Resiliency and Mitigation Council

Tuesday, May 13, 2025

1:00 P.M.

ARIZONA
DEPARTMENT OF INSURANCE
& FINANCIAL INSTITUTIONS

I. Welcome and Opening Remarks

ARIZONA
DEPARTMENT OF INSURANCE
& FINANCIAL INSTITUTIONS

General Meeting Logistics

- This meeting is being broadcast online and is being recorded.
- The recording and associated meeting materials will be posted on the Council's webpage. Comments in the chat will not be recorded.
- For Council members online, please use the hand raise feature to speak.
- Except for public comment periods, only Council members online will be able to unmute themselves and turn on their camera.
- If public comments are taken, each speaker's time will be limited to provide everyone who wishes to comment the opportunity to do so.
- To comment, fill out a speaking slip or the Google Form (if you are online).

ARIZONA
DEPARTMENT OF INSURANCE
& FINANCIAL INSTITUTIONS

II. Presentation from Verisk

ARIZONA
DEPARTMENT OF INSURANCE
& FINANCIAL INSTITUTIONS

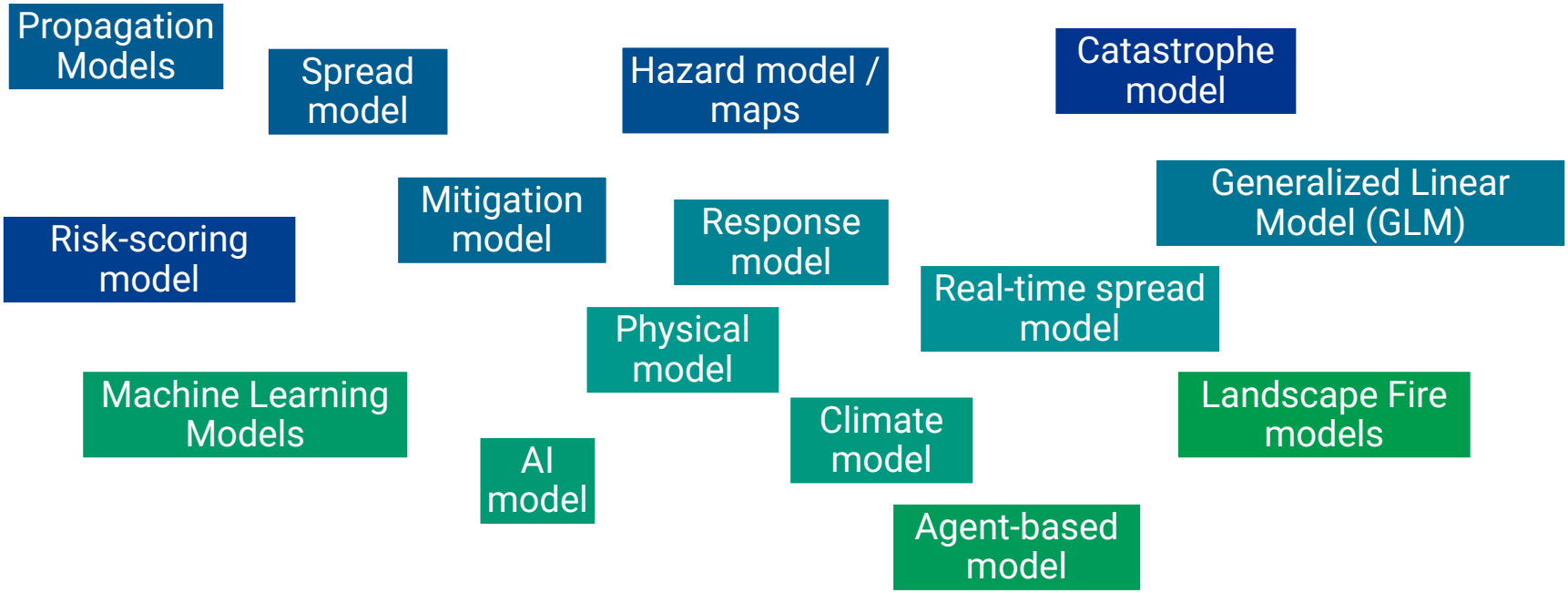
Verisk Wildfire Insurance Solutions

Arizona Resiliency and Mitigation Council

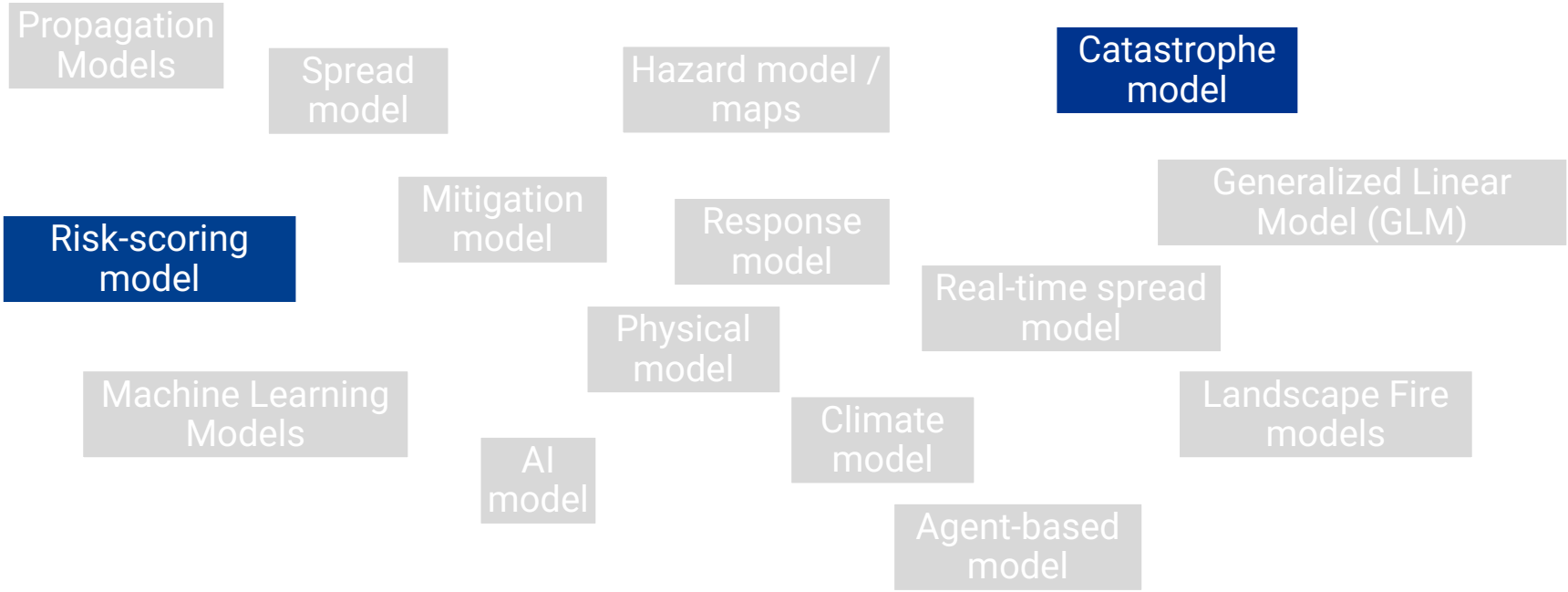
May 13, 2025

JulieAnna Anastassatos, VP, Wildfire
Dr. Julia Borman, AVP, Regulatory

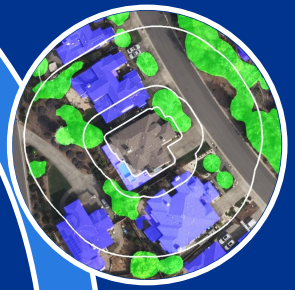
“Model” Could Mean…



“Model” Could Mean…



Verisk Wildfire Insurance Solutions



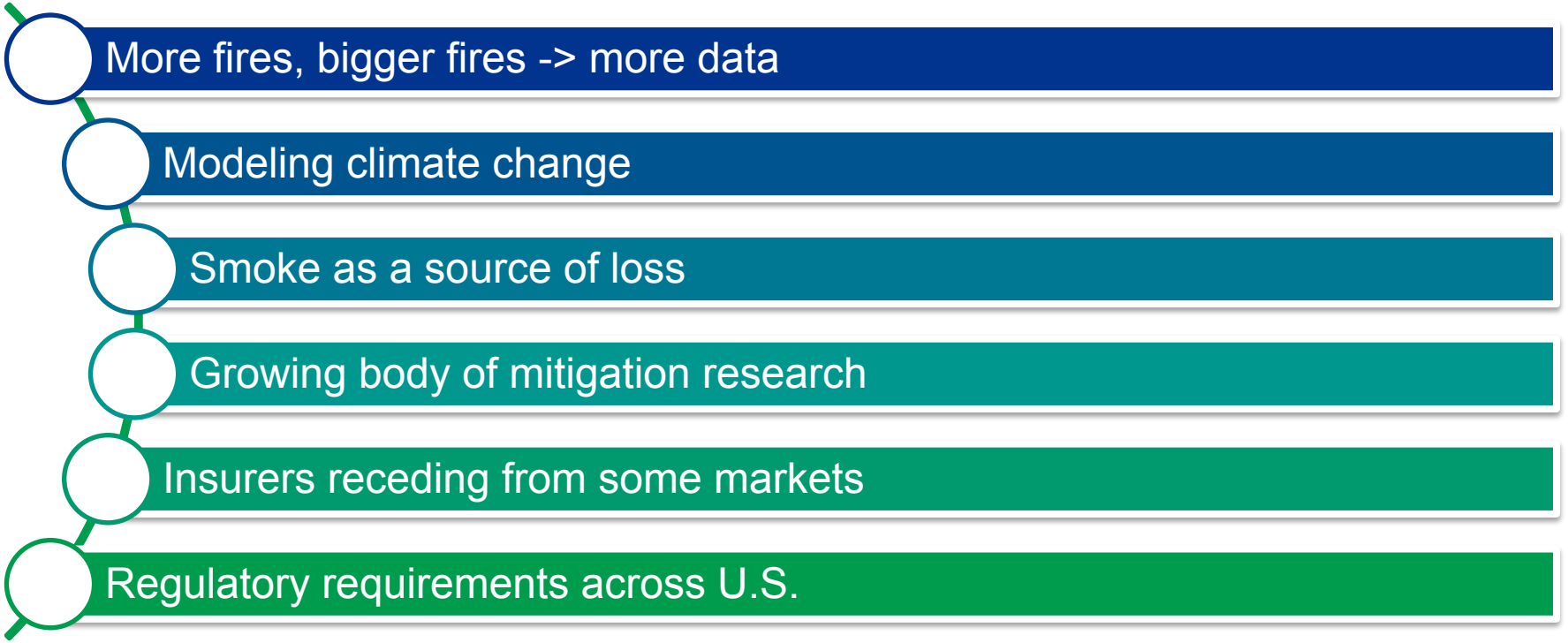
FireLine®

The Verisk Wildfire Model for the United States

Verisk's Staff Is Multidisciplinary

- Geoscientists
- Meteorologists
- Climatologists
- Physicists
- Software Specialists
- Mathematicians
- Statisticians
- Actuaries
- Operations Researchers
- Engineers
- Analysts
- Modelers
- Computer Scientists

Considerations for the Wildfire Peril



FireLine®

Critical Factors for Evaluating the Wildfire Hazard

Vegetative Fuels

Topography/Slope

Property Road Access

Science and Technology Behind FireLine

Multi-disciplinary experts participated in development and involved in ongoing maintenance/improvements

FireLine Expertise

- Forestry/wildland science – PhD scientists
- Remote Sensing – PhD Scientists
- Computer Science – Masters Degrees
- Insurance – PhD level
- Community fire protection
- State and local authorities – CA Dept. of Forestry

Technology

Remote Sensing

Imagery Analysis

Digital Mapping

Analytics

Vegetation

Topography

Road Networks

Weather/Climate

Collaboration

Insurance Industry

Fire Protection Community

NASA and DoD Research

FireLine Score

0 30

Score & Risk Data

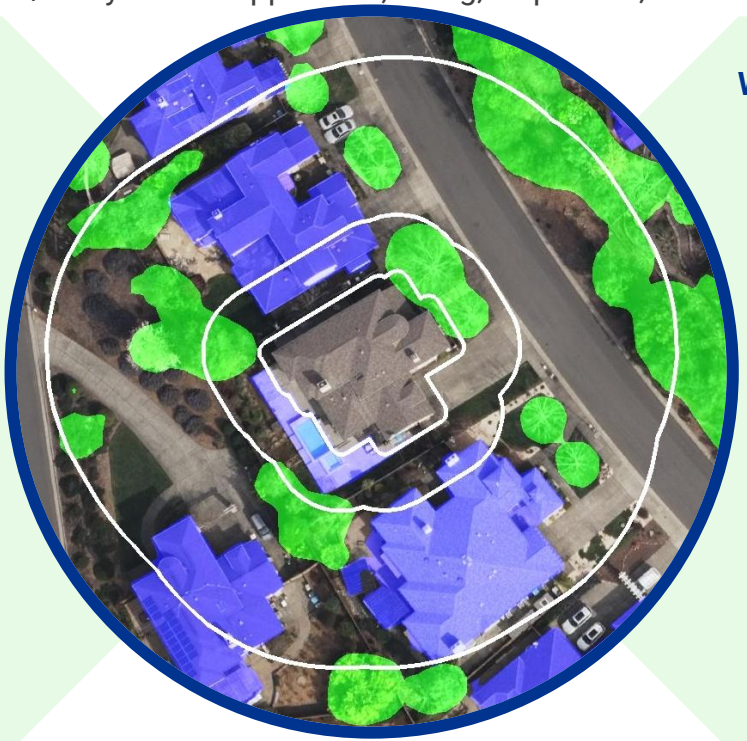
- Heavy Fuels
- Very steep slope
- Very limited road access
- Historical Wildfires

FireLine® - Wildfire Hazard & Mitigation Solution

Granular and customizable risk data/analytics to support UW, rating, inspection, marketing & regulatory compliance

FireLine Wildfire Hazard Score

- Wildland vegetation
- Terrain
- Road access
- Wind-borne embers
- Historic wildfire activity
- Weather/ climate



FireLine Wildfire Hazard and Mitigation Score

- **Defensible space and vegetation management**
- **Building exterior and structure hardening**
- **Community-level mitigation programs** (Firewise, Fire risk reduction community, Ready, Set, Go!)

