

Housing Resilience Agencies as a transformative approach to mitigate damage, accelerate recovery, and responsibly and equitably allocate the burdens from natural catastrophes in California

Submission for the California Earthquake Authority's Study on New Models and Approaches to Complement or Replace the Wildfire Fund

Submitted by:

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Background on the submission

The Climate and Community Institute (CCI) is a climate and economy think tank that mobilizes cutting-edge research on the intersections of climate, economy, and everyday life. Our research helps pass new policy, improve implementation, shift narratives, and deepen coalitions.

CCI staff and fellows have spent the last several years carrying out research to help reimagine disaster insurance for homes in the U.S. We have documented how today's residential property insurance system [fails many communities and housing providers](#) and the ways existing policies – including many proposals for reform – are [stop-gaps at best](#). And we have charted a [transformative vision](#) for the residential property insurance crisis that is rooted in availability, affordability, and disaster resilience.

Topics addressed in this submission

CCI's proposal for California to establish a Housing Resilience Agency speaks to many of the topics of interest to CEA's study. Those include:

- Accessibility and affordability of property insurance. [PUC § 917(c)(1)]
- Alternative structures to socialize risk. [PUC § 917(c)(2)]
- Additional mitigation measures and technology solutions to reduce risk. [PUC § 917(c)(3)&(8)]
- Financing, insurance and other mechanisms to expedite recovery for communities. [PUC § 917(c)(8)]
- Additional measures to benefit ratepayers through reducing costs caused by fiscal uncertainty. [PUC § 917(c)(5)]
- Ideas and options for enacting streamlined low-cost mechanisms to provide injured parties full compensation for damages resulting from wildfires. [PUC § 917(c)(6)]
- Ideas and options for reducing the economic damage resulting from wildfires and potentially other catastrophic natural disasters. [PUC § 917(c)(9)]
- Ideas and options for new models to complement or replace the California Wildfire Fund. [PUC § 917(c)(10)]

Proposal: Housing Resilience Agencies as a transformative approach to mitigate damage, accelerate recovery, and responsibly and equitably allocate the burdens from natural catastrophes in California

Escalating disasters, rising residential property insurance costs

Large-scale disasters, like the January 2025 fires in Los Angeles, illustrate the collective nature of risk: no one is spared (though specific impacts may vary), and **no individual household or housing provider can mitigate alone the scale of these disaster risks.**

Yet while the residential property insurance conversation in California tends to focus on wildfires, many communities are exposed to very high expected losses from other risks. As Figure 1 demonstrates, close to 80 percent of Californians live in an area exposed to very high expected losses from earthquakes. Often, various risks overlap; roughly 5 percent of Californians live in an area exposed to very high expected losses from earthquakes, wildfires, and floods.

