BLUE RIBBON COMMISSION ON

CLIMATE ACTION AND FIRE-SAFE RECOVERY

IN COLLABORATION WITH

UCLA

Final Commission Recommendations and Action Plans

FOR THE RESILIENT AND SUSTAINABLE REBUILDING OF LOS ANGELES

&

UCLA Research Context and Considerations

INFORMING RESILIENT REBUILDING FROM THE JANUARY 2025 LOS ANGELES FIRES

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Organizations listed for identification purposes only.

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Full Report Structure

PART I:
FINAL COMMISSION RECOMMENDATIONS AND ACTION PLANS FOR THE RESILIENT AND SUSTAINABLE REBUILDING OF LOS ANGELES

Introduction

Overview and Executive Summary of Commission Recommendations

The Commission's Two Overarching Proposals for Rebuilding and Long-Term Resilience

Executive Summary of Commission Recommendations

Final Recommendation Action Plans

Immediate Recovery Needs (IR)

Building Codes and Resilience Standards (B)

Vegetation, Urban Landscapes, and Wildlands (V)

Insurance Reforms for Resilient Communities (I)

Land Use and Workforce (L)

Energy System Resilience and Modernization (E)

Water System Resilience and Safety (W)

Community Resilience, Equity, and Health (C)

Finance (F)

Governance and Accountability (G)

Appendix: Commission Working Groups

PART II:
UCLA RESEARCH CONTEXT AND CONSIDERATIONS INFORMING RESILIENT REBUILDING FROM THE JANUARY 2025 LOS ANGELES FIRES

Executive Summary

Introduction

Guiding Principles

Community Engagement: Learning from Fire-Impacted Communities

Context and Considerations

Framework for Change

Tracing the LA Fires

Current and Future Fire Risk Landscape

Communities in the Fire Paths

Lessons for Recovery and Rebuilding

Planning for Infrastructure and Evacuation

Institutions for Recovery and Rebuilding

Planning for Future Fire

Conclusion

References

Appendix: Learning from Fire-Impacted Communities

Acronyms and Abbreviations

PART I

Final Commission Recommendations And Action Plans

FOR THE RESILIENT AND SUSTAINABLE REBUILDING OF LOS ANGELES

Part I: Table of Contents

Introduction

The January 2025 fires changed the face of Greater Los Angeles and Southern California, representing one of the worst climate disasters in U.S. history in terms of cost and serving as a harbinger of future risks facing the region in terms of extreme drought, weather, heat, and fire.

Recovery of our region must go beyond rebuilding. Bold, coordinated action is needed to counter the risks of displacement, rising insurance costs, and deepening community vulnerability to future climate events.

That is why the Blue Ribbon Commission was formed.

The Commission's recommendations and action plans are presented below for policymakers and yet are also offered with the intent to inform all stakeholders as the region strives to embrace this once-in-a-generation challenge to rebuild fire-impacted communities and housing with greater resilience and sustainability.

Foundational to the work of this Commission is the recognition—gleaned from post-disaster experiences in many other communities—that a coordinated response from all levels of government is essential for a resilient and equitable recovery. It also requires a concerted effort on the part of elected leaders and government officials to build and maintain the trust of the communities they represent, while ensuring those most vulnerable get the assistance and resources they need to rebuild and return to their communities.

By acting decisively, Greater Los Angeles can become a model for climate-resilient, equitable recovery—protecting future generations from compounding climate threats and serving as an example that will be seen by the world during the 2028 Olympic and Paralympic Games.

The Commission looks forward to working in the weeks and months ahead to encourage the adoption and implementation of the recommendations, and to continue informing efforts to advance recovery and the region's long-term resilience. The Commission's recommendations are informed by Commissioner expertise, UCLA research, community input, and stakeholder feedback. We are grateful to all those who have contributed to this collective effort.

BACKGROUND

Established by Los Angeles County Supervisor Lindsey Horvath in February 2025, the Blue Ribbon Commission on Climate Action and Fire-Safe Recovery brings together a broad range of independent experts and community leaders.

The Commission's goal is to deliver actionable and timely recommendations for how the City of Los Angeles; the cities of Pasadena, Malibu, and other affected municipalities; the County of Los Angeles; the state of California; the federal government; and key partners can lead a climate-resilient rebuilding effort.

The Commission kicked off its work with a two-day retreat Feb. 28 and March 1, 2025, in collaboration with research partners at UCLA, forming six initial working groups on critical topics (i.e., energy, water, building codes, governance and finance, community resilience and wellness, and land use). A short release of early action recommendations (labrcommission.org/) was issued on March 18, 2025, to policymakers. In May 2025, the Commission published the *Initial Recommendations and Draft Action Plans for the Resilient and Sustainable Rebuilding of Los Angeles County* (laincubator.org/wp-content/uploads/2025/05/BR-Commission-Initial-Recommendations-Draft-Action-Plans_050725.pdf). This June 2025 report expands and refines the early work, building on the Initial Recommendations with an updated and final cohesive set of policy recommendations and targeted actions that are essential to sustainable and resilient rebuilding.

The Commission's aim is to enable communities to rise out of the ashes stronger, including by helping:

- Residents, neighborhoods, and our region rebuild single-family homes, multifamily housing, schools, places of worship, community buildings, commercial buildings, and infrastructure in a more resilient, sustainable, equitable manner to better ensure long-term survivability and insurability;
- Retrofit existing homes, businesses, and infrastructure in at-risk communities, while supporting the well-being of residents, workers, and community members; and
- Advance regionwide climate mitigation and resilience measures and investments to reduce risks from other climate shocks and disasters.