Additional Hazards

- **Other property hazards** (solar panels, decks)
- **Smoke/ash damage and urban conflagration**

Mitigation Considerations and Partnerships

A commitment to wildfire mitigation and resilience

Verisk offers a growing data set of mitigation information for insurers, including those that leverage our relationships with others in the wildfire mitigation community.
These include:

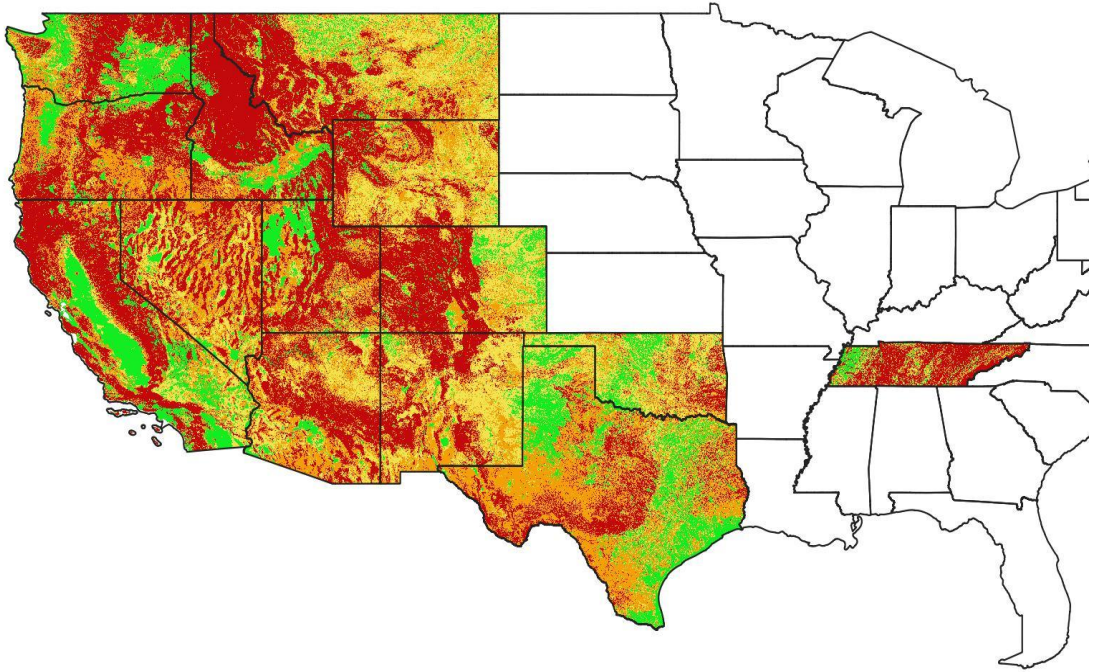
- The International Association of Fire Chief's Ready, Set Go! Program
- The National Fire Prevention Association's Firewise USA Program

Parcel Level Insights

A commitment to wildfire mitigation and resilience

- Detects the location and proximity of trees
- Identifies tree overhang
- Provide parcel tree coverage
- Identifies presence of fire-resistive materials and fire hazards

Wildfire Risk at a Glance



Negligible

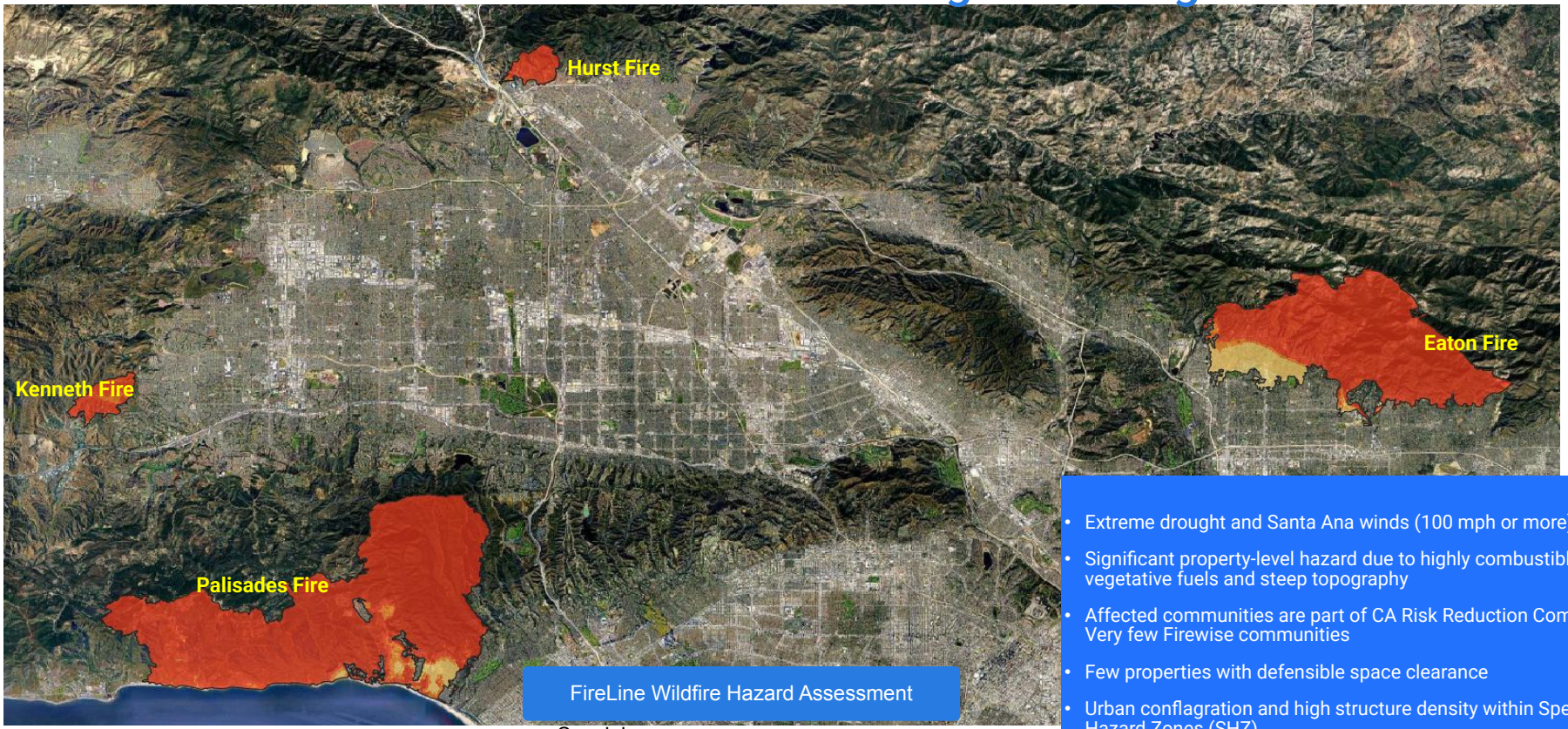
Low

Moderate

High and Extreme

Source: Verisk Wildfire Risk Reports 2024

LA Wildfires 2025 – FireLine Risk and Mitigation Insights



- Extreme drought and Santa Ana winds (100 mph or more)
- Significant property-level hazard due to highly combustible vegetative fuels and steep topography
- Affected communities are part of CA Risk Reduction Community. Very few Firewise communities
- Few properties with defensible space clearance
- Urban conflagration and high structure density within Special Hazard Zones (SHZ)
- Verisk (EES) loss estimates: $28-35 Billion

Wildfire perimeter source: NIFC

The Verisk Wildfire Model for the United States

Why Do We Need Catastrophe Models?

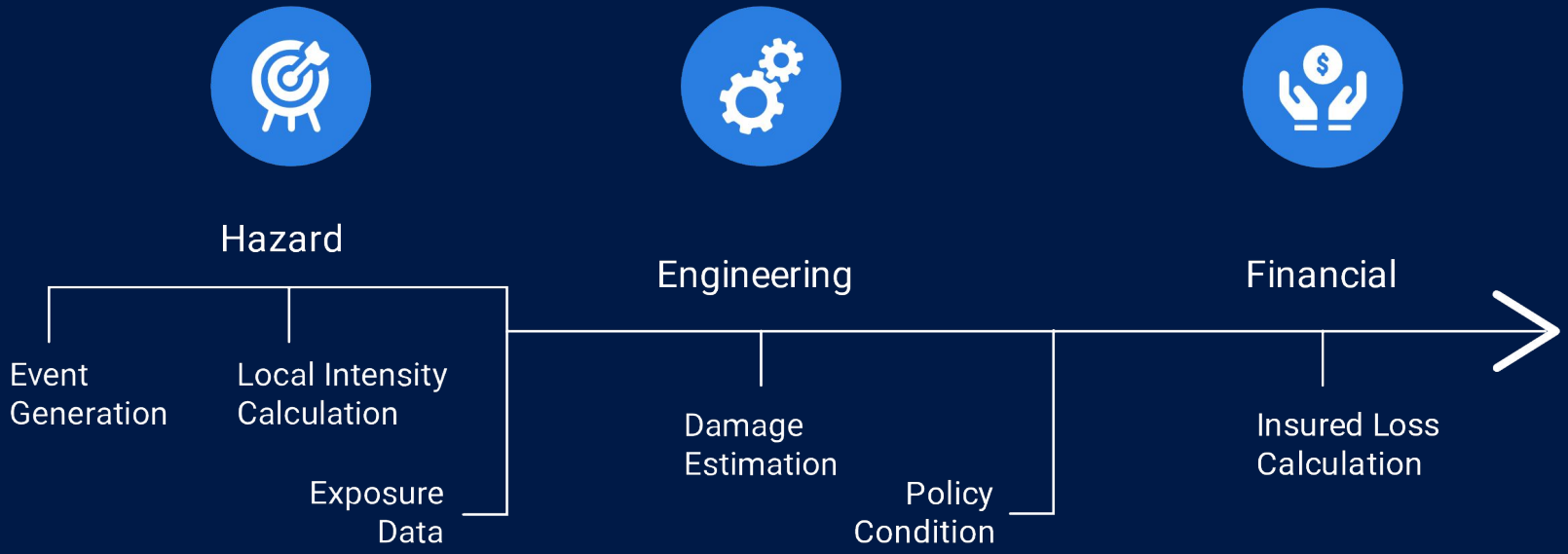
Traditional methods may not be a good predictor of possible loss

Constantly changing landscape of exposure data limits the usefulness of past loss experience

Models should capture potential losses ***before*** they occur

Verisk, Survey, 2025

Verisk Extreme Event Modeling Framework



Ultimate Goal in Hazard Module is to Generate Stochastic Wildfire Footprints and Local Intensities

Verisk Stochastic Catalog is 100,000 Event Years and includes 70 Million Fires

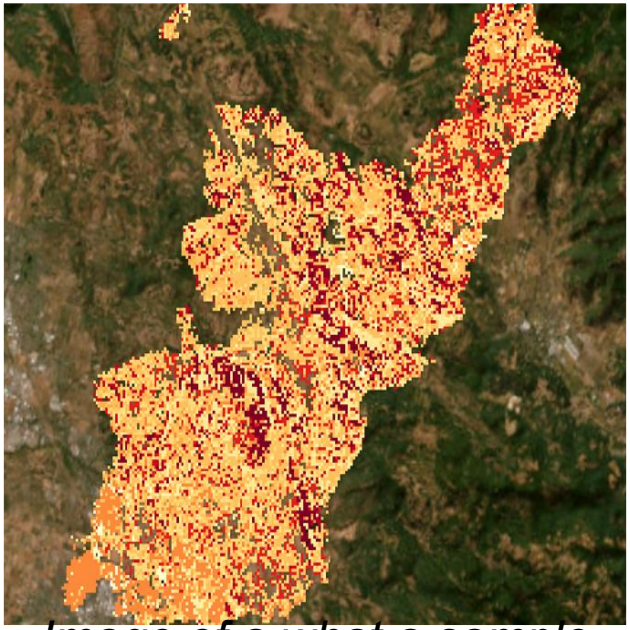
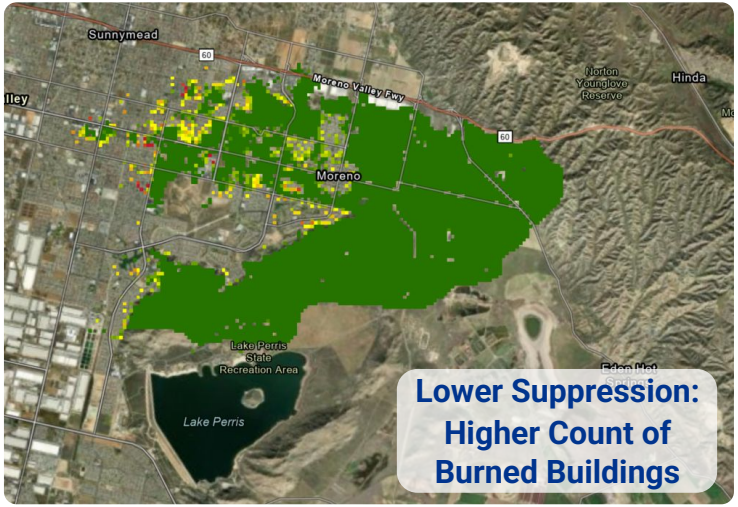