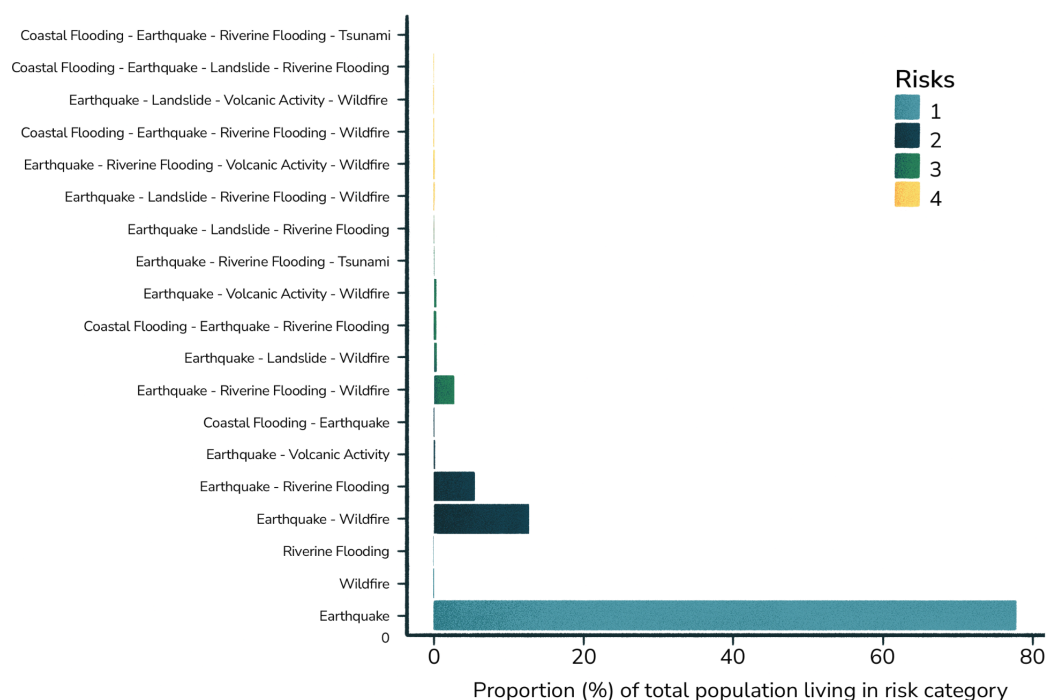


Figure 1: Proportion of California communities exposed to very high expected losses from multiple risk categories. Source: FEMA data as analyzed in: Moira Birss et al., [“Shared Fates: A Housing Resilience Policy Vision for the Home Insurance Crisis”](#), 2024, Climate and Community Institute.

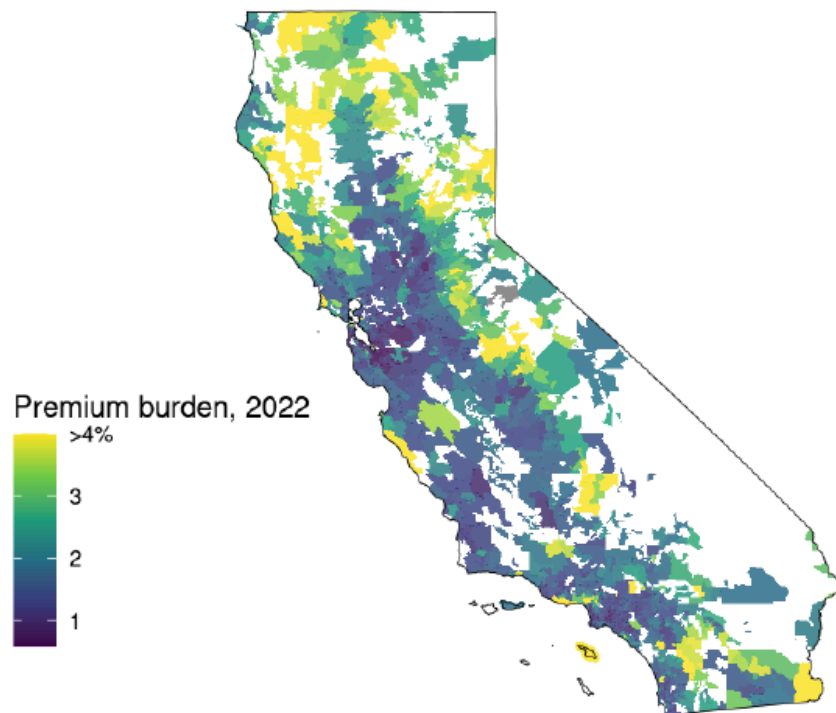
The profit vs. protection conflict in insurance markets

Insurance is a collective endeavor: it brings together many policyholders across different risks and geographies to reduce the burden of risks for everyone. It also operates on an individual level: a policyholder—be they a homeowner, housing provider or renter—enters

into a private contract with an insurer, expecting a payout to cover the costs of damage to the home.

This expectation of financial security is often undermined by the profit-driven nature of private insurance companies. This inherent conflict creates critical insurance gaps, leaving households and housing providers under protected and vulnerable. Many Californians are indeed vulnerable: Households in many parts of the state were already paying upwards of 4% of their income on homeowners insurance in 2022, before the latest wave of premium rate hikes (see Figure 2).

Figure 2: Premium burdens by zip code. Premium burden is the premium rate divided by median annual household income in a zip code. Source: CA DOI and ACS data as analyzed in Birss, et. al., “Shared Fates.”