In drafting these recommendations and action plans, the Commission drew on a wide range of expertise. Individual Commissioners brought their own knowledge and professional experience, and deliberated with one another in working groups. In partnership with UCLA along with other groups and stakeholders, the Commission reviewed work from other rebuilding-focused organizations across the region, and consulted with subject matter experts, advocacy organizations, policymakers, and community members leading efforts in the fire-devastated neighborhoods. Its work was further informed and strengthened by research and programmatic support from UCLA, whose team prepared background materials and briefings, provided legal and policy expertise, and coordinated dialogues with experts across a wide range of topics and disciplines.

Community Engagement and Stakeholder Input

To support community engagement, the UCLA research team conducted a three-month effort to identify shared goals, concerns, and key priorities of residents and community-based organizations affected by the Palisades and Eaton fires. Working with the Commission, UCLA prioritized direct dialogue with those impacted, ensuring community voices guided the Commission's recommendations.

The Commission and UCLA would like to recognize the community members and fire survivors for their dedication, tireless advocacy, and proactive role in driving the recovery process with resilience and foresight. Fire survivors are not only tackling urgent needs through grassroots organizing, but they are also developing thoughtful and ambitious strategies for rebuilding. Various organizations are supporting

recovery by offering immediate financial relief, gathering data on soil contamination, providing preapproved rebuilding plans, coordinating bulk purchasing to reduce construction costs, and mobilizing to prevent land speculation. These survivor-led initiatives, often spearheaded by individuals balancing full-time jobs while navigating their own recovery, demonstrate courageous leadership and a profound commitment to community-led restoration.

To ensure community voices informed the Commissioners' final recommendations, the Department of Angels partnered with the Commission and UCLA to host community-specific conversations with residents and community leaders from Altadena and the Palisades, as well as additional specific conversations on topics related to resilient and sustainable rebuilding. In addition, the Commission and UCLA organized convenings with residents of Malibu and Sunset Mesa.

In response to the Initial Recommendations and Draft Action Plans, many stakeholders and other community members submitted comments through the Commission website. Along with the community conversations, this stakeholder feedback greatly informed the final recommendations.

The Commission would like to express its deepest gratitude to the community members who dedicated their time to engage with us and provide feedback, as well as the stakeholders who took time to review and respond to the Initial Recommendations.

Commission's Next Steps

As the only group established explicitly to focus on the resilient and sustainable rebuilding of Los Angeles, the Commission's mandate is clear: support and advance this tragic yet once-in-a-generation responsibility to rebuild communities in a way that reduces vulnerabilities to climate hazards, while working toward a stronger, safer, and more resilient region. By doing so, lives and communities can be rebuilt while creating a national—and global—model for climate-resilient disaster recovery. In addition, several of the recommended actions will also help the LA region be more resilient in the face of ever-present seismic risks.

Over the last four months, the Commission developed, refined, and finalized its recommendations and action plans by:

- Deepening engagement with and obtaining feedback from representatives from the Palisades, Malibu, Altadena and other fire-affected communities;
- Presenting key recommendations to and engaging in dialogue with policymakers, other recovery and rebuilding initiatives and groups, stakeholders (e.g., insurance industry, lenders, housing organizations), utilities, and others; and
- Drawing upon UCLA's research to refine strategies for rebuilding neighborhoods and infrastructure in an equitable and resilient manner.

The Commission's Final Recommendations and Action Plans for Resilient and Sustainable Rebuilding along with the research and findings from UCLA are below. This document is also posted on the Commission's website. Please visit the website (labrcommission.org/) to learn more.

Overview and Executive Summary of Commission Recommendations

The Commission and its working groups developed recommendations for policy makers across 10 categories.

The recommendations and action plans are drawn and synthesized from the working group's deliberations, along with input from the community, experts, advocates, and policy makers. The recommendations, while targeted to policymakers, are also relevant to community members, philanthropic organizations, utilities, and other key stakeholders. In keeping with this mandate, the Commission and its working groups developed recommendations covering 10 categories.

When rebuilt and newly constructed homes are constructed using the latest building and energy codes along with the best science related to wildfire home ignitions and conflagration, the neighborhood and individual property owners will increase their insurability. The recommendations on materials (e.g., Chapter 7A practices, fire-resistant and energy efficient high performance windows with tempered glass) and landscaping (e.g., Zone 0) are the elements we have heard from experts that insurers want to see in the homes for which they choose to write policies.

Other recommendations (e.g., distributed energy and water systems, buffer zones) enhance not only resilience, but also survivability and defensibility of housing, other properties, and neighborhoods.

The executive summary below includes:

- An overview of the Commission's two principal, overarching proposals for sustainable rebuilding and long-term resilience: the Resilient Rebuilding Authority and a County-wide Fire Control District;
- Summary of the Commission's recommendations to policymakers;
- Recommendations and actions needed in the next three to six months; and
- Legislative action and budget requests to the state legislature and Governor.

After the executive summary, the detailed action plans and recommendations for each working group topic area can be found, followed by UCLA's research report that complements the Commission's work.