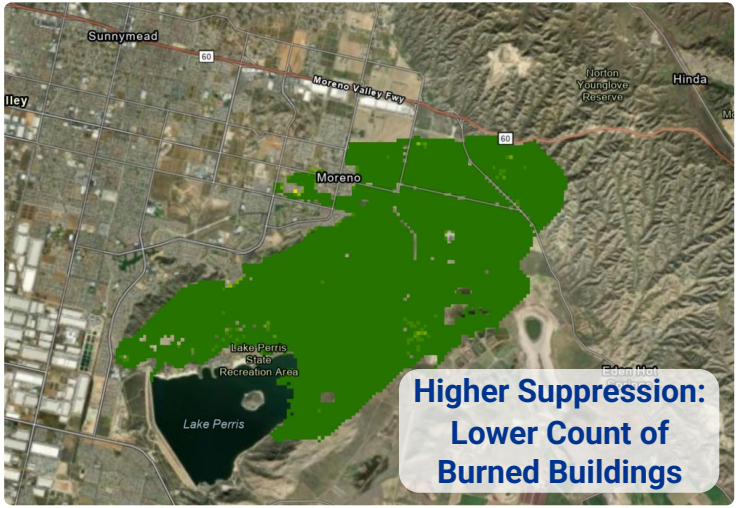
Image of a what a sample stochastic fire might look like

Fire suppression ability is dynamic and contingent on many factors

Primary drivers of modeled suppression

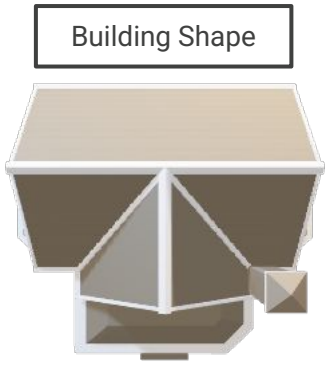
- Population Density
- Winds
- Fuel Moisture
- Fire Penetration
- Construction Type
- Fire Size

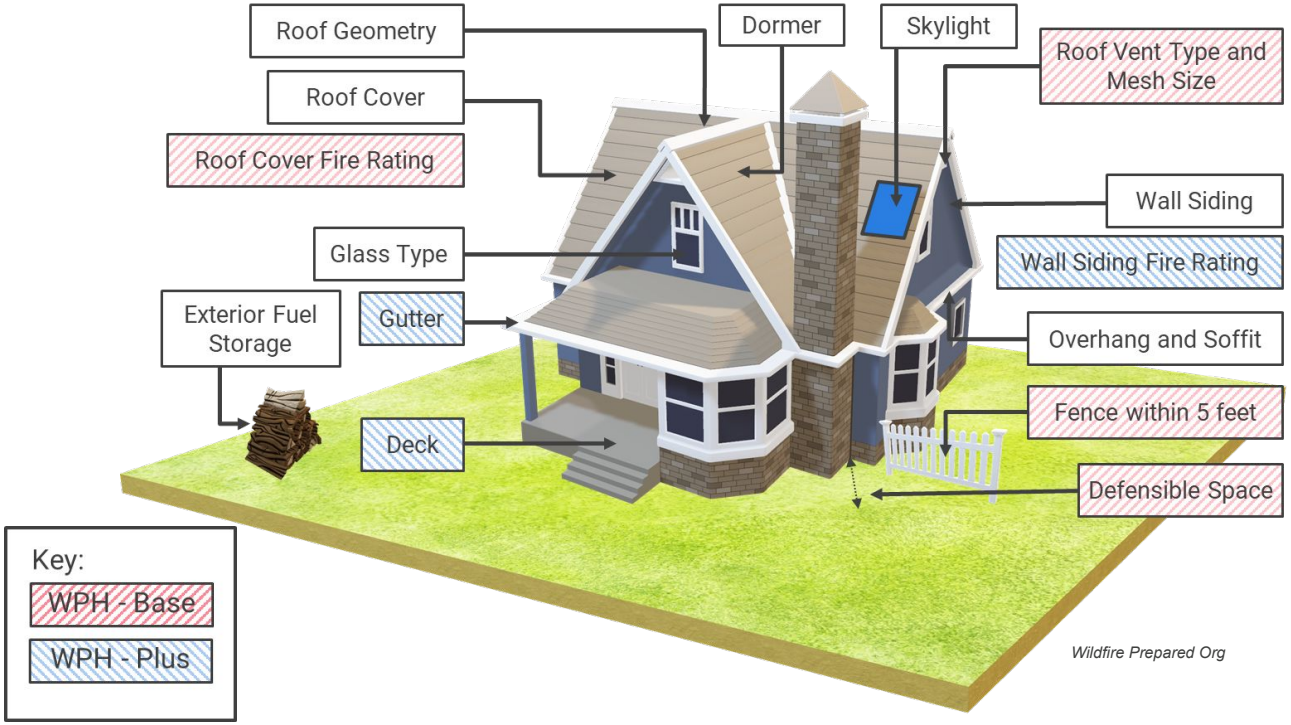




Damage Estimation Considers The Building's Mitigation Efforts

Ability to Incorporate "Wildfire Prepared Home" Designations





Los Angeles Area Wildfires

September 2024 – January 2025

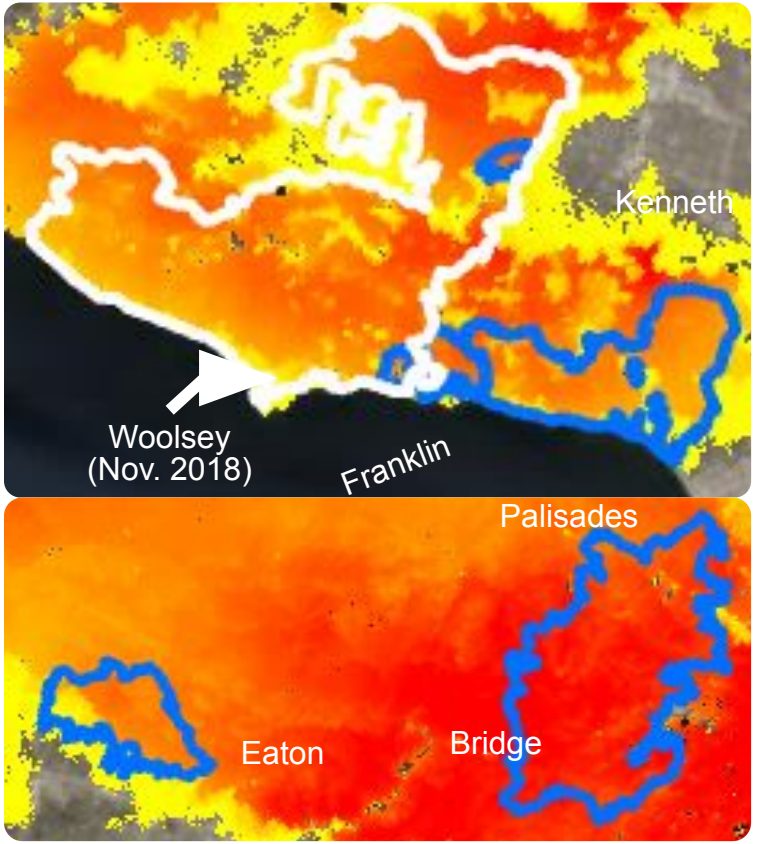
Bridge (September 2024)
- 56,030 Acres

Eaton (January 2025)
- 14,021 Acres

Franklin (December 2024)
- 4,037 Acres

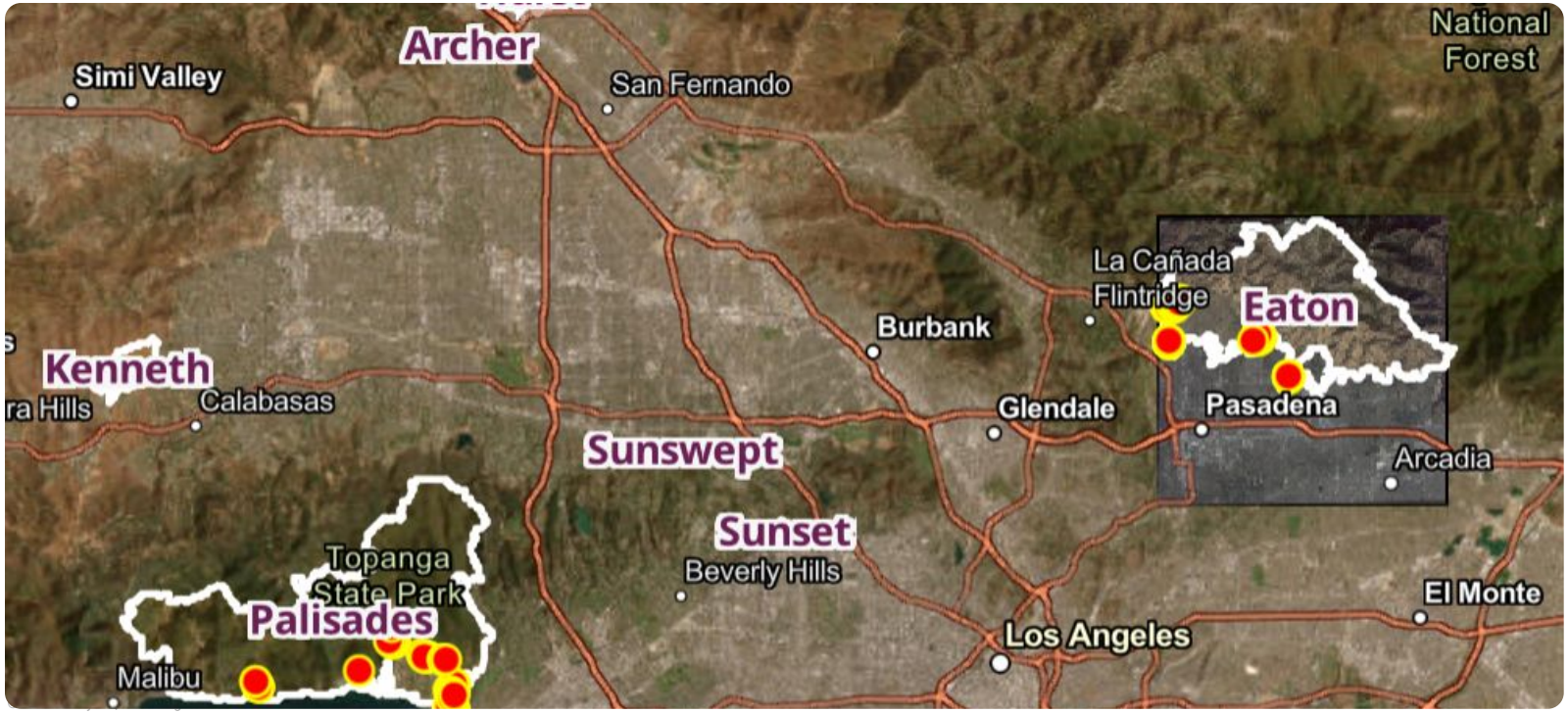
Kenneth (January 2025)
- 1,052 Acres
- Cause: Under Investigation

Palisades (January 2025)
- 23,448 Acres



2025 Damage Survey of Los Angeles Wildfires

Over 100 properties surveyed in the Eaton and Palisades fire footprints

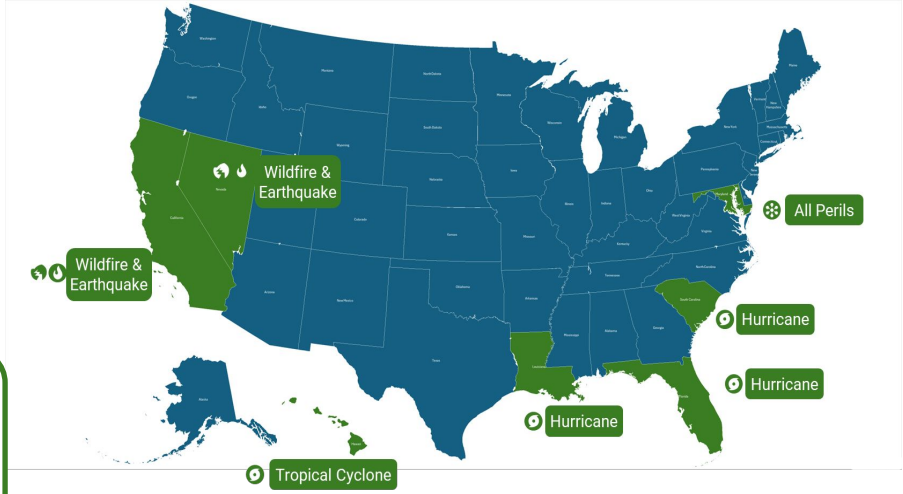


Verisk's Long Tradition of Catastrophe Model Acceptance Under Established Review Processes

The Verisk Wildfire Model for the United States was independently validated through a rigorous review by a state regulatory body