The primary profit source for insurance companies is the returns they earn from investing premium income. In order to have more capital to invest, insurance companies are incentivized to raise premium rates, transfer financial risk to reinsurance markets and policyholders, and to reduce payouts. Insurers may also have incentives to exploit, not avoid, risk—increasing disasters gives them an excuse for premium hikes and can essentially serve as free advertising.¹ Insurers can make a lot of money in these ways: One analysis found \$6 in profit for every \$1 in underwriting losses across the country.²

¹ Bench Ansfield, *Born In Flames: The Business of Arson and the Remaking of the American City* (W. W. Norton, 2025), 93-96.

² Martin D. Weiss, “Large Property Insurers in Florida Fail to Pay Nearly Half of Homeowner Claims,” Weiss Ratings, June 25, 2024, <https://weissratings.com/en/weiss-news/weiss-ratings-reveals-large-property-insurers-in-florida-fail-to-pay-nearly-half-of-closed-homeowner-claims>.

Insurers of last resort are not fit for purpose

To address past insurance gaps California policymakers established the FAIR Plan in 1968. Yet while the FAIR Plan model has provided an important safety net for households, its financial models are overstretched, premiums trend unaffordable, and it insufficiently drives disaster risk reduction.³ **FAIR Plan problems are no surprise, though, given the model's flaws**, including:

- Ignoring the basic principles of good insurance design: Spreading across types and levels of risk and creating broad and diverse risk pools. Instead, these programs tend to concentrate on one type of risk, like wildfire, and only for the “riskiest” policies. Such risk concentration is as problematic as a health insurance pool only for stage 4 cancer patients.
- Failing to address risk mitigation beyond the individual level (if at all). Broader, more collective, and more proactive risk mitigation would both better protect the program’s assets and the communities it serves.
- Provision of inferior products offering only “actual cash value” rather than “replacement cost” payouts.
- Governance largely run by insurers themselves.⁴

A broader property insurance market problem: Risk-based pricing

Residential property insurance pricing today is based largely on the theory that insurance markets can effectively incentivize homeowners or housing providers to carry out disaster risk reduction to housing through “risk-based pricing”. But **the use of price as the primary vehicle for disaster risk mitigation is ineffective and inequitable**, because:

- People make decisions about where to live for all kinds of reasons, like where schools, family, or jobs are located.
- Some households may have been forced into a risky location because housing discrimination or affordable housing shortages left them no choice on where to live.
- Low-income households, as well as many middle-income ones, cannot afford to pay upfront for big retrofits. Renters have almost no power to enact them.

³ Carolyn Kousky et al., “Driving Loss Reduction Through State-Created Residual Insurance Markets,” Environmental Defense Fund, 2025, <https://library.edf.org/AssetLink/v7l028dx0x68g22mj067j2kw41s28nj.pdf>; Brian Palmer and Jeff Turrentine, “It’s Time to Fix Our Water-Logged National Flood Insurance Program,” 2022, <https://www.nrdc.org/stories/time-fix-water-logged-national-flood-insurance-program>; Megan Fan Munce and Susie Neilson, “What Are We Paying for? California FAIR Plan Complaints from People Whose Homes Have Burned,” *San Francisco Chronicle*, January 25, 2025, <https://www.sfchronicle.com/california-wildfires/article/insurance-fair-plan-20036794.php>.

⁴ Isabel Peñaranda Currie et. al., “Insurers of Last Resort: Why Today’s FAIR Plans Need a Redesign to Address the Home Insurance Crisis,” 2025, Climate and Community Institute, <https://climateandcommunity.org/research/insurers-of-last-resort/>.

- Many of the necessary risk-reduction measures to respond to these big disasters, like sewer upgrades or neighborhood brush clearings, aren't measures individual households or building owners can take on their own.
- The wealthiest homeowners can always override price signals.
- Market-rate housing developers don't have to think about insurance coverage past the build completion date and so keep building new housing in high-risk areas.

