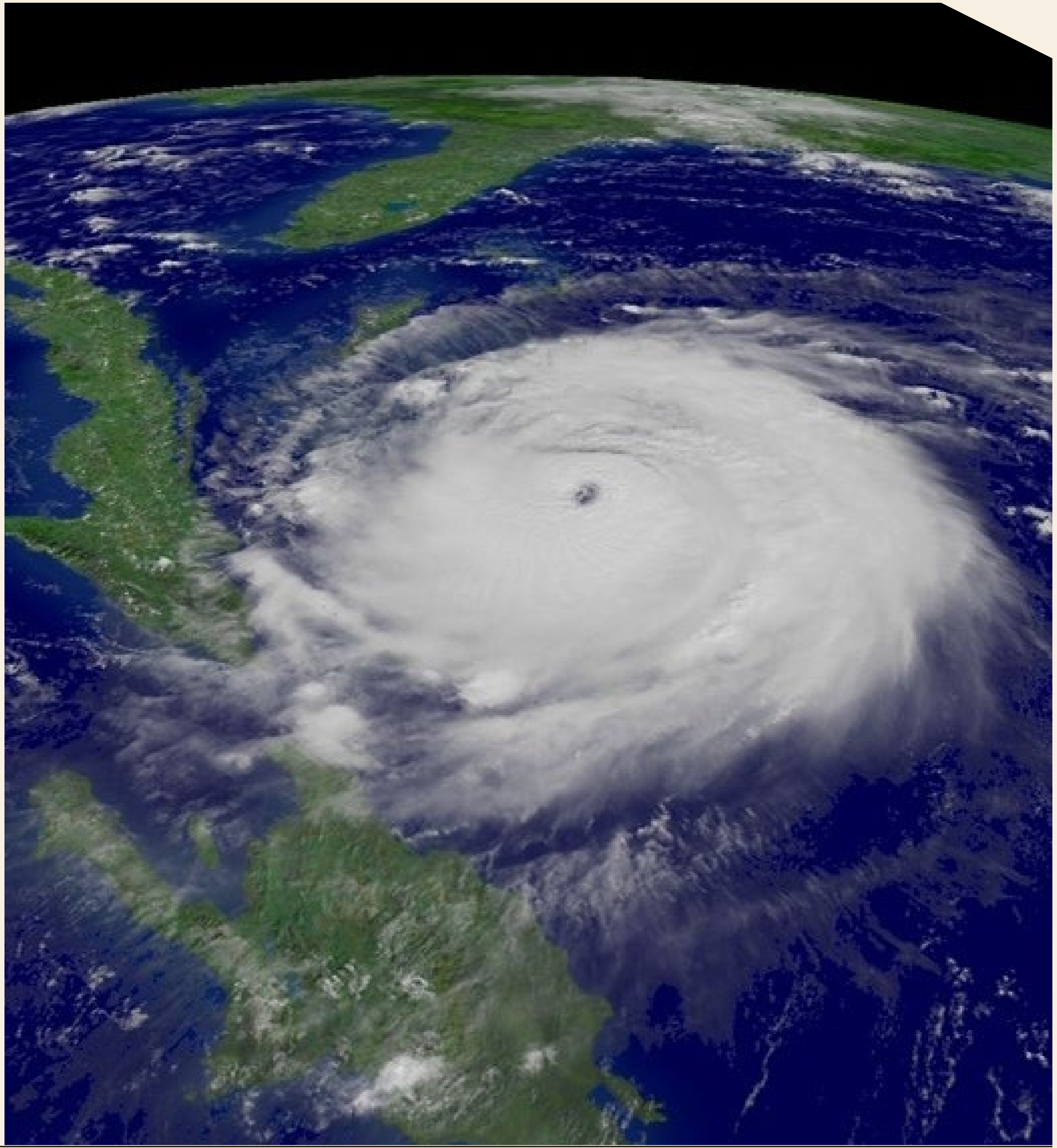
CoreLogic/Cotality Florida Hurricane Model 2025

FCHLPM
June 11, 2025
Tallahassee, FL

General Overview of the

CoreLogic/Cotality Hurricane Model



CoreLogic is now Cotality

CoreLogic rebranded as Cotality on March 24, 2025, with no change in ownership or organization.

Through the "Licenses and Trademarks" page we have updated the submission to replace CoreLogic with CoreLogic/Cotality; after that page, and in the material presented today after this overview presentation, all instances of CoreLogic should be interpreted as CoreLogic/Cotality.

Platforms

The **RQE** (Risk Quantification and Engineering™) platform is a networked, multi-user, client server architecture enabling enterprise-wide analysis using centralized and sharable databases. RQE uses a cost efficient industry standard computer infrastructure that can easily expand to meet growing user demand. RQE uses standard PCs for end user 'clients' running ordinary internet browsers. All users are networked to standard Windows based servers which can be configured in scalable clusters to provide higher performance and capacity. **This is the primary platform for the purpose of this submission.**

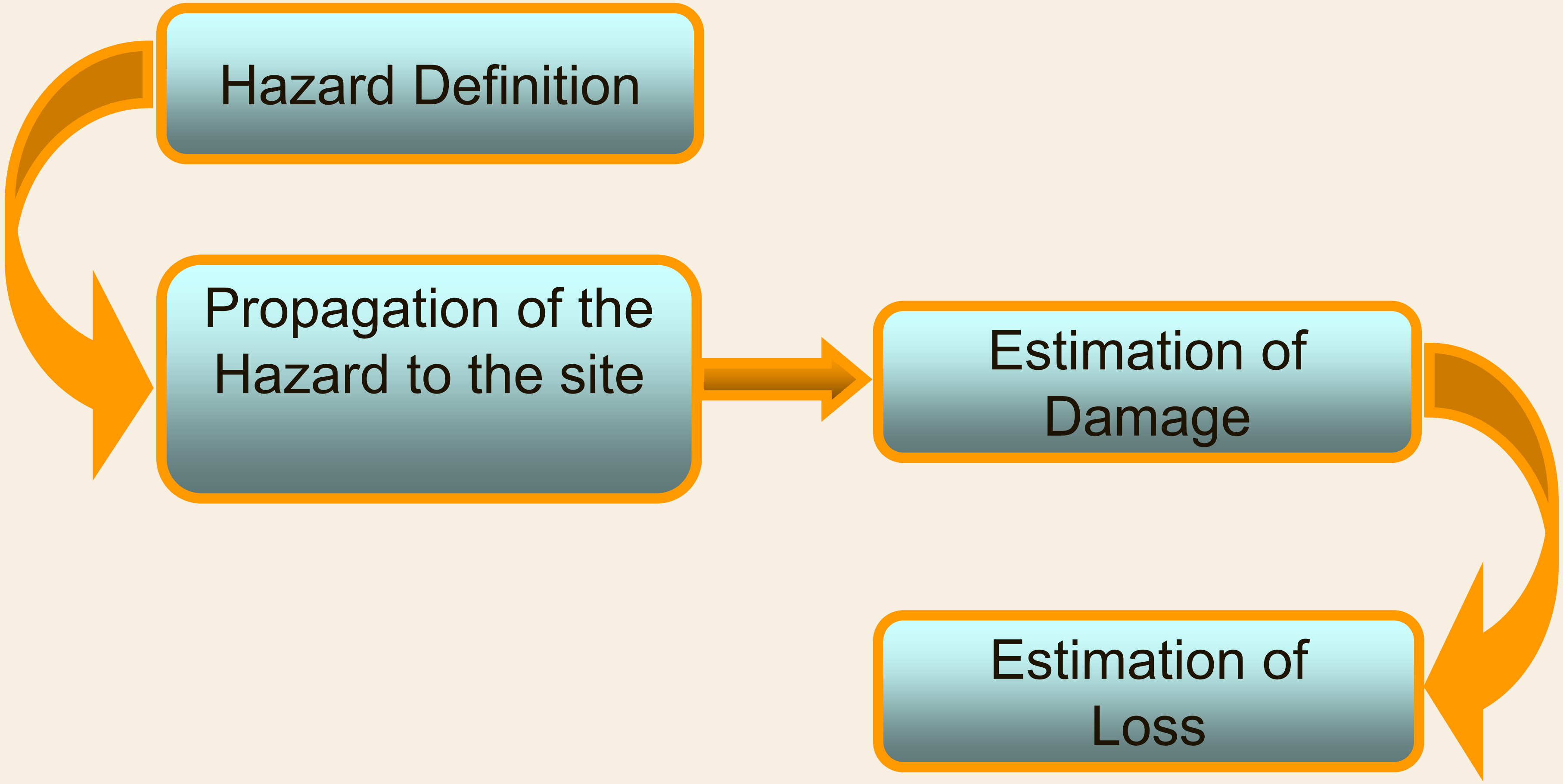
The **Navigate™** platform is a cloud based managed service software as a service (SaaS) offering provided by CoreLogic/Cotality. **The model running within Navigate is functionally equivalent to the model running in the RQE platform.**

Platforms (cont.)

Both RQE and Navigate are global, multi-peril platforms incorporating a simulation of 300,000 years of events

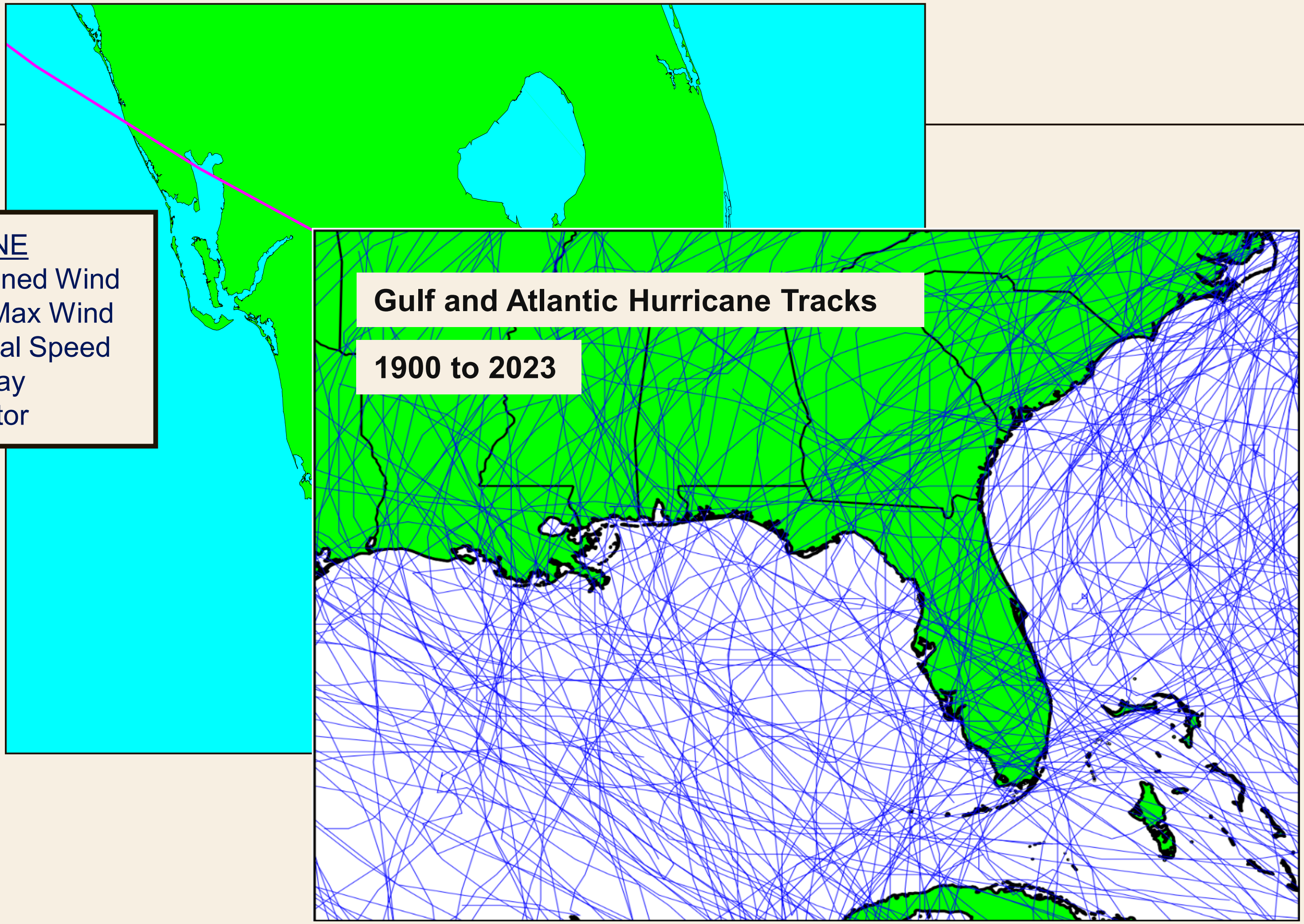
Comprehensive Atlantic Basin model - current update is scheduled to be released in both platforms after certification

Overall Model Methodology

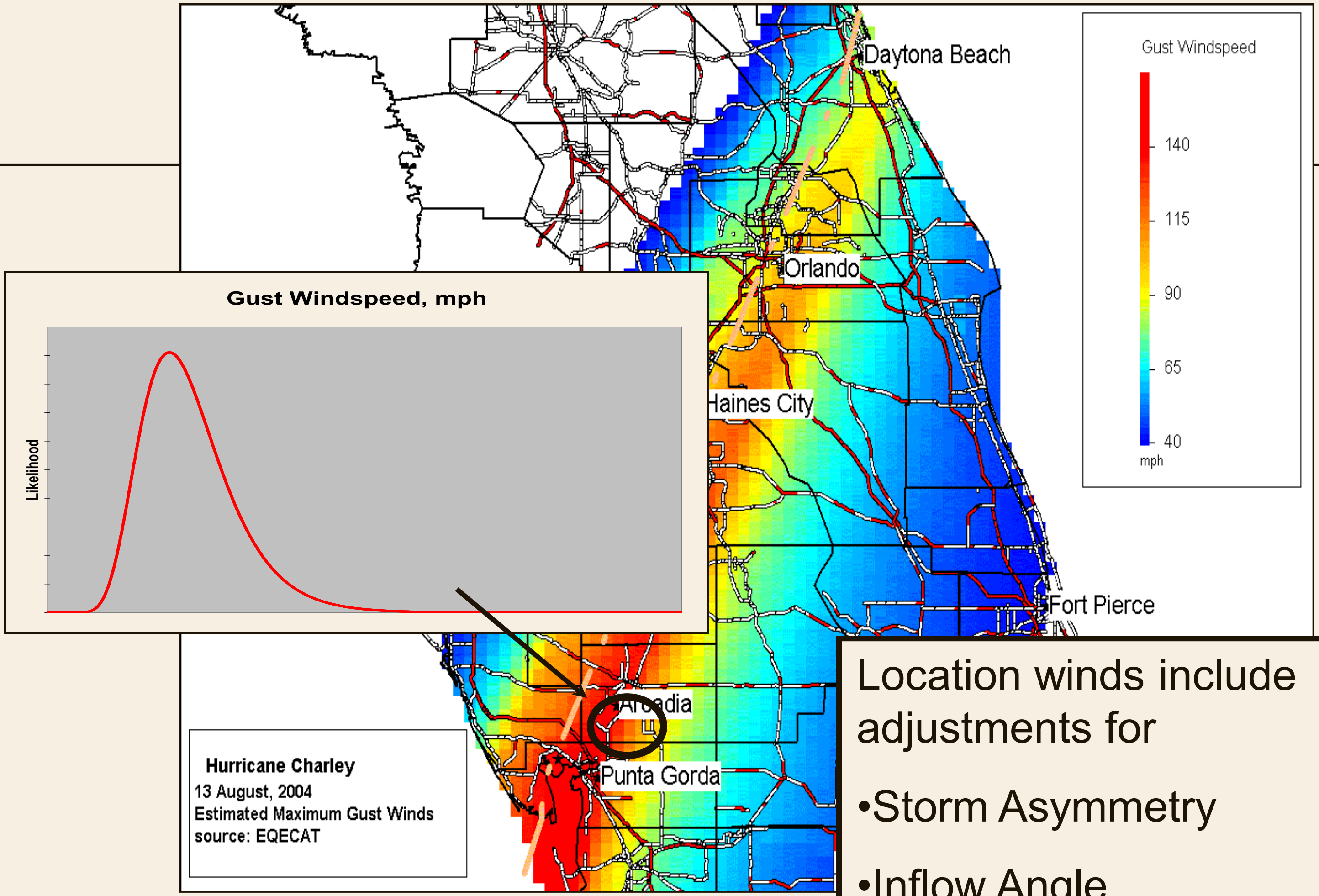


1. Hazard Definition

HURRICANE
Max Sustained Wind
Radius to Max Wind
Translational Speed
Inland Decay
Profile Factor