THE COMMISSION'S TWO OVERARCHING PROPOSALS FOR REBUILDING AND LONG-TERM RESILIENCE

Through this process the Commission identified two principal, overarching proposals for dedicated governing bodies with critical powers needed to coordinate and carry out the recommended actions for resilient rebuilding of affected communities and enhancing the region's long-term fire resilience:

1. Formation of a Resilient Rebuilding Authority to meet the immediate, extensive, and ongoing resilient rebuilding needs in Altadena and Pacific Palisades.

2. Creation of a complementary Los Angeles County Fire Control District to support fire adaptation and community resilience throughout the region and into the future.

While they are not a panacea, these two cross-cutting, comprehensive recommendations are critical to our progress in dealing with the magnitude and scope of the rebuilding and long-term mitigation of risk. Hence, these two recommendations are summarized below in greater detail than the other recommendations.

1. Managing Recovery: The Resilient Rebuilding Authority

To streamline complex recovery efforts, prioritize and support the return of residents and businesses, and enable rebuilding by displaced owners of homes and rental and commercial properties, the Commission recommends a Resilient Rebuilding Authority covering all areas affected by the January 2025 fires be established by state legislation.

California has long recognized the value of development authorities conferred with broad powers to manage, plan, and finance rebuilding efforts after a disaster. A Resilient Rebuilding Authority (Authority) with broad financing and land acquisition powers can help residents and business owners overcome many of the choke points and barriers to rebuilding, while expediting the restoration of civic and commercial infrastructure that anchors and facilitates a community's recovery. The Commission proposes a Rebuilding Authority expressly designed to counterbalance the forces that drive displacement and inequality in the aftermath of disasters. The Commission is clear that the Authority should have many of the powers historically granted to a redevelopment agency while complementing local governments' role for building permitting and approvals, while partnering on infrastructure and distributed resources where needed and as detailed below.

Through land banking and coordinated design and construction, the Authority can lower costs and ease the burden of rebuilding, either supporting property owners through their own rebuilds or acquiring properties to rebuild itself, which then would be resold with priority given to returning residents. The Rebuilding Authority can also advance resilience by ensuring that construction at scale meets fire-hardened building standards and enabling acquisition of properties that could be put to use for community mitigation measures. In exercising its powers, the Authority should be required, through either goals or mandates, to advance resilience and clean energy objectives and to deliver rental and owned housing options (including housing type and income availability) no less than what existed prior to the fires.

The Commission recommends establishment of a single Authority to oversee both burn areas, with:

- **Representative Governance of Communities:** Appointed by key elected officials, the Authority will be governed by representatives who have related expertise to guide the Authority's CEO and staff leadership. Inclusion of residents or property owners from the burn areas as of January 7, 2025 is critical. Appointments will be made by the Governor, state legislators representing the affected districts, and affected local governments.
- **Two Divisions Representing Distinct Needs of Communities:** The Authority will have two separate geographic divisions, each guided by Community Advisory Committees that provide additional community voice and ensure accountability in Authority operations.

- **Powers and Financial Assistance Tools to Aid Communities in Resilient Rebuilding:** To aid communities in rebuilding and other priorities noted above and complement the existing role of local and state government in the rebuilding, the Authority's powers will include shaping and overseeing a range of products to incentivize private sector investment into recovery.
  - Initiate tax products which may include tax increment financing;
  - Convene philanthropic, and other private funding;
  - Issue bonds backed by tax increment financing or other sources to support recovery;
  - Drive Public Private investment, advancing innovative financing products and convening investment community;
  - Purchase lots at a fair price for land banking;
  - Select builders to reconstruct properties to resilient rebuilding standards and sell homes with first look provided to returning residents and their families;
  - Manage and/or coordinate rebuilding and related logistics and costs;
  - Provide financing options for families that lack ability to cover costs of rebuilding on their own;
  - Create economies of scale for acquiring equipment and materials;
  - Create more efficiency in real-estate processes in order to effectively advance rebuilding in a timely manner;
  - Plan and/or coordinate with local agencies and/or utilities as needed to advance installation of community-scale resiliency infrastructure such as cisterns, drought-resistant native street tree canopy, micro-grids, and battery back-up systems; and
  - Carry out other activities that enhance property insurability and promote a resilient and sustainable recovery.

Creation of a Resilient Rebuilding Authority will help ensure implementation of the many of the Commission's recommendations that focus on developing the capacity, workforce, and staged coordination that are necessary to support the region's resilient recovery. Specifically, the following are just some of the recommendations that ideally would be carried out largely or primarily by the Authority. Without an Authority to exercise and streamline these activities, the burden will be on other government entities to coordinate and implement these recommendations:

Building Codes and Resilience Standards: Implement recommendations on maximizing structural spacing (B-1), enhancing fire-resistant building standards (B-2, B-3), and supporting education around sustainable design practices and materials (B-7).

Energy System Resilience and Modernization: Support the development and pre-approval of high resilience and energy-efficient designs (E-2) and, in coordination with utilities, facilitate the development and siting of distributed energy resources, microgrids, and virtual power plants alongside undergrounding efforts (E-4, E-5).

Vegetation, Urban Landscape and Wildlands: Implement defensible space requirements (V-3, V-4) and coordinate landscape planning (V-5, V-6) in rebuilt areas.

Water System Resilience and Safety: Coordinate with local governments and fire departments to ensure property-level water systems standards that support enhanced firefighting capabilities and prevent contamination from entering the water system (W-3, W-4).

Land Use and Workforce: Facilitate appropriate densification and mixed-use development along commercial corridors (L-1) and voluntary transfer of development rights to enable redevelopment in the most suitable areas (L-5).

