Public and Private Residential Insurance in a Changing Climate

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What We'll Discuss Today

1. Public and private residential property insurance overview
2. Climate-related perils are stressing markets
3. A closer look: Eaton and Palisades Fires
4. Federal and state policy outlook
5. Conclusions

Four Key Points

- Rising residential insurance costs are adding to housing cost burdens.
- Concerns are growing among residents and policymakers about future ***availability*** and ***affordability*** of residential property insurance.
- Property- and regional-level measures, private sector innovation, and well-designed regulation can help increase insurance availability and affordability.
- Risk-based pricing can ***signal*** risk, but doesn't directly ***reduce*** risk; insurance is just one tool in the risk management toolbox!

I. Public and Private Residential Property Insurance Overview

What Is Residential Insurance?

- **Residential insurance:** a type of property insurance that covers a policyholder's residential structure and/or belongings from damage, theft, and other liabilities.

- Examples of common residential insurance policies:
  - homeowners insurance (multi-peril; structure and contents)
  - dwelling coverage (multi-peril; structure)
  - commercial coverage (multi-peril; structure and contents)
  - renters insurance (multi-peril; contents)
  - flood insurance (single-peril; structure and contents)
  - earthquake insurance (single-peril; structure and contents)

Why Does Residential Property Insurance Matter?

- Facilitates access to mortgage credit, home equity lines of credit, rental housing.
- Preserves value of hard-earned home equity, personal possessions stored at home (You & Kousky, 2024)
- “Protection gaps” create financial vulnerability; ~12% of homeowners do not purchase homeowners insurance (III, Munich RE, 2023).

Sources: You & Kousky (2024); III, Munich RE (2023).

How Are Residential Property Insurance Premiums Determined?

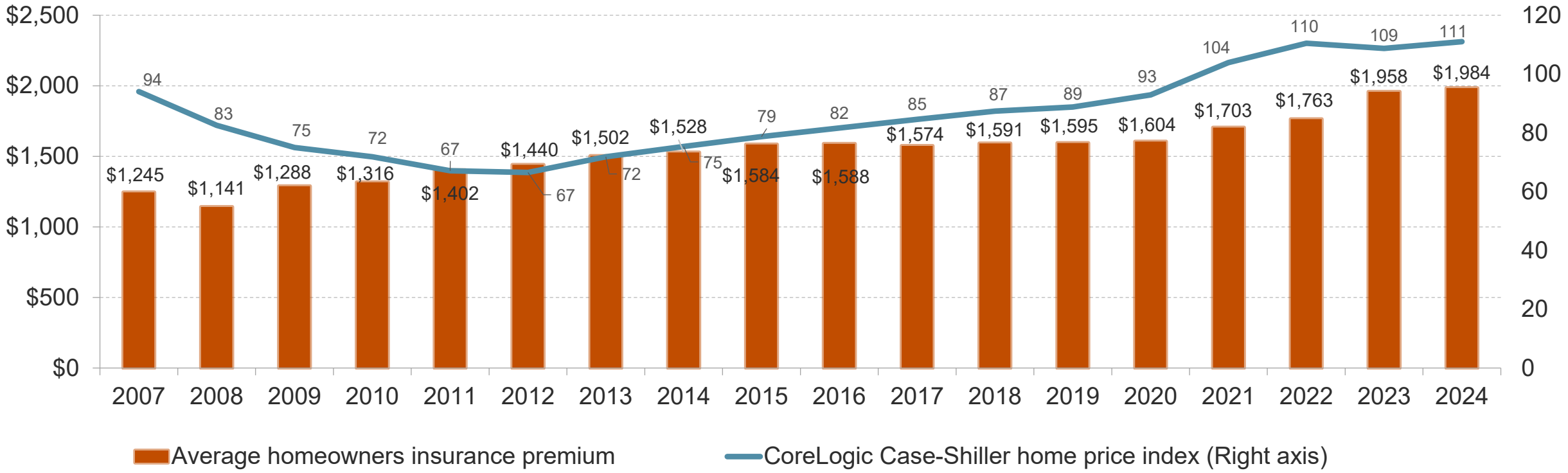
- Current and future residential insurance prices depend on multiple parties:
  1. Regulators (ratemaking decisions)
  2. Insurance firms (pricing sophistication, business strategy)
  3. Policyholders (individual adaptation, deductible choice)
  4. External factors (community wildfire risk; cost of materials/labor)

- Recent homeowners insurance premium spikes are driven by elevated replacement costs and increasing event severity.

Rising Homeowners Insurance Premiums Are Exacerbating Homeowner Cost Burdens

Average annual homeowners insurance[1] premium (2024 USD)

S&P CoreLogic Case-Shiller National Home Price Index (inflation-adjusted)



Notes: [1]Pertains to HO-3 homeowner package policy for owner-occupied dwellings in 1 to 4 family units. This is the most common package written. Average homeowners insurance premiums for 2022-2024 are calculated by multiplying Insurance Information Institute estimates of average homeowners premium in 2021 by estimated annual effective homeowners insurance rate changes nationwide according to S & P Global. Premiums are calculated in 2024 US dollars using US Bureau of Labor Statistics Consumer Price Index (CPI): All Items. S&P CoreLogic Case-Shiller National Home Price Index is also adjusted by CPI: All Items per St. Louis Fed calculations. March 2006=100.
Sources: Insurance Information Institute (2022); S&P Global; U.S. Bureau of Labor Statistics; Property Insurance Plans Service Office; Federal Reserve Bank of St. Louis.

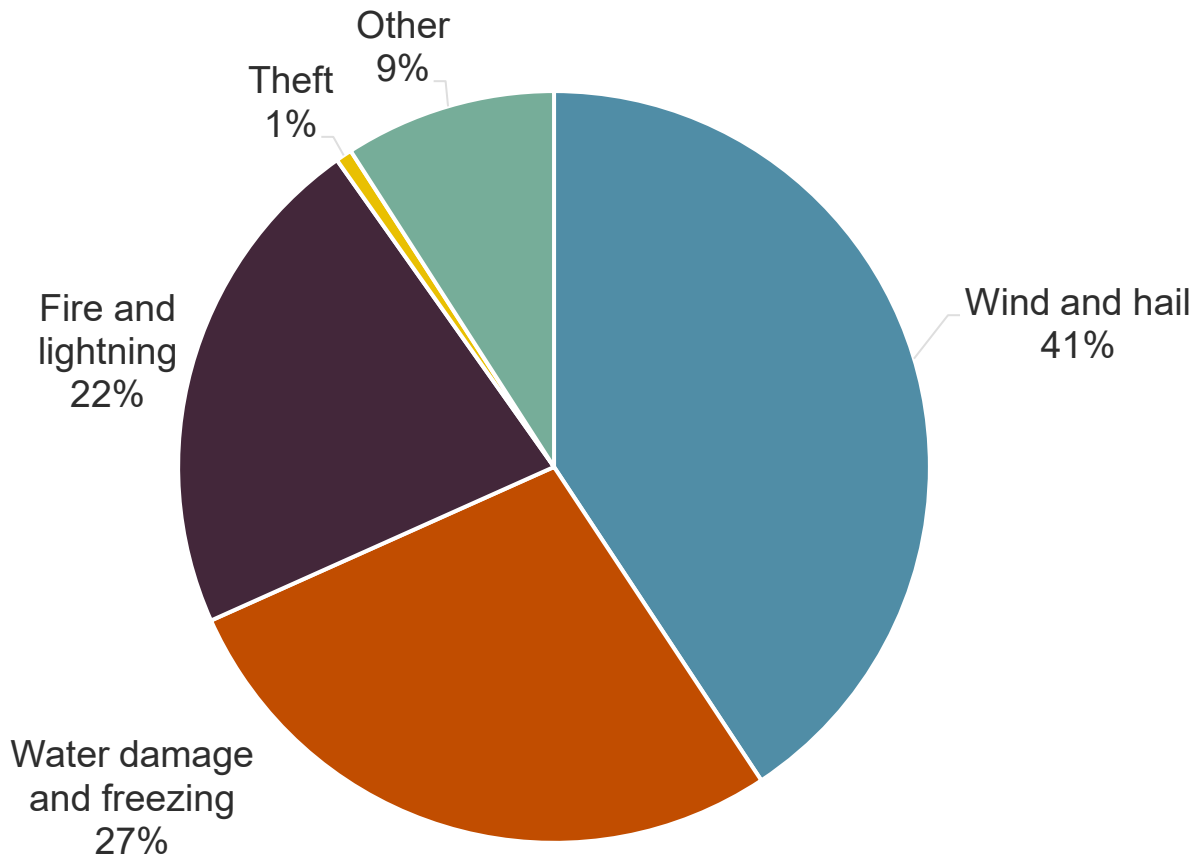
Climate Change Is Impacting Perils Covered by Common Residential Insurance Policies

Climate change physical impact	Peril	Insurance policy affected
• Sea level rise • More extreme precipitation	• Flood	• Flood insurance (single-peril)
• Drought • Higher temperatures	• Wildfire	• Homeowners insurance (multi-peril) • Renter's insurance (multi-peril)
• More rapid hurricane intensification • Higher peak wind speeds	• Wind • Storm surge	• Homeowners insurance (multi-peril) • Flood insurance (single-peril)

Sources: IPCC Sixth Assessment Report, Working Group I; Barnes et al. (2025)

Insured Losses Are Driven by Frequency and Severity of Covered Perils and Claims

Homeowners insurance insured losses by cause, 2022



Loss cause	Average claim (2018-2022	Claims frequency (2018-2022) [per 100 house-years]
Fire and lightning	$83,991	0.24
Wind and hail	$13,511	2.82
Water damage and freezing	$13,954	1.61

Note: ”Other” pertains to all other property damage, liability, and credit card.
Source: Insurance Information Institute.