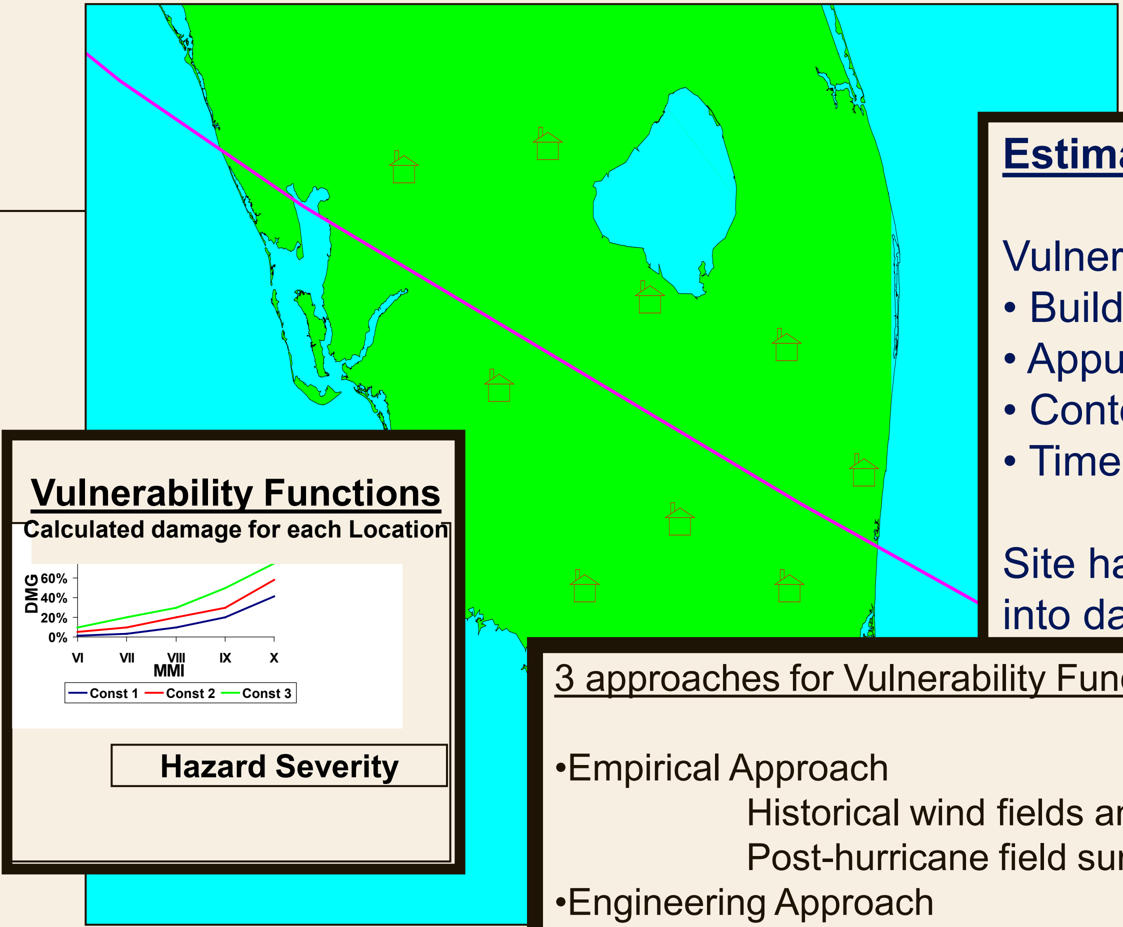
2. Determine Site Hazard Severity



Location winds include adjustments for

- Storm Asymmetry
- Inflow Angle
- Land Use / Land Cover

3. Estimate Ground up Damage



Vulnerability Functions

Calculated damage for each Location

Hazard Severity

Estimate Damage for each Site:

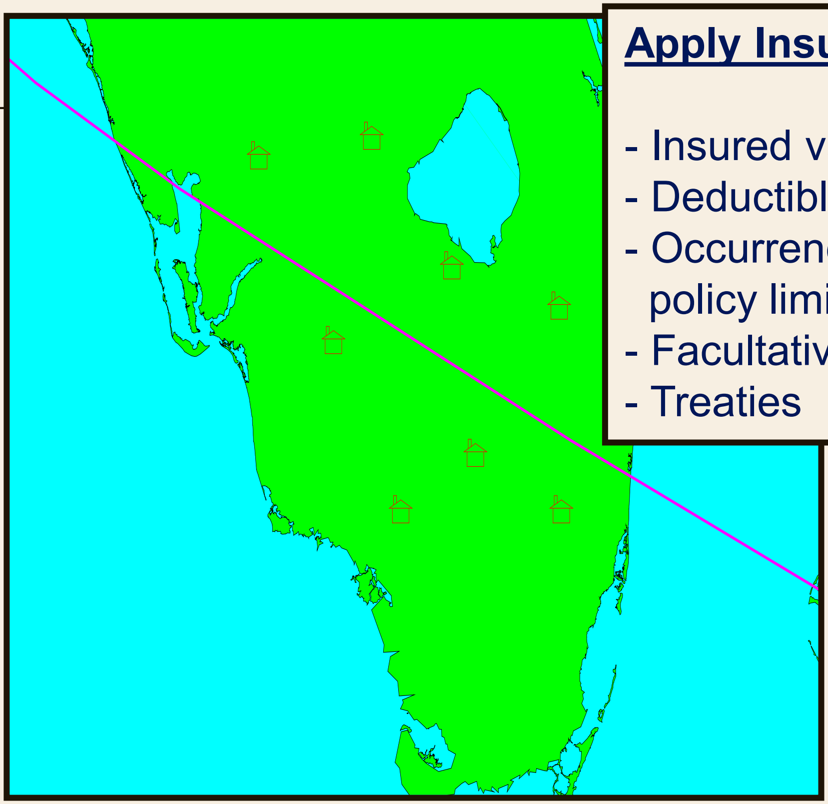
Vulnerability curves for:
- Building
- Appurtenant Structure
- Contents
- Time Element (ALE/BI)

Site hazard intensity converted into damage distribution

3 approaches for Vulnerability Function Development:

- Empirical Approach
  - Historical wind fields and claims data
  - Post-hurricane field surveys
- Engineering Approach
  - Experimental research conducted by Mehta and McDonald (Texas Tech), and structural calculations
- Expert opinion

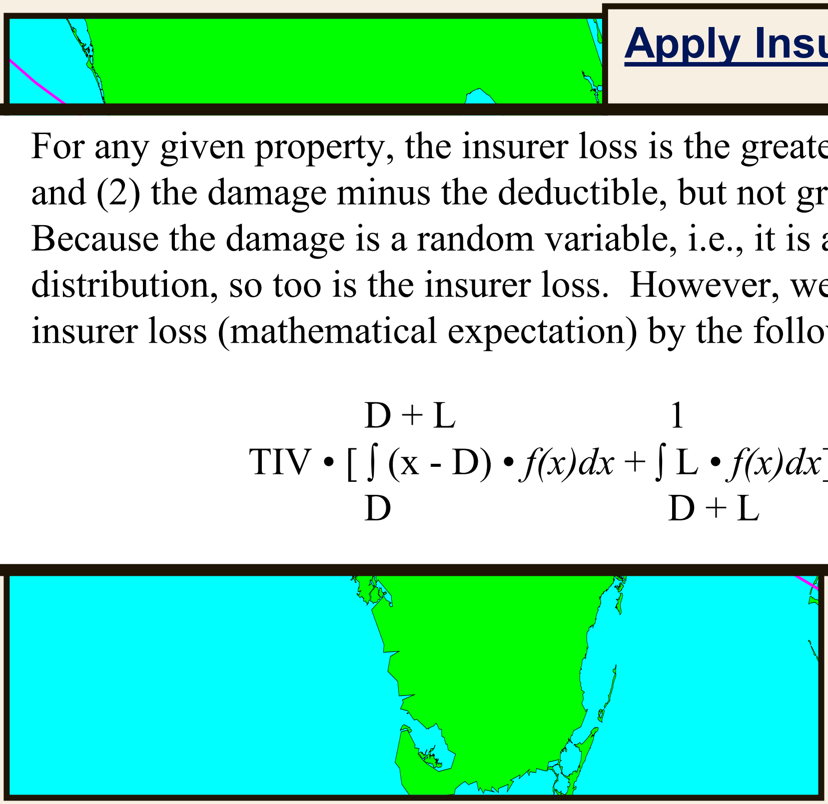
4. Compute Insured Loss



Apply Insurance Data:

- Insured value
- Deductible & layers
- Occurrence, site & policy limits
- Facultative
- Treaties

4. Compute Insured Loss

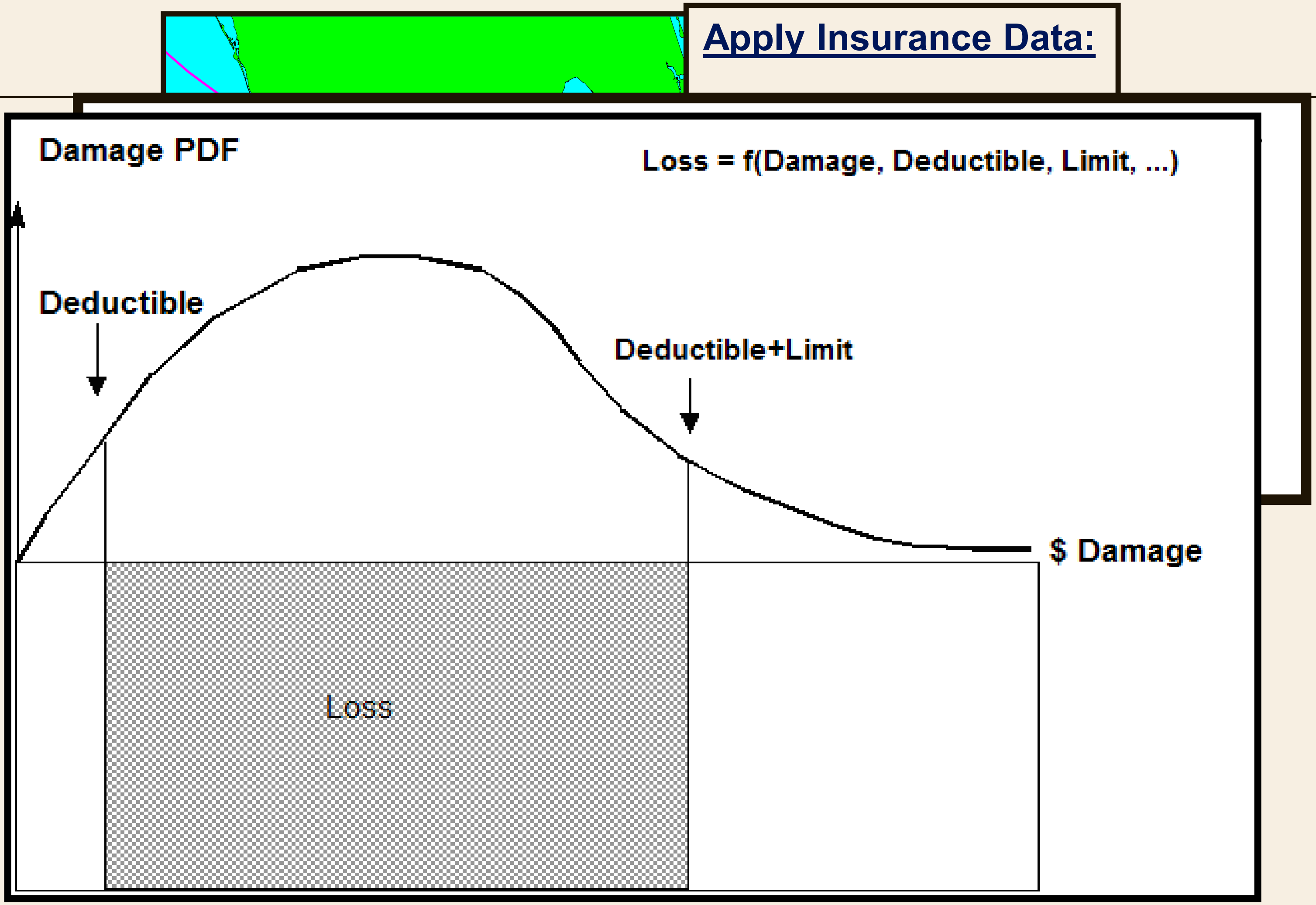


Apply Insurance Data:

- For any given property, the insurer loss is the greater of two quantities: (1) zero, and (2) the damage minus the deductible, but not greater than the policy limit. Because the damage is a random variable, i.e., it is associated with a probability distribution, so too is the insurer loss. However, we can calculate the average insurer loss (mathematical expectation) by the following expression:

$$\text{TIV} \cdot \left[\int_{D}^{D+L} (x - D) \cdot f(x)dx + \int_{D+L}^{1} L \cdot f(x)dx \right]$$

4. Compute Insured Loss



How is Loss Cost Generated?

It is the sum of losses from all events affecting a location divided by the number of sampling years

$$\int_{Storm\_t} \text{Site Loss (Storm\_t)} * f_t(t)\,dt$$

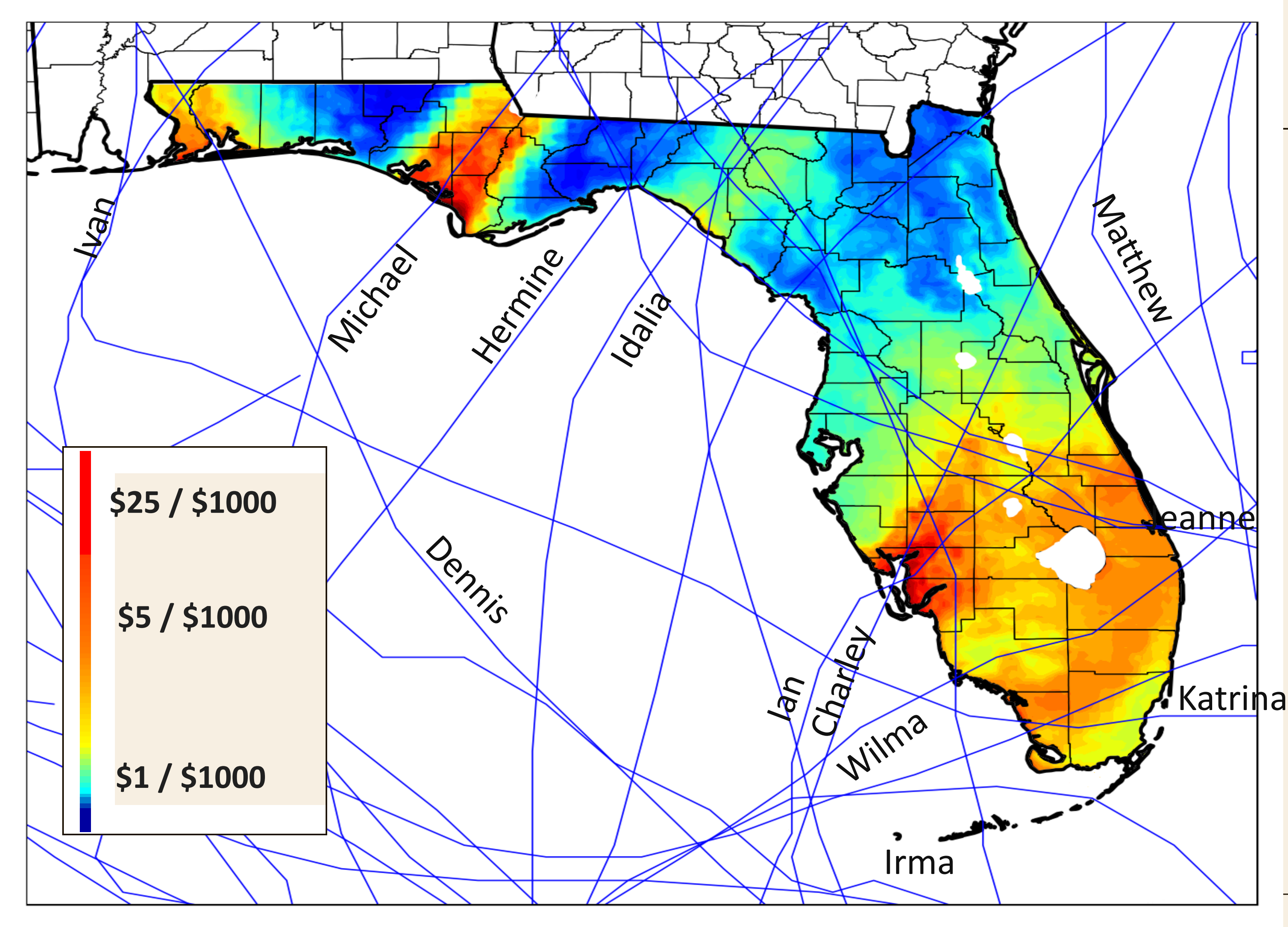
Where $f_t(t)$= the annual frequency of one storm from all potential events

It is the sum over all potential events of the product of the damage from an event times the annual frequency of each event

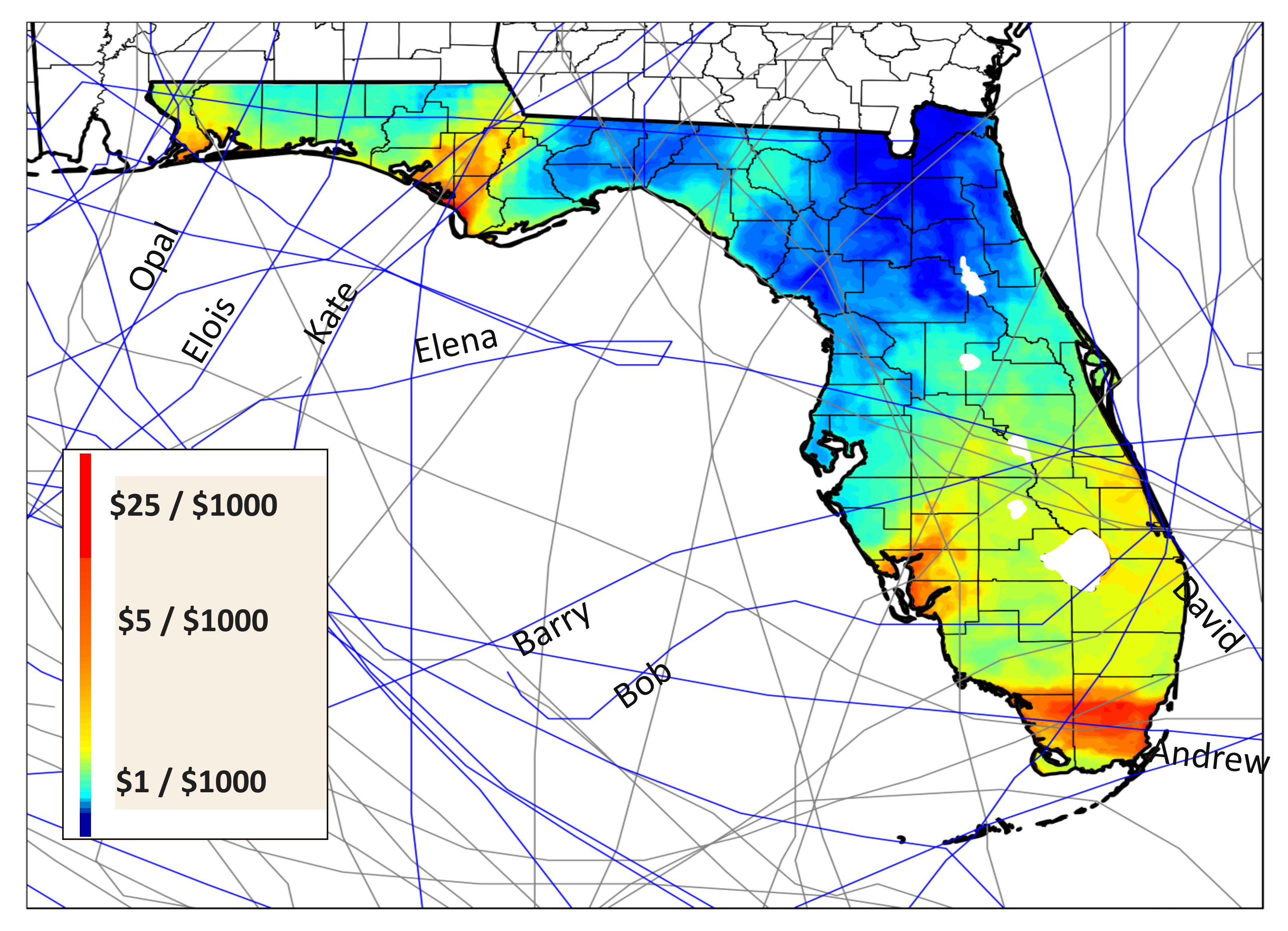
$$\frac{\mathbf{1}}{\mathbf{124}\ \boldsymbol{Years}} = \sum_{\boldsymbol{Storm\ Year}=\mathbf{1900}}^{\mathbf{2023}} \boldsymbol{Site\ Loss}\ (\boldsymbol{all\ storms})$$