Community Resilience, Equity, and Health: The Authority can promote community cohesion and facilitate the return of displaced communities by working with other local agencies and organizations to orchestrate community events (C-1, C-5) and can coordinate rebuilding community facilities and civic infrastructure like parks, schools, and houses of worship equipped to serve as disaster response and recovery centers (C-6).

 **= Rebuild Authority Focus**

2. Ensuring Resilience to Future Fire: The LA County Fire Control District

To implement proactive, long-term fire mitigation across multiple scales, the Commission recommends establishing an LA County Fire Control District with a dedicated funding stream to carry out a range of mitigation activities, including creation of vegetated greenspace buffer zones and coordinated retrofits for vulnerable neighborhoods.

Although wildfire has always been part of the landscape surrounding Los Angeles, the devastation of January 2025 demonstrates that fire's risk to Angelenos has become grave. As climate change progresses, the conditions that allow intense wildfire to reach into densely populated areas are all but guaranteed to reappear. In a housing-scarce region, communities will continue to develop in areas exposed to high fire hazard. This escalating risk demands serious and sustained attention to protecting populated areas from urban fire spread.

The Fire Control District will plan and implement a regional fire and climate mitigation strategy. The District will be responsible for managing a portfolio of different fire mitigation activities including vegetation management, fire detection and evacuation planning, and support for home hardening and defensible space. Beyond that, it also will have authority to acquire land or easements to construct and maintain a buffer zone with vegetation appropriate to its location, whether on the open space or urban side of the wildland-urban interface. In its governance and decision-making rules, the District should be required to design strategies that are adaptive to advances in scientific knowledge and to evolving conditions in the natural and built environments.

 = Fire Resilience Focus

Fire mitigation strategies are only effective if maintained over the long term. A parcel tax or fee on properties, approved by voters, would be the most reliable source of funding to establish the District and maintain mitigation strategies. The newly established tax or fee could be assessed just on properties in a specified coverage area, or on all property within the County with risk-adjusted fees assigned by severity of fire risk. With this dedicated funding, the District will be able carry out many of the Commission's recommendations that focus on increasing the region's resilience to future fire, in addition to those outlined in Recommendation G-2:

Building Codes and Resilience Standards: Facilitate the implementation of a comprehensive retrofit program for fire resilience (B-8).

Vegetation, Urban Landscape and Wildlands: Promote water-efficient and resilient landscaping (V-5) and help ensure defensible space is maintained in high-risk areas over the long term (V-3, V-4, V-6).

Community Resilience, Equity, and Health: Coordinate with local governments to facilitate a community-driven wildfire mitigation planning process (C-8).

Although the District provides County-wide benefit with retrofits and fire risk reduction, the Commission recognizes the need to ensure such a county-wide measure is supported by voters. As such, a ballot measure may be broadened to reflect the needs for mitigating extreme climate hazards beyond fire in its final formulation.

EXECUTIVE SUMMARY OF COMMISSION RECOMMENDATIONS

Below are the top-line summaries of each recommendation. The full text of the recommendations and related context are in the following section of the report, Final Action Plans with Full Recommendations.

ACTION KEY

= Rebuild Authority Focus

= Fire Resilience Focus

= Urgent Action

Immediate Recovery Needs (IR)

IR - 1. Expand the Federal Debris Removal Program to Cover all Properties in the Burn Areas

- All properties within the burn areas–including nonprofits, churches, mobile home parks, non-owner occupied housing, and commercial properties–should be included in the FEMA/USACE Phase 2 Debris Removal Program. Priority consideration should be given to properties that are suitable for temporary housing and other recovery-related uses, including construction staging areas and worker housing.
- FEMA, USACE, CalOES, and other partners should coordinate with insurers and funders to identify supplemental resources for debris removal.

IR - 2. Standardize Soil Testing and Remediation

- A standardized, parcel-specific soil testing and remediation program should be implemented for all properties in the Eaton and Palisades burn zones. The State should provide technical and financial assistance to Los Angeles County for this program.
- The LA County Department of Public Health should issue clear, consistent public health guidance on evaluating and remediating airborne, water-borne, and soil risks in fire zones.

IR - 3. Continue State and Federal Involvement in Interagency Recovery Coordination

- The Interagency Recovery Coordination (IRC) structure should continue with ongoing support and participation by federal and state agencies until the Resilient Rebuilding Authority is established, or the County, City of LA, and other impacted cities establish some other long-term recovery multi-level agency coordination entity.

IR - 4. Coordinate Near- and Long-Term Housing Recovery

- The Governor and Legislature should support the California Department of Housing and Community Development's (HCD) ongoing involvement in the fire recovery and reconstruction. A senior HCD official should be appointed to continue the support for local near- and long-term housing recovery efforts and to help bring all available resources, including funding and technical assistance, to communities impacted by the January 7 fire.
- HCD should facilitate collaboration between housing developers and the California Department of Insurance to address insurability challenges in rebuilding.

IR - 5. Limit Exemptions to Owners of Record or Immediate Family Members

- Exemptions to code and/or provisions for "like-for-like" provided by both the City and the County should only benefit the owner of record on January 7, 2025 or a family member of the owner of record on that date.

Building Codes and Resilience Standards (B)

B - 1. Maximize Structural Spacing

- Local governments should establish setback requirements to maintain spacing between structures, ideally aiming for at least 10 feet of separation.