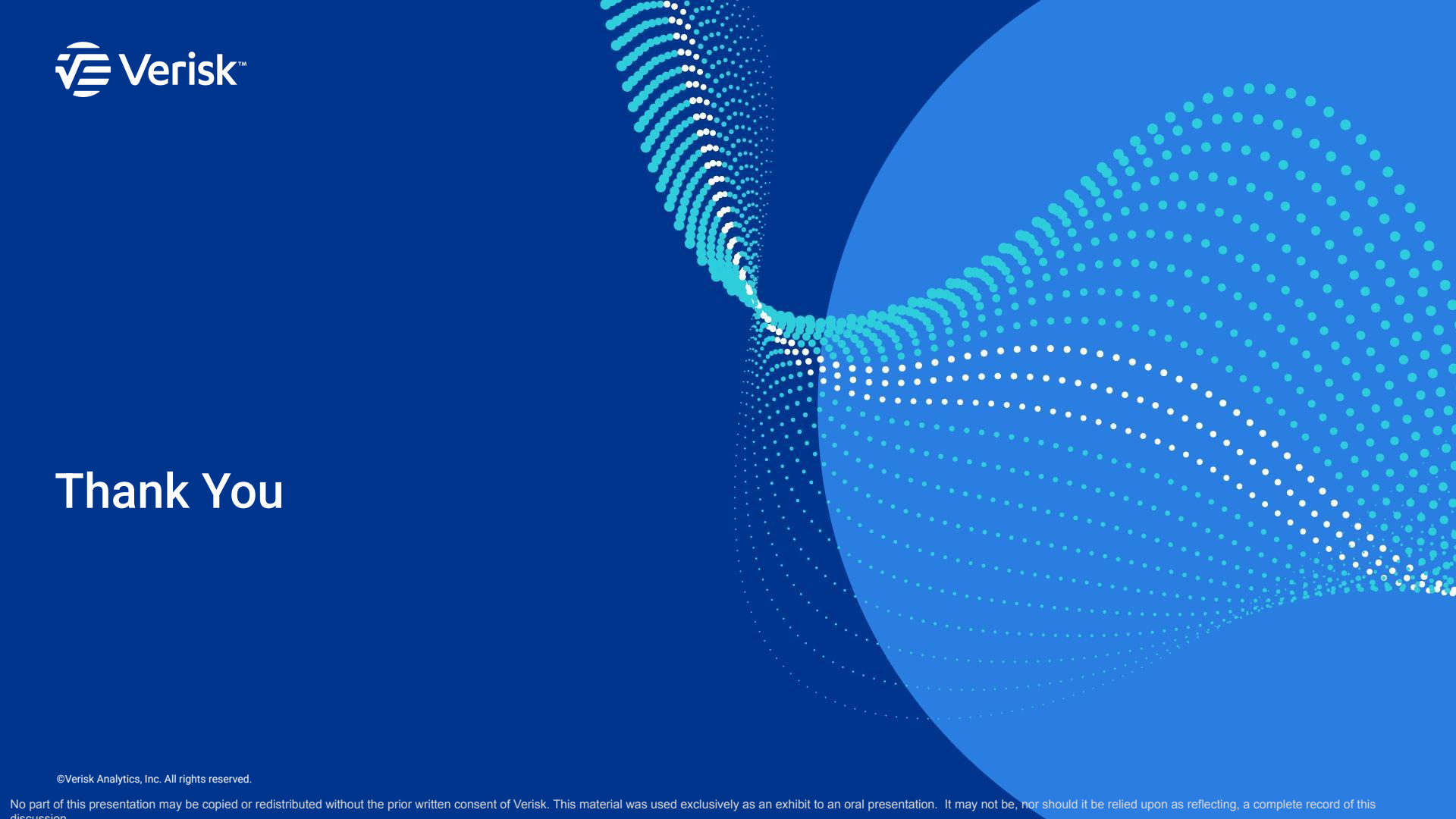
The Verisk Wildfire Model for the United States was **approved by Nevada's Department of Insurance** in February 2025

The Verisk Wildfire Model for the United States is the **1st model to be reviewed under California's new PRID procedure**



Verisk maintains the **longest record of model acceptance for hurricane modeling** under the 1st major model review process from the Florida Commission

What Carriers are Considering when using these tools



Thank You

III. Presentation from Milliman

ARIZONA
DEPARTMENT OF INSURANCE
& FINANCIAL INSTITUTIONS

Wildfire Modeling and Mitigation

Arizona Department of Insurance and Financial Institutions (DIFI)

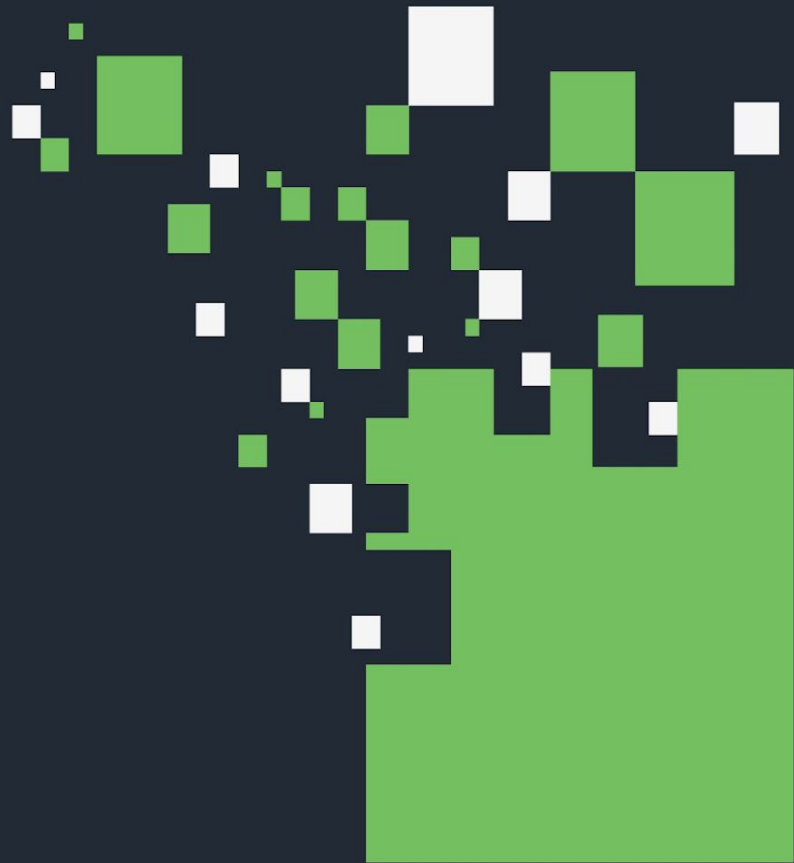
Taylor Munch, ACAS, Milliman, Inc.
May 13, 2025

Milliman

Agenda

- Models and sustainable insurance
- Solutions
  - #1 Community mitigation and modeling
  - #2 WUI Data Commons
- Q&A
- Additional resources

Models and sustainable insurance



Milliman

What constitutes a sustainable insurance market?

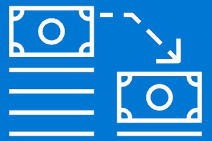
And how do catastrophe models and risk models contribute?

Availability

- Insurer can manage and measure the risk
- Insurer can charge premiums that represent the cost of risk transfer

Affordability

- Policyholders are willing to pay the price offered to transfer the risk
- Policyholders are able to pay the premium



Reliability

- Insurer will be able to pay claims
- System will be stable over the long term

Real model gaps exist, especially for secondary perils

Variety of issues may diminish user confidence

- Lack of convergence
- Insufficient historical events/data for validation
- Perceived under- or overstatement of risk
- Poor visibility of current conditions
- Consideration of important risk factors
- Inability to model mitigation efforts

Common misconceptions contribute to perceived model gaps

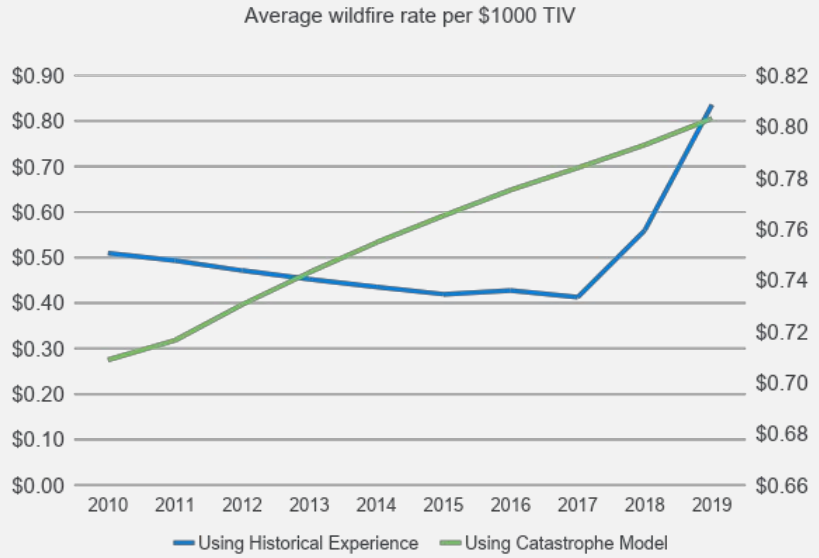
…but when it comes to trust, perception is real

- Black boxes
- Biased
- Drastically increase premiums
- Undermine regulatory oversight
- Model disagreement they can't be trusted

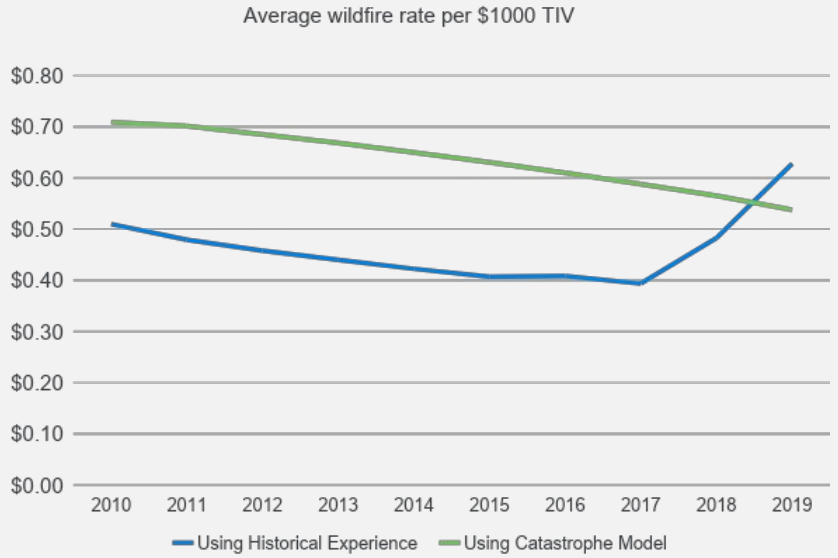
Historical averages do not reflect the underlying risk and are largely random

For insurers, shedding risks in the WUI helps avoid the shock that goes along with this randomness.

Growing in the WUI



Shrinking in the WUI

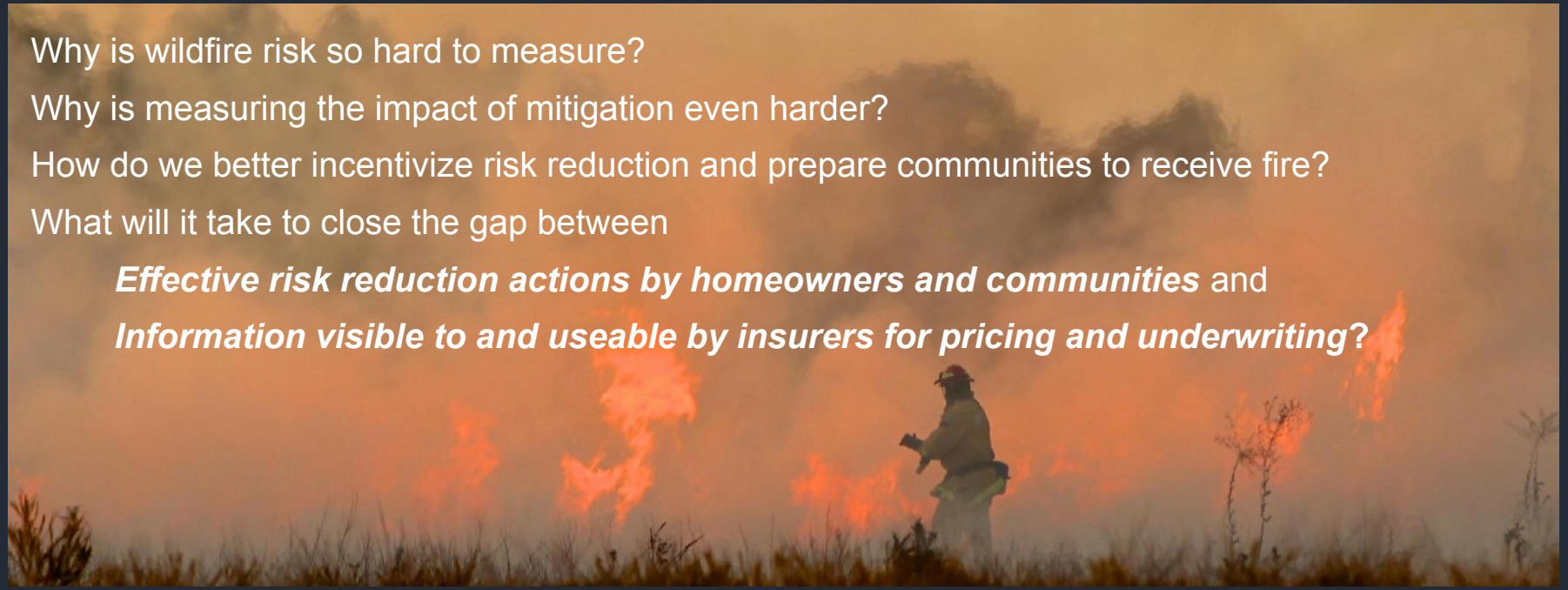


https://www.milliman.com/-/media/milliman/pdfs/2022-articles/10-19-22_pci-pifc-cdi-summary.ashx

Milliman

The key questions

Understanding the relationship between wildfire mitigation actions, data, risk modeling, and insurer decisions



Why is wildfire risk so hard to measure?

Why is measuring the impact of mitigation even harder?

How do we better incentivize risk reduction and prepare communities to receive fire?

What will it take to close the gap between

Effective risk reduction actions by homeowners and communities and

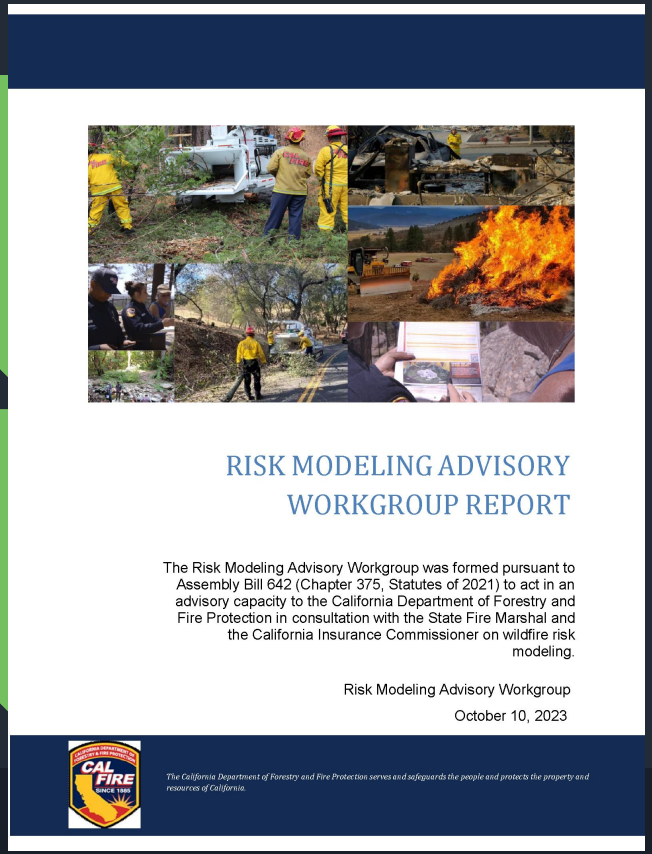
***Information visible to and useable by insurers for pricing and underwriting*?**

Solution #1:

Community mitigation and modeling

How do we understand and effectively reduce wildfire risk?