How is this done? A simplified example

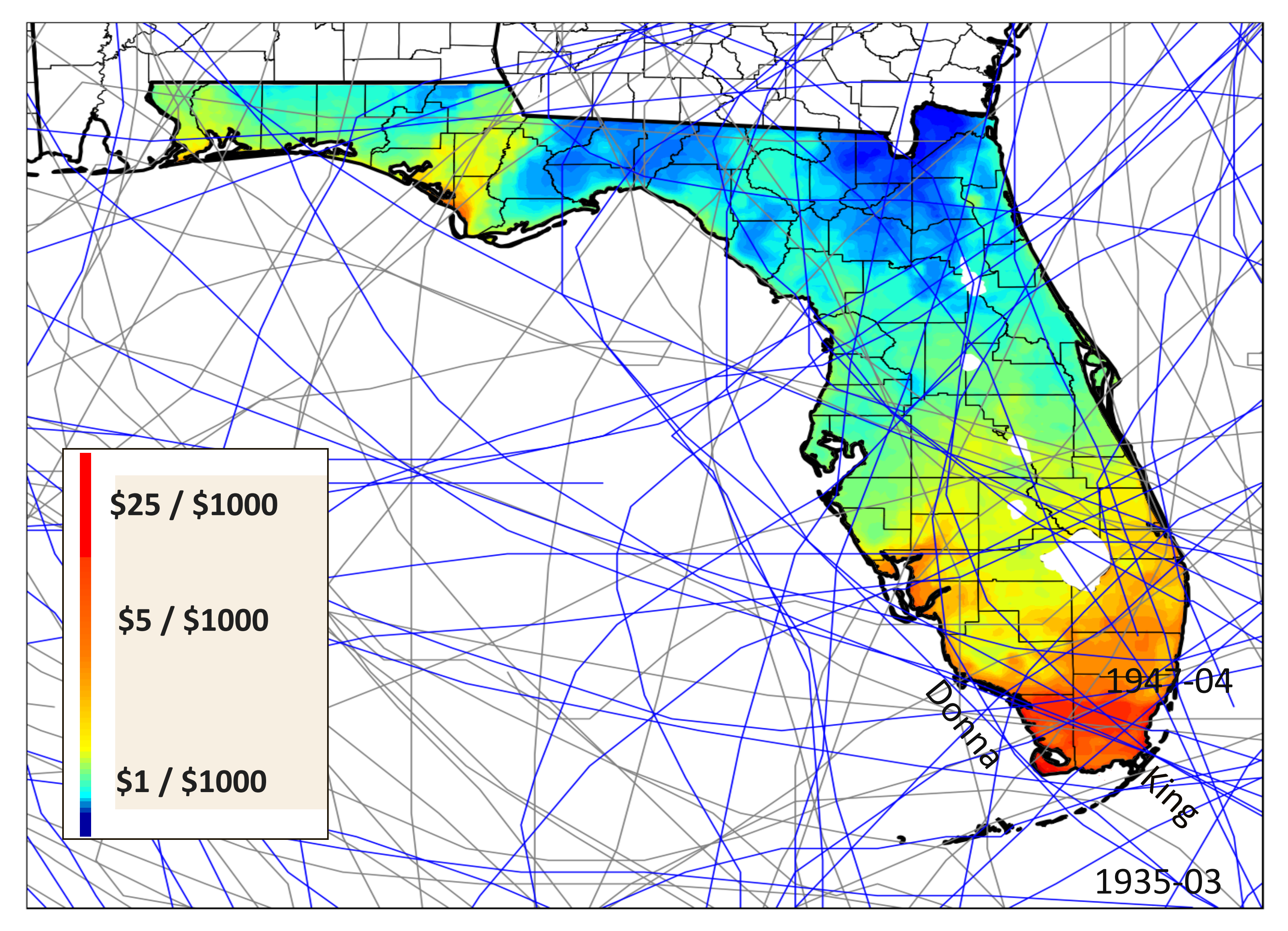
Loss Cost, 2000 to 2023 Storms



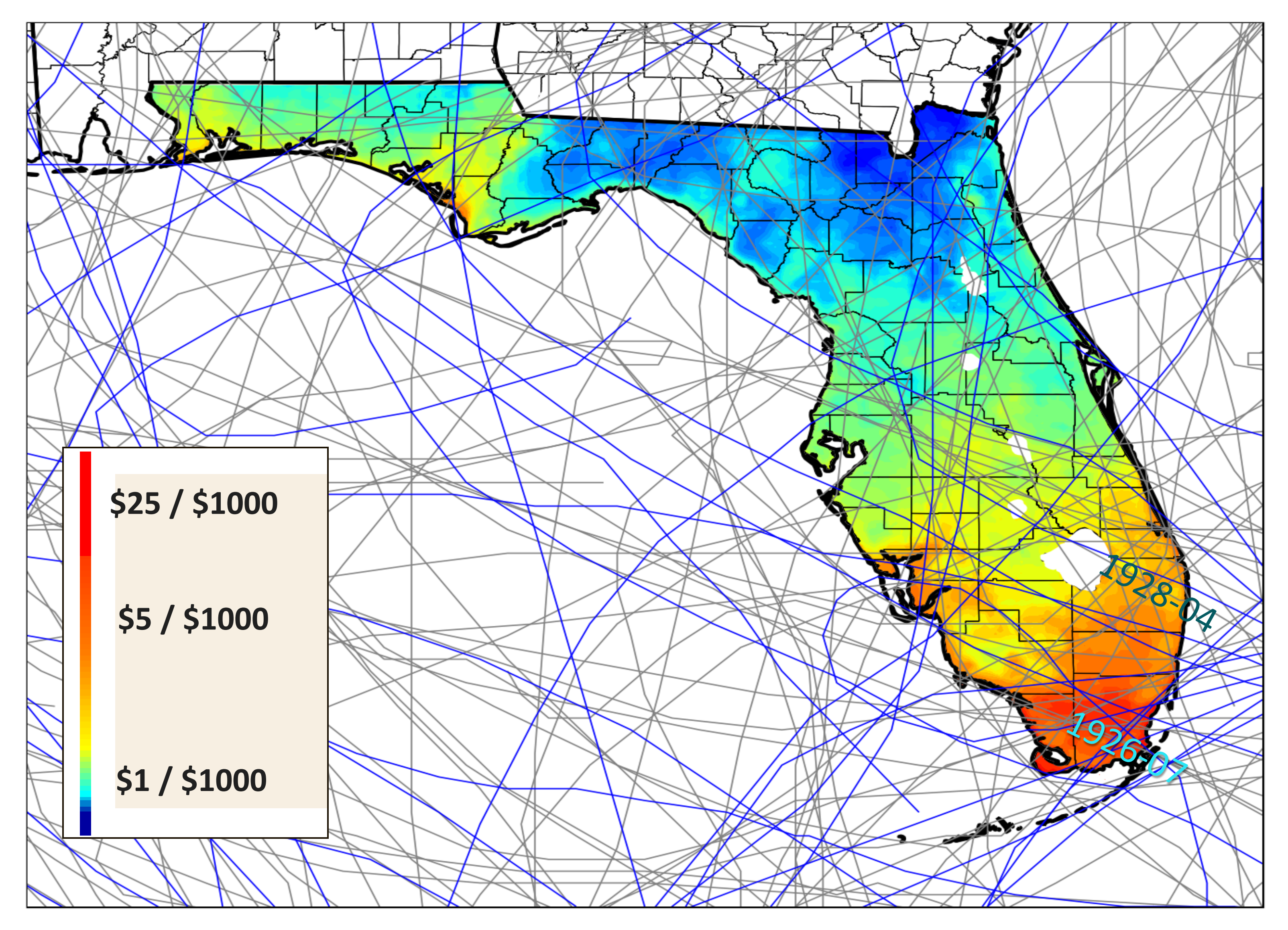
Loss Cost, 1970 to 2023 Storms



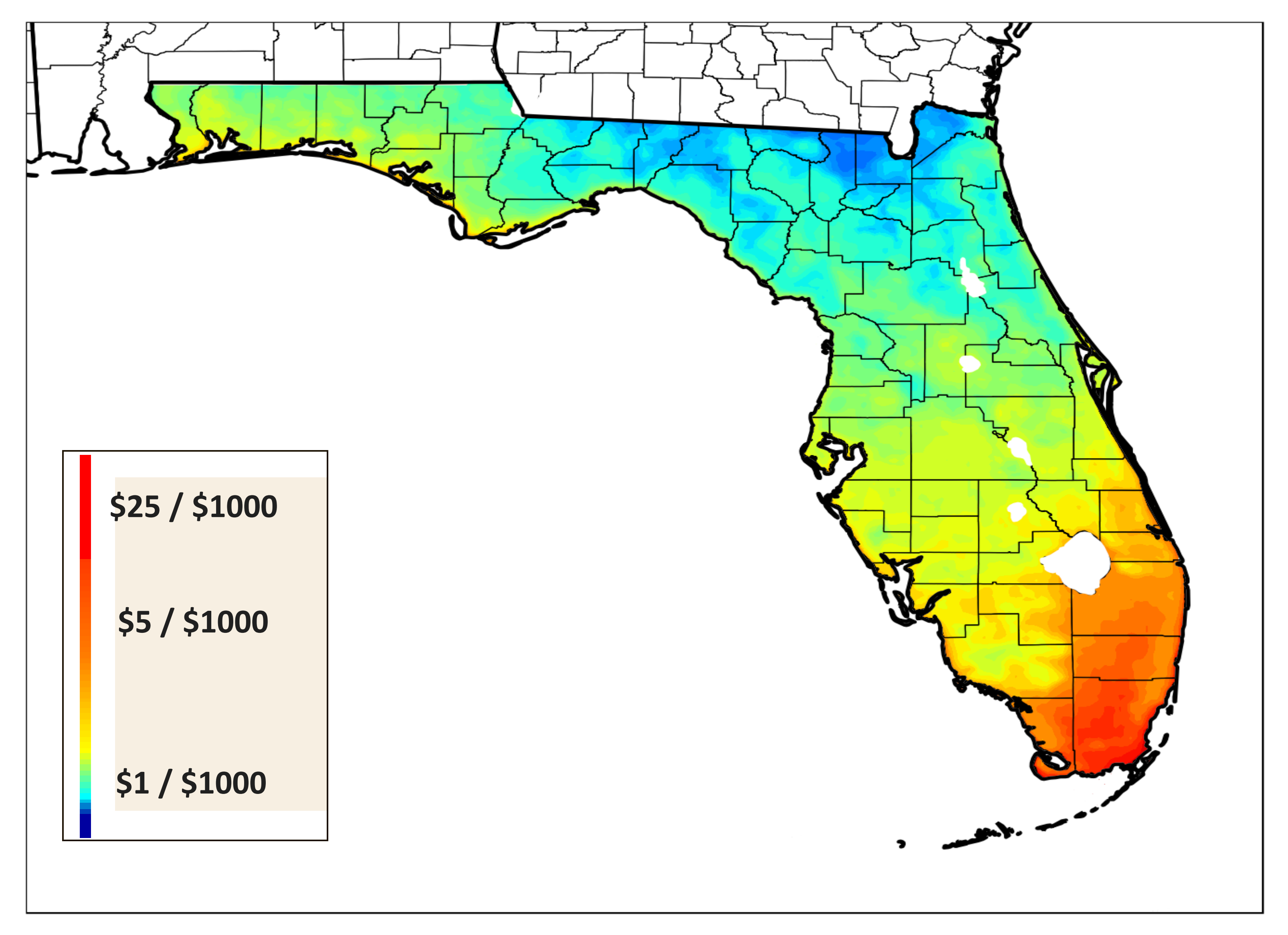
Loss Cost, 1930 to 2023 Storms



Loss Cost, 1900 to 2023 Storms



Probabilistic Loss Cost



Developing a high caliber “Probabilistic Model”

Historic set of events is insufficient

- In spatial distribution (large stretches of coast with few or no events)
- In severity distribution (very few severe hurricanes)

Generating a synthetic “probabilistic” event set

- Event set must have sufficient numbers to adequately simulate all severities and geometries

Important aspects to test

- Spatial distribution of AAL
- Sensitivity of OEP / AEP to model granularity

Model Validation Process

Post Landfall information

- Conduct engineering reconnaissance: aerial & ground field survey of the damaged sites / regions
- Create actual event footprints
- Collect claims data information from insurance companies

Validation & Model Improvement

- Derive vulnerability functions from claims data information and compare with existing vulnerability functions in the model
- Regenerate of the probabilistic storm set by the update and inclusion of the historic storms of the past hurricane season
- Validate vulnerability (new curves) with actual insured losses
- Update the model to be abreast with the latest findings, research, and technology

CoreLogic/Cotality Hurricane Modeling

The basis of the CoreLogic/Cotality Hurricane Model is empirical data from

- Meteorology
- Engineering
- Insurance and actuarial science

It has been tested and compared to actual event outcomes to produce a reliable measure of risk

Thank you

CoreLogic/Cotality Florida Hurricane Model 2025

FCHLPM Standards Review
June 11, 2025
Tallahassee, FL

Corrections Made to the Submission

CoreLogic Submissions to FCHLPM

- November 5, 2024 – Original Submission

- January 17, 2025 – Response to Deficiencies

- April 10, 2025 – Revisions and editorial changes performed during the Professional Team meetings

- May 6, 2025 – Final Submission
  - Editorial changes performed during Professional Team meetings
  - Provide information related to the change of the company name from CoreLogic to Cotality in the first few pages of the submission
  - Provide Signatures for Forms G-1 to G-7 for Final Submission

Summary of Changes

Model Changes Since 2023 Submittal

1. The probabilistic hurricane database has been regenerated to be consistent with the National Hurricane Center's HURDAT2 data set as of April 26, 2024.

2. The storm parameters Rmax, Forward Speed, Profile Factor, and Filling Rate have been updated to reflect updates in the HRD HURDAT Reanalysis Project and HURDAT2 data set. Offshore hurricane intensity changes are based on local statistics of intensity changes derived from HURDAT2.

3. The vulnerability component of the hurricane model has been updated as follows: the defaults for roof age and condition have been updated; the post 2023 age band has been introduced.

Model Changes Since 2023 Submittal

4. The vintage of the underlying demand surge has been updated to 2023 data.

5. The ZIP Code database, including wind-borne debris region status, has been updated to March 2024.

Effect on Statewide Average Annual Zero Deductible Loss Costs

The following modifications to the model have produced the following changes (2025 Submission relative to 2023 Submission):

Modification	Percent Change in Loss
HURDAT2 Update	4.77%
Storm Parameter Updates	1.92%
Vulnerability Updates	0.23%
Demand Surge Update	-2.98%
ZIP Code Database	-0.19%
Net Impact	**3.75%**

General Hurricane Standards

G-1 Scope of the Hurricane Model and Its Implementation (1/4)

- CoreLogic's hurricane model projects hurricane loss costs and probable maximum losses for insured residential property from hurricane events.
- Wind losses resulting from a hurricane are included even if wind speeds fall below hurricane force.
- CoreLogic maintains a documented process to assure continual agreement and correct correspondence of databases, data files, computer source code, presentation materials, scientific and technical literature, and modeling organization documents.
- Code documentation is generated using Doxygen and SharePoint.
- Model software, data, and flowcharts, used to validate the model, project modeled loss costs, and create forms fall within the scope of the Computer / Information Standards and are located in centralized model-level file areas.

G-1 Scope of the Hurricane Model and Its Implementation (2/4)

- All meteorological forms, statistical Forms S-1, S-2, and all actuarial forms with the exception of Form A-2 has been produced through automated procedures (such as Python scripts) as indicated in the form instructions.
- Data vintages are reviewed annually by the catastrophe modeling team to plan for updates if needed. Updated data is reviewed to determine if it warrants changes in the model.
- As scientific and technical literature becomes available, the team reviews and discusses if it warrants any changes in the model.
- Code is updated accordingly to support the data and algorithmic changes needed to update the models.
- In addition, there may be purely software changes as a part of the regular maintenance (e.g., refactoring, library updates, tests, etc.).