B - 2. Extend Chapter 7A Applicability to Entire Eaton Burn Area

- Los Angeles County should adopt a local ordinance designating the Eaton Fire burn area as a Very High Fire Hazard Severity Zone, so that Chapter 7A and other fire-resilience building standards apply uniformly to all structures being rebuilt.

B - 3. Enhance Chapter 7A with the Insurance Institute for Business and Home Safety (IBHS) Standards

- The Commission encourages the use of the IBHS Base and Plus levels in reconstruction to enhance protection and increase the likelihood of obtaining more affordable insurance–especially once the California Department of Insurance completes the Sustainable Insurance Strategy. Complementary income-based incentives should be provided by the state and utilities–as recommended below–to cover the additional costs for resilient rebuilding for low-income families, along with other financial tools such as soft seconds for those most vulnerable.

B - 4. Create Statewide Standards for Smoke Remediation

- The State should finalize and adopt uniform, science-based smoke remediation standards developed by the Department of Insurance's Smoke Claims & Remediation Task Force. State agencies should be required to enforce these standards to protect returning residents and ensure consistency in insurance claims and home restoration practices.

B - 5. Create Programs for Third-Party Contractors to Review Permits

- The County of LA, the City of LA, and other affected cities should establish official lists of pre-approved third-party reviewers (plan checkers and inspectors). Rebuild applicants should be offered the option to use third-party reviewers for faster permitting and inspection. The County and affected cities should audit a set percentage of third-party-reviewed projects for compliance, and evaluate broader expansion of the program after six months.

B - 6. Require Training if Third-Party Review and/or Self-Certification are Allowed

- The City and County of Los Angeles should require and facilitate mandatory completion of specialized training from accredited organizations (e.g., AIA, USGBC, community colleges) that covers resilience/sustainability best practices (including Chapter 7A, Zone 0, fire-resistant and sustainable materials/design) as part of qualifying for self-certification or as a third-party verifier. Barriers should be removed to accessing training programs in order to expand the pool of qualified professionals.

B - 7. Increase Education Around Sustainable Design Practices and Materials

- Utilities and local governments should partner with organizations (e.g., AIA, USGBC) to provide residents–along with architects, engineers, and contractors–with educational materials and information on incentives for sustainable design strategies, including electrification, Passive House design, and toxin-free materials.

B - 8. Implement Wildfire Protection Retrofit Program

- Either at the state or at the local government level–and ideally through an LA County Fire Control District–a comprehensive retrofit program should be established to reduce the overall wildfire risk within communities by combining financial incentives, mandates, and public education to bring older buildings up to modern fire safety standards (e.g., ember-resistant vents, noncombustible siding, defensible space compliance).

Vegetation, Urban Landscapes and Wildlands (V)

V - 1. Conduct Post-Fire Tree Assessments Before Removal

- The City of LA's Urban Forestry Division, Office of Forest Management or City Plants should implement procedures for assessments by arborists with Tree Risk Assessment Qualification (TRAQ) before removing fire-damaged trees, to better preserve viable mature trees that provide fire resilience, cooling, and ecosystem value.

V - 2. Update Fire Hazard Severity Zone (FHSZ) Maps for Urban Conflagration Scenarios

- CAL FIRE should update the Fire Hazard Severity Zone (FHSZ) maps every 5 years using the best available science, to reflect the potential for urban conflagrations and to account for how vegetation and structures interact to affect fire ignition and spread in Local Responsibility Areas.

V - 3. Develop and Apply Zone 0 Standard for All Burn Areas

- The Los Angeles County Board of Supervisors, the Los Angeles City Council, and all local governments with territory designated as Very High FHSZ should develop and adopt comprehensive local defensible space ordinances to specifically address the clearance of combustible materials in Zone 0 (0 - 5 feet from structures). These ordinances should allow well maintained, existing, mature, well-irrigated trees if they are trimmed within an acceptable distance of the roofline.

V - 4. Implement Defensible Space Requirements for a Fire-Resilient Urban Canopy

- CAL FIRE (for State Responsibility Areas) and the Los Angeles County and municipal Fire Departments (for Local Responsibility Areas) should develop and implement consistent defensible space standards for properties in High and Very High FHSZs. The City of Los Angeles should adopt the same defensible space definitions as the County and State of up to 100 feet. Regulations in Zones 1 and 2 (5–100 feet from structures) should prioritize establishment of healthy, well-maintained trees and fire-resistant, native plant species.

V - 5. Promote Water-Efficient & Resilient Landscaping and Water Capture

- The California Department of Water Resources, Los Angeles County Department of Public Works, the City of Los Angeles Bureau of Sanitation and Environment, and all cities with high fire hazard areas should develop a plant species scoring system that integrates water efficiency, fire resistance, and climate resilience; incorporates the system into updated and enforceable MWELO standards; and incentivizes rainwater capture, bioswales, and permeable surfaces through LID ordinances.

V - 6. Require Landscape Plan Review for Defensible Space

- Los Angeles County and all cities within Very High FHSZ should require submission and review of landscape plans as part of the building permit process to ensure compliance with local defensible space ordinances (including Zone 0), use of ignition-resistant materials, and reduced water use, while supporting a healthy tree canopy.
- Local governments should implement programming to increase public awareness about the benefits of native plants (including sample plant palettes), including reducing wildfire risk, conserving water, and increasing biodiversity.