Scope and Nature of Public Sector Involvement Varies Across Residential Insurance Markets

Public ⟵ **Private**

Public insurers

- FEMA's National Flood Insurance Program (1968)
- California Earthquake Authority (1996)

Residual markets

State public insurance entities

- Citizens Property Insurance Corporation (FL) [2002]
- Louisiana Citizens Property Insurance Corporation (2003)

State-mandated associations of private insurers (aka, FAIR plans)

- California FAIR Plan (1968)
- Massachusetts Property Insurance Underwriting Association (MPIUA) [1968]

Private insurers

Admitted private insurers

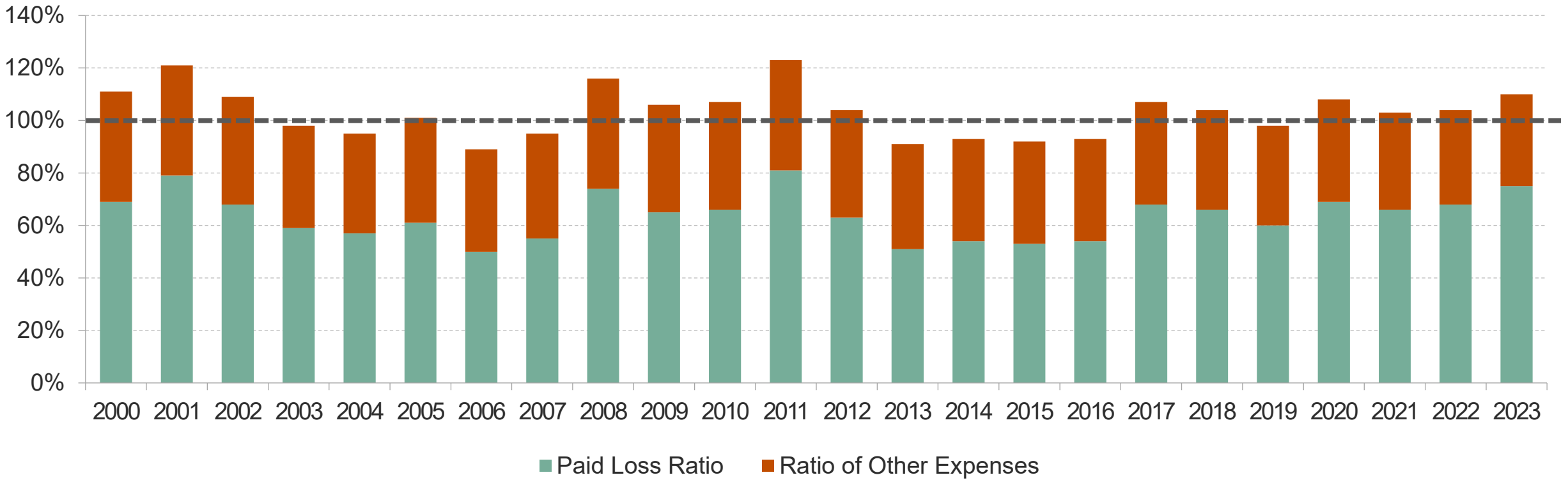
- State Farm
- Allstate
- Liberty Mutual

Non-admitted insurers (surplus lines)

II. Climate-related Perils Are Stressing Insurance Markets

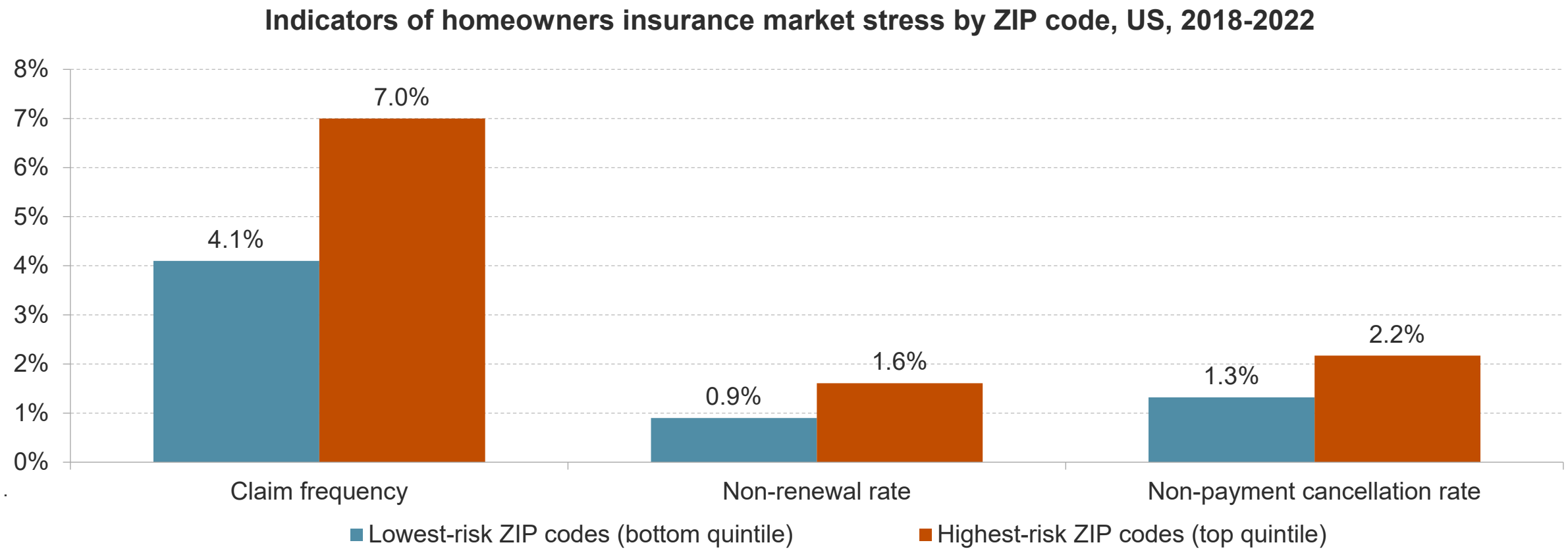
Homeowners Insurance Line of Business Delivers Limited and Uncertain Profits

Homeowners insurance net combined underwriting ratios, 2000-2023



Source: Federal Insurance Office, U.S. Department of the Treasury. "Analyses of U.S. Homeowners Insurance Markets, 2018-2022: Climate-Related Risks and Other Factors." January 2025.

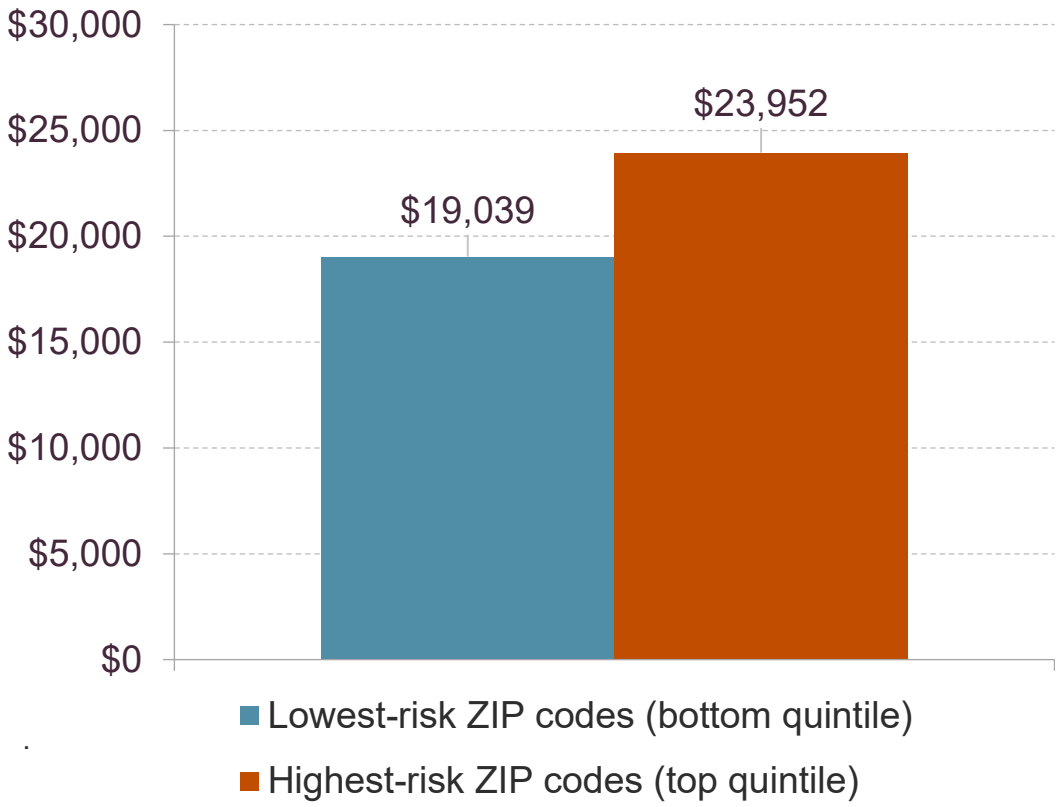
Claim Frequency, Non-renewal Rates Are High in Zip Codes with Relatively High Climate-Related Risks