G-1 Scope of the Hurricane Model and Its Implementation (3/4)

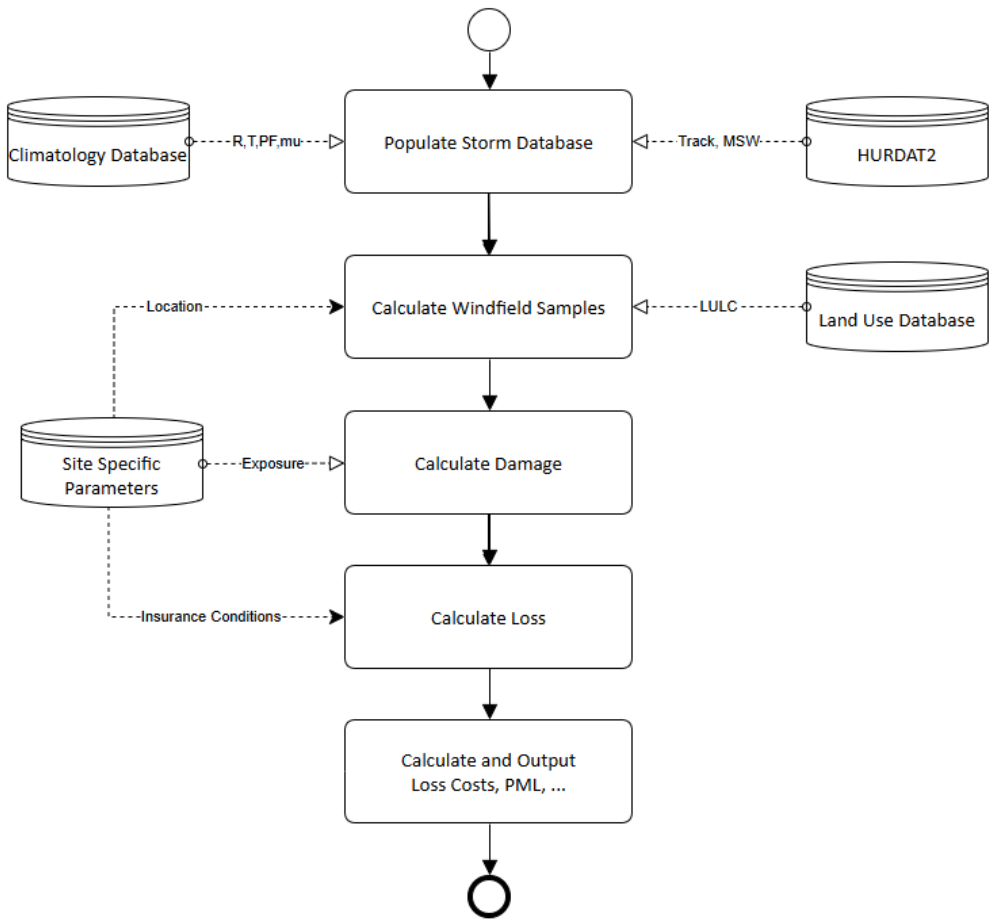


Figure 1. Flowchart – The Florida Hurricane Model Probabilistic Analysis

Verified by Professional Team: Yes

G-1 Scope of the Hurricane Model and Its Implementation (4/4)

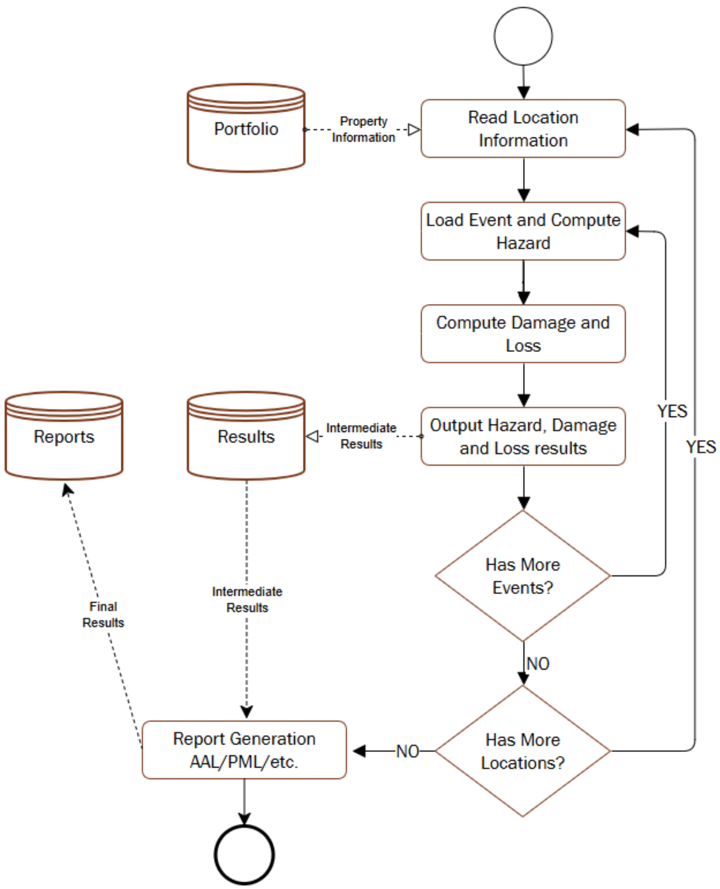


Figure 2. The Florida Hurricane Model Hazard, Damage, and Loss Calculation Procedure

Verified by Professional Team: Yes

G-2 Qualifications of Modeling Organization Personnel and Consultants Engaged in Development and Implementation of the Hurricane Model (1/2)

- CoreLogic's model construction, testing, and evaluation was performed by a team of individuals who possess the necessary skills, formal education, and experience to develop hurricane loss projection methodologies. The model and the submission documentation is reviewed by personnel in the following professional disciplines with requisite experience:
  - Structural/Wind Engineering (current licensed Professional Engineer)
  - Statistics (advanced degree)
  - Actuarial Science (Associate or Fellow of Casualty Actuarial Society or Society of Actuaries)
  - Meteorology (advanced degree)
  - Computer/Information Science (advanced degree or equivalent experience and certifications).
- These individuals are signatories on Forms G-1 through G-6 as applicable and abide by the standards of professional conduct if adopted by their profession.

G-2 Qualifications of Modeling Organization Personnel and Consultants Engaged in Development and Implementation of the Hurricane Model (2/2)

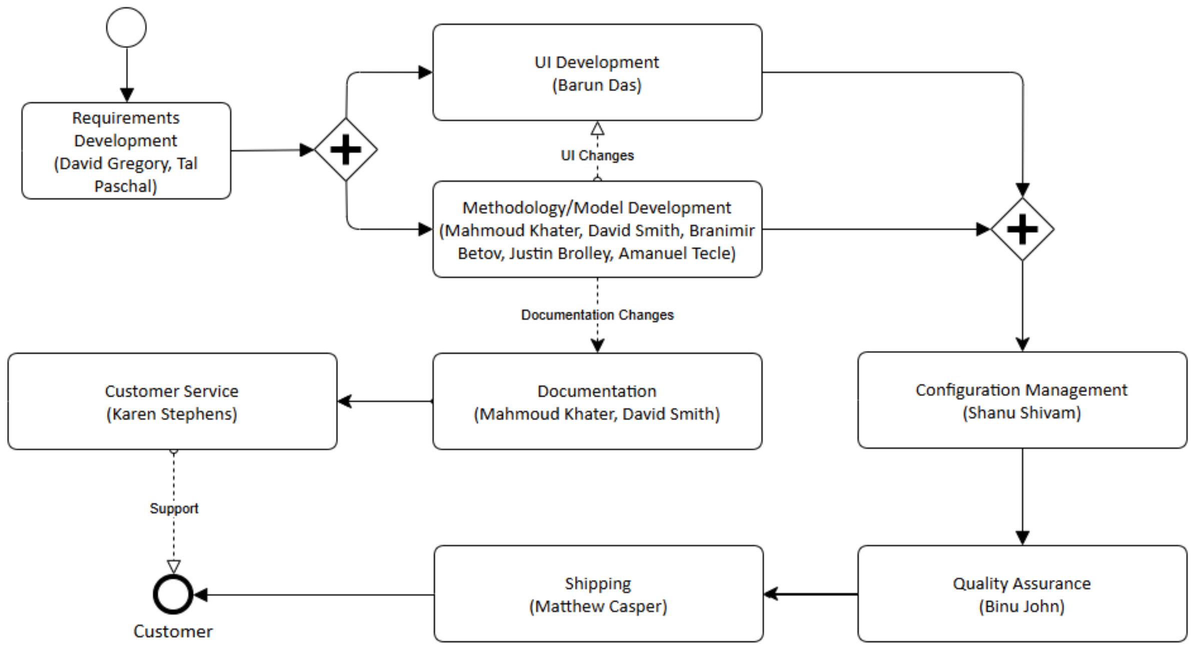


Figure 3. Business Workflow Diagram

Verified by Professional Team: Yes

G-3 Insured Exposure Location

- CoreLogic's ZIP Code database was updated in October 2024, based on information originating from the United States Postal Service current as of March 2024.
- The ZIP Code centroids are derived using population data.
- CoreLogic verifies each new ZIP Code database through a suite of procedures, including automated numeric tests and visual tests.
- CoreLogic has a logical process that maintains and ensures the consistency between the ZIP Code database updates and the hazard and vulnerability components.
- CoreLogic geocoding methodology is justified as indicated in Standard G-3, Disclosures 1 through 6.

Verified by Professional Team: Yes

G-4 Independence of Hurricane Model Components

- The meteorology, vulnerability, and actuarial components have been independently developed, verified, and validated.
- The meteorology component, completely independent of the other components, calculates wind speed at each site.
- The vulnerability component is entirely independent of all other calculations.
- Whenever the vulnerability functions have been validated using claims data from a historical storm, the wind field for that storm has first been validated independently.
- Validation of the vulnerability functions has been performed independently from other validation tests.
- All components together have been validated and verified to produce reasonable and consistent results.

Verified by Professional Team: Yes

G-5 Editorial Compliance

- All documents provided to the Commission by CoreLogic throughout the review process have been reviewed and edited by a person or persons with experience in reviewing technical documents.
- The document has been personally reviewed to ensure that it is editorially correct as indicated in Standard G-5, Disclosures 1 and 2.
- The document has been reviewed by all key team members.
- The document has been personally reviewed to ensure that it is editorially correct.
- This has been certified on Form G-7.

Verified by Professional Team: Yes

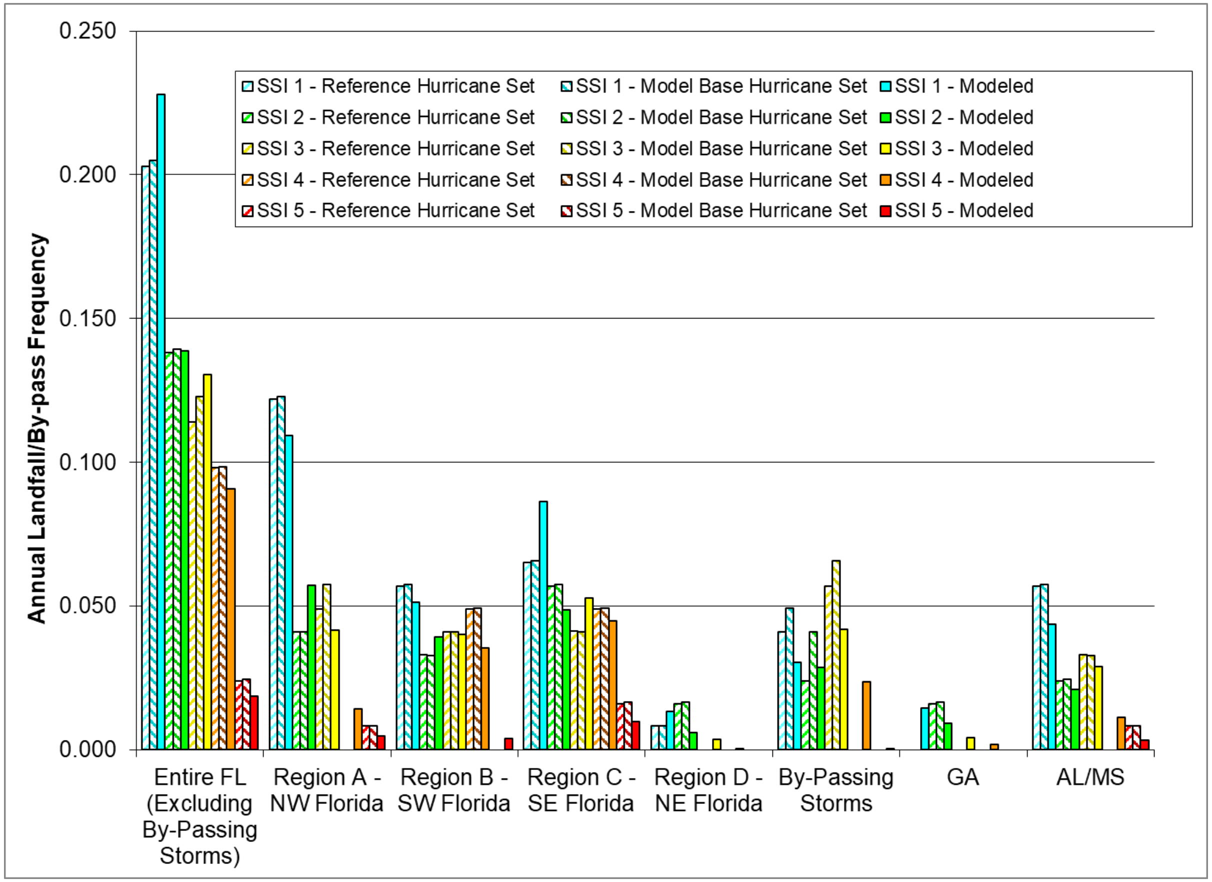
Meteorological Hurricane Standards

M-1 Model Base Hurricane Set (1/8)

- The storm set used is the National Hurricane Center HURDAT2 starting at 1900 as of April 26, 2024.
- Storms from 1900-2023 are included in the Base Hurricane Storm Set.
- CoreLogic uses the long-term view of hurricane risk.
- Annual frequencies used in the hurricane model validation are based upon the Model Base Hurricane Set.
- No trending, weighting, partitioning, or climate adjustment has been performed with respect to the Base Hurricane Storm Set.

M-1 Model Base Hurricane Set (2/8)

Form M-1



M-1 Model Base Hurricane Set (3/8)

Form M-1

Category	Modeled Frequency
1	0.228
2	0.139
3	0.130
4	0.091
5	0.019

Total: 0.606

Form S-1

Number of Hurricanes per Year	*Modeled Probability*	*Modeled Probability*counts*
0	0.562	0.000
1	0.309	0.309
2	0.099	0.198
3	0.024	0.072
4	0.005	0.020
5	0.001	0.005
6	0.000	0.001
7	0.000	0.000
8	0.000	0.000
9	0.000	0.000
10	0.000	0.000

Total: 0.606

M-1 Model Base Hurricane Set (4/8)

Form A-2

Name	Region A – Category
NoName02-1911	A-1
NoName04-1915	A-1
NoName05-1924	A-1
NoName01-1945	A-1
Florence-1953	A-1
Flossy-1956	A-1
Alma-1966	A-1
Agnes-1972	A-1
Earl-1998	A-1
Hermine-2016	A-1
NoName03-1903	C-1/A-1
NoName02-1939	C-1/A-1
Erin-1995	C-1/A-1
NoName05-1941	C-2/A-1
NoName02-1929	C-3/A-1
NoName14-1916	A-2
NoName05-1936	A-2
Gladys-1968	A-2
Kate-1985	A-2
LaborDay03-1935	C-5/A-2
NoName04-1917	A-3
Easy-1950	A-3
Eloise-1975	A-3
Opal-1995	A-3
Dennis-2005	A-3
Idalia-2023	A-3
GreatMiami07-1926	C-4/A-3
Michael-2018	A-5

Form M-1

	Region A – NW Florida
	Model Base Hurricane Set
Category	Number
1	15
2	5
3	7
4	0
5	1

M-1 Model Base Hurricane Set (5/8)

Form A-2

Name	Region B – Category
NoName10-1924	B-1
NoName06-1946	B-1
Hazel-1953	B-1
Floyd-1987	B-1
Irene-1999	B-1
NoName02-1906	B-1/C-1
NoName09-1947	B-1/E-2
NoName05-1910	B-2
NoName09-1948	B-2
Isbell-1964	B-2
Georges-1998	B-2/F-2
NoName11-1909	B-3
TampaBay06-1921	B-3
NoName13-1944	B-3
Wilma-2005	B-3
NoName08-1906	B-3/C-3
NoName02-1919	B-4
NoName08-1948	B-4
Donna-1960	B-4
Charley-2004	B-4
Irma-2017	B-4
Ian-2022	B-4

Form M-1

	Region B – SW Florida
	Model Base Hurricane Set
Category	Number
1	*7*
2	*4*
3	*5*
4	*6*
5	*0*

M-1 Model Base Hurricane Set (6/8)

Form A-2

Name	Region C - Category
NoName02-1906	B-1/C-1
NoName04-1904	C-1
NoName05-1933	C-1
Katrina-2005	C-1
Nicole-2022	C-1
NoName03-1903	C-1/A-1
NoName02-1939	C-1/A-1
Erin-1995	C-1/A-1
NoName01-1928	C-2
NoName07-1935	C-2
Cleo-1964	C-2
Inez-1966	C-2
Frances-2004	C-2
NoName05-1941	C-2/A-1
David-1979	C-2/E-2
NoName11-1933	C-3
Betsy-1965	C-3
Jeanne-2004	C-3
NoName02-1929	C-3/A-1
NoName08-1906	B-3/C-3
LakeOkeechobee04-1928	C-4
NoName09-1945	C-4
NoName04-1947	C-4
NoName02-1949	C-4
King-1950	C-4
GreatMiami07-1926	C-4/A-3
Andrew-1992	C-5
LaborDay03-1935	C-5/A-2

Form M-1

	Region C – SE Florida
	Model Base Hurricane Set
Category	Number
1	*8*
2	*7*
3	*5*
4	*6*
5	*2*

M-1 Model Base Hurricane Set (7/8)

Form A-2

Name	Region D - Category
NoName01-1915	D-1
NoName01-1926	D-2
Dora-1964	D-2

Name	Florida Bypassing - Category
Eta-2020	ByP-1
Bob-1985	ByP-1
Ophelia-2005	ByP-1
NoName04-1912	F-1/ByP-1
NoName03-1932	F-1/ByP-1
Baker-1950	F-1/ByP-1
Rita-2005	ByP-2
Dorian-2019	ByP-2
Elsa-2021	ByP-2
NoName01-1934	ByP-2
NoName06-1906	F-2/ByP-2
NoName10-1926	ByP-3
Matthew-2016	ByP-3
Zeta-2020	ByP-3
NoName09-1909	ByP-3
NoName17-1933	ByP-3
NoName02-1916	F-3/ByP-3
Elena-1985	F-3/ByP-3
Ivan-2004	F-3/ByP-3

Form M-1

	Region D – NE Florida
	Model Base Hurricane Set
Category	Number
1	*1*
2	*2*
3	*0*
4	*0*
5	*0*

	Florida Bypassing
	Model Base Hurricane Set
Category	Number
1	*6*
2	*5*
3	*8*
4	*0*
5	*0*

M-1 Model Base Hurricane Set (8/8)

Form A-2

Name	Region E - Category
NoName09-1947	B-1/E-2
David-1979	C-2/E-2

Name	Region F - Category
NoName04-1901	F-1
Ethel-1960	F-1
Danny-1997	F-1
Nate-2017	F-1
NoName04-1912	F-1/ByP-1
NoName03-1932	F-1/ByP-1
Baker-1950	F-1/ByP-1
Sally-2020	F-2
NoName06-1906	F-2/ByP-2
Georges-1998	B-2/F-2
Frederic-1979	F-3
NoName02-1916	F-3/ByP-3
Elena-1985	F-3/ByP-3
Ivan-2004	F-3/ByP-3
Camille-1969	F-5

Form M-1

	Region E – Georgia
	Model Base Hurricane Set
Category	Number
1	*0*
2	*2*
3	*0*
4	*0*
5	*0*

	Region F – Alabama/Mississippi
	Model Base Hurricane Set
Category	Number
1	*7*
2	*3*
3	*4*
4	*0*
5	*1*

Verified by Professional Team: Yes

M-2 Hurricane Parameters (Inputs)

The modeling of hurricane parameters and characteristics is based on information documented by currently accepted scientific and technical literature.