V - 7. Reduce Spread of Highly Flammable Invasive Plants and Protect Biodiversity

- The LA County Agricultural Commissioner and LA County Weed Management Area should work together–in consultation with other relevant organizations–to develop and fund an Early Detection/Rapid Response Program targeting high priority invasive plant species in burn areas.
- In rebuilding efforts, communities should prioritize the ecological restoration of open spaces to encourage the regrowth of California native plant communities and reduce flammable invasive plants and trees.

V - 8. Replant and Restore the Burned Wildlands

- Resource agencies (e.g., California State Parks, National Parks Service) should work with local California Native American tribes who are listed on the State Native American Heritage Commission (NAHC) and LA County Harms Report to develop

restoration guidelines. Complete an assessment within 6 months of damage to sensitive species and habitats, followed by restoration efforts to recontour, decompact, and add erosion control materials so that native plants can re-establish themselves.

- Resource management agencies working with academics should assess the habitat damage in and adjacent to the burn zones to coastal estuaries and nearshore habitats within 6 to 9 months. Restoration should be site-specific, and include restoration of watersheds to protect the water quality and supply.

V - 9. Manage, Restore, and Maintain Habitat Quality

- Resource agencies should develop a restoration plan within a year for the wildland areas within the fire perimeters and closely adjacent. Within 6 months, local governments in or adjacent to High or Very High FHSZ should develop, approve and implement policies to reduce ignition risk in wildland areas on red flag warning days.
- Wildland resource managers should meet at least annually to improve coordination, consistency and efficacy of habitat management approaches.
- Local governments and resource agencies should pilot innovations for remote fire detection surveillance cameras–joined by drones for detection and potential immediate response for difficult to reach areas and high wind events.

Insurance Reforms for Resilient Communities (I)

I - 1. Advocate for Insurers and the FAIR Plan to Support Resilient Rebuilding

- Insurers and the FAIR Plan should incentivize investment in fire risk reduction, including discounts for IBHS structure and neighborhood standards, and study a community-scale discount model for application to communities at risk from fire hazard. Such a program should offer no- or low-cost endorsements to pay for home hardening at the time of a substantial loss and offer grants to expand wildfire mitigation.

I - 2. Provide Means-Tested Premium Assistance for Low- and Moderate-Income Households

- The California Department of Insurance should adopt a state-level policy for private insurance or the FAIR Plan to provide means-tested, sliding-scale insurance premium assistance to households based on income, with premium assistance funded by public and other sources.

I - 3. Support State Efforts for Greater Public Oversight and Integration of Risk Reduction into Insurance-Sector Models for Underwriting and Pricing

- The Commission urges prompt and full implementation of the Insurance Commissioner's 2023 Sustainable Insurance Strategy to allow insurers to price wildfire risk and wildfire mitigation in rate-setting.

- The State should support data access and work with the catastrophe modeling vendors to develop standards for pricing and accounting for wildfire mitigation measures, while encouraging ongoing research and funding a public wildfire catastrophe model to benchmark pricing, support wildfire planning, and increase transparency in risk data.

I - 4. Protect Residential Renters from Losses With Household Renter Insurance

- To protect renters from property loss or the impacts of displacement, the Insurance Commissioner should research current rental insurance take-up rates and explore renter-specific insurance regulations, along with subsidies for extremely low-income households.

Although not a formal recommendation, the Commission encourages CDI to explore policies that promote sufficient coverage to meet full reconstruction costs, not just mortgage value, for all homeowners and property owners.

Land Use and Workforce (L)

L - 1. Allow for Increased Density in Commercial Areas & Corridors

- The City and County should encourage and expedite the development of multi-family and mixed-use projects in areas that can best accommodate them, such as in commercially-zoned and multi-family-zoned lots and on lots that are located along commercial corridors, allowing increased density when a specified-percentage of designated affordable units are provided.
- The City and County should create incentives for fire hardening and resilient development in exchange for modifications to certain development standards or design requirements.
- The City should redefine "Eligible Projects" and the County should redefine "like-for-like" rebuilds to include projects that maintain prior size and scale but introduce or increase housing units.
- The County should support continued use of the State Density Bonus Law in appropriate locations and reconsider moratoriums on its application in fire-impacted areas.

L- 2. Create Temporary and Permanent Housing Opportunities in the Burn Areas

- The Cities of Los Angeles, Pasadena, Sierra Madre, and Malibu and the County of Los Angeles should enable displaced residents to remain in their neighborhoods by preserving access to affordable rental units and Section 8 housing, permitting use of temporary housing options—such as ADUs, RVs, and tiny homes—on affected lots, and ensuring local permitting aligns with state Executive Order N-9-25.
- Affected cities and the County should extend temporary housing flexibility beyond 2028 if needed; and prioritize utility flexibility (e.g., mobile waste services); and develop a real-time inventory of vacant rental units to support rehousing efforts.
- FEMA should implement the Direct Lease program to supplement traditional housing vouchers for disaster-affected households.

L - 3. Build Workforce Housing for Construction Workers and their Families

- The City of LA, the County of LA, and other local governments should develop programs and expedited approval processes to promote the construction of worker housing on publicly-owned and religious institution-owned land, and where appropriate, schools, to produce an initial set of units by January 7, 2026, to house the workers who will build replacement housing in the burn areas. Pre-approved designs, tax credits for modular rental housing, and the County Land Bank pilot program should be used to assemble 4-5 larger sites for rental worker housing.
- Local governments in the affected areas should create pathways for quick construction of alternative housing types–which could include modular, prefab and other quick, low-cost assembly methods–on property owned by government and religious institutions.