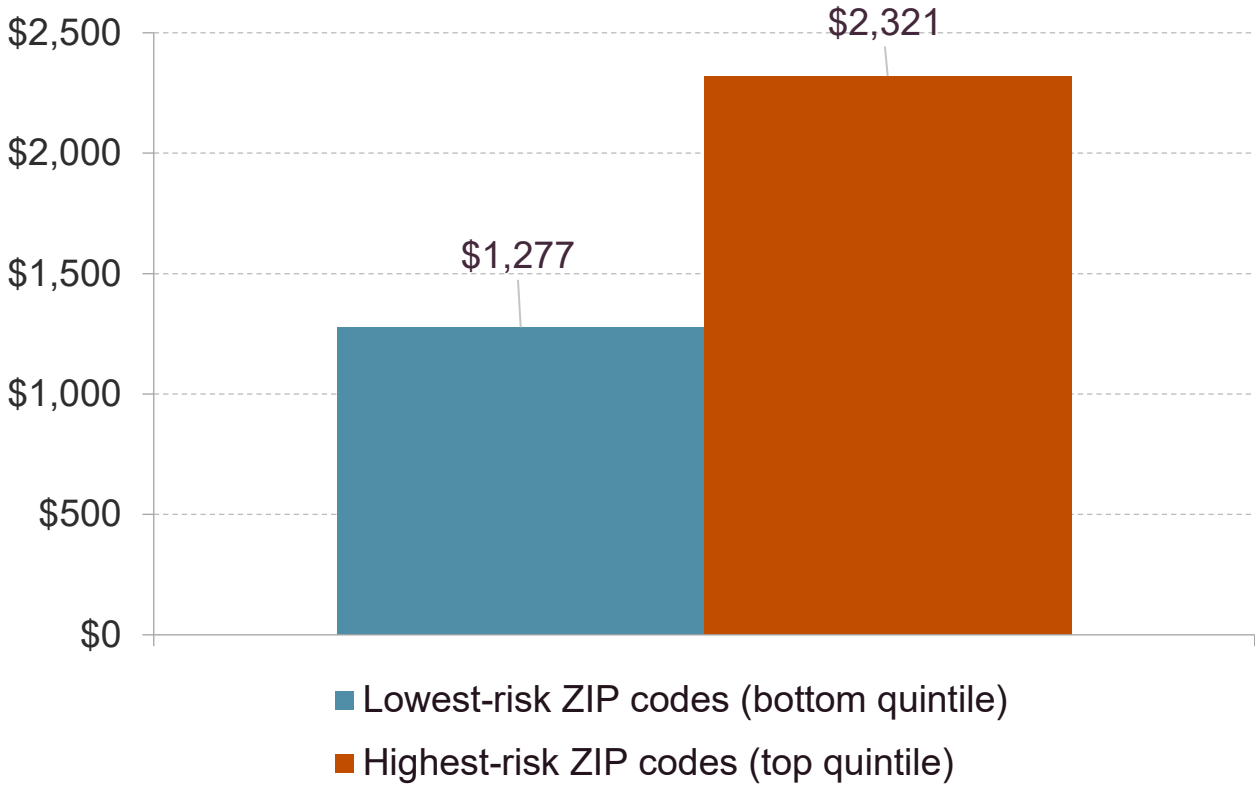
Note: Zip code tabulation area (ZCTA) climate-related risk is estimated as the sum of expected annual losses to buildings from homeowners insurance perils divided by total building value. More information on calculations available in Section IV.A of the US Treasury report cited below. Perils included in risk group categorization include: cold wave, hail, heatwave, hurricane, lightning, strong wind, tornado, wildfire, and winter weather.
Source: JCHS tabulations of US Treasury Department Federal Insurance Office PCMI data. "Analyses of U.S. Homeowners Insurance Markets, 2018-2022: Climate-Related Risks and Other Factors." January 2025.

Claim Severity, Premiums Are High in Zip Codes with Relatively High Climate-Related Risks

Average claim severity, US, 2018-2022



Average premiums per policy, US, 2018-2022



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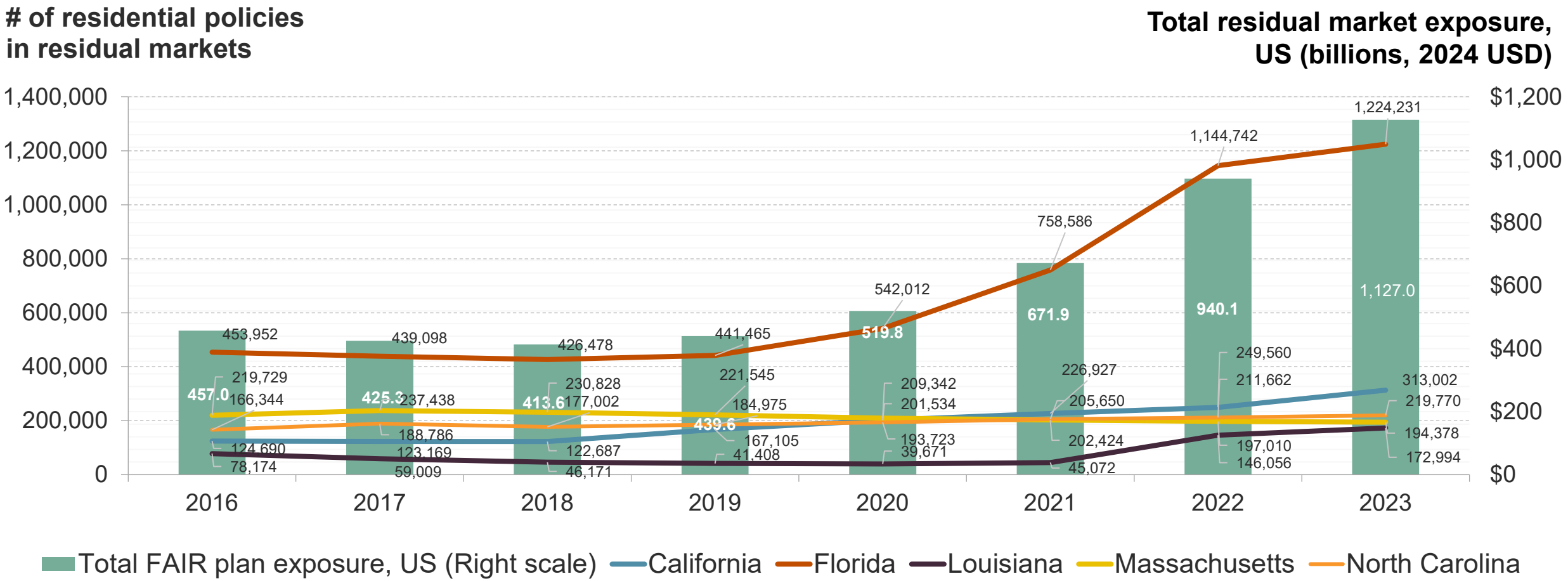
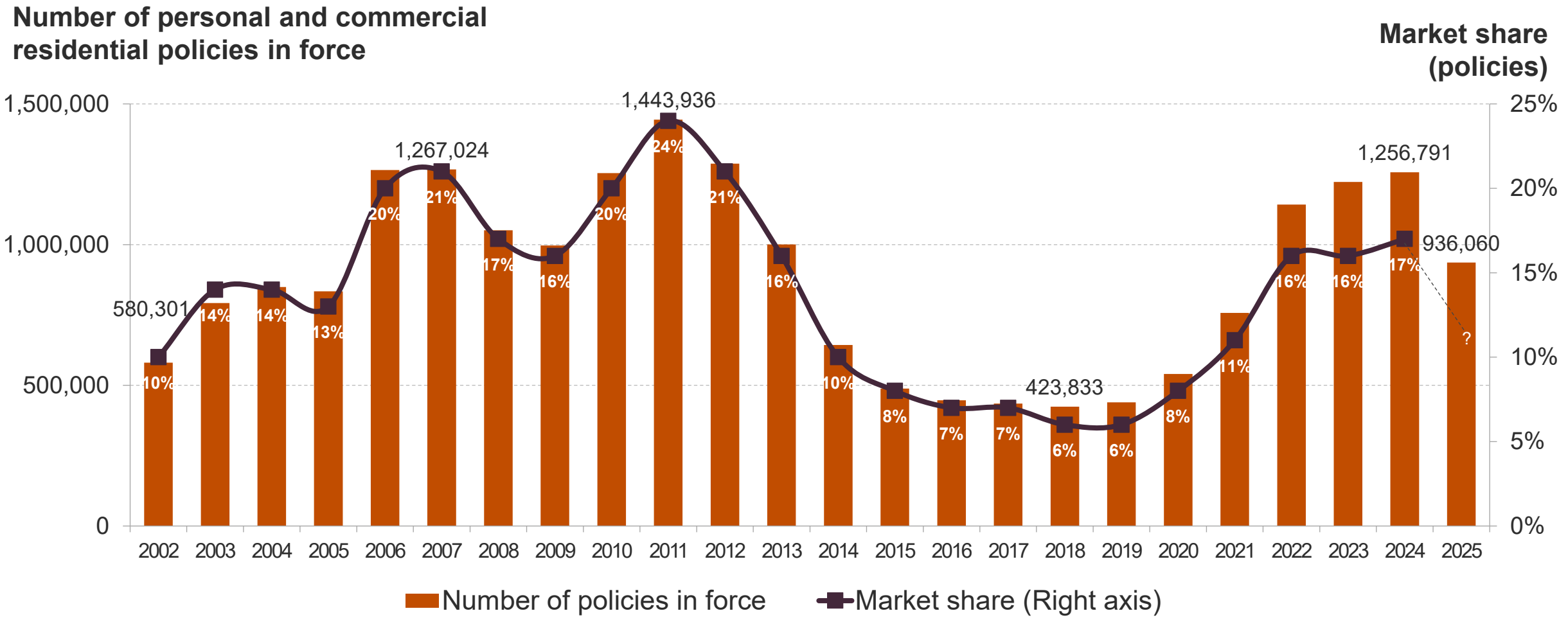
Source: JCHS tabulations of US Treasury Department Federal Insurance Office PCMI data. "Analyses of U.S. Homeowners Insurance Markets, 2018-2022: Climate-Related Risks and Other Factors." January 2025.