To be sure, the risk-assessment tools of insurance provide useful information about the location and scale of risk. But given the collective nature of disaster risk, such tools are most effectively and equitably deployed as inputs to policymaking: To identify, for example where collective risk-reduction resources should flow,⁵ or where land use policy should proactively direct housing away from high-risk geographies.⁶

Reimagining the disaster risk insurance and mitigation system for California: The Housing Resilience Agency

The conventional wisdom on risk allocation from natural catastrophes tends to rely very heavily on the insurance industry as a primary arbiter and implementer of risk allocation and pricing. Yet, as demonstrated here, insurance tools are not capable of all the things currently asked of them, and insurance companies prioritize profit over protection. Especially since California lawmakers have made clear that they want to “responsibly and equitably allocate the burdens from natural catastrophes” (PUC § 917(p)), we urge California policymakers to carefully consider the role of insurance tools – not just insurance companies – in allocating the burdens from natural catastrophes in the state. In other words, we urge a policy approach that seeks to answer the question, “How can insurance tools help keep people safely and affordably housed as disasters increase in frequency and scale?” Approaching the question this way leads to the prioritization of coordinated and proactive risk reduction, equitable access to the financial protection of insurance, and accountability and responsibility from the entities most implicated in the breakdown of our current system.

To achieve this, **we propose that California create a Housing Resilience Agency (HRA) to run the state's housing risk-reduction work and home disaster insurance provision with**

⁵ Paula Jarzabkowski, “Are Premium Price Increases Really a Way to Reduce Climate Risk Exposure?,” 2024, Climate and Community Institute, <https://www.climateandcommunity.org/premium-price-increases>.

⁶ Moira Birss and Rebecca Elliot, “How Do We Fix Public Insurance Programs?,” 2024, Climate and Community Institute, <https://www.climateandcommunity.org/fix-insurance-programs>; Jarzabkowski, “Are Premium Price Increases Really a Way to Reduce Climate Risk Exposure?; Laurence Barry, “The Moral Economies of Natural Disasters Insurance: Solidarity or Individual Responsibility?,” *Journal of Cultural Economy* 17, no. 1(2024): 39–51, <https://doi.org/10.1080/17530350.2023.2258909>; Rebecca Elliott, *Underwater: Loss, Flood Insurance, and the Moral Economy of Climate Change in the United States* (Columbia University Press, 2021).

transparency, democracy, and equity. The HRA model combines comprehensive disaster risk mitigation with public disaster insurance provision, while also facilitating collaboration with other state entities to ensure coordinated policy that increases affordability, availability, and resilience of housing and related infrastructure. For full details on this proposal, see the full HRA proposal in [“Shared Fates.”](#)

Comprehensive disaster risk mitigation

Central to the HRA model is holistic risk reduction at the household and community infrastructure-level, combining structural fortifying measures with energy efficiency updates; such measures are proven to lower costs for the state and for households.⁷

Key to the most effective approach to risk mitigation is recognizing that disaster risk cannot be adequately mitigated through isolated, voluntary improvements to individual homes. Housing resilience also requires proactive, collective action at community- and landscape-levels, such as home hardening across a neighborhood, regional fire breaks in wildfire-prone areas, infrastructure relocation, and more.⁸ While initiatives like California’s Wildfire Mitigation Program have helped with risk reduction, mitigation is not currently proceeding at the scale necessary—not at the individual home or community level, typically not for households beyond single-family homeowners, and not in a coordinated way.⁹ Furthermore, there is inadequate combination of structural fortification measures with energy efficiency updates, both in new construction as well as in post-disaster rebuilding.

A California HRA would prioritize, plan, and coordinate risk mitigation measures for housing across the state. The CA HRA would directly support home retrofits for existing housing, ensuring affordability and ease of access for homeowners and housing providers. An HRA would also play a key role in land use policy by developing, implementing, and enforcing building codes for preventing construction of new housing and other infrastructure in high-risk areas, like easements or setbacks along coastal and other flood-prone areas.

The CA HRA would also carry out cross-agency coordination with other State Agencies, like HCD, LCI, and OPR, to design policies that incentivize building in low-risk areas,¹⁰

⁷ National Institute of Building Sciences, “Mitigation Saves: Mitigation Saves up to \$13 per \$1 Invested,” 2019, https://nibs.org/wp-content/uploads/2025/04/ms_v4_overview.pdf.

⁸ Moira Birss et al., “Shared Fates: A Housing Resilience Policy Vision for the Home Insurance Crisis,” 2024, Climate and Community Institute, <https://climateandcommunity.org/research/shared-fates-home-insurance>, p. 82–86.