Stochastic Hurricane Parameter (Function or Variable)	Data Source	Year Range Used (for Fitting)
Landfall Location	HURDAT2	1900-2023
Track Direction	HURDAT2	1900-2023
Maximum Sustained Wind Speed	HURDAT2	1900-2023
Radius of Maximum Winds	HRA HURDAT Reanalysis Project (1900-1970, 2021-2023); NWS 38 (1971-1984); NHC TC Reports and Advisories (1985-1987); DeMaria's Extended Best Track (1988-2020)	1900-2023
Translation Speed	HURDAT2 (1900-1970), (1983-2023); NWS 38 (1971-1982)	1900-2023
Inland Filling Rate	HURDAT2	1900-2023
Profile Factor	NHC Advisories (1963-1967); DeMaria's Extended Best Track (1988-2003); HURDAT2 (2004-2023)	1963-1967; 1988-2023

Verified by Professional Team: Yes

M-3 Hurricane Probability Distributions

- Modeled probability distributions of hurricane parameters and characteristics are consistent with historical hurricanes in the Model Base Hurricane Set in the Atlantic Basin.
- Modeled hurricane landfall frequency distributions reflect the base hurricane storm set used for category 1 to 5 hurricanes and are consistent with those observed for each coastal segment of Florida and other states along the Atlantic and Gulf Coasts.
- CoreLogic's Florida Hurricane Model uses maximum one-minute sustained 10-meter wind speed when defining hurricane landfall intensity.
- Wind speeds developed for historical hurricanes are also consistent with the observed values as indicated in Form M-1.

Verified by Professional Team: Yes

M-4 Hurricane Windfield Structure (1/2)

- Windfields generated by the hurricane model are consistent with observed historical storms.
- The land use and land cover database is consistent with the National Land Cover Database (NLCD) 2016 (published April 2019).
- The translation of land use and land cover information into a surface roughness distribution in the model is consistent with current state-of-the-science and has been implemented with appropriate GIS data.
- The hurricane model accounts for the vertical variation of winds for multi-story structures in the vulnerability functions.

M-4 Hurricane Windfield Structure (2/2)

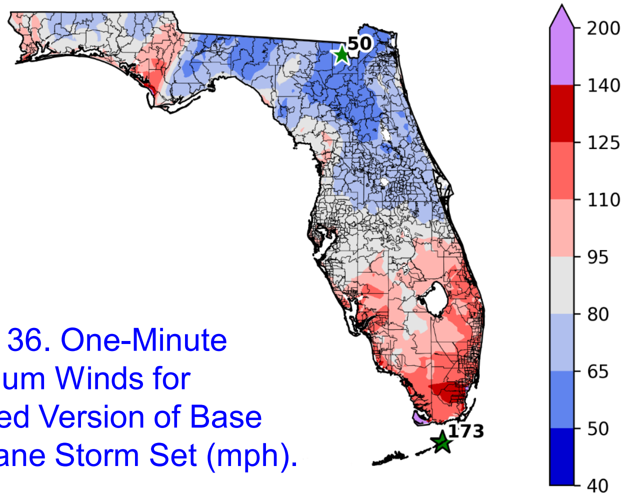


Figure 36. One-Minute Maximum Winds for Modeled Version of Base Hurricane Storm Set (mph).

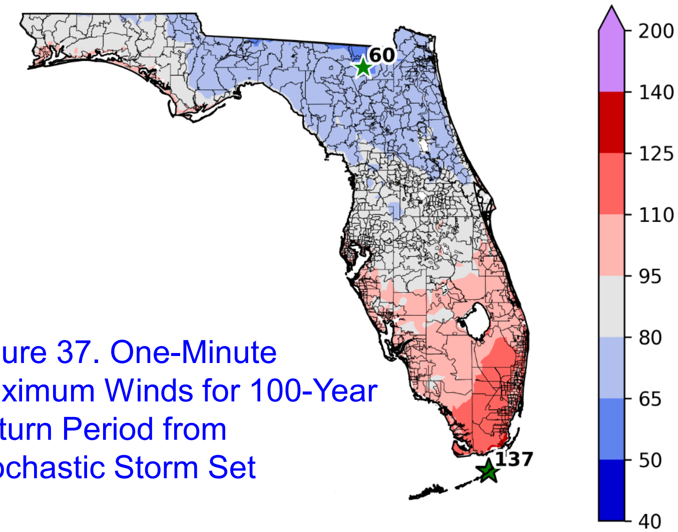


Figure 37. One-Minute Maximum Winds for 100-Year Return Period from Stochastic Storm Set

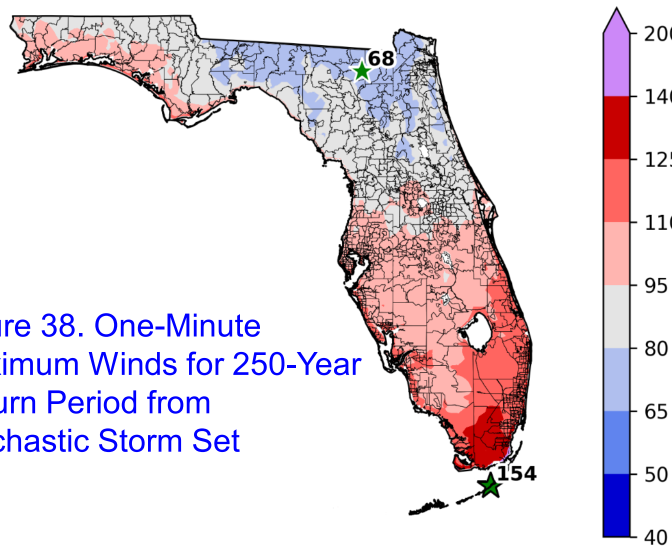


Figure 38. One-Minute Maximum Winds for 250-Year Return Period from Stochastic Storm Set

Verified by Professional Team: Yes

M-5 Hurricane Intensity Change Methodologies (1/3)

- The hurricane intensity change methodology used by the Florida Hurricane Model for hurricanes in Florida is based on and consistent with the current state-of-the-science and indicated in Standard M-5, Disclosure 1.
- The hurricane over-land weakening rate methodology, based on Vickery 2005, is consistent with historical records and the current state-of-the-science.
- CoreLogic's Intensity change of hurricanes that pass from over land to over water are consistent the current state-of-the-science and indicated in Standard M-5, Disclosure 2.

M-5 Hurricane Intensity Change Methodologies (2/3)

- CoreLogic's hurricane model uses land friction to produce a reduction of the marine (overwater) wind speeds when moving over land and is consistent with accepted scientific literature and geographic surface roughness.
- The directionally averaged surface roughness friction factors produce a smooth transition of windspeeds from over-water to over-land exposure.
- The land use and land cover database is consistent with the National Land Cover Database (NLCD) 2016 (published April 2019).

M-5 Hurricane Intensity Change Methodologies (3/3)

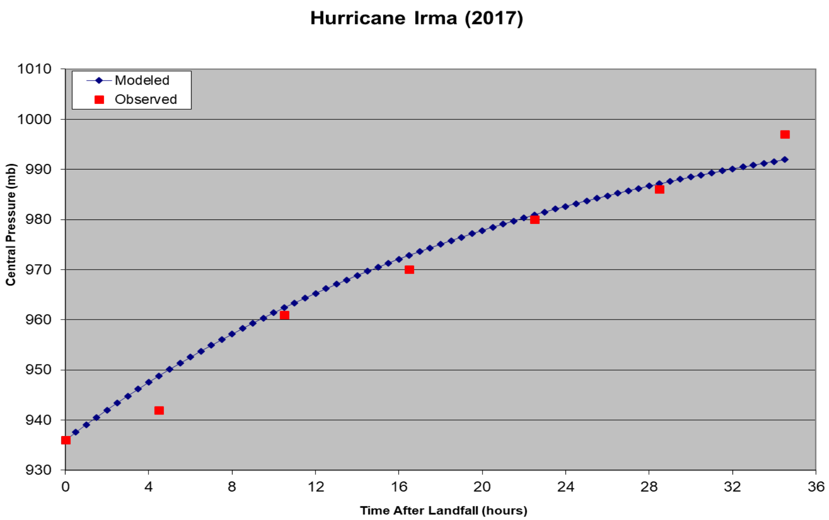


Figure 17. Hurricane Irma (2017)

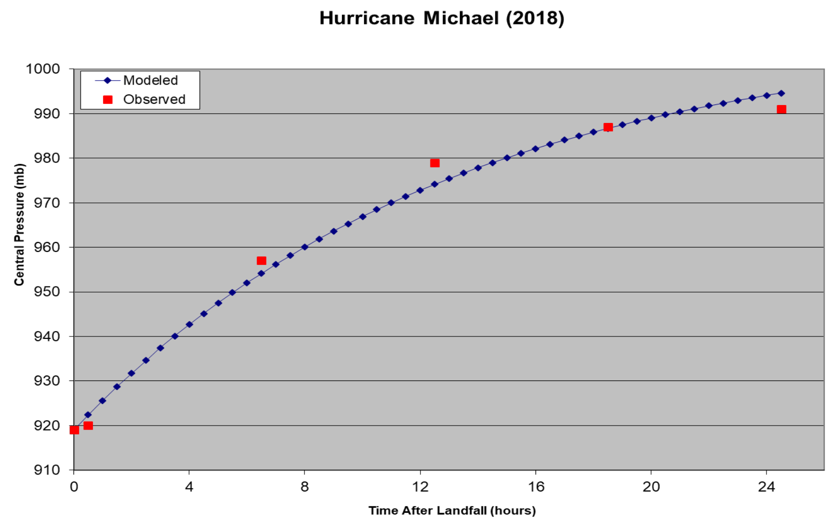


Figure 18. Hurricane Michael (2018)

Verified by Professional Team: Yes

M-6 Logical Relationships of Hurricane Characteristics

- The magnitude of asymmetry in CoreLogic's hurricane model increases as the translation speed increases, all other factors held constant.
- The mean windspeed in the CoreLogic's hurricane model decreases with increasing surface roughness (friction), all other factors held constant.
- The wind radii and the radius of maximum winds in Form M-3 has been reviewed by the professional team.

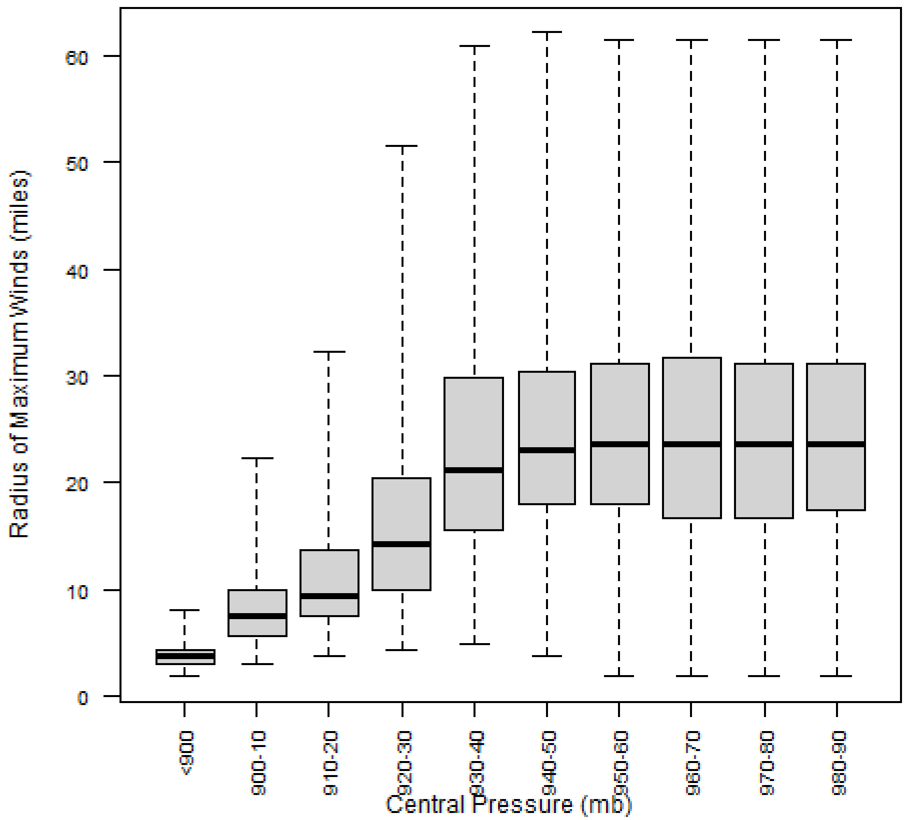


Figure 39. Rmax vs. Central Pressure – Box plot

Verified by Professional Team: Yes

Statistical Hurricane Standards

S-1 Modeled Results and Goodness-of-Fit (1/2)

- CoreLogic's use of historical data in developing the Florida Hurricane Model is supported by rigorous methods published in current scientific and technical literature.
- Modeled and historical results reflect agreement using current scientific and statistical methods in the appropriate disciplines for the various hurricane model components and characteristics.
- The validation and verification of the model is based on the claims data from Hurricanes Alicia (1983), Elena (1985), Gloria (1985), Juan (1985), Kate (1985), Hugo (1989), Bob (1991), Andrew (1992), Iniki (1992), Erin (1995) and Opal (1995), Charley (2004), Frances (2004), Ivan (2004), Jeanne (2004), Katrina (2005), Wilma (2005), Irma (2017), Michael (2018), and Ian (2022).

S-1 Modeled Results and Goodness-of-Fit (2/2)

- Model-generated peak gust wind patterns have been validated with the actual peak gust observations for a number of notable hurricanes since 1960.

TABLE 7. COMPARISON OF POINT LOCATION OBSERVATIONS WITH MODEL-GENERATED WINDS (Peak Gust Observations 60 mph or more)

Hurricane	Year	#Obs	#Simulated +/- 10 mph		#Simulated +/- 15 mph	
Donna	1960	21	14	67%	17	81%
Carla	1961	14	7	50%	10	71%
Betsy	1965	18	10	56%	13	72%
Alicia	1983	6	4	67%	5	83%
Elena	1985	8	3	38%	6	75%
Gloria	1985	18	14	78%	16	89%
Hugo	1989	8	5	63%	5	63%
Bob	1991	18	10	56%	12	67%
Andrew	1992	11	5	45%	7	64%
Charley	2004	7	7	100%	7	100%
Frances	2004	23	8	35%	14	61%
Ivan	2004	3	2	67%	2	67%
Jeanne	2004	7	5	71%	7	100%
Katrina	2005	13	8	62%	11	85%
Wilma	2005	28	12	43%	22	79%
Matthew	2016	13	10	77%	12	92%
Irma	2017	41	24	59%	30	73%
Michael	2018	10	3	30%	5	50%
Ian	2022	87	58	67%	72	83%
Idalia	2023	11	6	55%	9	82%
Total		365	215	59%	282	77%

Verified by Professional Team: Yes

S-2 Sensitivity Analysis for Hurricane Model Output

- CoreLogic has assessed the sensitivity of temporal and spatial outputs with respect to the simultaneous variation of input variables using current scientific and statistical methods in the appropriate disciplines and has taken appropriate action.
- Sensitivity analyses have been performed on track spacing, on the number of attack angles given landfall, on the number of wind speed class intervals given landfall and attack angle; and on the number of other storm parameter samples used in the stochastic hurricane database.

Verified by Professional Team: Yes

S-3 Uncertainty Analysis for Hurricane Model Output

- CoreLogic has performed uncertainty analysis on the temporal and spatial outputs of the model using currently accepted scientific and statistical methods in the appropriate disciplines and has taken appropriate action.
- The analysis has identified and quantified the extent that input variables impact the uncertainty in model output as the input variables are simultaneously varied.