A Growing Number of Residential Policies Are Moving Into Residual Markets



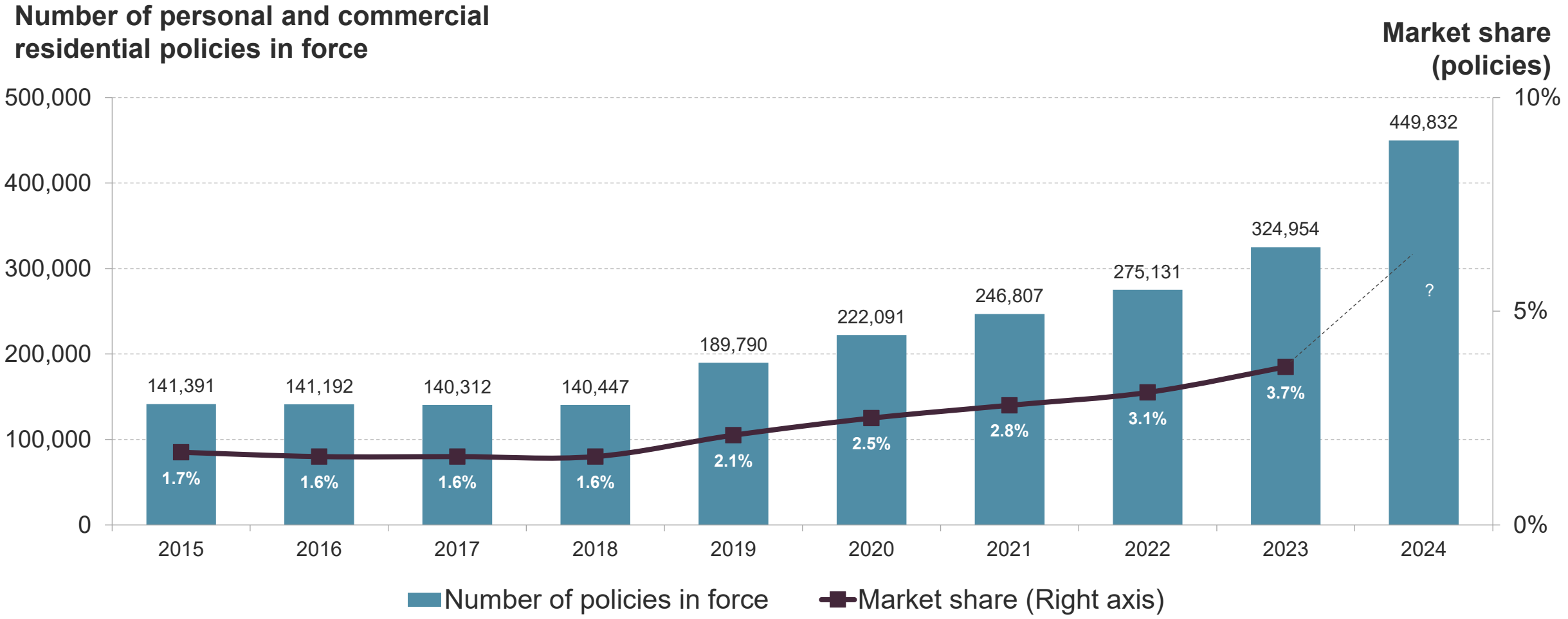
Note: According to the Insurance Information Institute, the five above US states have the highest number of residential policies in Fair Access to Insurance Requirements (FAIR) plans in the United States. Florida statistics reflect the number of policies in force on December 31 of each year. Right axis scale reflects the estimated aggregate value of all insurance in all FAIR plans in all lines (except liability and crime) in 2024 US dollars using US Bureau of Labor Statistics Consumer Price Index – All Items adjustment.
Sources: Insurance Information Institute; California Department of Insurance; Florida Citizens Property Insurance Corporation.

Citizens Property Insurance Corporation of Florida: A National Bellwether



Source: Citizens Property Insurance Corporation Market Reports. 2025 data are reported policies in January 2025; market share estimates note available.

California's Fair Access to Insurance Requirements (FAIR) Plan Is Experiencing Unprecedented Growth and Stress



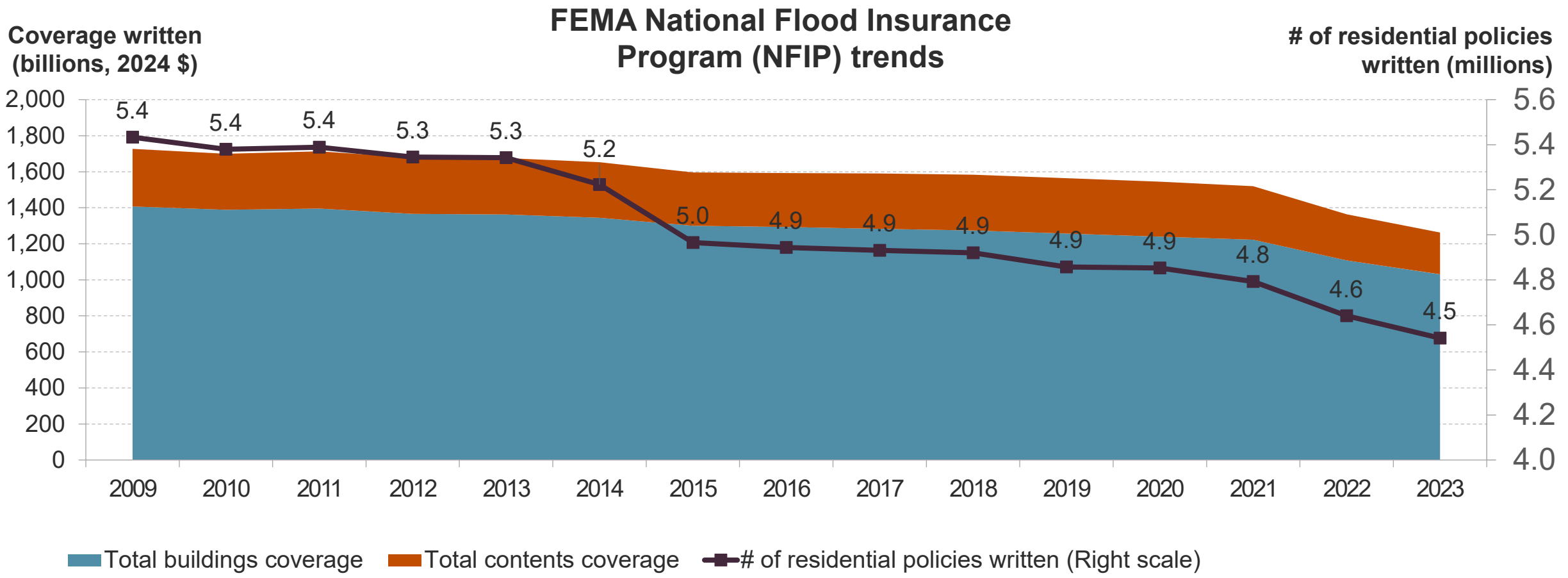
Source: California FAIR Plan. 2024 data represent totals from September 2024 statistics.

State Residual Markets Are Incentivized to Transfer Policies to Private Insurers

- States (e.g., Florida, California, Louisiana) have explicit statutory obligations to depopulate their residual markets.
- Residual plans are typically required to adjust premiums and coverage to remain “noncompetitive” with private insurers.
- Recent work by Sastry et al. (2025) in Florida finds Demotech-rated insurers (with relatively high insolvency risks)“ dominate Citizens’ depopulation program.”
- In Florida, California, a growing number of residential policies are written by non-admitted insurers in “surplus lines.”