Excerpt from report adopted by California Department of Forestry and Fire Protection (CAL FIRE)



"Wildfire risk is complex, significant, and changing fast, making risk challenging to measure with precision.

There are many uncoordinated stakeholders in the wildfire space, resulting in significant disconnects between who is exposed to the risk, who understands it, and who is in a position to take action to reduce it."

https://osfm.fire.ca.gov/committees/risk-modeling-advisory-workgroup

How do we achieve risk reduction at scale?

Three necessary conditions (none of which are present now) & steps to achieve them

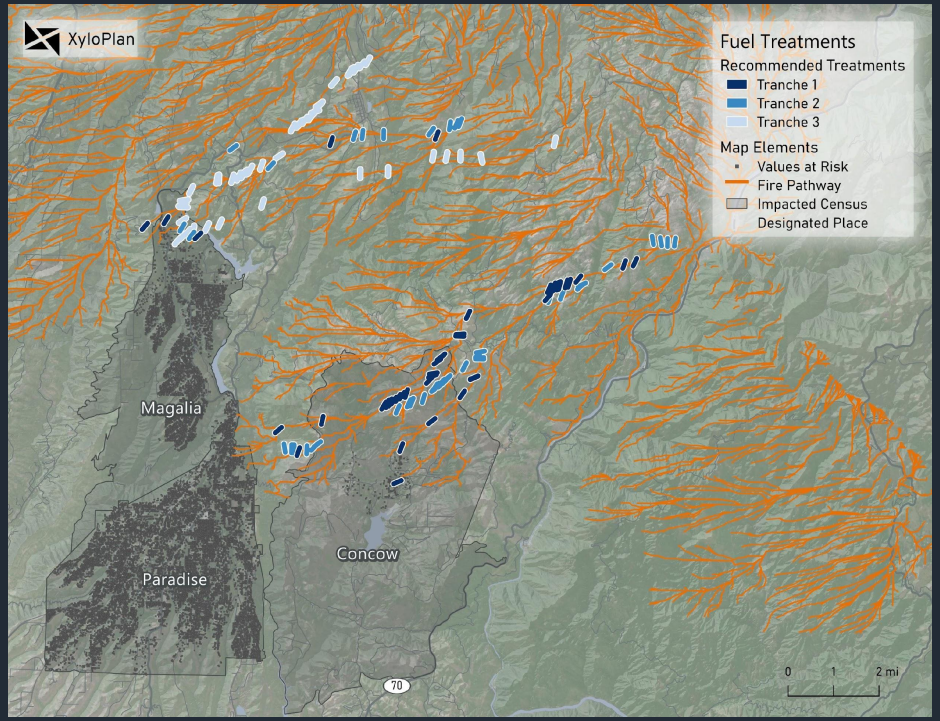
Systematic **alignment** of multiple stakeholders

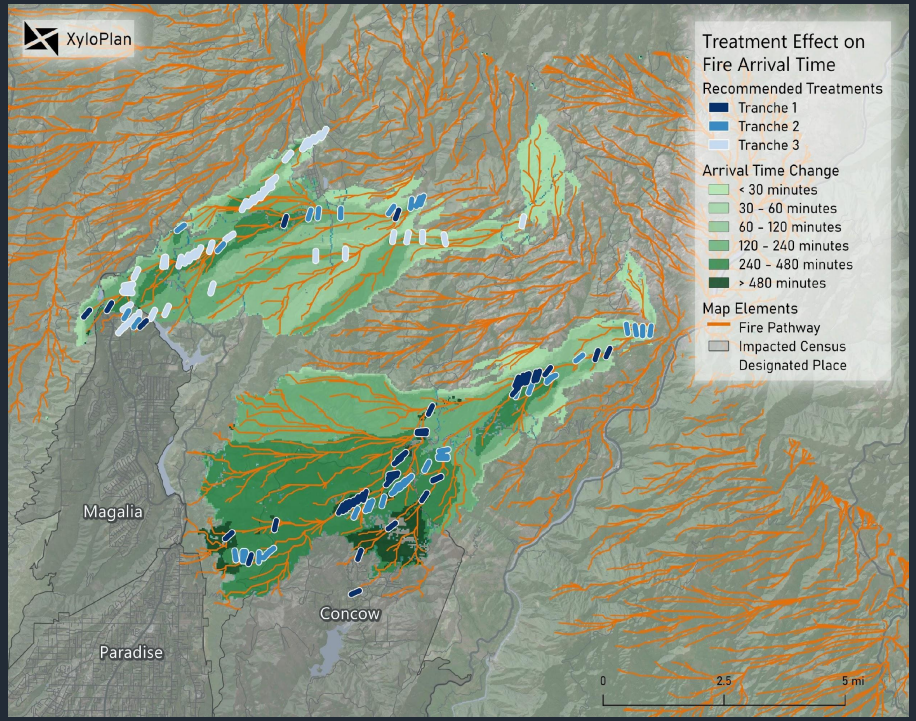
Taking coordinated and effective action to **disrupt fire pathways** in the WUI

Facilitating **visibility of effective resilience actions** by WUI communities

Fire pathways modeling	Prioritize vegetation treatment	Widescale parcel level inspections	Value options using catastrophe models	Data extrapolation and aggregation	Fire suppression capacity and capabilities
					

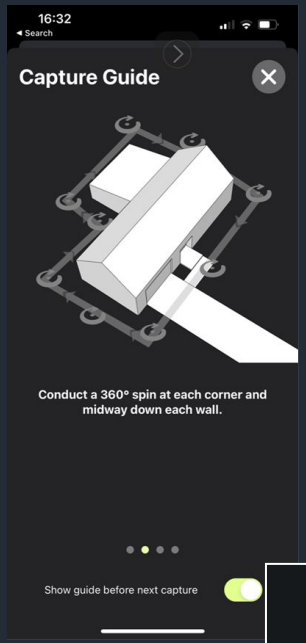
Prioritize vegetation treatments to delay fire arrival, protect structures & critical infrastructure at risk

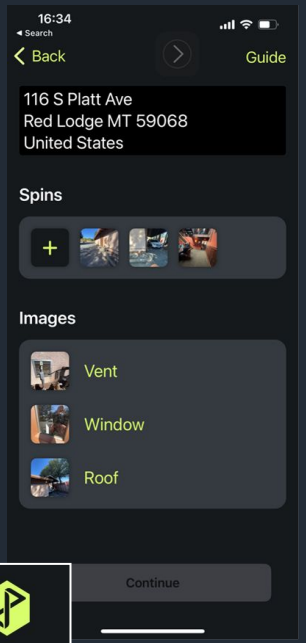




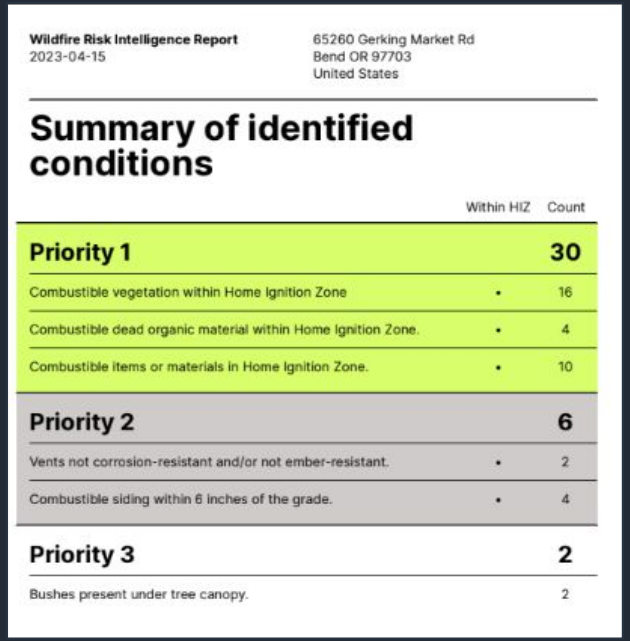
Capture key mitigation data at the parcel level

Technology can decrease cost and expand utility of on-the-ground inspections





PYREZO



Wildfire Risk Intelligence Report
2023-04-15

65260 Gerking Market Rd
Bend OR 97703
United States

Summary of identified conditions

	Within HIZ	Count
Priority 1		**30**
Combustible vegetation within Home Ignition Zone	•	16
Combustible dead organic material within Home Ignition Zone.	•	4
Combustible items or materials in Home Ignition Zone.	•	10
Priority 2		**6**
Vents not corrosion-resistant and/or not ember-resistant.	•	2
Combustible siding within 6 inches of the grade.	•	4
Priority 3		**2**
Bushes present under tree canopy.		2

Wildfire Risk Intelligence Report
2023-04-15

65260 Gerking Market Rd
Bend OR 97703
United States

Combustible vegetation within Home Ignition Zone

Remove any vegetation on or within 5 feet of the structure to disrupt the continuity of receptive fuel beds which are capable of supporting fire spread. This includes bushes and shrubs as well as low groundcover plants. Combined with the removal of non-living organic material such as bark chips and leaves, this is the highest impact, lowest cost measure residents can take to protect their lives, homes, and community from both ground fire and ember cast.

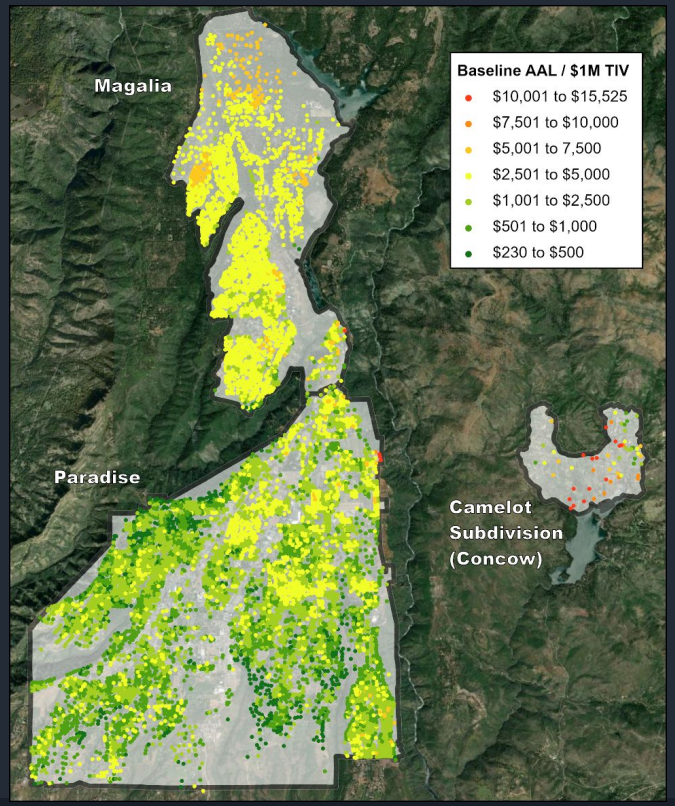
Priority 1

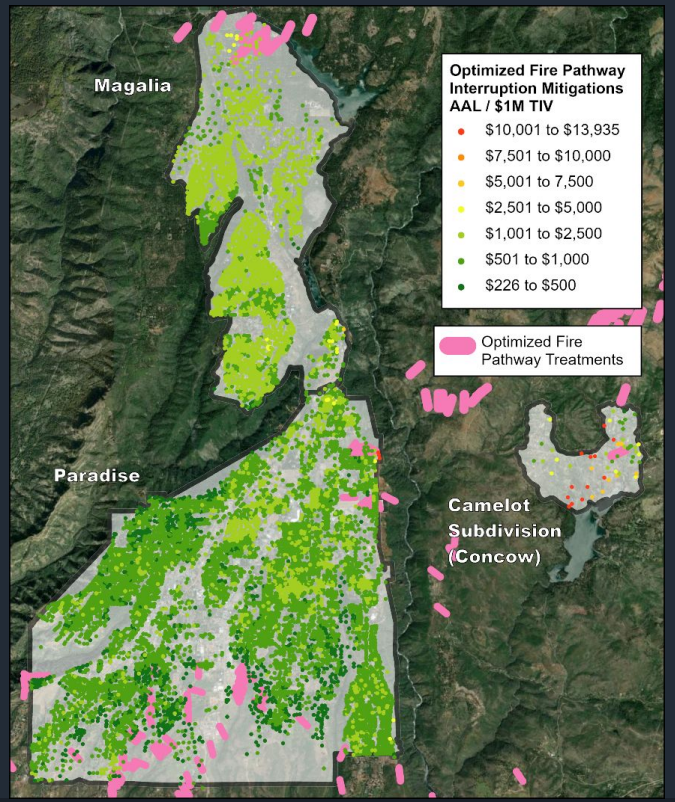
Remove vegetation from Home Ignition Zone