⁹ Birss et al., “Shared Fates,” p. 57.

¹⁰ CCI’s Green Social Housing Development Authority proposal provides a model for this; while it is a federal-level proposal, it could also be adapted to the state level: Gianpaolo Baiocchi et al., “Green Social Housing at Scale: How a Federal Green Social Housing Development Authority Can Build, Repair, and Finance Homes for All,” 2024, Climate and Community Institute, <https://www.climateandcommunity.org/green-social-housing-at-scale>.

implement tenant and consumer protections to ensure affordability, and integrate climate risk modeling across state activities (see Figure 3).

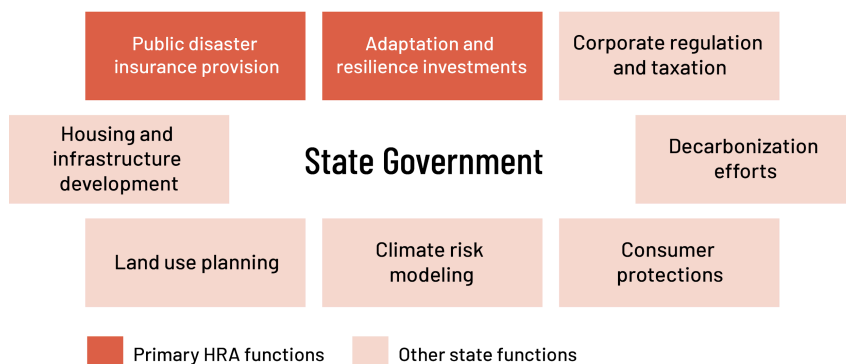


Figure 3: The HRA as part of a whole-of government approach to disaster risk mitigation and insurance.

Equitable, stable, affordable insurance

Insurance tools are uniquely positioned to support post-disaster recovery and increase resilience before and after disasters; insurance therefore must be available, affordable, and effective for all households and housing providers as the climate crisis increases the frequency and severity of disasters. Residential property insurance must also cover the full range of disasters that have some likelihood of affecting households in the state, both in recognition of the overlapping types of disaster risk faced by communities across the state, and because risk spreading strengthens insurance pools.

Yet the profit-protection tension in today’s private insurance markets will perpetually produce insurance gaps, particularly as climate change worsens disasters, and particularly for those with limited means. Private insurers have proven incapable of the task of dealing with large-scale, highly correlated disasters, particularly for the non-wealthy, affordable housing providers, and those living in risky areas through no fault of their own. Our research demonstrates that **robust, public disaster insurance for residential properties is the only way to ensure the existence of affordable, accessible, and comprehensive coverage for all.**

In the HRA model, private insurers would provide the standard, individual building-level policies that cover things like kitchen fires and burglaries while the state provides single-payer disaster cover up to a cap, at a standardized rate. Private insurers could offer “surplus” disaster insurance policies on top of the standard HRA policies: While HRA policies would cover what an ordinary household needs, the affluent could purchase further protection—as long as it complied with the risk reduction-oriented land use policies established by the HRA. This is akin to New Zealand’s National Hazard Cover

program.¹¹ **An interim step to achieve this could be to overhaul the state's FAIR Plan** to focus on adequate, affordable disaster coverage; restructure financial models; and move governance into public, not industry, control.¹²

Whether in the full HRA or the overhauled FAIR Plan, premiums for disaster insurance should be standardized, with a coverage cap for very expensive homes. This pricing mechanism turns risk-based pricing on its head by incentivizing the State to reduce the total costs of the program through its risk reduction work. Furthermore, this approach eliminates the possibility of rate setting that discriminates on marital status, credit score, or other problematic factors that private insurers may use to set rates.¹³

How we pay for it

Setting up an HRA would require adequate capitalization, especially in the initial phase as the program builds up sufficient surplus. Furthermore, dedicated funding sources alongside premium income would be necessary for adequate risk reduction resources and would also reduce the need for the HRA insurance program to rely heavily on risky and/or expensive hedging products like catastrophe bonds.