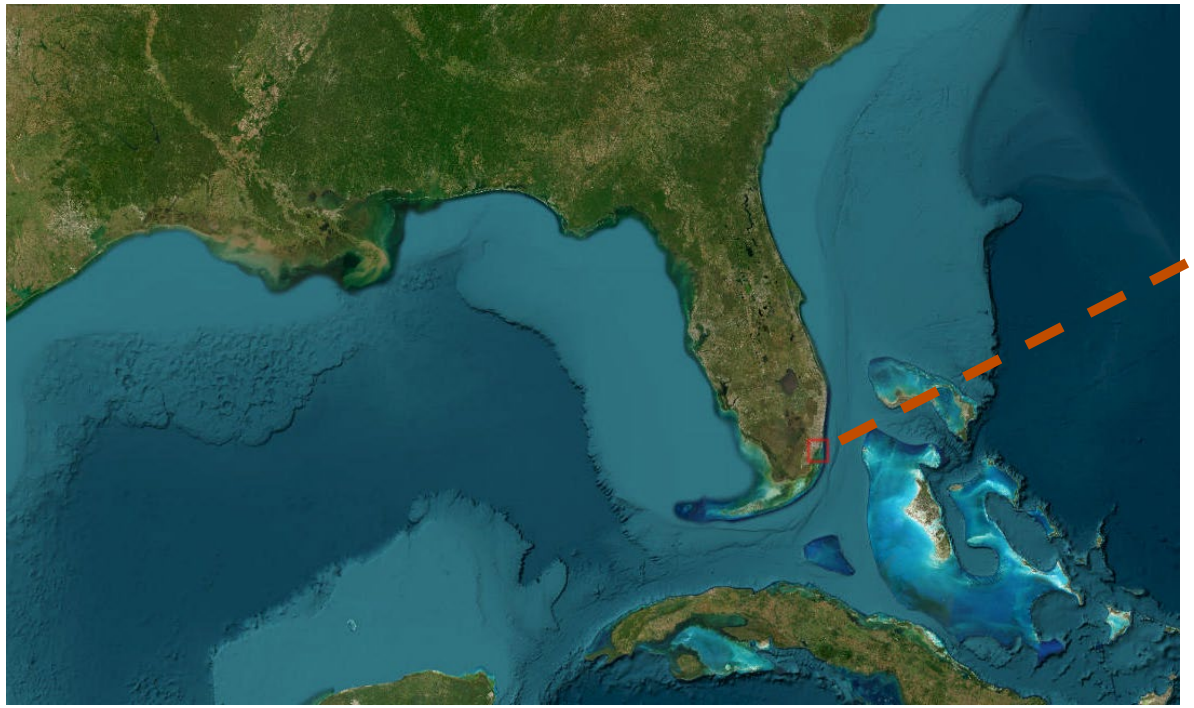
Sources: Sastry et al. (2025). “When Insurers Exit: Climate Losses, Fragile Insurers, and Mortgage Markets.” Working paper available here.

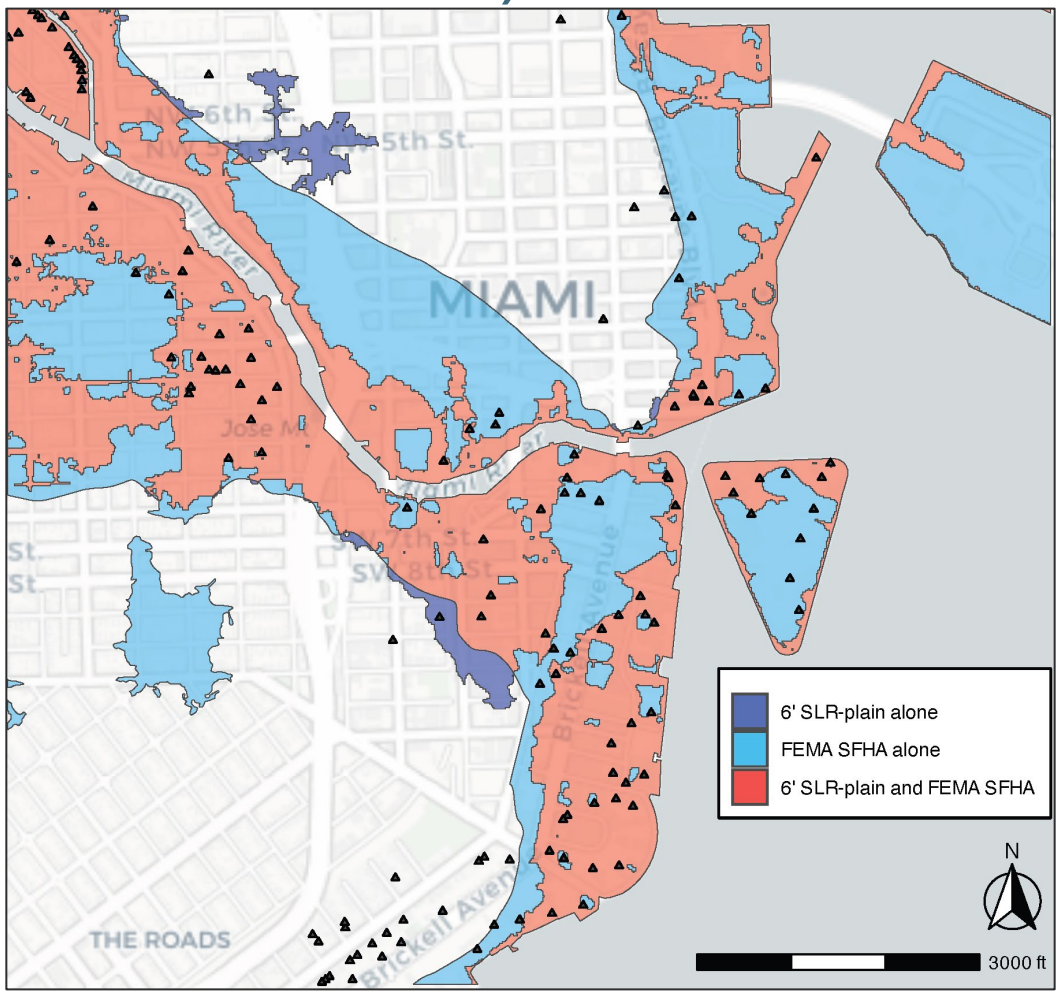
Flood Insurance Coverage Remains Limited Despite Federal Underwriting, Mandatory Purchase Requirements, Growing Flood Risks



Note: Figure reflects year in which policy was written. Written exposures are calculated in 2024 US dollars using the US Bureau of Labor Statistics Consumer Price Index Inflation Calculator. Data only reflect NFIP policies covering flood peril corresponding to residential occupancy types (i.e., corresponding to values 1, 2, 3, 11, 12, 13, 14, 15, or 16 for FEMA's "occupancyType" variable). Approximately 94.8% of the ~84.0 million NFIP policies from 2009-present in the OpenFEMA dataset were residential.
Source: Federal Emergency Management Agency "OpenFEMA Dataset: Federal Insurance and Mitigation Administration National Flood Insurance Program Redacted Policies – v2". Data accessed November 13, 2024.

Insurance Markets Are Not Designed to Price Medium- And Long-Term Climate Risks (e.g., Sea Level Rise)

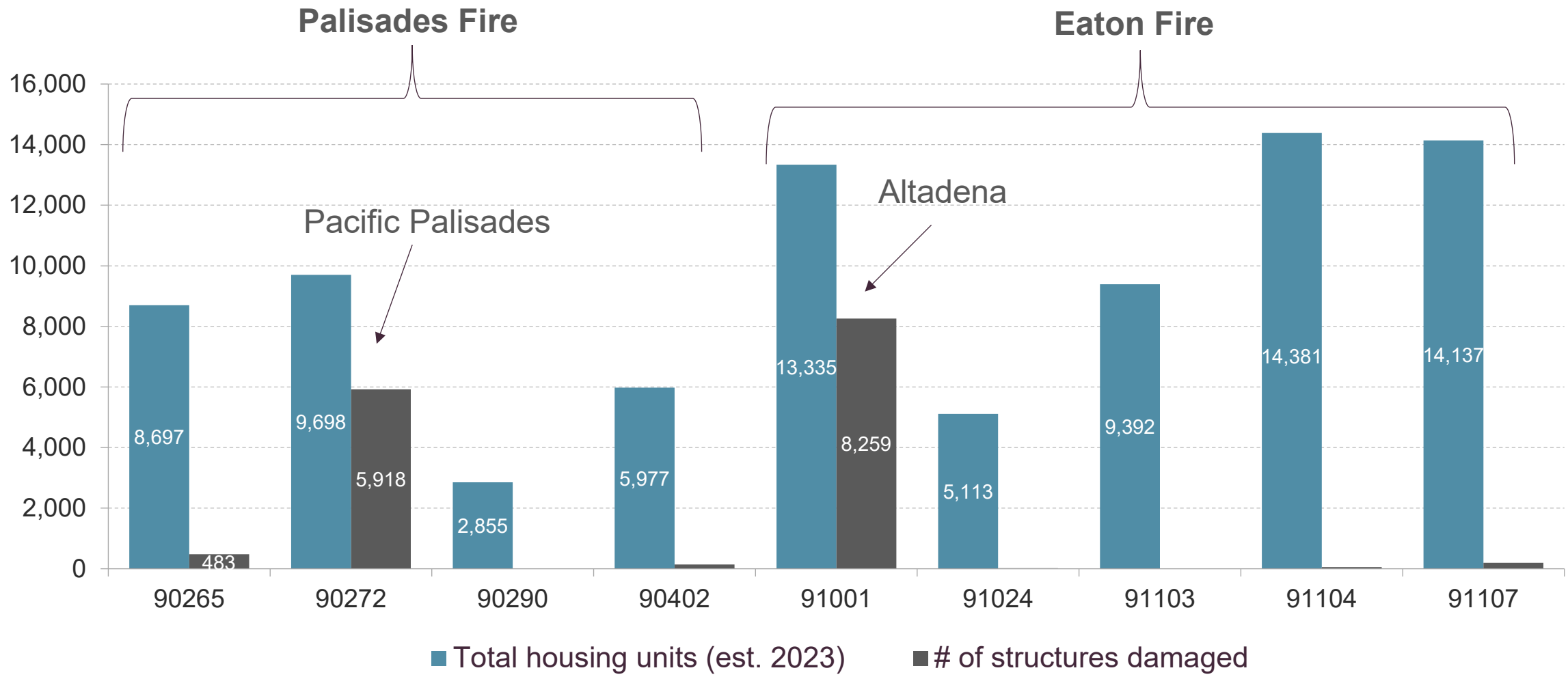




Note: “SLR-plain” refers to areas projected to be permanently inundated by six feet of sea level rise absent adaptation. “SFHA” refers to FEMA’s Special Flood Hazard Area, which is estimated to have a 1% annual exceedance probability of flood exposure.
Source: Koller, S. “Housing disparities and estimated effects of projected mean sea level rise exposure on residential property value.” *Under review.*

