see in the Rate manual that do not seem to come from the GLM but perhaps from a prior program such as Exhibit 15 Dwelling Usage; please explain the source of the factors. This may also pertain to Fire Alarm Exhibit 22; possibly Burglar Alarm Exhibit 23 although that may be in the GLM, Sprinkler System Exhibit 24, Lightning Protective Device Exhibit 25, Gated Community Exhibit 26, Affinity Discount Exhibit 27, and Association Discount Exhibit 28. Also, Secondary Heating Sources Exhibit 36, Oil Tank Factor Exhibit 37, Windstorm Mitigation Truss Bracing Factor Exhibit 38, Windstorm Mitigation Gable Bracing Factor Exhibit 39, Windstorm Mitigation Hurricane Shutters Factor Exhibit 40, Mitigation Plywood Shutters Factor Exhibit 41, Windstorm Mitigation Hurricane Straps Factor Exhibit 42, Windstorm Mitigation Reinforced Exterior Doors Factor Exhibit 43, and Windstorm Mitigation Laminated Windows Factor Exhibit 44.

**Response:** Please see the new Filing Road Map exhibit which lists sources, and exhibits if applicable, for each factor.

**Objection 8:** Similarly, we need support for optional coverages and endorsements coverages including: Computer Coverage Exhibit 49, Replacement Cost Loss Settlement for Certain Non-Building Structures on Resident Premises Exhibit 50, Building Additions and Alterations – Increased Limit Exhibit 51, Livestock Collision Exhibit 52, Identity Fraud Expenses Exhibit 53, Scheduled Personal Property Exhibit 54, Coverage C Increased Limits of Liability Exhibit 55, Personal Property Replacement Cost Loss Settlement Exhibit 56, Refrigerated Property Exhibit 57, Special Property Exhibit 58, Extended Theft Coverage for Residence Premises Occasionally Rented to Others Exhibit 59, Unit-Owners Coverage C Special Coverage Exhibit 60, Unit-Owners Rental to Others Exhibit 61, Theft of Building Material Exhibit 62, Valuable Possessions Coverage Endorsement Exhibit 63, Increased Limits on Business Property Exhibit 64, Specified Additional Amount of Insurance for Coverage A Exhibit 65, Loss Assessment Coverage Exhibit 66, Credit Card, EFT Card, Forgery/Counterfeit Money – Increased Limit; Ordinance or Law Increased Amount of Coverage Exhibit 68, Personal Injury Exhibit 69, Structure Rented to Others – Residence Premises Exhibit 70, Permitted Incidental Occupancies – Residence Premises Exhibit 71, Additional Residence Rented to Others Exhibit 72, Business Pursuits Exhibit 73, Incidental Farming Personal Liability – On Premises Exhibit 74, Watercraft Exhibit 75, Additional Insured – Student Living Away from Resident Premises Exhibit 76, Special Loss Settlement Exhibit 77, Other Insured Location Occupied by Insured Exhibit 78, Secondary Residence Liability Credit, Limited Water Back-up and Sump Discharge or Overflow Coverage Exhibit 80, Earthquake

*Coverage Exhibit 81, Earthquake Loss Assessment Exhibit 82, Service Line Coverage Exhibit 83, Home Systems Protection Exhibit 84, Guaranteed Replacement Cost Exhibit 85, MAPFRE Advantage Plus Exhibit 86, MAPFRE Elite Plus Exhibit 87, Endorsement Combination Discount Exhibit 88, Umbrella Base Rate Exhibit 89 and Umbrella Increased Limit Factor Exhibit 90, and Umbrella Flat Rates Exhibit 91. For these items we would be thinking a red-line of an existing program with these items or competitors support exhibit for each of them; showing competitors and company selected with SERFF Tracking numbers with an explanation for these items.*

**Response:** Please see the new Filing Road Map exhibit which lists sources, and exhibits if applicable, for each factor.

**Objection 9:** *Other items we expected comment on for this new program with more detail than the sentences in the actuarial memo;*

- a. *Base Rates – how developed from current CT program, adjustments to get to proper starting level*
- b. *Expected Expense Exhibit*
- c. *Minimum Premium Support – Exhibit 48*
- d. *Expense Fee calculation/Support – if applicable*
- e. *Rate Algorithm – Rate Order of Calculation – please provide a Red line from your existing program.*

**Response:** Please see the updated Exhibit I – Non-Modeled Factors exhibit as well as the new Expected Expense Exhibit.

**Objection 10:** *Increase Limit Factor Analysis -*

- a. *Please provide an actuarial narrative describing your data and methodology.*
- b. *Please prepare an exhibit to show your calculations to demonstrate the selected factors follow the consistency test “the marginal premium per \$1000 of coverage should decrease as the limit of coverage increases” as presented in in Miccolis’s actuarial paper attached. This would be for each of your Exhibit 1 exhibits for Coverage B, C, D, E and F.*

**Response:** Please see the updated Exhibit I – Non-Modeled Factors exhibit for updated support for Coverage E and Coverage F ILFs. Remaining ILFs are sourced from our approved Massachusetts MAPS filing, SERFF # CMRC-134239073.

**Objection 11:** Please explain what the Pure Premium Exhibit III is and what it is trying to tell us.

**Response:** Pure Premium Exhibit III illustrates the effectiveness of the rating structure in identifying and pricing different risk levels. The graph is sorted by proposed average premium, with decile 1 representing the lowest average premium group and decile 10 the highest. The upward slope of the pure premium relativity line indicates that the new rates are successfully distinguishing between higher and lower risks. Similarly, the upward trend of the proposed premium relativity line demonstrates that premiums are increasing with rising risks.

**Objection 12:** Rule C-5 Tier – We are looking for the definitions of each item in the Table to be defined in the Rules. Please tell us where the rules for each item would be; For example, we see some have similar names perhaps; like for Financial Merit; but where is PNI Financial Merit Score defined? Are pre-program loss claim counts the same as the Loss History Rule C-32? Where is Smoker/Non-Smoker defined and how would this information be obtained? Where is Prior Homeowner Carrier defined and how would be information be obtained?

**Response:** Rule B-10 of the Rules Manual has been updated to clarify the definition of PNI. The remainder of the Financial Merit Score rules are also in Rule B-10. Pre-program losses are losses that have occurred prior to policy inception with MAPFRE. The losses that are included in the Loss History rating step and rule are losses that have occurred on or after policy inception with MAPFRE. Please see our Tier Rating Manual for definitions of each of the Tier calculation steps.