Verified by Professional Team: Yes

S-4 County Level Aggregation

- CoreLogic's hurricane model estimates loss costs in the mainland United States from Texas to Maine on the basis of 33,082 stochastic storm simulation results.
- Florida is impacted by 16,204 stochastic storms.
- Given the high resolution of the stochastic storm database, the contribution to the error in loss cost estimates induced by the sampling process is negligible.

Verified by Professional Team: Yes

S-5 Replication of Known Hurricane Losses (1/2)

- CoreLogic's hurricane model reasonably replicates incurred hurricane losses on a sufficient body of past hurricane events, including the most current data available to CoreLogic.

- Recent hurricanes include Hurricane Irma (2017), Hurricane Michael (2018), and Hurricane Ian (2022) data as indicated in Form S-4.

- The hurricane model estimates incurred hurricane losses in an unbiased manner from more than one company.

S-5 Replication of Known Hurricane Losses (2/2)

TABLE 16. TOTALS BY COMPANY

Company	Event	Year	TIV ($M)	Actual / TIV (%)	CoreLogic / TIV (%)	Difference
A	Opal	1995	222,270.00	0.05%	0.05%	1.8%
B	Andrew	1992	4,578.28	1.05%	1.28%	22.0%
C	Andrew	1992	1,229.95	1.62%	2.00%	23.5%
D	Andrew	1992	519.86	5.92%	7.24%	22.3%
E	Andrew	1992	608.67	4.77%	6.00%	25.8%
F	Charley	2004	221,681.89	0.51%	0.44%	-14.0%
F	Frances	2004	221,681.89	0.31%	0.16%	-48.0%
F	Ivan	2004	221,681.89	0.13%	0.15%	8.7%
F	Jeanne	2004	221,681.89	0.16%	0.18%	11.5%
F	Wilma	2005	240,854.58	0.37%	0.32%	-14.2%
H	Irma	2017	6,162.96	21.05%	13.32%	-36.7%
H	Michael	2018	5,815.92	6.18%	4.87%	-21.1%
I	Michael	2018	4,014.30	4.02%	4.87%	21.3%
J	Ian	2022	193,781.96	0.53%	0.56%	6.4%

Verified by Professional Team: Yes

S-6 Comparison of Projected Hurricane Loss Costs (1/2)

- The difference, due to uncertainty, between historical and modeled annual average statewide loss costs is reasonable by established statistical expectations and norms.
- Validation of the average annual loss estimate has been carried out by checking each component of the model separately – frequency of the storm, severity of the storm, and loss calculation.
- Loss estimate by CoreLogic is compared against the alternative method of estimating the annual loss.
- CoreLogic has carried out convergence tests to ensure stability of the results.

S-6 Comparison of Projected Hurricane Loss Costs (2/2)

Form S-5: RQE and Navigate

Average Annual Zero Deductible Statewide Loss Costs

Time Period – 2017 FHCF Exposure Data	Historical Hurricanes	Produced by Model
Current Submission	$3.11 Billion	$3.64 Billion
Currently-Accepted Hurricane Model (2021 Hurricane Standards)	$3.03 Billion	$3.51 Billion
Second Previously-Accepted Hurricane Model (2019 Hurricane Standards)	$3.05 Billion	$3.68 Billion

Verified by Professional Team: Yes

S-6 Comparison of Projected Hurricane Loss Costs (2/2)

Form S-5: RQE and Navigate

Average Annual Zero Deductible Statewide Loss Costs

Time Period – 2023 FHCF Exposure Data	Historical Hurricanes	Produced by Model
Current Submission	$4.27 Billion	$5.02 Billion

Verified by Professional Team: Yes

Vulnerability Hurricane Standards

V-1 Development of Building Hurricane Vulnerability Functions (1/4)

- CoreLogic's hurricane model building vulnerability functions are based on historically observed damage (claims data and post-hurricane field surveys) and experimental research conducted by Professors Kishor Mehta and James McDonald at Texas Tech.

- Claims data from major storms during the 1954 – 1994 period were analyzed by Dr. Don Friedman and John Mangano while managing the Natural Hazard Research Service (NHRS) effort for The Travelers Insurance Company.

- Claims data from 1983-1995 storms from other insurance companies.

- Claims data from the 2004 and 2005 hurricanes has resulted in an update to the manufactured home vulnerability in Florida in June 2008.

- CoreLogic[1] teams have conducted post-disaster field surveys for several storms including Superstorm Sandy and Hurricanes Florence (2018), Ian (2022), Helene (2024), and Milton (2024).

[1] In this document, CoreLogic is used in lieu of EQE, EQECAT, and ABS Consulting for work performed by any of these entities prior to the acquisition by CoreLogic.

V-1 Development of Building Hurricane Vulnerability Functions (2/4)

- The method of derivation of the CoreLogic's hurricane vulnerability functions and the treatment of associated uncertainties is theoretically sound and consistent with fundamental engineering principles.
- Residential building stock classification is representative of Florida construction for personal and commercial residential buildings.
- The user to account for the unique features of individual buildings, including building height/number of stories, primary construction material, year of construction, location, building code, and other construction characteristics.
- CoreLogic's hurricane vulnerability functions are separately derived for commercial residential building structures, personal residential building structures, manufactured homes, and appurtenant structures.

V-1 Development of Building Hurricane Vulnerability Functions (3/4)

- CoreLogic's vulnerability functions calculate damage for all peak gust wind speeds greater than or equal to 40 miles per hour.
- CoreLogic's building hurricane vulnerability functions include damage due to hurricane hazards such as windspeed and wind pressure, water infiltration, and missile impact.
- CoreLogic's building hurricane vulnerability functions do not include explicit damage due to flood, storm surge, or wave action.

V-1 Development of Building Hurricane Vulnerability Functions (4/4)

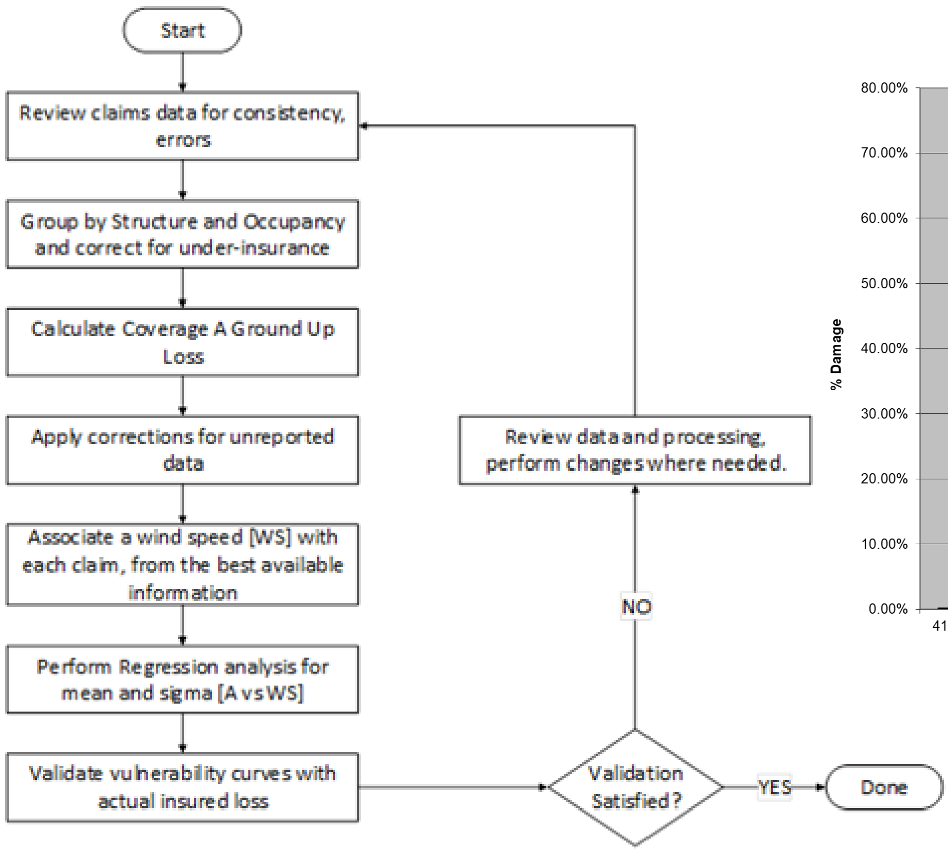


Figure 24. Flowchart – Building Coverage Vulnerability Development

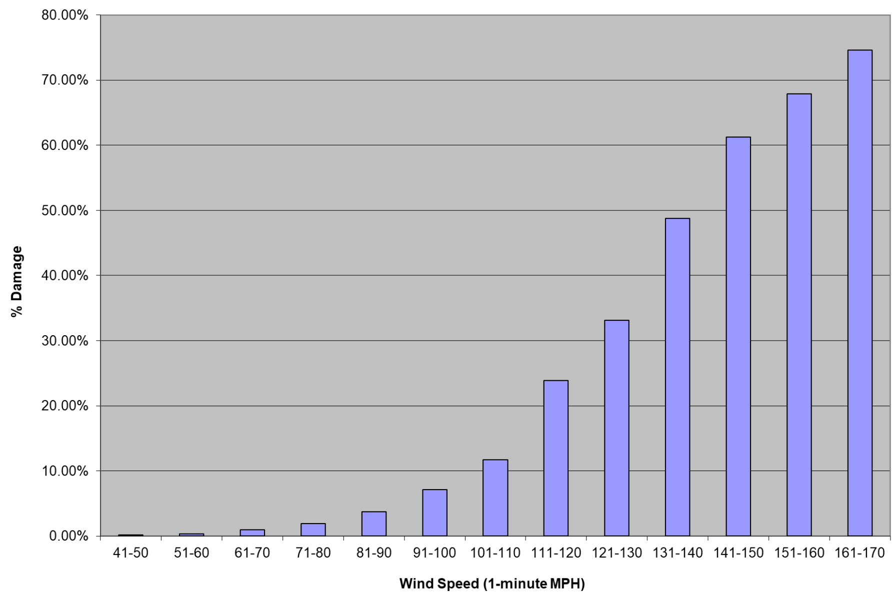


Figure 46. Plot of Form V-1 Part A Building Data

Verified by Professional Team: Yes

V-2 Development of Contents Hurricane Vulnerability Functions (1/3)

- CoreLogic's hurricane model contents vulnerability functions are based on historically observed damage (claims data and post-hurricane field surveys) and experimental research conducted by Professors Kishor Mehta and James McDonald at Texas Tech.
- Claims data from major storms during the 1954 – 1994 period were analyzed by Dr. Don Friedman and John Mangano while managing the Natural Hazard Research Service (NHRS) effort for The Travelers Insurance Company.
- Claims data from 1983-1995 storms from other insurance companies.
- Claims data from the 2004 and 2005 hurricanes has resulted in an update to the manufactured home vulnerability in Florida in June 2008.

V-2 Development of Contents Hurricane Vulnerability Functions (2/3)

- CoreLogic[1] teams have conducted post-disaster field surveys for several storms.
- CoreLogic has separate hurricane vulnerability functions for contents. Content vulnerability curves in the hurricane model are based on claims data.

[1] In this document, CoreLogic is used in lieu of EQE, EQECAT, and ABS Consulting for work performed by any of these entities prior to the acquisition by CoreLogic.

V-2 Development of Contents Hurricane Vulnerability Functions (3/3)

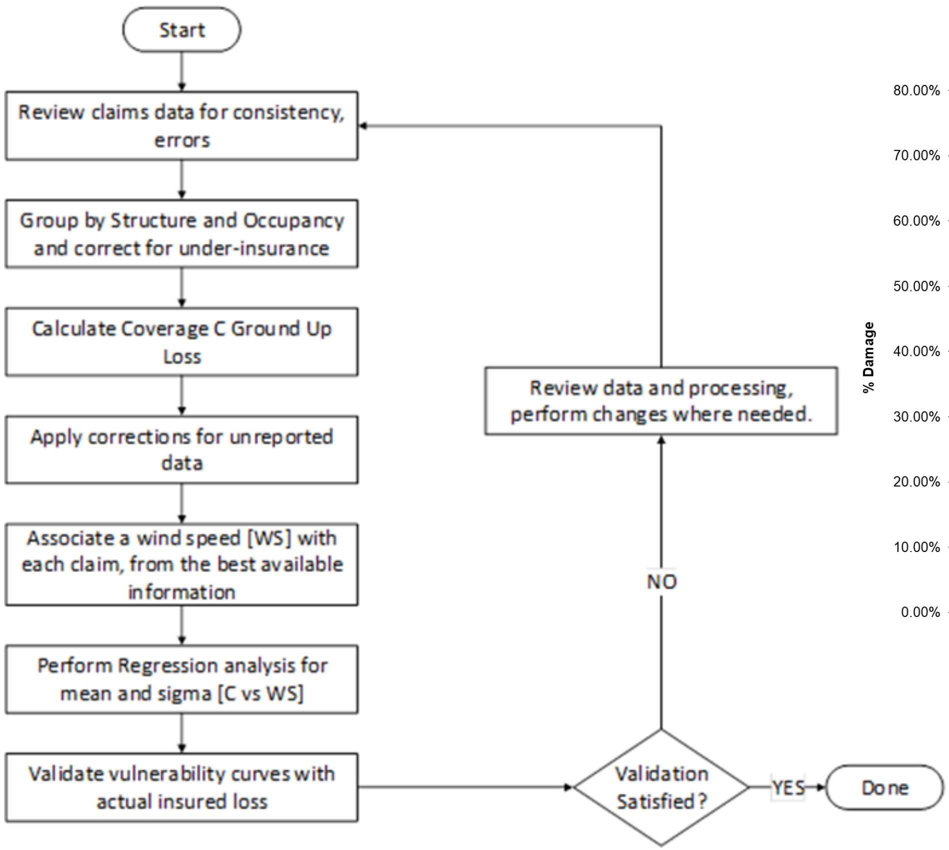


Figure 27. Flowchart – Contents Coverage Vulnerability Development

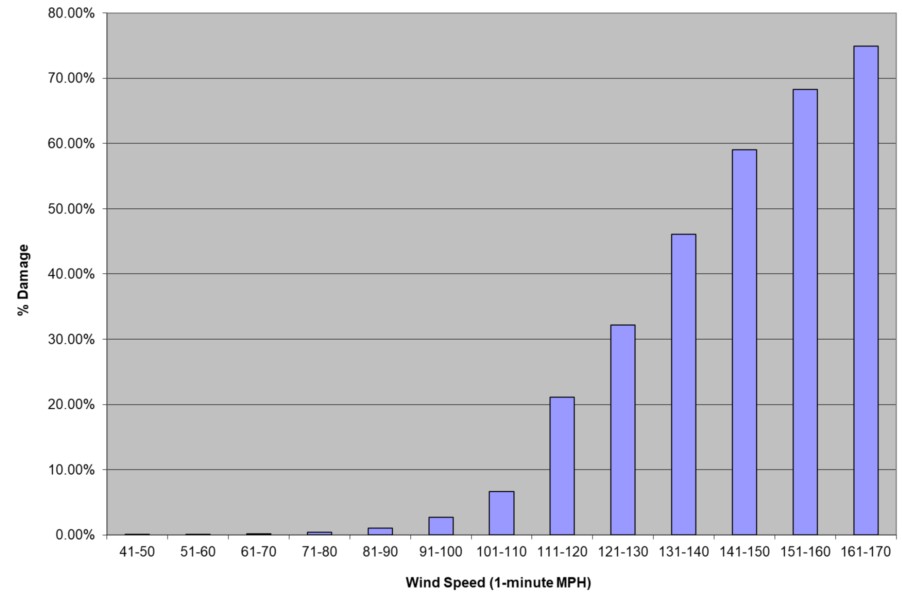


Figure 47. Plot of Form V-1 Part A Contents Data

Verified by Professional Team: Yes

V-3 Development of Time Element Hurricane Vulnerability Functions (1/3)

- CoreLogic's hurricane model time element vulnerability functions are based on historically observed damage (claims data and post-hurricane field surveys) and experimental research conducted by Professors Kishor Mehta and James McDonald at Texas Tech.

- Claims data from major storms during the 1954 – 1994 period were analyzed by Dr. Don Friedman and John Mangano while managing the Natural Hazard Research Service (NHRS) effort for The Travelers Insurance Company.

- Claims data from 1983-1995 storms from other insurance companies.

- Claims data from the 2004 and 2005 hurricanes has resulted in an update to the manufactured home vulnerability in Florida in June 2008.

- CoreLogic[1] teams have conducted post-disaster field surveys for several storms.

[1] In this document, CoreLogic is used in lieu of EQE, EQECAT, and ABS Consulting for work performed by any of these entities prior to the acquisition by CoreLogic.

V-3 Development of Time Element Hurricane Vulnerability Functions (2/3)

- CoreLogic has separate hurricane vulnerability functions for time element. Time element vulnerability curves in the hurricane model are based on claims data.
- The model's time element hurricane vulnerability functions have been derived from claims data and consider the estimated time required to repair or replace the property.
- Time element hurricane vulnerability curves in the hurricane model are based on claims data.