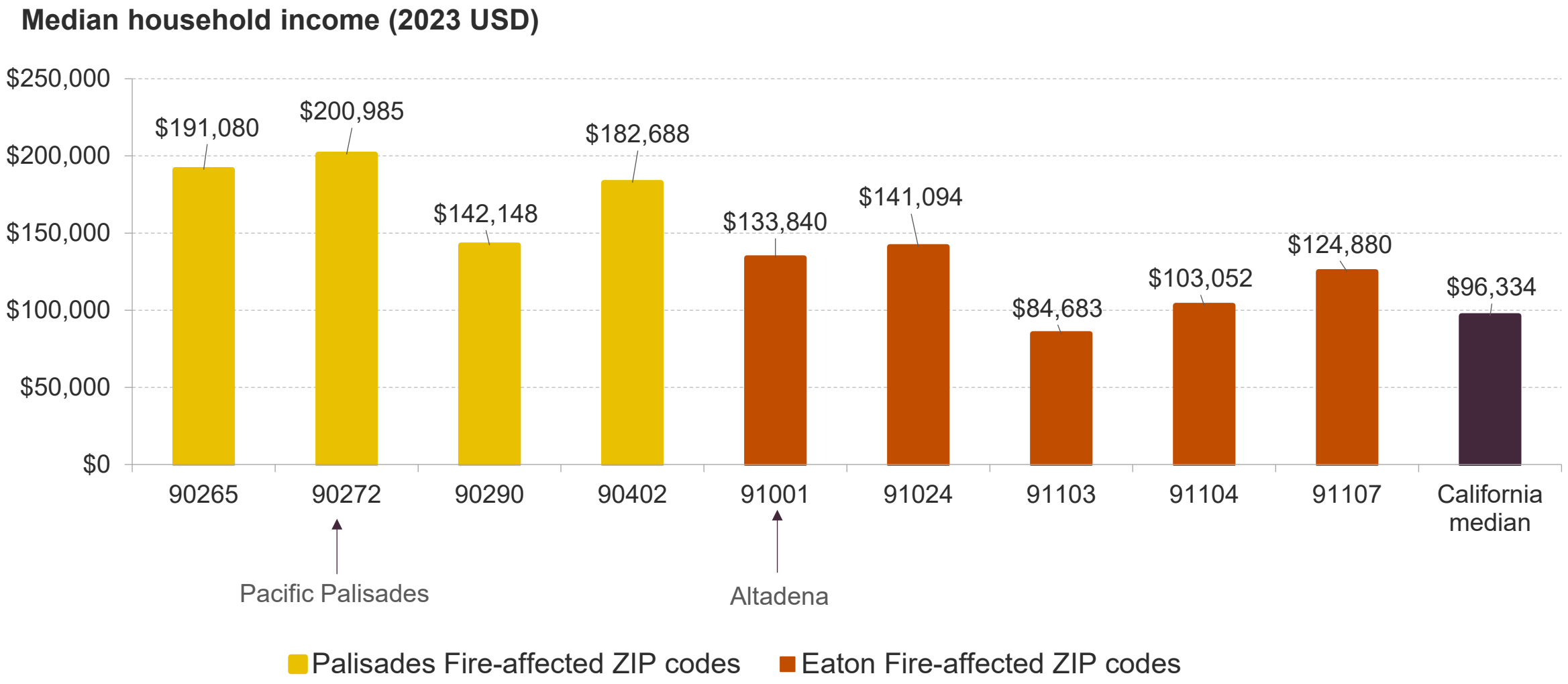
III. A Closer Look: Eaton and Palisades Fires

Palisades and Eaton Wildfires: Estimated $76-$131 Billion in Property and Capital Losses



Source: United States Census Bureau (2023) American Community Survey five-year estimates; Microsoft AI for Good Lab; Li & Yu (2025).

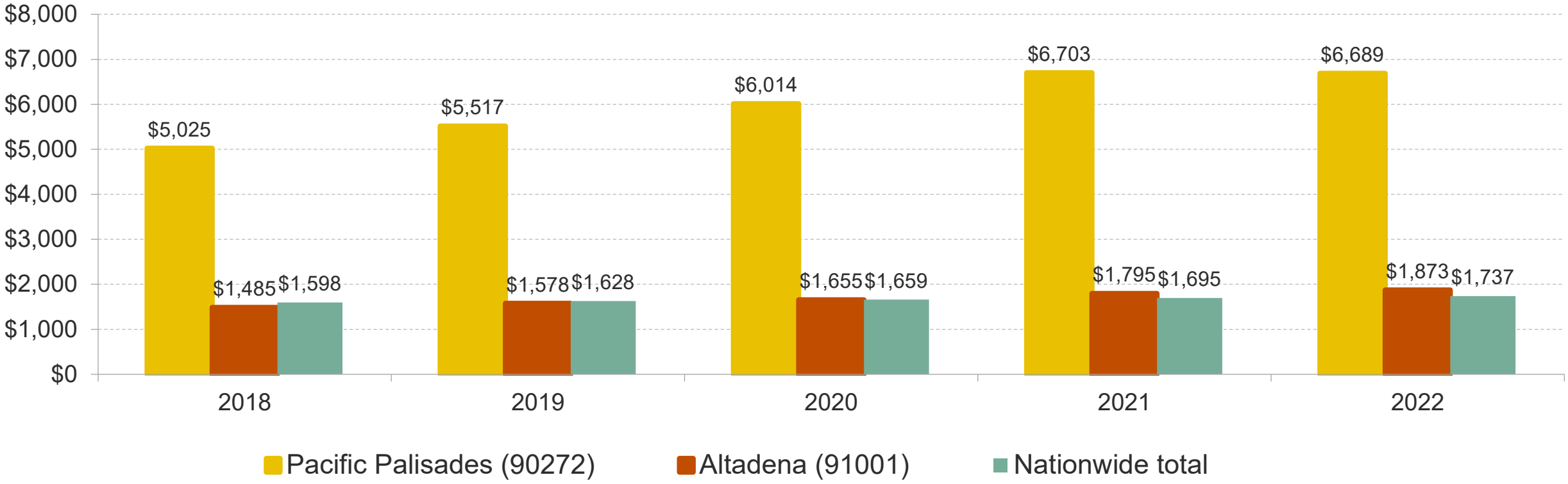
Eaton and Palisades Fires Impacted Relatively High-Income Zip Codes



Source: US Census Bureau American Community Survey (2023) five-year estimates.

Pacific Palisades' Homeowners Insurance Premiums Are Much Higher than the National Average

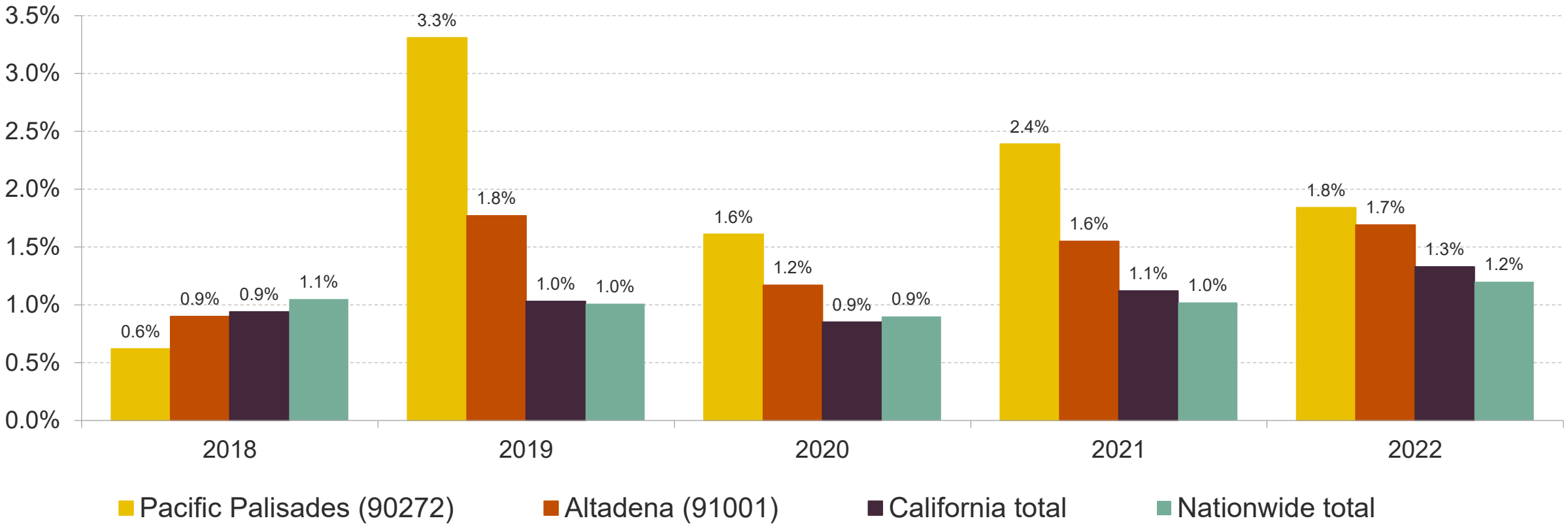
Average homeowners insurance premium (2025 USD)



Source: JCHS tabulations of US Treasury Department Federal Insurance Office PCMI data. "Analyses of U.S. Homeowners Insurance Markets, 2018-2022: Climate-Related Risks and Other Factors." January 2025.