L - 4. Expedite Workforce Training for the Rebuild and Landscape Restoration

- To rapidly develop a construction and habitat restoration workforce with the capacity to meet the scale needed for the rebuild and restoration effort, the City of Los Angeles Economic and Workforce Development Department (EWDD) and the County Department of Economic Opportunity (DEO) should establish and enhance partnerships across the public and private sectors and with community organizations to ensure protections for undocumented workers and recent immigrants.

L - 5. Create Voluntary Transfer of Development Rights (TDR) Programs

- The City of LA and the County of LA should establish a TDR program to shift development from high-risk, constrained, or uninsurable parcels to more suitable sites (e.g., commercial zones and corridors), allow institutional property owners (e.g., churches, schools) to consolidate or transfer development rights across their properties.The City and County should conduct real estate market analysis to set fair pricing formulas for development rights, streamline the TDR process to avoid project delays and encourage broader participation, and tailor program criteria to support housing production while retiring development rights from fire-prone, inaccessible, or ecologically sensitive locations.

Energy System Resilience and Modernization (E)

E - 1. Provide Energy Code Certainty, Accelerate Resilient and All-Electric Construction, and Educate Stakeholders

- The County of LA should fast-track permitting for resilient, all-electric rebuilds using a similar approach to the City's EO 5, while providing expedited support for all-electric, resilient rebuilds.
- The City should implement EO 5 with urgency.
- The Governor and CEC should clarify state energy code requirements for all rebuilds and affirm the benefits of all-electric and battery-ready designs in achieving GHG reduction targets. The CEC should

develop an AI agent for navigating resilient building requirements.

- The State, local governments, utilities, and school districts should prioritize solar and battery installations, promote modular designs, create incentive programs, and expand access and financial incentives. They should prioritize low-income households by collaborating with utilities and nonprofits to leverage standardized plans and available incentives, and improve access to training for contractors and the trades.

E - 2. Develop Pre-Approved Designs and Streamline Permitting and Interconnection

- The City and Count should each create a set of City- and County-level master permits and/or pre-approved designs for fire-resistant, all-electric homes (e.g., Passive House) and building systems. Include a rapid permit for electrical system designs (e.g., solar and battery storage) that are pre-approved by fire department and building officials.
- Local governments should implement automated permitting tools like SolarAPP+, offer expedited, fee-waived, bundled permits for clean energy rebuilds and create a master permit for all-electric whole home designs.
- The Governor should direct the CPUC and CEC to confirm state incentive program eligibility (SGIP, TECH Clean CA) for locally pre-approved designs.
- All utilities should adopt an emergency policy to expedite interconnection for rebuilds.

E - 3. Provide Dedicated "Resilient Rebuild" Incentives

- The Governor and Legislature should appropriate substantial state funding for "resilient rebuild" incentives (e.g., the Wildfire and Natural Disaster Resiliency Rebuild with $54 million or more for Altadena, Malibu, and Sunset Mesa, and $56 million or more for Palisades and Pasadena), as well as provide additional income-based incentives for low-income residents who need additional financial support.
- The State should explore executive actions and legislation to allow stacking of state, local and utility incentives for rebuilding in fire-torn areas, approve a permanent solar/storage property tax exclusion (i.e., SB 710) and provide income-qualified cash incentives for all-electric rebuilding, including through the Resilient Rebuilding Authority.
- The City of Los Angeles, LADWP, County of Los Angeles, and Southern California Edison should establish local, stackable rebate and incentive programs that complement and leverage state funds for qualifying systems (i.e., portion of Chapter 7A costs, heat pumps, batteries, etc.).

E - 4. Prioritize Strategic Undergrounding & Fire-Safe Infrastructure in Equitable Manner

- Utilities should prioritize undergrounding of power lines to reduce ignition risk.
- Costs to connect homes that remain intact should be borne by utilities, and/or via funding provided via state budget and potential federal reimbursements. Alternative financing mechanisms beyond utility rate increases should be explored.
- Utilities should take steps to reduce costs to ratepayers and improve safety, including co-locating fiber/broadband conduit when trenching and undergrounding, integrating future electrification capacity needs when planning for undergrounding, and implementing safety measures like auto shut-off valves where gas infrastructure remains.

E - 5. Strengthen and Modernize the Electrical Grid with Distributed and/or Bidirectional Energy Resources (DERs), Virtual Power Plants (VPPs)

- The State should expand grants and incentives for fire-zone microgrids, DERs, and VPPs.
- The Los Angeles Department of Water and Power (LADWP), Pasadena Water and Power, and Southern California Edison should integrate high levels of DER.

in service planning and upgrades to distribution infrastructure in fire zones.

- LADWP, Pasadena Water and Power, and SCE should install load management tools, ensure battery back up power for critical water infrastructure, and prioritize microgrids at critical facilities. They should also explore VPPs, and conduct advance planning for vehicle to grid (V2G) and vehicle to home (V2H). Utilities should also explore where microgrids can provide neighborhood-scale back-up power solutions to multiple properties, reducing the need and cost for each individual building to install solar and battery storage systems.

E - 6. Ensure Resilient Communication and Essential Services During Public Safety Power Shutoffs

- Utilities should coordinate with telecommunication and other essential services providers to ensure system resilience and that PSPS preparations and appropriate notification protocols are in place.
- Utilities should plan and communicate with essential service providers–in particular first responders and hospitals–about being ready for PSPS.