V-3 Development of Time Element Hurricane Vulnerability Functions (3/3)

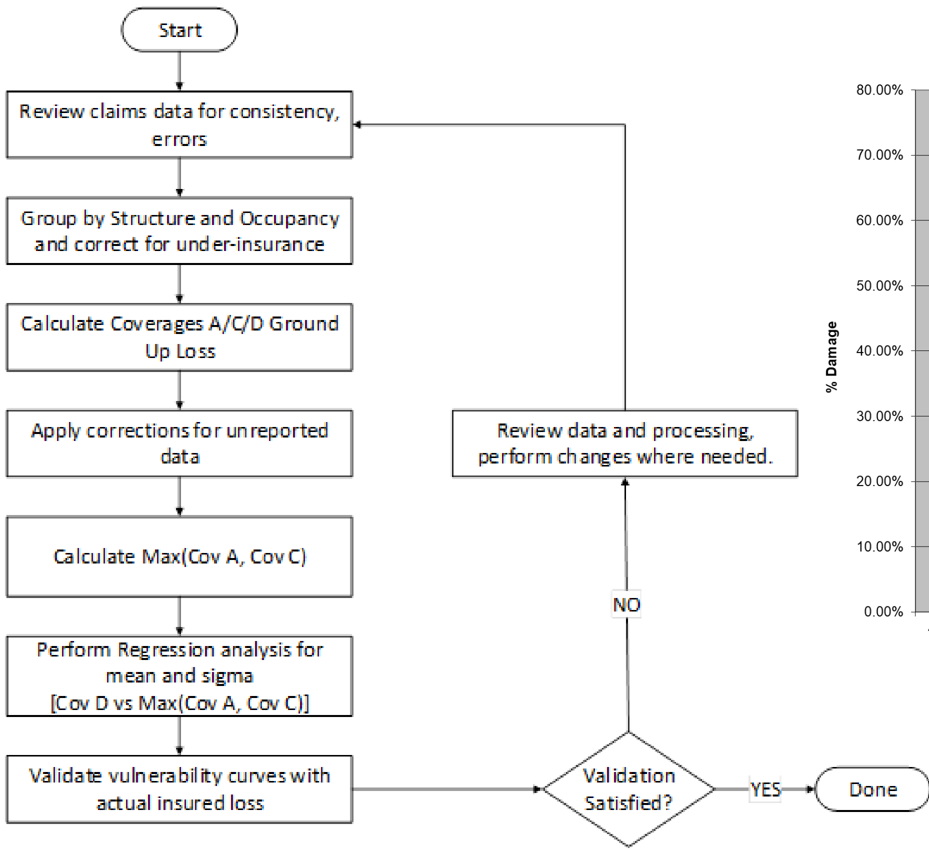


Figure 30. Flowchart – Time Element Coverage Vulnerability Development

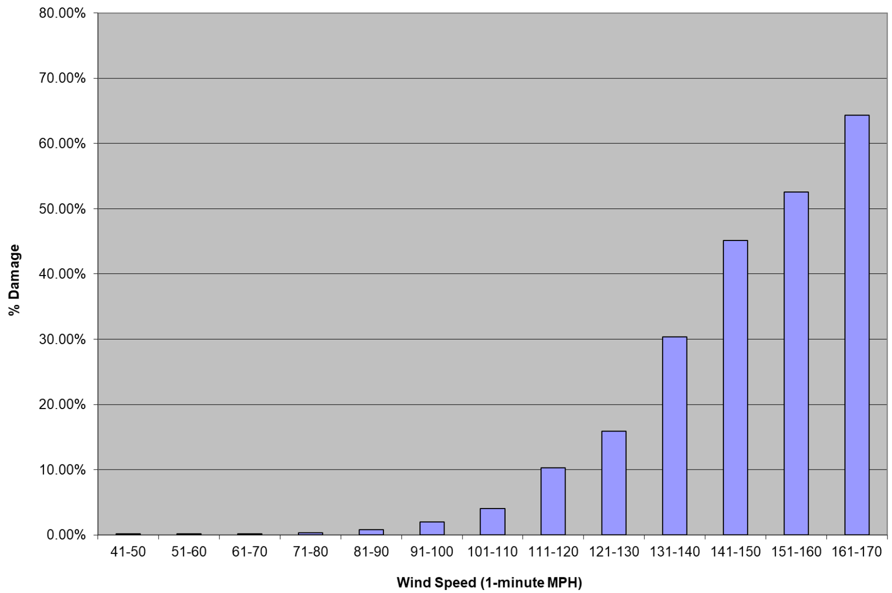


Figure 48. Plot of Form V-1 Part A Time Element Data

Verified by Professional Team: Yes

V-4 Hurricane Mitigation Measures and Secondary Characteristics (1/2)

- CoreLogic's hurricane model allows for modifications to the vulnerability curves in the secondary structural component of the model if additional knowledge about the construction characteristics is available. Such construction characteristics include roof strength, roof covering performance, roof-to-wall strength, wall-to-floor-to-foundation strength, opening protection, and window, door, and skylight strength.
- All hurricane mitigation measures and secondary characteristics in the are justified according to Standard V-4, Disclosures 1 through 12.
- The application of modifications to the vulnerability curves in the secondary structural component is reasonable both individually and in combination.
- CoreLogic's secondary characteristics, both individual and combined, are designed to incorporate the major structural characteristics that represent the unique distinctiveness of a building and hence its performance during extreme wind events. The system combination that analyzes the overall individual secondary characteristics interaction reasonably measures the complete roof-to-foundation load path and hence the performance of the building.

V-4 Hurricane Mitigation Measures and Secondary Characteristics (2/2)

Form V-2

INDIVIDUAL HURRICANE MITIGATION MEASURES AND SECONDARY CHARACTERISTICS			PERCENTAGE CHANGES IN DAMAGE* ((REFERENCE DAMAGE RATIO - MITIGATED DAMAGE RATIO) / REFERENCE DAMAGE RATIO) * 100									
			FRAME BUILDING					MASONRY BUILDING				
			WINDSPEED (MPH)					WINDSPEED (MPH)				
			60	85	110	135	160	60	85	110	135	160
	REFERENCE BUILDING		---	---	---	---	---	---	---	---	---	---
ROOF STRENGTH	BRACED GABLE ENDS		15.3%	15.1%	12.9%	10.2%	4.9%	14.2%	14.4%	12.4%	10.0%	6.2%
	HIP ROOF		19.3%	18.8%	16.0%	12.8%	6.3%	17.7%	17.6%	15.3%	12.4%	7.8%
ROOF COVERING	METAL		-6.7%	-6.7%	-5.7%	-4.5%	-2.2%	-6.1%	-6.2%	-5.4%	-4.3%	-2.6%
	ASTM D7158 Class H Shingles		3.4%	3.3%	2.8%	2.2%	1.1%	3.2%	3.3%	2.8%	2.2%	1.4%
	MEMBRANE		-3.4%	-3.3%	-2.8%	-2.2%	-1.1%	-2.9%	-3.0%	-2.6%	-2.1%	-1.3%
ROOF SHEATHING	NAILING OF DECK	8d	1.6%	1.5%	1.3%	1.0%	0.5%	1.6%	1.6%	1.4%	1.1%	0.7%
ROOF-WALL STRENGTH	CLIPS		0.3%	0.3%	0.2%	0.2%	0.1%	0.5%	0.5%	0.5%	0.4%	0.2%
	STRAPS		0.3%	0.3%	0.2%	0.2%	0.1%	0.5%	0.5%	0.5%	0.4%	0.2%
WALL-FLOOR STRENGTH	TIES OR CLIPS		4.1%	4.1%	3.5%	2.8%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%
	STRAPS		4.1%	4.1%	3.5%	2.8%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%
WALL-FOUNDATION STRENGTH	LARGER ANCHORS OR CLOSER SPACING		0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-
	STRAPS		4.1%	4.1%	3.5%	2.8%	1.3%	-	-	-	-	-
	VERTICAL REINFORCING		-	-	-	-	-	-	-	-	-	-
OPENING PROTECTION	WINDOW SHUTTERS	STRUCTURAL WOOD PANEL	14.8%	14.6%	12.4%	9.8%	4.7%	13.7%	14.0%	12.1%	9.7%	6.0%
	WINDOW SHUTTERS	METAL	11.4%	11.3%	9.6%	7.6%	3.7%	11.1%	11.4%	9.8%	7.9%	4.8%
	DOOR AND SKYLIGHT COVERS		21.8%	21.1%	18.1%	14.5%	7.3%	20.2%	19.9%	17.3%	14.1%	9.0%
	WINDOW	IMPACT RATED	9.9%	9.7%	8.3%	6.6%	3.2%	9.5%	9.8%	8.4%	6.7%	4.1%
	ENTRY DOORS	MEETS WIND-BORNE DEBRIS REQUIREMENTS	9.9%	9.7%	8.3%	6.6%	3.2%	9.5%	9.8%	8.4%	6.7%	4.1%
	GARAGE DOORS	MEETS WIND-BORNE DEBRIS REQUIREMENTS	9.9%	9.7%	8.3%	6.6%	3.2%	9.5%	9.8%	8.4%	6.7%	4.1%
	SLIDING GLASS DOORS	MEETS WIND-BORNE DEBRIS REQUIREMENTS	19.1%	18.6%	15.9%	12.7%	6.2%	17.5%	17.4%	15.1%	12.3%	7.7%
	SKYLIGHT	IMPACT RATED	13.5%	13.3%	11.3%	9.0%	4.3%	12.9%	13.2%	11.4%	9.1%	5.6%
HURRICANE MITIGATION MEASURES AND SECONDARY CHARACTERISTICS IN COMBINATION			PERCENTAGE CHANGES IN DAMAGE* ((REFERENCE DAMAGE RATIO - MITIGATED DAMAGE RATIO) / REFERENCE DAMAGE RATIO) * 100									
			FRAME BUILDING					MASONRY BUILDING				
			WINDSPEED (MPH)					WINDSPEED (MPH)				
			60	85	110	135	160	60	85	110	135	160
BUILDING	MITIGATED BUILDING		33.2%	31.3%	27.1%	22.1%	11.4%	31.0%	29.8%	26.0%	21.5%	14.0%

Verified by Professional Team: Yes

Actuarial Hurricane Standards

A-1 Hurricane Model Input Data and Output Reports

- Adjustments, edits, inclusions, or deletions to insurance company input data used by the modeler are based upon generally accepted actuarial, underwriting, and statistical procedures:
  - Review claims data for consistency, correct any errors and determine all elements included within the claims data
  - Group data by class, ensure consistency between insurers including relevant underwriting practices
  - Correct data for underinsurance, if any
- Any assumption or method used by CoreLogic's hurricane loss projection model that relates to a specific insurer's inputs to the model, if any, for the purposes of preparing the insurer's rate filing is clearly identified.
- Treatment of missing values for user inputs required in the model are actuarially sound.

Verified by Professional Team: Yes

A-2 Hurricane Events Resulting in Modeled Hurricane Losses

- Modeled hurricane loss costs and hurricane probable maximum loss levels reflect all damages starting when modeled damage is first caused in Florida from an event modeled as a hurricane at that point in time and will include all subsequent damage in Florida from that event.
- CoreLogic has a documented procedure for distinguishing wind-related hurricane losses from other peril losses.

Verified by Professional Team: Yes

A-3 Hurricane Coverages (1/2)

- The methods used in the calculation of building hurricane loss costs, including the effect of law and ordinance coverage, are actuarially sound.
- The methods used in the calculation of appurtenant structure hurricane loss costs are actuarially sound.
- The methods used in the calculation of contents hurricane loss costs are actuarially sound.
- The methods used in the calculation of time element hurricane loss costs are actuarially sound.

A-3 Hurricane Coverages (2/2)

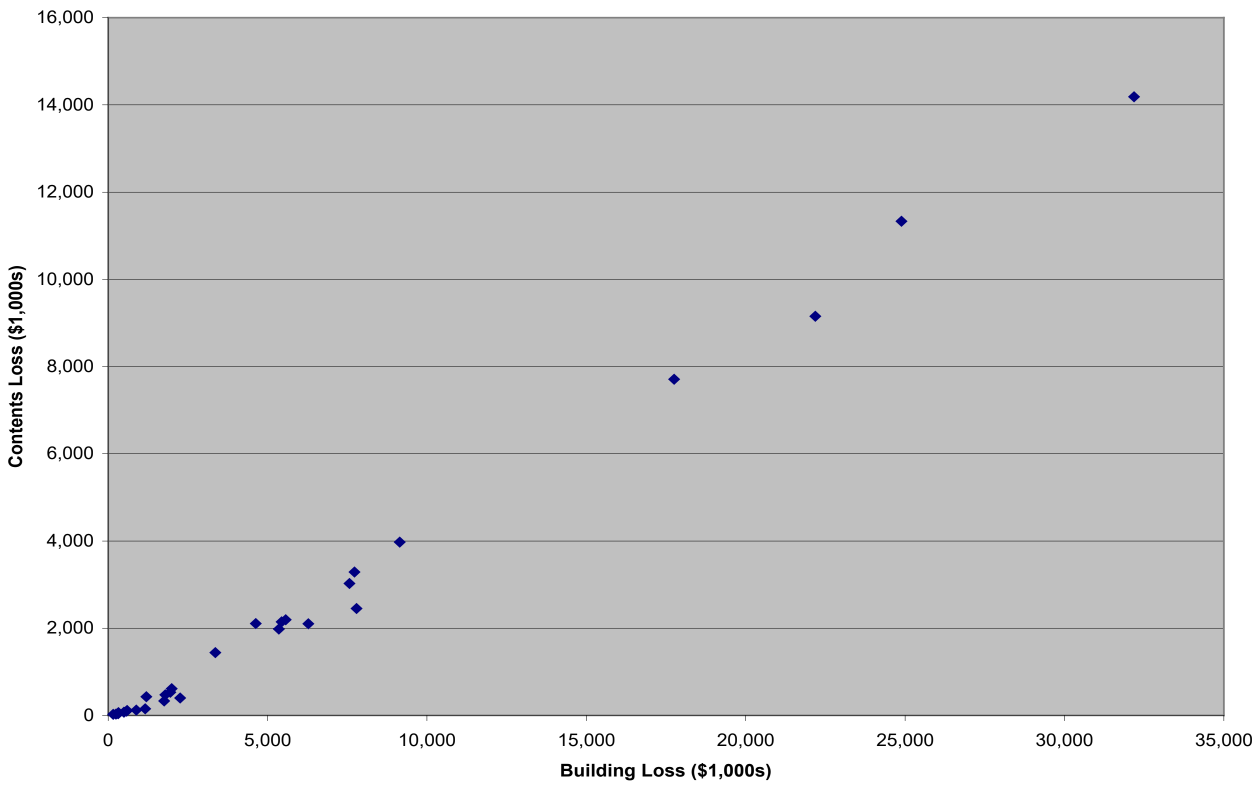


Figure 31. Relationship between Building and Contents Losses

Verified by Professional Team: Yes

A-4 Modeled Hurricane Loss Cost and Hurricane Probable Maximum Loss Level Considerations

- Hurricane loss costs and probable maximum loss levels do not include expenses, risk load, investment income, premium reserves, taxes, assessments, or profit margin.
- The model does not make a prospective provision for economic inflation.
- The model does not include any explicit provision for direct inland and storm surge flood losses.
- The model can calculate loss costs and probable maximum loss levels for specific latitude and longitude coordinates.
- Demand surge has been included in all analyses using relevant data.
- The methods and assumptions used in the estimation of demand surge are actuarially sound.

Verified by Professional Team: Yes

A-5 Hurricane Policy Conditions (1/2)

- The methods used in the development of mathematical distributions to reflect the effects of deductibles and policy limits are actuarially sound.
- The relationship among the modeled deductible hurricane loss costs are reasonable.
    - CoreLogic's hurricane model estimates the damage distribution for a given site through discrete calculations of the site hazard distribution and the corresponding vulnerability function.
    - The loss distribution is estimated through the discrete calculations of the site damage distribution, taking into account the deductibles and limits.
- All hurricane loss costs have been calculated in accordance with s.627.701(5)(a), F.S.

A-5 Hurricane Policy Conditions (2/2)

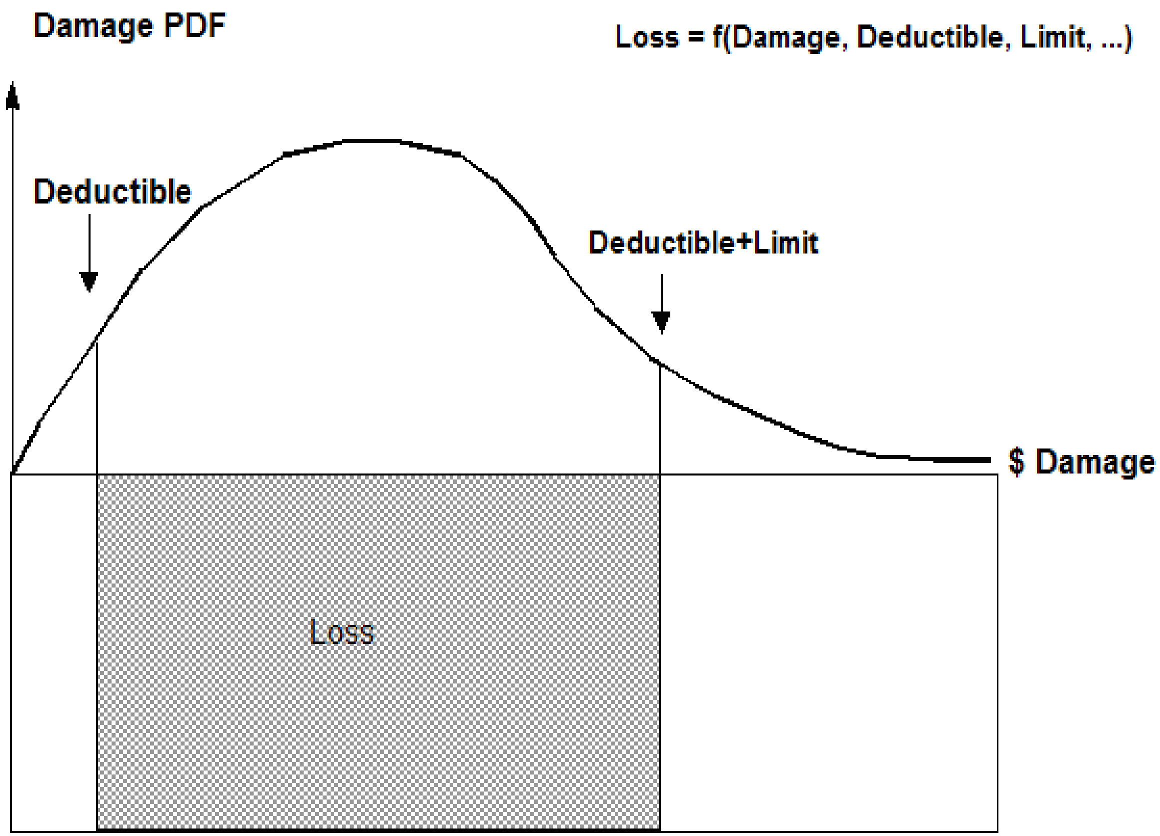


Figure 33. Damage Distribution to Calculate Loss

Verified by Professional Team: Yes

A-6 Hurricane Loss Outputs and Logical Relationships to Risk (1/4)

- The methods, data, and assumptions used in the estimation of hurricane loss costs and hurricane probable maximum loss levels are actuarially sound.
- Loss costs produced by the hurricane model do not exhibit a significant change when the underlying risk does not change significantly.
- Hurricane loss costs produced by the hurricane model are positive and non-zero for all valid Florida ZIP Codes.
- All other factors held constant, hurricane loss costs do not increase
  - as the quality of construction type, materials, and workmanship increases
  - with the presence of fixtures or construction techniques designed for hazard mitigation
  - with the use of wind-resistant design provisions
  - as building code enforcement increases.
- The output ranges produced by the hurricane model reflect lower loss costs, in general, for newer construction versus older construction.