Overview Map

8 PYREZO pyrezo.com

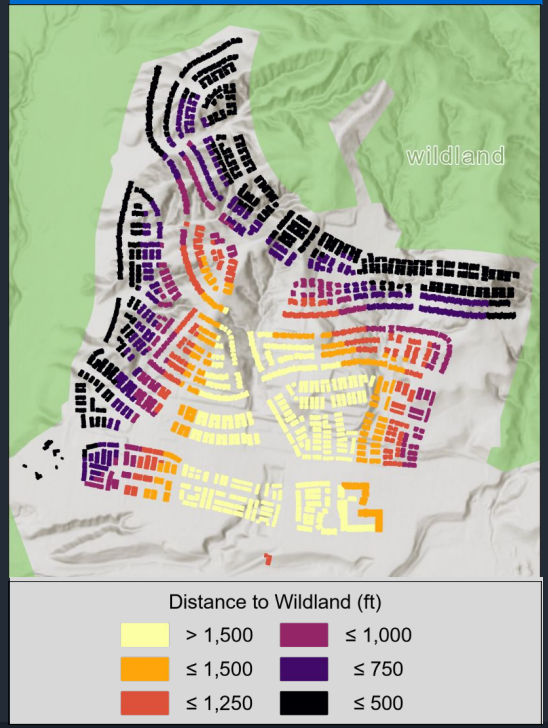
Use wildfire catastrophe models to quantify benefits of mitigation options



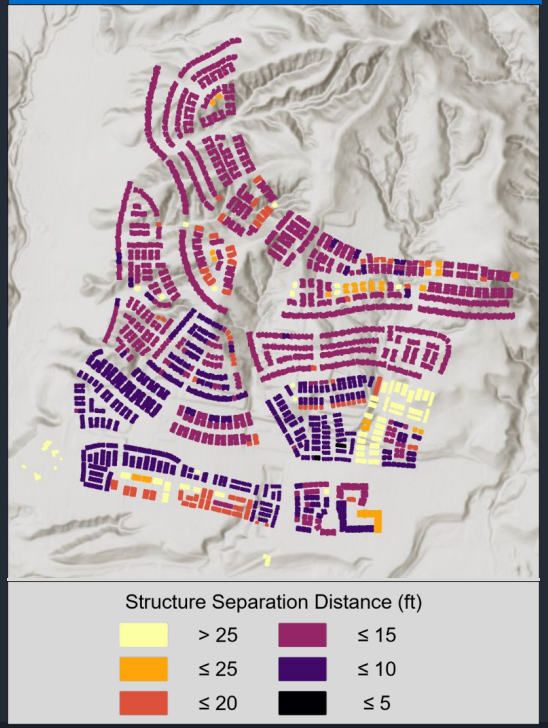


Data extrapolation and aggregation: sample GIS layers

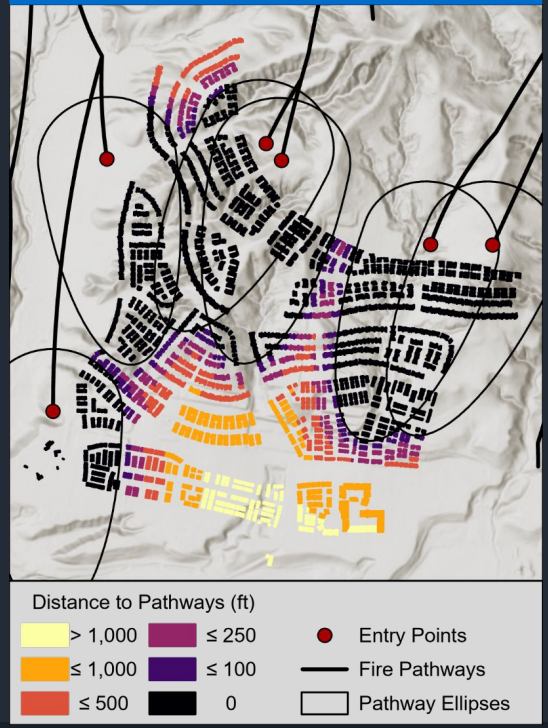
Distance to Wildland



Structure Separation Distance

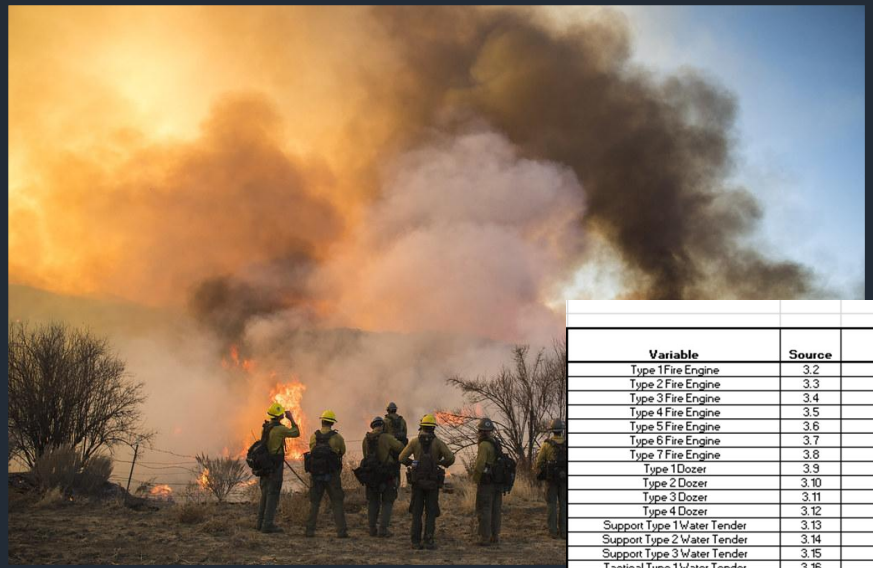


Distance to Fire Pathway Ellipses



Evaluate wildfire suppression ability with WUI Fire Protection Score

Measure the ability/capacity of a community's fire protection agency to prevent urban conflagrations



- Uniform data from fire fighting battalions
- Assessment of command/operational staff, equipment, training, risk reduction activities
- Community scores based on surrounding resources and travel times

			Ability			Capacity		
Variable	Source	Item Detail	Vegetation to Vegetation	Vegetation to Structure	Structure to Structure	Vegetation to Vegetation	Vegetation to Structure	Structure to Structure
Type 1 Fire Engine	3.2	6 Type 1 Fire Engines	1.00	1.00	1.00	6.00	6.00	6.00
Type 2 Fire Engine	3.3	6 Type 2 Fire Engines	1.00	1.00	1.00	6.00	6.00	6.00
Type 3 Fire Engine	3.4	4 Type 3 Fire Engines	1.25	0.75	0.75	4.00	4.00	4.00
Type 4 Fire Engine	3.5	6 Type 4 Fire Engines	1.50	0.75	0.75	6.00	6.00	6.00
Type 5 Fire Engine	3.6	6 Type 5 Fire Engines	1.75	0.50	0.50	6.00	6.00	6.00
Type 6 Fire Engine	3.7	4 Type 6 Fire Engines	2.00	0.25	0.25	4.00	4.00	4.00
Type 7 Fire Engine	3.8	6 Type 7 Fire Engines	2.25	0.25	0.25	6.00	6.00	6.00
Type 1 Dozer	3.9	2 Type 1 Dozers	2.00	2.00		1.00	1.00	
Type 2 Dozer	3.10	2 Type 2 Dozers	1.75	1.75		1.00	1.00	
Type 3 Dozer	3.11	0 Type 3 Dozers	0.00	0.00		0.00	0.00	
Type 4 Dozer	3.12	0 Type 4 Dozers	0.00	0.00		0.00	0.00	
Support Type 1 Water Tender	3.13	1 Support Type 1 Water Tender	0.50	0.50	0.50	5.00	5.00	5.00
Support Type 2 Water Tender	3.14	0 Support Type 2 Water Tenders	0.00	0.00	0.00	0.00	0.00	0.00
Support Type 3 Water Tender	3.15	1 Support Type 3 Water Tender	0.50	0.50	0.50	1.00	1.00	1.00
Tactical Type 1 Water Tender	3.16	0 Tactical Type 1 Water Tenders	0.00	0.00	0.00	0.00	0.00	0.00
Tactical Type 2 Water Tender	3.17	0 Tactical Type 2 Water Tenders	0.00	0.00	0.00	0.00	0.00	0.00
Assigned Portable Radio	3.18	Yes	1.00	2.00	1.00			
Radio - Interoperability - Auto Aid	3.19	Programmable w/ Auto-Aid Mobile	1.30	1.30	0.70			
Radio - Interoperability - Cross Group Scan	3.19	Interoperability with Cross Group Scan				3.00	3.00	3.00
Crew Size - Type 1 IHC	3.20	18 - 22 Type 1 IHC Crew Members	4.00	4.00	4.00	5.00	5.00	5.00
Crew Size - Type 2 IA	3.21	24 - 26 Type 2 IA Crew Members	2.00	2.00	2.00	15.00	15.00	15.00
Crew Size - Type 2	3.22	21 - 23 Type 2 Crew Members	1.00	1.00	1.00	10.00	10.00	10.00
Basic Training	3.23	(Page 10)	0.25	0.20	0.20			
Supervisory Training	3.24	(Page 11)	2.56	2.56	2.36			
Risk Reduction Programs	3.25	(Page 12)	4.00	4.00	4.00			
Self Component Rating			**31.61**	**26.31**	**20.76**	**79.00**	**79.00**	**77.00**

GORDON AND BETTY MOORE FOUNDATION

WESTERN FIRE CHIEFS ASSOCIATION

Use WUI Fire Protection Score data to enhance risk modeling

Localized data can be built into catastrophe models to inform fire spread and other components

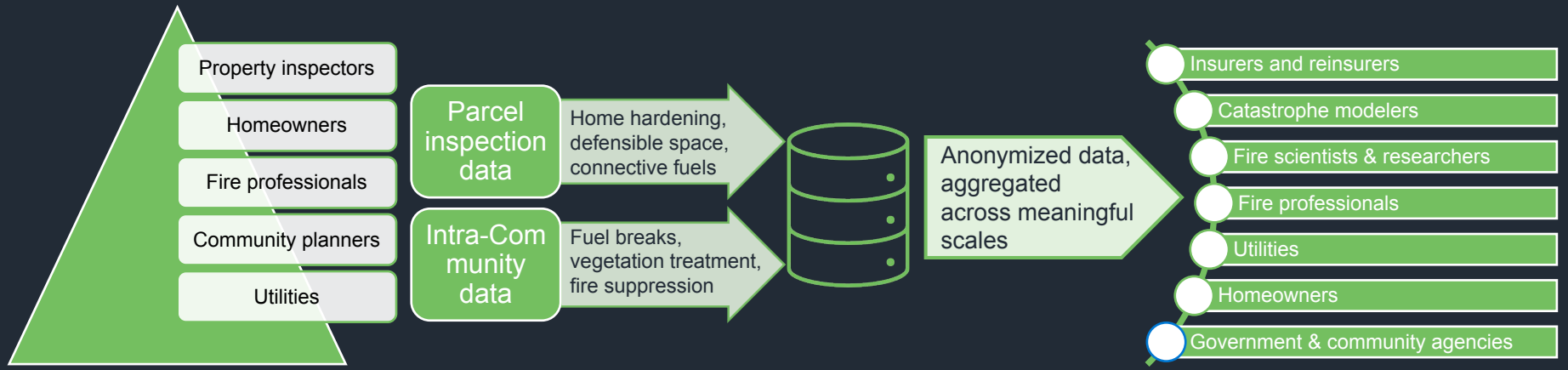
Solution #2:

WUI Data Commons

Milliman

What is the WUI Data Commons?

A public/private collaboration to provide controlled access to previously unobtainable wildfire mitigation and suppression data, with the goal of aligning efforts to reduce urban conflagration risk



Key findings from survey for parcel-level data collection

WUI Data Commons - Parcel Attribute Survey
Thank you for taking the time to fill out our survey. For questions, please contact siewgee.Lim@milliman.com

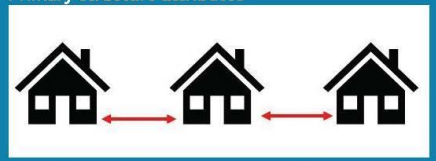
The following pages will present you with various parcel attributes which are being considered for inclusion in the data commons.

For each attribute, please select:

- Your perceived **utility** of the attribute. Do you think having this information for structures in WUI communities would be useful for your company?
- The level of **complexity** of data desired. If this var… useful, how detailed would you like the data to be… attribute workbook for examples values for each l… complexity. If a variable is not useful, you can leav…
- Typical **consistency** of the data you have worked … If you have received data about this attribute for s… past from a data vendor or inspector, how consist… been? If you have not worked with this data or are… unsure, please select no opinion.
- How **confident** you are, generally speaking, in you… regarding utility, complexity, and consistency.

For attribute definitions, please refer to the attribute …

WUI Data Commons - Parcel Attribute Survey
Primary structure attributes



Structure separation distance is the minimum distance between homes and other structures.

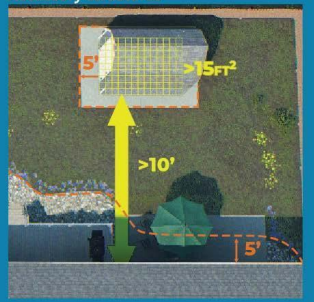
4. Primary structure attributes

	Utility	Complexity	Consistency	Confidence
Structure Type				
Number of Stories				
Structure Separation Distance				

26. Landscaping attributes

	Utility	Complexity	Consistency	Confidence
Receptive Fuel Bed				
Fire Pathways to House				
Elevated Fire Pathways to House				
Ground Fire Spread				
Ground Fire to Canopy				
Fire Spread				
Landscaping Debris				
Tree Spacing				
Tree Pruning				
Shrub Spacing				

WUI Data Commons - Parcel Attribute Survey
Accessory structures



Accessory structures are structures detached from the main structure.