Non-renewal Rates in Acutely Fire-Affected Areas Were Above State and National Averages

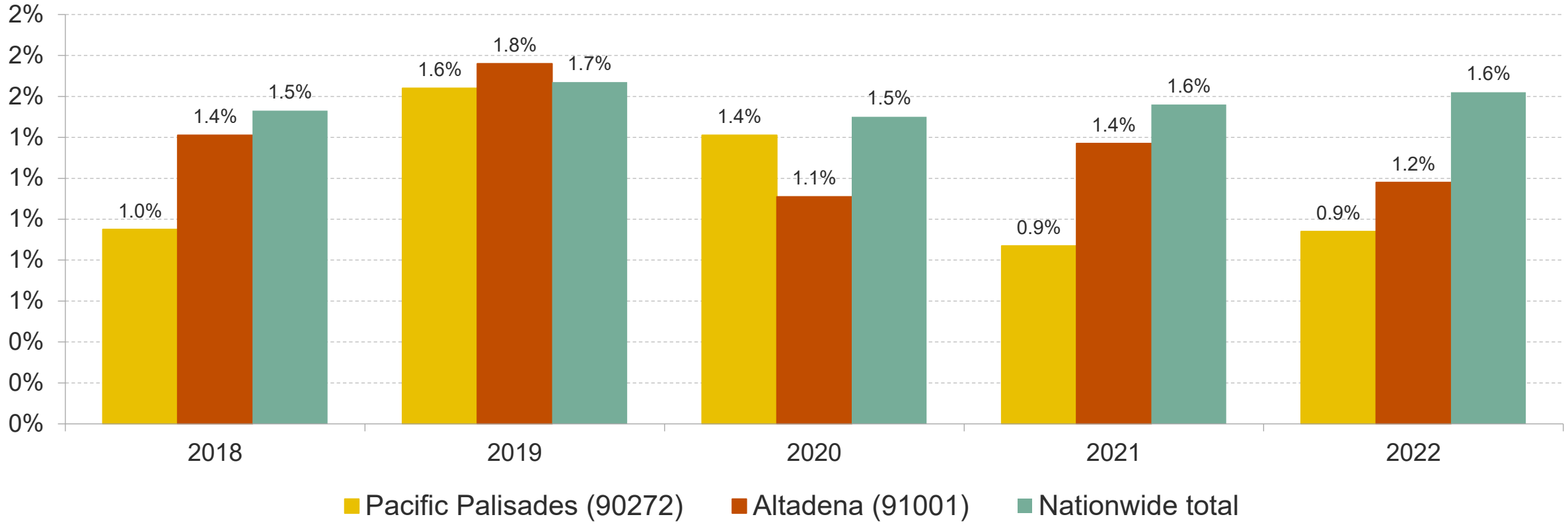
Percentage of policies not renewed due to risk profile of property or area



Sources: JCHS tabulations of December 2024 US Senate Budget Committee "Next to Fall" report data (California totals); US Treasury Department Federal Insurance Office PCMI data. "Analyses of U.S. Homeowners Insurance Markets, 2018-2022: Climate-Related Risks and Other Factors." January 2025.

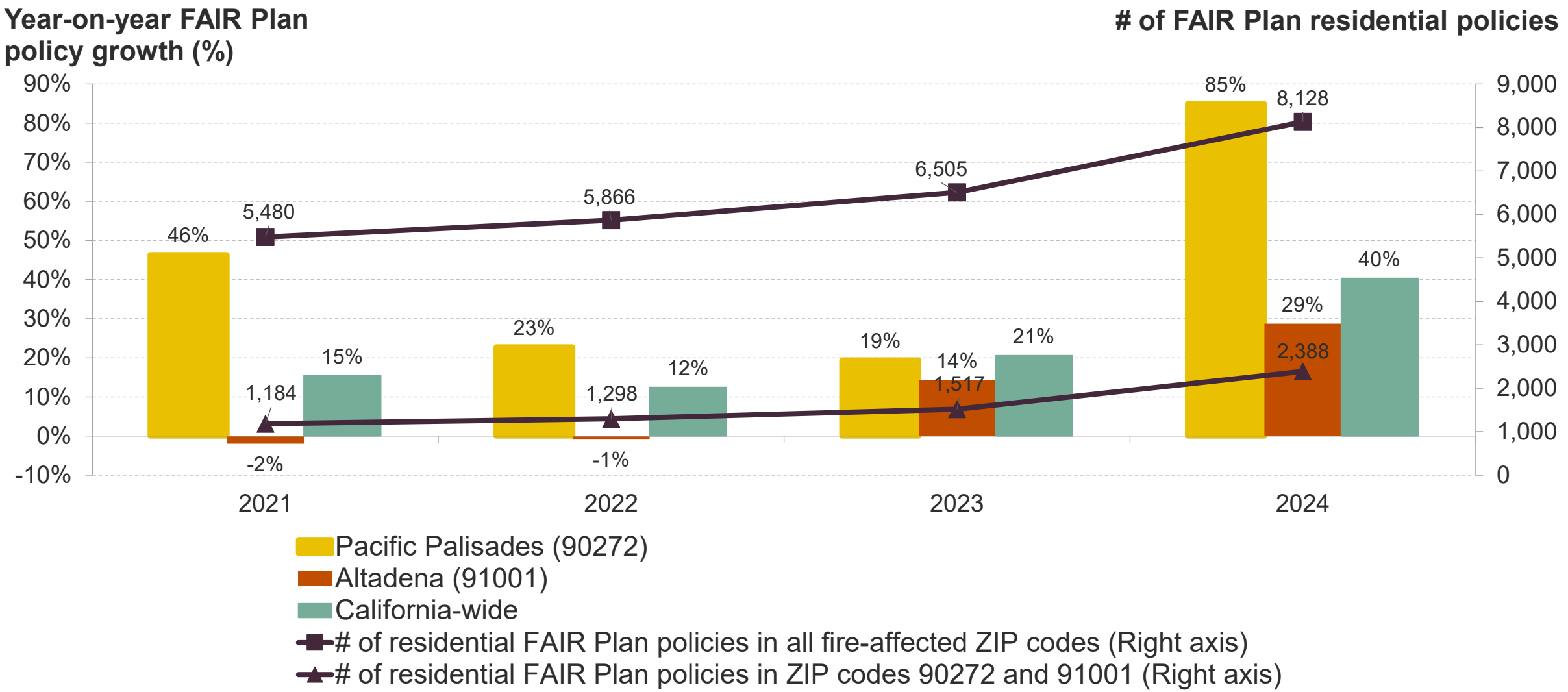
Homeowners Who Can *Afford* High Premiums May Still Face *Availability* Challenges

Percentage of policies cancelled due to nonpayment



Sources: JCHS tabulations of US Treasury Department Federal Insurance Office PCMI data. "Analyses of U.S. Homeowners Insurance Markets, 2018-2022: Climate-Related Risks and Other Factors." January 2025.