A-6 Hurricane Loss Outputs and Logical Relationships to Risk (2/4)

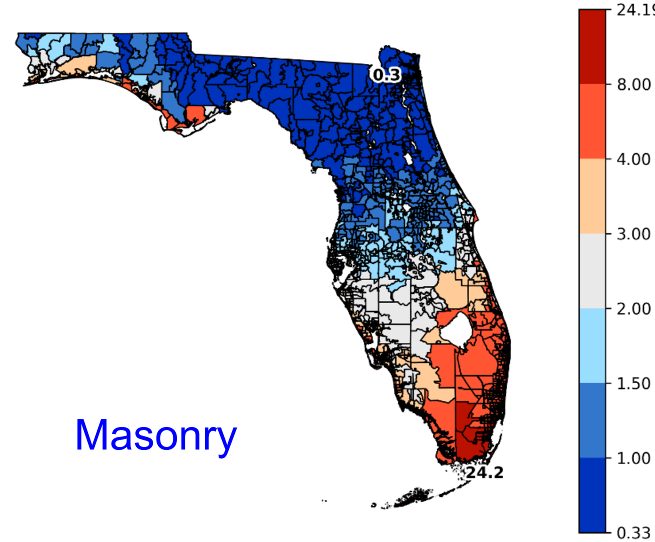
- The output ranges produced by the hurricane model reflect lower loss costs, in general
  - for inland counties versus coastal counties
  - for northern counties versus southern counties
- Hurricane loss costs decrease as the deductibles increase, all other factors held constant.
- Relationships among the hurricane loss costs for coverages A, B, C, and D are consistent with the coverages provided.
- The output ranges produced by the hurricane model are logical for the type of risk being modeled and deviations are supported.

A-6 Hurricane Loss Outputs and Logical Relationships to Risk (3/4)

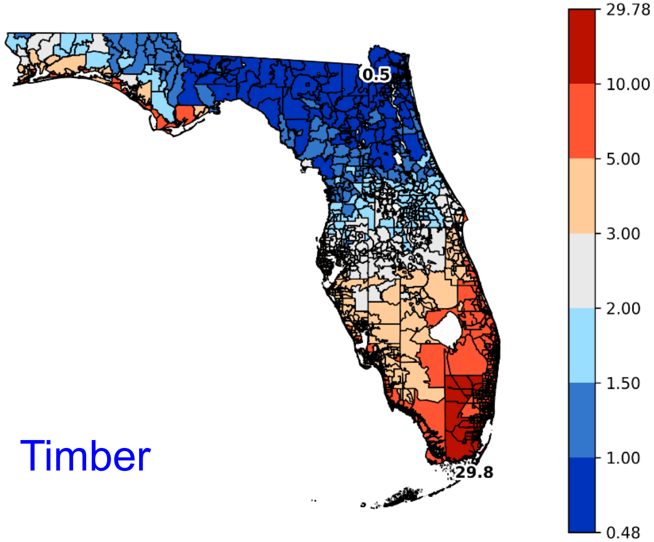
- The output ranges produced by the hurricane model reflect lower loss costs for masonry construction versus frame construction, subject to the discussion in Disclosure 15.
- The output ranges produced by the hurricane model reflect lower loss costs for personal residential risk exposure versus manufactured home risk exposure, subject to the discussion in Disclosure 16.
- Hurricane vulnerability functions in CoreLogic’s model are based on claims data obtained from insurance companies and are appropriate based on the type of risk being modeled.
- CoreLogic’s hurricane loss costs exhibit logical relation to risk as indicated in the Actuarial and Vulnerability Forms.

A-6 Hurricane Loss Outputs and Logical Relationships to Risk (4/4)

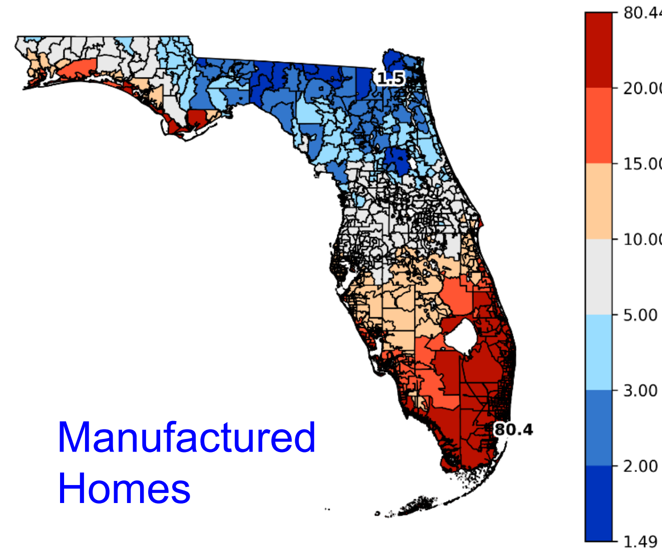
Form A-1



Masonry



Timber



Manufactured Homes

Verified by Professional Team: Yes

Computer/Information Hurricane Standards

CI-1 Hurricane Model Documentation (1/2)

- CoreLogic maintains an archive of model functionality and technical descriptions separate from the use of correspondence including emails, presentation materials, and unformatted text files.
- CoreLogic maintains a repository containing a complete set of documentation specified model structure, detailed software description, and functionality. The documentation is indicated of current model development and software engineering practices.
  - SharePoint
  - Doxygen generated documentation
  - GitHub
- CoreLogic maintains dated documentation of all computer software, including user interface, scientific, engineering, actuarial, data preparation, and validation.

CI-1 Hurricane Model Documentation (2/2)

- CoreLogic maintains such a table that provides all changes from the currently accepted submission to the initial submission and all substantive changes since this year's initial submission.
- CoreLogic maintains documentation separate from the source code.
- CoreLogic maintains lists of all externally acquired currently used hurricane model-specific software and data assets including asset name, version number, acquisition date, acquisition source, acquisition mode, and length of time asset has been used by CoreLogic.
- All relevant documentation and tables were reviewed by the Professional Team.

Verified by Professional Team: Yes

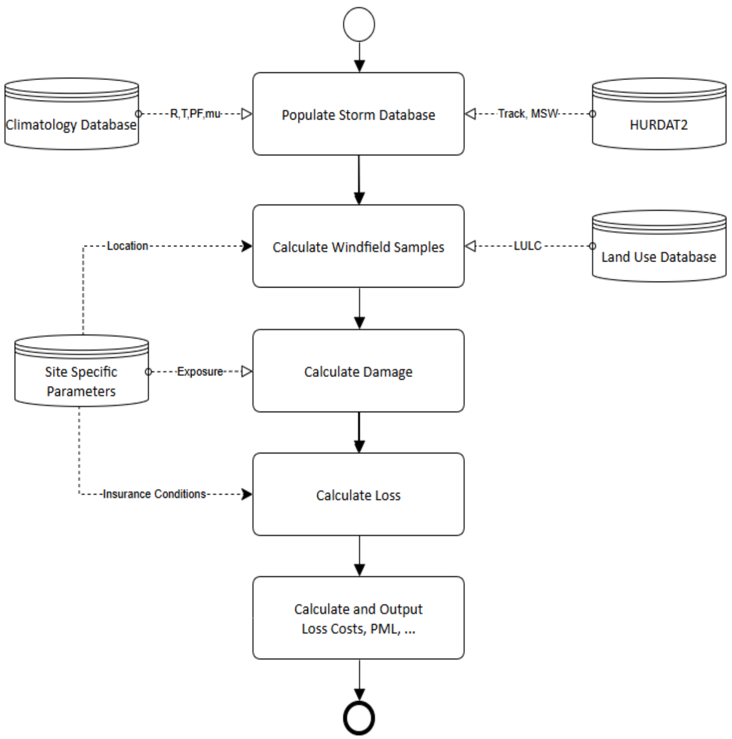
CI-2 Hurricane Model Requirements

- CoreLogic maintains requirements and documentation for each software component.
- CoreLogic updates the relevant requirements documentation whenever changes are made to the model.

Verified by Professional Team: Yes

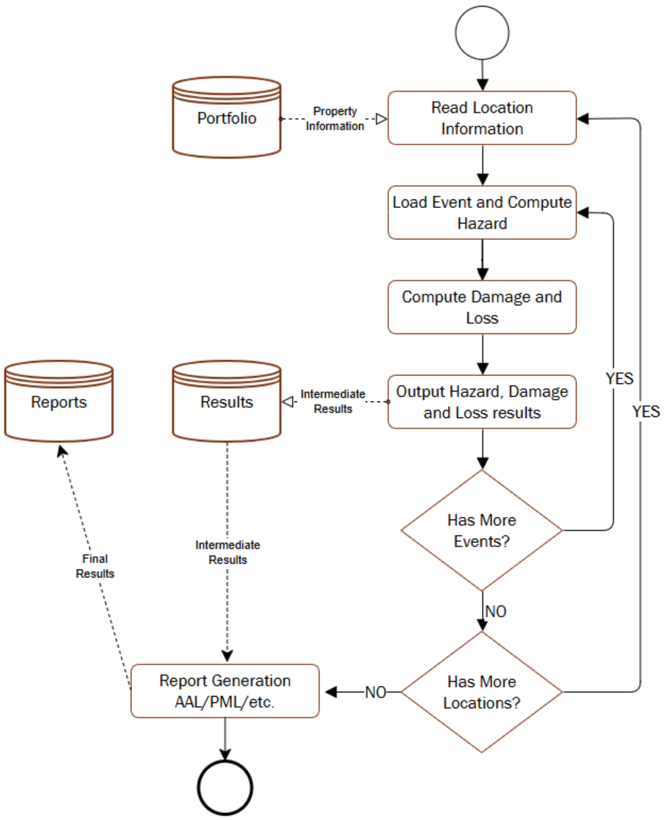
CI-3 Hurricane Model Organization and Component Design (1/2)

- The design levels of the software have been documented, including software components and interfaces, data files, and database elements.
- The documentation includes detailed control and data flowcharts (in the submission and in other relevant documentation) and interface specifications for each software component,



CI-3 Hurricane Model Organization and Component Design (2/2)

- schema definitions for each database and data file, and flowcharts illustrating model-related flow of information and its processing by modeling organization personnel.
- CoreLogic maintains all flowcharts based on referenced industry standards, including Doxygen guidelines.



Verified by Professional Team: Yes

CI-4 Hurricane Model Implementation (1/2)

- CoreLogic maintains a procedure of coding guidelines consistent with accepted software engineering practices for all programming languages used in the hurricane model and submission document.
- CoreLogic maintains network organization documentation using Arch Network Cloud Operations guidelines.
- CoreLogic maintains a procedure used in creating, deriving, procuring, and verifying databases and data files accessed by components.
- All components are traceable through explicit component identification in hurricane model representations down to the code level.
- CoreLogic maintains a table of software components affecting hurricane loss costs and probable maximum loss levels using the following columns: component name, number of lines of code, and number of comment lines.

CI-4 Hurricane Model Implementation (2/2)

- The source code is commented in a manner that a software engineer unfamiliar with the code can comprehend the component logic.
- Documentation includes list of equations and formulas with definitions of variables.
- Documentation includes a cross-referenced list of implementation source code terms and variable names.
- Hurricane model code and data are accompanied by documented maintenance, testing, and update plans with their schedules. The vintage of the code and data are justified.

Verified by Professional Team: Yes

CI-5 Hurricane Model Verification (1/3)

- The model has been extensively tested to verify that calculated results are consistent with the intended simulation approach using algorithm verification, hand calculations, and sensitivity analyses.
- Much of this verification is performed by personnel other than the original component developers.
- Extensive validation testing of the software-generated wind fields has been performed to confirm that generated wind speeds are consistent with observations.
- Numerous analyses have been conducted using actual insurance portfolio data to confirm the reasonableness of resulting answers.
- Testing software is used to assist in documenting and analyzing all components, including TSMS.

CI-5 Hurricane Model Verification (2/3)

- Unit tests have been performed and documented for each updated component relevant to residential hurricane loss costs in Florida.
- A suite of automated regression tests is regularly run on the software to ensure the integrity of the various components as well as the results produced by the integrated system.
- The unit testing suite is also covering all classes used to calculate hurricane loss costs in Florida.
- Quality assurance documentation includes a description of each test case from the regression testing suite.
- Testing software is used to assist in documenting and analyzing all databases and data files accessed by components.

CI-5 Hurricane Model Verification (3/3)

- Client data is extensively tested during the import process into the CoreLogic system to confirm its accuracy.
- Field level validation is performed to confirm that every data element within each record falls within known ranges.
- Data not falling within known ranges is marked as an error or a warning in a log depending upon the severity of the problem.
- Child/parent and other key relationships are also checked.
- A summary log is displayed at the end of import process denoting the number records which have warnings or errors.
- These procedures were reviewed by the professional team during the on-site visit.

Verified by Professional Team: Yes

CI-6 Human-Computer Interaction (1/2)

- CoreLogic maintains a set of human interface guidelines.
- The Risk Quantification and Engineering (RQE) and Navigate platforms conform to Microsoft Guidelines.
- All options in the RQE and Navigate platforms related to the U.S. Hurricane Model are designed to be clear and unambiguous, following the internal User Interface / User Experience (UI/UX) guidelines and practices.

CI-6 Human-Computer Interaction (2/2)

- The RQE and Navigate User Interfaces have a specific option for enforcing the regulatory compatible analysis settings. When selected, the analysis options related to Florida insurance rate filing are enforced and cannot be changed.
- CoreLogic has provided a demonstration of the RQE and Navigate User Interfaces, including regulatory compatible settings and options related to Florida rate filings, to the Professional Team.
- The human interface guidelines have been reviewed by the Professional Team.

Verified by Professional Team: Yes

CI-7 Hurricane Model Maintenance and Revision (1/2)

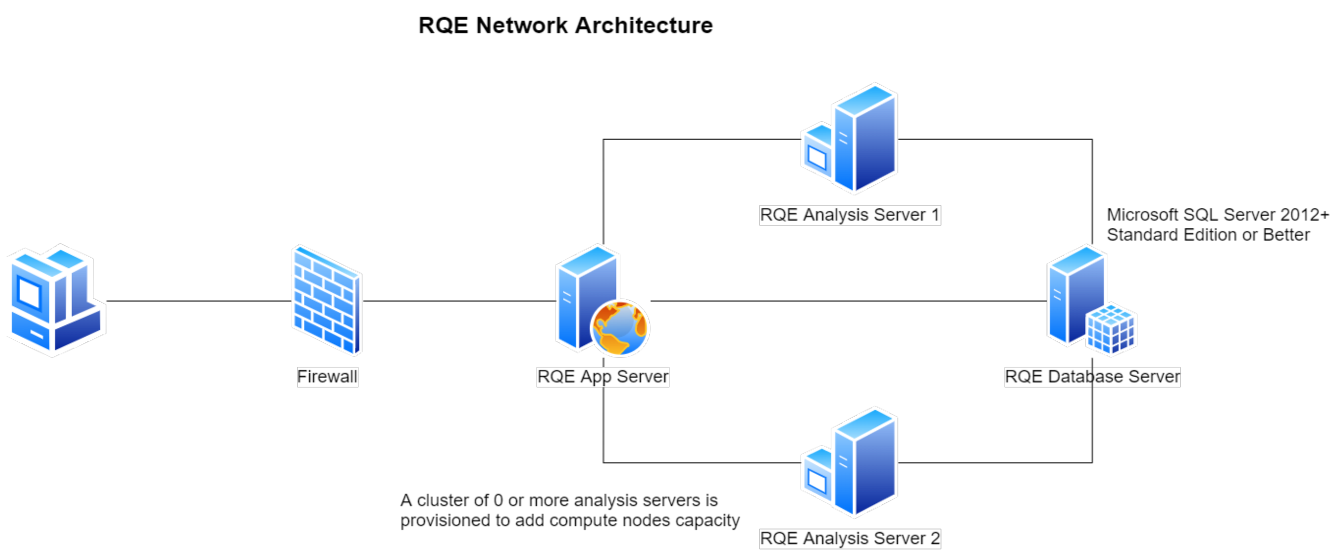
- CoreLogic has a clearly written policy for model revision with respect to methodologies and data, including model review, maintenance, verification and validation of revised components, databases, and data files.

- A revision to any portion of the model that results in a change in any Florida personal and commercial residential hurricane loss cost results in a new model version identification.

- CoreLogic uses tracking software to identify and describe all errors, as well as modifications to code, data, and documentation.

CI-7 Hurricane Model Maintenance and Revision (2/2)

- CoreLogic maintains such a list of all hurricane model versions since the initial submission for the year. Each hurricane model description has a unique version identification with a list of additions, deletions, and changes that define that version.



Verified by Professional Team: Yes

CI-8 Hurricane Model Security

- In accordance with standard industry practices, CoreLogic has in place security procedures for access to code, data, and documentation, including disaster contingency, and for maintenance of anti-virus software on all machines where code and data are accessed.

- Procedures are also in place to ensure that licensees of the model cannot compromise the correct operation of the software.

- These procedures were reviewed by the professional team during the on-site visit.

Verified by Professional Team: Yes