6. Accessory structure attributes

	Utility	Complexity	Consistency	Confidence
Accessory Structure(s) Present				
Accessory Structure Distance				
Accessory Structure Compliant				
Accessory Structure Detail				

Critical use cases of the WUI Data Commons

Three primary use cases that may generate public/private wins

- Communities: Receive/provide data to monitor and prioritize mitigations
- IBHS: Receive/provide data to support WF Prepared Home and WF Prepared Neighborhood designations at scale
- Cat modelers: Receive data to incorporate mitigation actions into models

Proposed WUI Data Commons pilot plan

Steps to build a working prototype WUI Data Commons

Facilitate collection of granular mitigation data at the parcel level using on-the-ground inspection technology

Build pipelines to existing sources of community-level mitigation and fire suppression data

Accumulate, verify, and standardize data using Oasis standard within CRC's OXM platform

Disseminate data at appropriate levels of aggregation with customized access controls

Leverage stakeholder relationships to amplify existing efforts, reduce cost

Lay groundwork for self-sustaining public-private enterprise

Questions

Additional resources

Community Mitigation and Modeling commissioned by Rancho Mission Viejo

The insurance industry can't weather another wildfire season (video)

The WUI Data Commons: Driving wildfire resilience through data transparency

Community-based solutions to wildfire risk

All Things Wildfire podcast on insurance and wildfire mitigation

Wildfire season is here. California needs to fight back smarter

Study for the Town of Paradise on resilient rebuilding

Helping Paradise, CA rebuild (video)

Catastrophe models for wildfire mitigation: Quantifying credits and benefits to homeowners and communities

Use of catastrophe models in California homeowners ratemaking formula

Preparing for global wildfire risk: What can other countries learn from Australia's "Black Summer"?

Wildfire catastrophe models could spark the changes California needs

The California wildfire conundrum

Wildfire: An Issue Paper - Lessons Learned from the 2017 to 2021 Events

Milliman

Thank you

Taylor.munch@milliman.com

IV. Presentation from Center for Insurance Policy and Research (CIPR)

ARIZONA
DEPARTMENT OF INSURANCE
& FINANCIAL INSTITUTIONS

NAIC Catastrophe Modeling Center of Excellence (CAT COE)

Arizona Department of Insurance and Financial Institutions
Resiliency and Mitigation Council
May 13, 2025

Jeffrey Czajkowski
Director, Center for Insurance Policy and Research (CIPR)
Brian Powell
Catastrophe Risk Resilience Specialist (CAT COE)

Disclaimer:

This presentation reflects the opinions of the author(s) and is the product of impartial research. It is not intended to represent the positions or opinions of the National Association of Insurance Commissioners (NAIC) or its members, nor are any of its contents an official position of the NAIC or any of its members or staff. Any errors are the sole responsibility of the author(s).

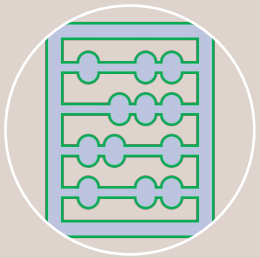
Items to Discuss

- Overview of the NAIC CAT COE
- Overview of Resilience HUB
- Further technical connection between CAT COE capabilities and Resilience HUB goals

Numerous Ways CAT Models are Used for CAT Risk Management

Ratemaking / Pricing

Risk Transfer and Reinsurance Purchase



Concentration Risk and Scenario Analysis

Capital Adequacy and Solvency Assessment

Mitigation Studies

Catastrophe Models and Mitigation Studies
(Wildfire as an example)

Peril Specific Research Insights

Center for Insurance Policy and Research (CIPR) did a study working with RMS and IBHS using RMS's wildfire CAT Model different communities in 3 states (California, Oregon and Colorado).

Table 27: Mean Benefit Cost Ratios by Analysis Time (10,25,50 years) for Structural

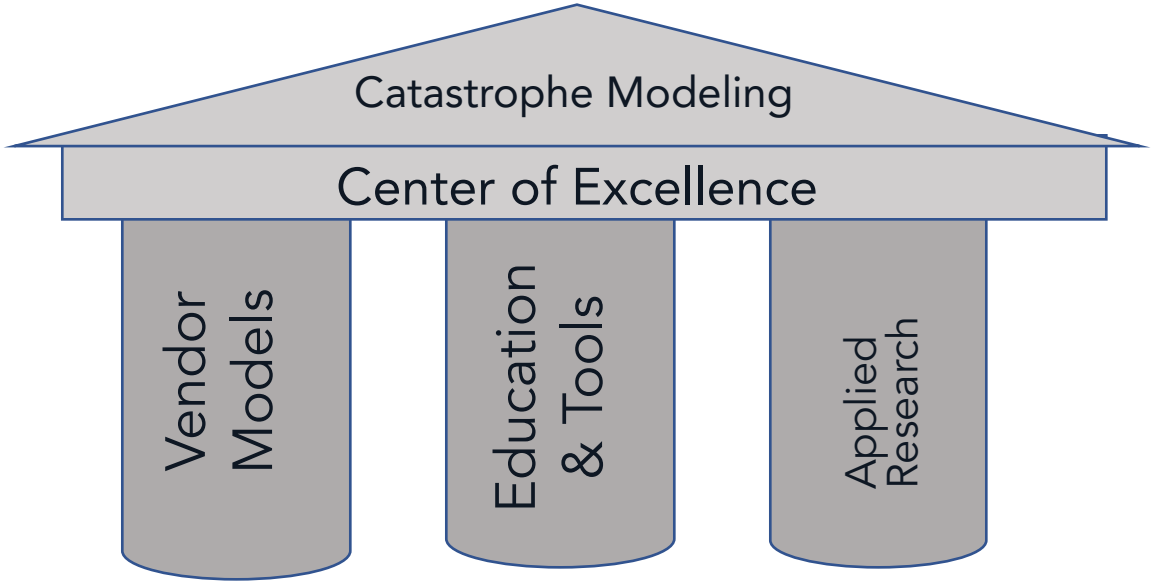
Community	Low Cost Scenario ($20,000 Structural)			Medium Cost Scenario ($40,000 Structural)	
	10 year	25 Year	50 Year	10 year	25 Year
California					
Upper Deerwood	1.6	3.6	6.5	0.8	1.8
Berry Creek	0.4	0.9	1.7	0.2	0.5
Oroville	0.0	0.0	0.1	0.0	0.0

https://content.naic.org/sites/default/files/cipr_report_wildfire_mitigation_0.pdf

MISSION STATEMENT

The purpose of the NAIC Catastrophe Modeling Center of Excellence (COE) is to **provide state insurance regulators with the necessary technical expertise, tools, and information to effectively regulate their markets.**

Officially launched in the Summer of 2022



Regulatory Uses of CAT Models

- **Solvency Regulation**
  - Monitoring of financial condition – before & after events
  - Risk-focused financial examinations, ORSAs, Reinsurance Disclosures
  - RCAT RBC charges
- **Rate Regulation**
  - Rate reviews
  - Model reviews & Model Evaluation/Validation

Develop & enhance knowledge & expertise within existing tools

- **Market and Resilience Planning**
  - Property market insights
  - Event response and claims
  - Resilience initiatives

Develop new knowledge & expertise

CAT Related Insolvencies

- Since 1992 (Hurricane Andrew):
  - 10% of total P/C insolvencies related to CAT events
- Since 2021
  - 61% of total P/C insolvencies related to CAT events

COE Solvency Initiatives – CAT Focused

- **CAT related enhancements to NAIC financial handbooks have been implemented**
  - Existing RBC RCAT PMLs for Hurricane, Earthquake, Wildfire, and Severe Convective Storm
  - New CAT Reinsurance Interrogatory

- Leveraging existing **CAT 101** training, working with NAIC Financial Regulatory Services (FRS) colleagues have **built targeted training for Financial Examiners/Analysts on updated procedures**
  - Implemented in early 2025 with continued roll-out
  - Access to CAT model vendor technical documentation

Use of Catastrophe Models in Ratemaking

Total Premium
=

- Expected CAT Losses (AAL or Pure Premium)
- Risk Load (CAT perils)
- Expected Losses incl. Risk Load (non-CAT)
- Expenses
- Profit

Catastrophe Models are used to estimate AAL and Risk Load (for the Cat portion)

Catastrophe Models are also used to estimate Net Cost of Reinsurance

(Reinsurance Premium- Expected Recoveries)

- Cost to the company
- Expected benefit to the company

Model Documentation Available for Regulators

Access to Industry Resources

NatCAT Perils	Moody's RMS	Verisk Formerly AIR Worldwide	CoreLogic Formerly EQECAT	Impact Forecasting (AON)	Karen Clark & Company	KatRisk
Hurricane	• Methodology(v21) • Long-term rates Methodology • Loss Validation	US Hurricane Methodology	US Hurricane	• Florida Hurricane • US Hurricane • US Storm Surge	General Overview of Peril modeling incl. recording	• Data and Model Documentation • Climate Change Scenarios
Earthquake	• Methodology (v17) • Loss Validation	US Model Methodology	US Earthquake	US Earthquake Model		
Severe Convective Storm(SCS)	• Methodology(v17) • Hazard Validation • Loss Validation	US Model Methodology	US SCS	US SCS Model	Overview of Peril modeling incl. recording	US Hail Model Presentation
Winter Storm	• US and Canada Model Methodology					
Flood	• Methodology • Loss Validation (HD Models)	US Inland Flood	US Flood	US Inland Flood	General Overview of Peril modeling incl. recording	US Flood Model Presentation
Wildfire	• Methodology • Loss Validation (HD Models)	US Wildfire	US Wildfire	• Probabilistic Model Methodology • Wildfire Hazard Score		

Model not available yet

Model available, Documentation not received

67

DOI Rate Filing Review - Training for Regulators

CAT 101 (Beginner) ✔ → **CAT 201 (Intermediate – CAT Risk)** ✔ → **CAT 202 (Intermediate - Application)**

Available Now

Basics of Catastrophe Modeling - (in-person and online version – see registration link)

Ongoing Development

Peril Modules (Basics of Peril Modeling)

- Severe Convective Storm
- Wildfire
- Hurricane

Ongoing/Future Development

- FAH and FCEH Changes (in-progress)
- PC Rate filings
- Reinsurance
- Other - TBD

Design CAT Model Questionnaire

Rating

- Exposure Data Input and Validation
- Model Version and Run Settings
- Model Output Adjustment
- Questions Applicable for Rating

Solvency

- Exposure Data Input and Validation
- Model Version and Run Settings
- Model Output Adjustment
- Questions Applicable for Solvency

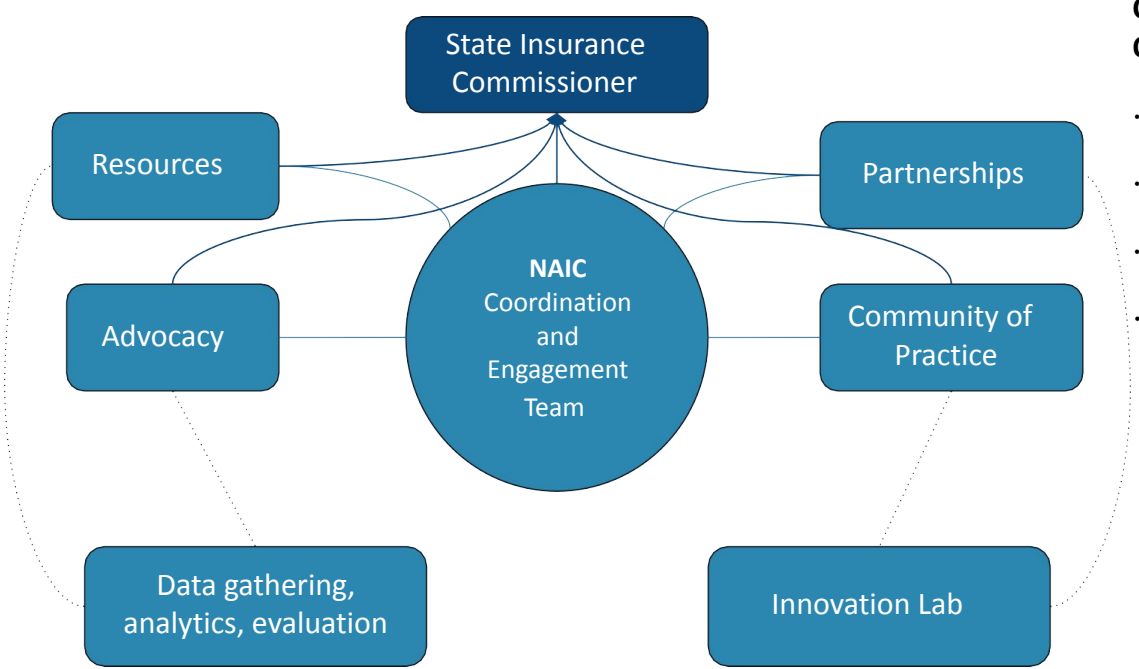
Mitigation and Resilience Assistance – **Resilience HUB**

Mitigation Program Coordination and Development

- Leads DOIs through establishment of mitigation programs
- Coordinates between partners to establish operating programs

Peer to Peer Learning Opportunities

- Educational Events
- Legislative Templates



Consumer Education and Outreach

- Federal Alliance for Safe Homes
- Insurance Institute for Business and Home Safety
- Smart Home America
- United Policyholders

Resilience Funding

- Internal and external resources
- Reinsurers and Brokers

Data and Analysis

- Insurance Market Insight
- Mitigation Research
- Hazard Impacts Research

We work directly with insurance commissioners to provide expertise and create consistency across the US in the approach and support of mitigation and resiliency efforts

Increasing demand for resources requires a consistent approach to provide effective support for commissioners and partners:

- Need for consistency in the approach to program design is imperative to provide expected interaction for insurance companies (consistent approach to language, discount methodology & reporting, incentives, etc.).
- Need for consistency in the approach to program design is imperative to provide expected entities evaluating mitigation standards (IBHS).
- Partners in this space are developing standard approaches to support mitigation and resilience initiatives as an effective tool for determining and deploying resources.
- Demand for cross communication and problem-solving resources from the CAT COE Resilience HUB.

Working with states to develop grant mitigation programs through state departments of insurance, the IBHS standards for wind and wildfire are the most popular.

FORTIFIED
A PROGRAM OF IBHS™

Sample of projects by the HUB:

1. State level wind mitigation programs in the US as of 5/7/25 engaged with the Resilience HUB:

Existing DOI wind mitigation program in operation	Authority to establish a DOI wind mitigation program; creating	Legislation filed to establish authority for a DOI wind mitigation program
1. Alabama	1. Kentucky	1. New Hampshire
2. Louisiana	2. Minnesota	2. Rhode Island
3. Mississippi	3. Maine	3. Texas
4. South Carolina	4. Arkansas	4. Colorado
5. Oklahoma		

2. Working with States in the Western US are planning wildfire mitigation programs. Most want programs using the IBHS Wildfire Prepared Home and Home Plus Standard.