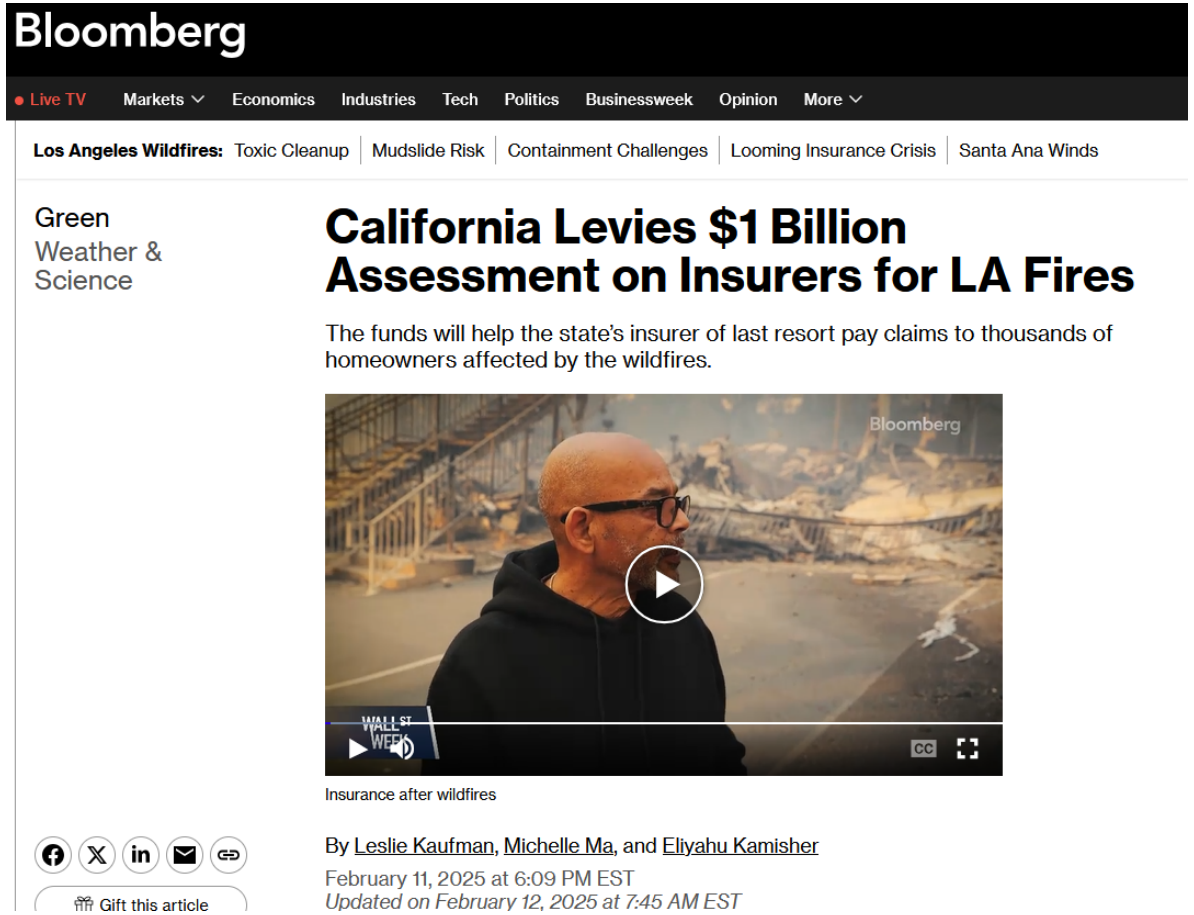
Before Eaton and Palisades Fires, a Growing Number of Residential Policies Moved Into FAIR Plan in Fire-affected ZIP codes



Source: California FAIR Plan.

Policyholders Statewide Will Pay More Because California FAIR Plan Is/Was "substantially threatened with insolvency."

- California FAIR Plan: 4,794 claims from Eaton and Palisades fires; estimated total FAIR Plan-insured losses of $4+ billion.
- California Insurance Commissioner's Order No. 2025-1 (February 11, 2025) authorized $1 billion emergency assessment on all "Plan members."
- Costs are assessed on all member insurers' policyholders across Dwelling and Commercial lines; some exceptions (e.g., auto).



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California Levies $1 Billion Assessment on Insurers for LA Fires

The funds will help the state's insurer of last resort pay claims to thousands of homeowners affected by the wildfires.

Insurance after wildfires

By Leslie Kaufman, Michelle Ma, and Eliyahu Kamisher

February 11, 2025 at 6:09 PM EST
Updated on February 12, 2025 at 7:45 AM EST

Gift this article

Source: California Insurance Commissioner Bulletin 2025-4; Order No. 2025-1.

IV. Federal and State Policy Outlook

Consumers, Insurance Industry, State Regulators Will Continue to Negotiate and Adapt

- December 2024: California adopts and amends regulations allowing “insurers to use forward-looking catastrophe models in their rate calculations”; stipulation: insurers committed to writing more policies in high-risk areas.

- March 2025: California Department of Insurance preliminarily approves State Farm average homeowners insurance premium increase of 22%; stipulation: public hearing and pause on policy cancellations.

- Low-income households and households of color less likely to be satisfied with their claims process (Martín et al., 2024)

Source: California Department of Insurance; AM Best; Martín et al. (2024).

Federal Government Is Poised to Retreat from Residential Insurance Markets and Climate Risk Preparedness

- Project 2025, Chapter 5: argues for privatization of the National Flood Insurance Program.
- January 2025: Executive Order No. 14180 establishes "Council to Assess the Federal Emergency Management Agency."
- January 2025: Executive Order No. 14030 on Climate-related Financial Risk rescinded via Executive Order No. 14148
- Relevant Congressional bills (e.g., H.R. 6944 to establish a federal reinsurance program) have been written and introduced; limited near-term prospects for passage.

Insurers warn that US weather agency mass firings will hit climate risk data

Reinsurance trade group appeals to US commerce secretary Lutnick to preserve data collection after thousands of jobs axed

www.ft.com

Sources: Project 2025, Chapter 5; Executive Order 14180; Executive Order 14148; H.R. 6944.

There Are Reasons to Be Optimistic About Future Affordability and Availability of Residential Property Insurance

- Innovative construction approaches (e.g., FORTIFIED) and salient financial incentives (e.g., Strengthen Alabama Homes program) can reduce vulnerability.
- Non-profit organizations (e.g., Insurance for Good, InnSure) are increasingly leveraging risk transfer to achieve social and environmental goals.
- Promising insurance products (e.g., parametric insurance, building code coverage) can simplify claims processes and/or facilitate climate-resilient development post-disaster.
- Growing number of climate-related peril disclosure requirements and democratization of climate risk data products can lead to better-informed housing choices.

V. Conclusions

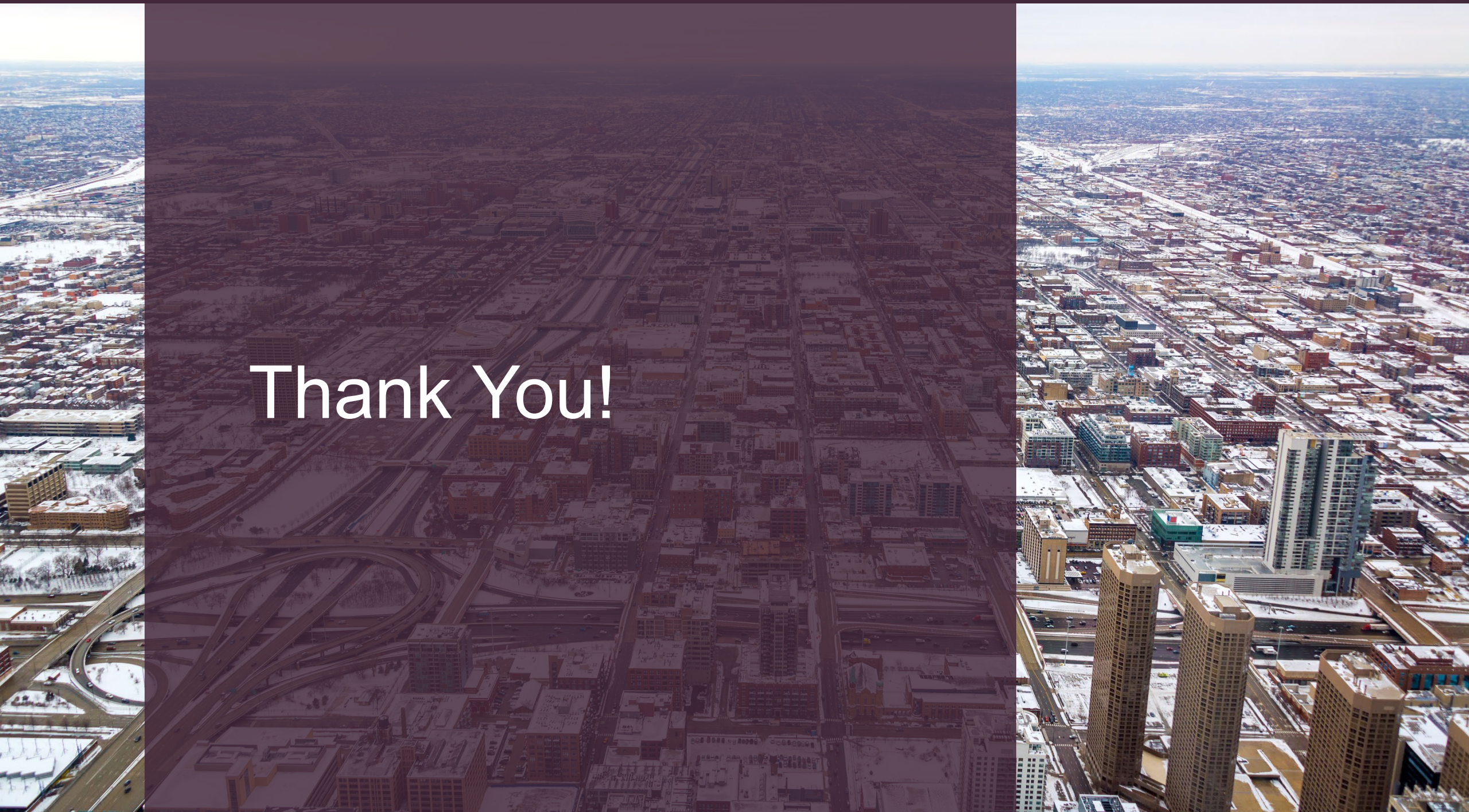
Conclusions

- Rising residential insurance costs are adding to housing cost burdens.
- Concerns are growing among residents and policymakers about future ***availability*** and ***affordability*** of residential property insurance.
- Property- and regional-level resilience measures, private sector innovation, and well-designed regulation can help increase insurance availability and affordability.
- Risk-based pricing can ***signal*** risk, but doesn't directly ***reduce*** risk; insurance is just one tool in the risk management toolbox!

An ounce of prevention is worth a pound of cure.

-Benjamin Franklin in “On Protections of Towns from Fires,” circa 1735

Source: Franklin, B. (1735) *The Pennsylvania Gazette.*



Thank You!