To identify adequate funding sources, CCI proposes an analysis of which entities are most responsible for the current climate-driven insurance crisis, and which would most benefit from stability in residential property insurance. Such analysis is crucial for equitably distributing the costs and benefits of a more stable insurance system and addressing reduced federal disaster-prevention funding.

Figure 4 suggests a possible approach. When it comes to assigning responsibility, we suggest taxes or fees on fossil fuel companies causing climate change and the insurance industry players that long knew climate change was a risk to housing and did little to change industry practices (including investments in fossil fuels).¹⁴ Reporting under SB 253 (the Climate Corporate Data Accountability Act) could provide a framework for identifying the amount of responsibility to be assigned to each entity. Among the types of entities that would benefit from stability in residential property insurance and therefore should

¹¹ Tina Mitchell, "New Zealand's Natural Hazards Insurance Scheme Is Based on Lessons of the Past," Conseguros, accessed November 24, 2025, <https://www.consegurosdigital.com/en/numero-21/sumario/contributions/new-zealands-natural-hazards-insurance-scheme-is-based-on-lessons-of-the-past/>.

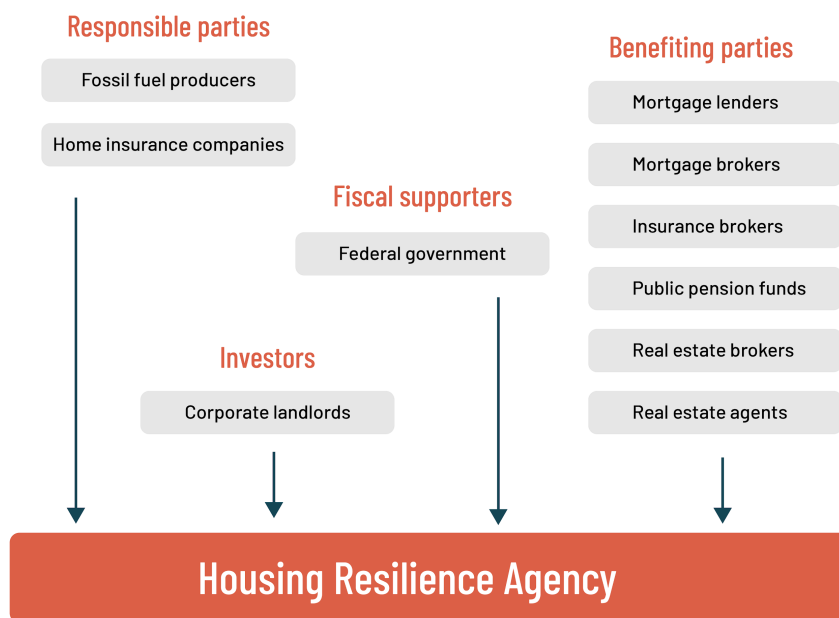
¹² See the full suite of recommended reforms in: Peñaranda Currie et al., "Insurers of Last Resort".

¹³ Moira Birss et al., "Penalized: The Hidden Cost of Credit Score in Home Insurance Premiums," 2025, Consumer Federation of America & Climate and Community Institute, <https://climateandcommunity.org/research/penalized-the-hidden-cost-of-credit-score-in-homeowners-insurance-premiums/>.

¹⁴ Peter Bosshard, "Fifty Years of Climate Failure: 2023 Scorecard on Insurance, Fossil Fuels and the Climate Emergency," 2023, Insure our Future, <https://global.insure-our-future.com/wp-content/uploads/2023/11/IOF-2023-Scorecard.pdf>.

contribute to a better system are property market lenders and real estate agents: Their business model rests upon the existence of insurable properties. In the California context, charges on utility companies whose faulty equipment contribute to wildfires may still make sense as an accountability measure, though we argue that no one entity should be the primary funding source for disaster risk mitigation or response, and corporate entities should not be permitted to pass along these costs to ratepayers or customers.

Figure 4: Sample funding sources for an HRA.



Risk sharing could also provide support for HRA financial stability. Multiple state HRAs could set up cooperation agreements with one another to pool resources, share risk, and provide mutual support during disasters.¹⁵

¹⁵ For more details, see Birss et al., "Shared Fates," p. 87–88.