3. Working with states that exceed mitigation measures for concerns in their own market:

- Connecticut's Department of Insurance - Fortified program with flood education component.

- Maine on a tree mitigation component to their Fortified program.

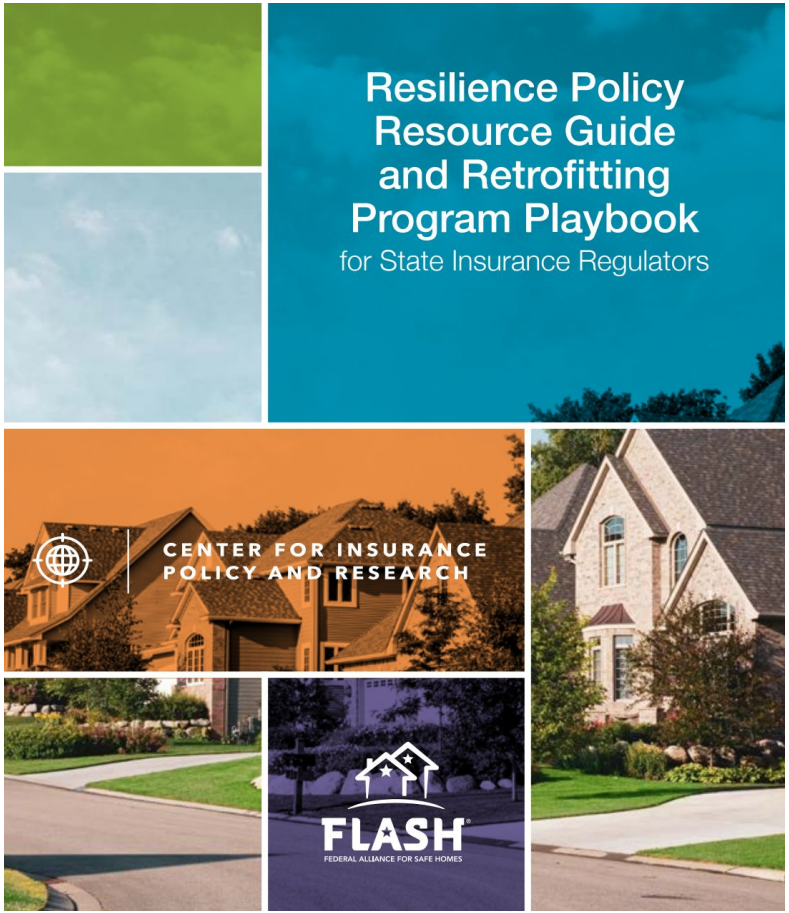
The CIPR CAT COE's Resilience HUB - Examples of on-going work:

- As mentioned before, assisting in evaluating, developing and implement various *mitigation grant programs* (*wildfire, wind, hail*, earthquake, and flood) and demonstrating leadership in building code education and adoption.

- Support the education, use by demonstrate the importance of catastrophe models through training and use case studies for departments of insurance.

- Continue to build resources for regulators to utilize in support of insurance policy and research. More specifically, all states have access to the CIPR CAT COE SharePoint site and an NAIC Connect Site for resources affecting insurance, mitigation and highlighted studies.

- Working with departments of insurance and FEMA regions across the country to address flood mitigation and development a risk transfer programs for flood.



Example of a Resilience HUB resource available to commissioners:

i. Building Code Policy Leadership

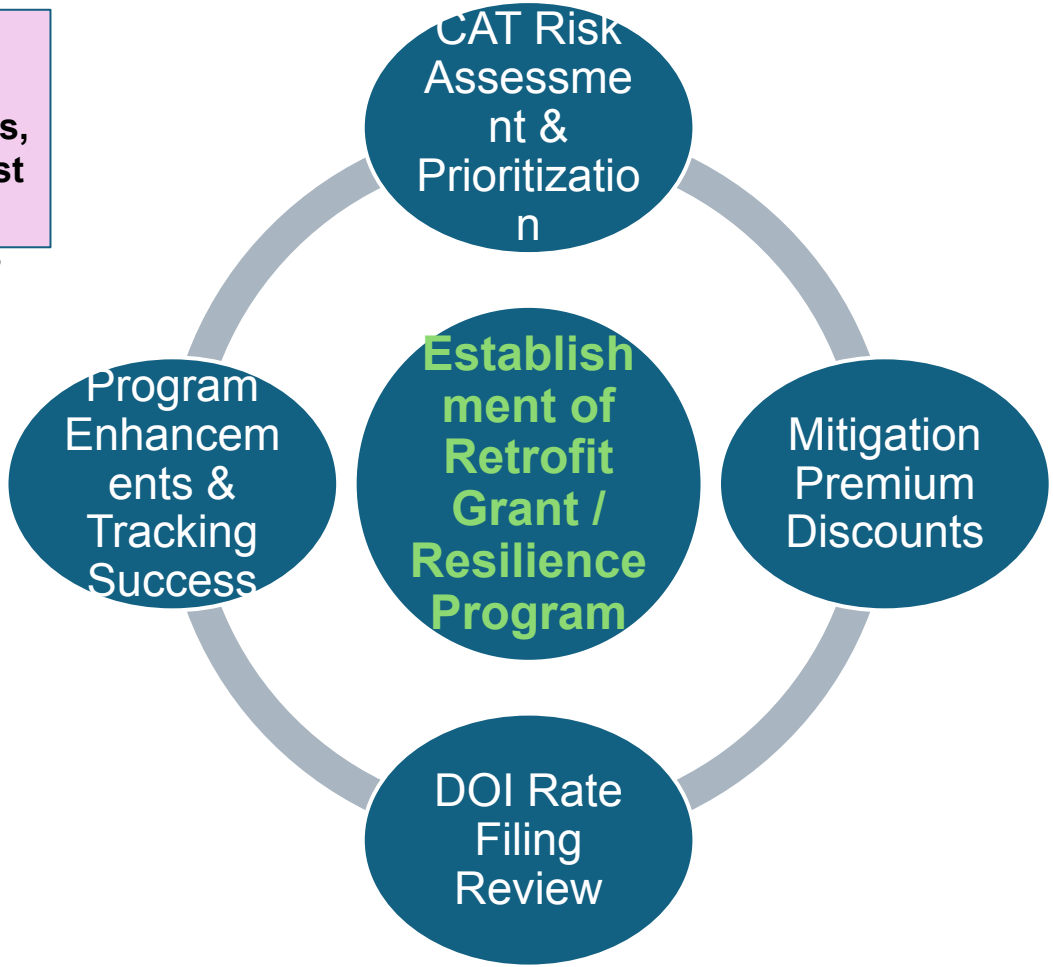
ii. Creating and Sustaining Retrofit Programs

iii. Creating a Culture of Resilience

With climate-fueled wildfires straining insurance markets, officials work to avoid 'uninsurable future'

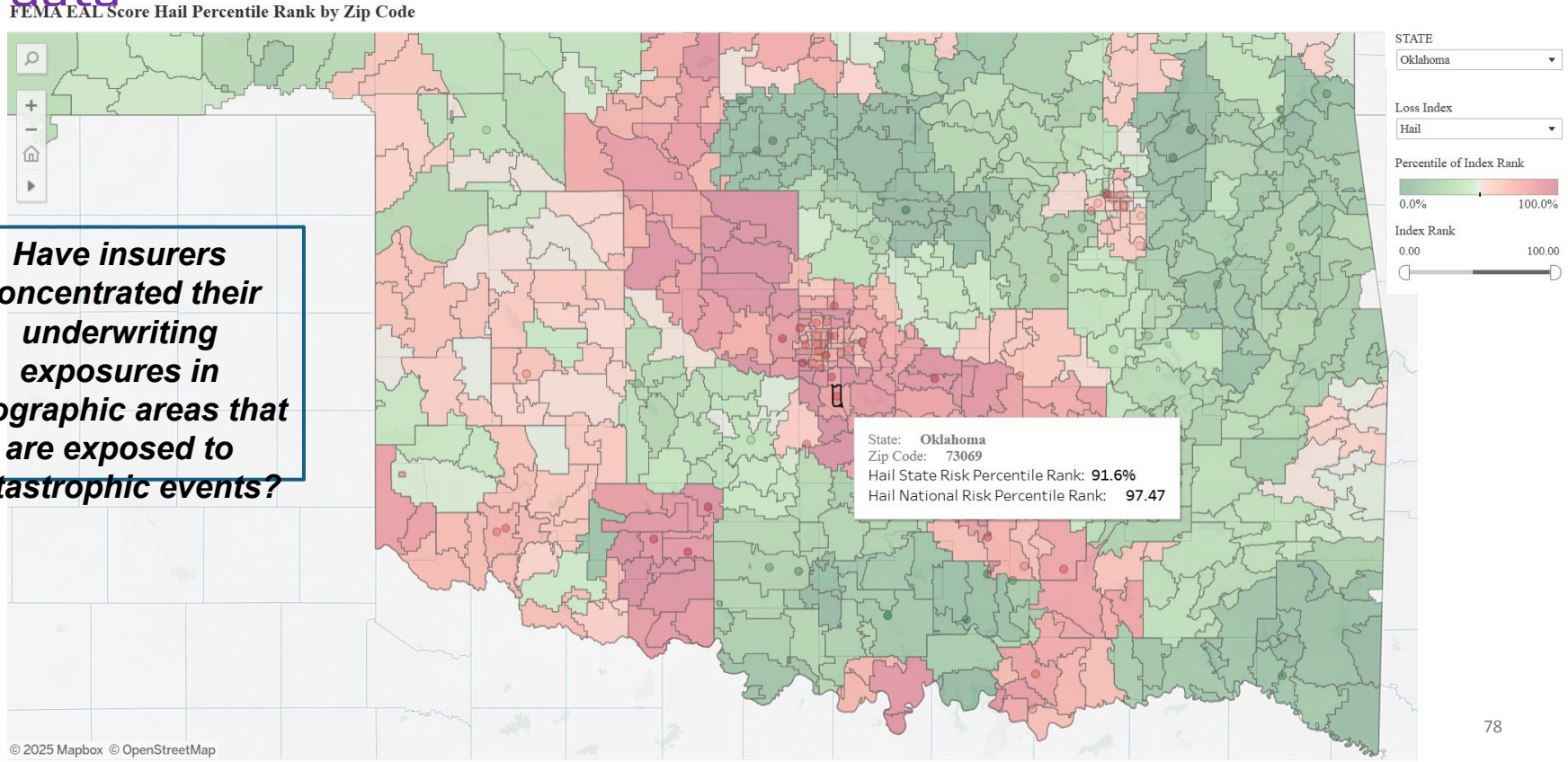
April 29, 2024

NAIC's CAT COE has/is building the <u>technical</u> skills, tools, and training to assist DOIs with each of these components



CAT Risk Assessment & Prioritization

Homeowners Market Data Call combined with CAT Risk data



Have insurers concentrated their underwriting exposures in geographic areas that are exposed to catastrophic events?

DEVELOPMENT OF PROMISING BELIEFS FOR CONSUMER MESSAGING

- **Family**
  - My parents are likely to install a high wind resistant roof
- **Community**
  - My neighbors are likely to install a high wind resistant roof
- **Protection – family**
  - If I install a high wind resistant roof, my family will be protected
- **Protection – property**
  - If I install a high wind resistant roof, my belongings will be protected

Susan, 68, installed a high wind resistant roof

A lot of residents in coastal areas say that their family wants to install a high wind resistant roof. After a few years of living in her home, Susan decided to install a high wind resistant roof. "I understood how important it was to my family that we have a stronger roof. After learning this, it became clear that I had to make this modification to my house."

Catastrophe Modeling Center of Excellence

Providing regulators with technical expertise, tools, and information to effectively regulate their markets.

https://content.naic.org/research/center-of-excellence

Contacts

- Jeff Czajkowski, CIPR Director - jczajkowski@naic.org
- Eli Russo, Enterprise Risk Management Advisor - erusso@naic.org
- Brian Powell, Catastrophe Risk Resilience Specialist - bpowell@naic.org
- Roger Claybrooke, Catastrophe Risk Data Analyst - rclaybrooke@naic.org
- Tim Barnett, PC Catastrophe Risk Actuary - tbarnett@naic.org

V. Council Remarks & Discussion

ARIZONA
DEPARTMENT OF INSURANCE
& FINANCIAL INSTITUTIONS

VI. Public Comments

ARIZONA
DEPARTMENT OF INSURANCE
& FINANCIAL INSTITUTIONS

Public Comment Logistics

- If you have not done so, please fill out a speaking slip or the Google Form (if you are online) to comment.
- Online comments will be taken after in-person comments.
- Online attendees will be able to unmute themselves and turn on their camera.
- When providing comments, please first identify yourself and who you are representing, if applicable.
- The Council will not be answering any questions during the public comment period but may request that any matters presented be reviewed by Council staff or placed on an upcoming agenda.

ARIZONA
DEPARTMENT OF INSURANCE
& FINANCIAL INSTITUTIONS

VII. Closing Remarks and Next Meeting Logistics

ARIZONA
DEPARTMENT OF INSURANCE
& FINANCIAL INSTITUTIONS

Next Meeting Logistics

- The Council will normally meet monthly on the second Wednesday of each month at 1:00 P.M., **unless otherwise noted in the agenda**.
- The next Council meeting is scheduled for June 11th at 1:00 P.M.
- We will continue the discussion around on the ground risk and mitigation efforts.

ARIZONA
DEPARTMENT OF INSURANCE
& FINANCIAL INSTITUTIONS

Contact Information

For inquiries or witten comments, please contact Resiliency and Mitigation Council Staff: RMCouncil@difi.az.gov

Council Webpage: https://difi.az.gov/resiliency-and-mitigation-council*
* Includes a link to sign up for the Council's mailing list.

ARIZONA
DEPARTMENT OF INSURANCE
& FINANCIAL INSTITUTIONS