Water System Resilience and Safety (W)

W - 1. Assess Existing Conditions and Needs Before Rebuilding

- The County and affected water utilities should complete a comprehensive evaluation to understand current system damage, ongoing vulnerabilities, and opportunities for improvement, including an inventory of wildfire damage.
- All water utilities should seek state/federal funding for upgrades.
- The County should evaluate progress on post-Woolsey Fire recommendations.
- LADWP, Los Angeles County Department of Public Works (LACDPW), and other agencies as appropriate should conduct vulnerability assessments for water/sewer systems and small utility capacity including testing system flow rates.
- The Los Angeles County Fire Department (LACoFD) and City of Los Angeles Fire Department (LAFD) should plan for firefighting without aircraft.
- All water utilities should site critical water infrastructure outside high-risk zones, working collaboratively with LACoFD and LAFD.

W - 2. Response Actions to Reduce Exposure to Fire-Related Contaminants Exposure

- State and local government actors should test drinking water for VOCs before lifting health advisories and develop a user-friendly portal for public water quality information.
- Implement short- and long-term erosion control to prevent sediment and pollutant runoff while upgrading low-flow diversion infrastructure and stormwater systems.
- The Los Angeles County Department of Public Works and City of Los Angeles Bureau of Sanitation and Environment should increase the capacity of low flow diversions so they can handle the first flush of pollution for the first two hours or .01 inches of a storm.
- Create post-disaster surface water monitoring programs while developing risk-based thresholds for recreational exposure.
- Ensure energy resilience at water infrastructure sites using solar and batteries.

W - 3. Enhance Regional and Local Firefighting Capabilities

- LACoFD and LAFD should collaborate with other agencies to update and align water infrastructure design with fire protection standards including fire flow volumes, residual pressure, hydrant design and spacing. The agencies should also coordinate refill locations for firefighting helicopters.
- Local governments should increase distributed on-site water reserves for firefighting, encourage the use of external sprinklers with distributed on-site water storage and batteries, and facilitate strategic service shutdowns to protect water pressure during firefights.
- LADWP and other water districts should evaluate existing and potential connections with adjacent districts to share access to potable, recycled, and other water sources, as well as expand connectivity between water systems and create hyperlocal non-potable water storage through cisterns at rebuilt parks, schools and even rebuilt housing in high risk areas.

W - 4. Protect Building-Scale and Property-Level Infrastructure

- Water utilities and local governments should require new water meters for burned structures to be installed in insulated vaults. Copper piping should be used in high-risk areas to reduce contamination risk along with backflow devices to prevent system contamination.

W - 5. Expand Resilience of the Wastewater System in Places Currently on Septic Systems

- The City of Malibu should evaluate existing septic/on-site wastewater treatment systems (OWTS) and pipes,consider various wastewater management and conveyance alternatives, and consider connecting to sewers in vulnerable areas like Malibu and Palisades. It should also assess damage to septic systems and prevent discharge into Santa Monica Bay.
- The City of LA and County of Los Angeles should complete an assessment of the OWTS in the Palisades and Altadena burn zones, and develop a sewer hook-up plan.

W - 6. Leverage Partnerships and Financing to Enable Rapid Implementation

- The Los Angeles County Department of Public Works, Pasadena Water and Power, Metropolitan Water District, and LADWP should form partnerships to support smaller, more cost-constrained water utilities in the Altadena area.
- The County should help to support and clarify new and existing mutual aid agreements between water systems.
- By 2026, the State Water Resources Control Board should consider both temporary and permanent financing assistance to systems with downgraded bond ratings due to fire damage or risk.
- Utilities should consider modifying their rate structures to more fairly distribute costs of service through differentiated charges.
- Incentivize local and regional scale climate resilience and water pollution prevention projects through funding from water districts, the LA County Safe Clean Water Program, and state funding from Proposition bond funds.

Community Resilience, Equity & Health (C)

Photo Credit: County of Los Angeles

C - 1. Promote Cohesion, Connection, and Consensus by Supporting Community-Led Recovery Efforts

- The philanthropic sector should provide multi-year staffing and support for community-driven recovery, visioning, design and planning efforts to provide a safe space to address complex issues of policy and development.
- Displaced residents should have the opportunity to co-develop community-driven recovery plans, while ensuring inclusive decision-making by creating transparent, multilingual, and culturally competent planning processes.

C - 2. Ensure Worker Health and Safety During Cleanup

- To protect workers and residents from exposure to hazardous materials and toxicants in fire debris, Cal OSHA, Los Angeles County Public Health and City health departments should develop and distribute clear health and safety guidance materials.

C - 3. Provide Health Screening for Organized Groups of Volunteer Responders

- The California Fire Chiefs Association and the City and County Fire Departments should coordinate to create a formal program to identify volunteers for screening, establish a screening location, and ensure future access to these services.

C - 4. Expand Accessible Mental Health Services

- The LA County Department of Mental Health (DMH), LA County Parks and Recreation, philanthropic organizations, community-based organizations, places of worship, community clinics, and healthcare providers should collaborate to expand mental health services for affected communities.

C - 5. Facilitate the Return of Displaced Communities through Services, Art, and Commerce

- CalOES, the Los Angeles County Department of Public Health, and the Southern California Association of Governments should collaborate to co-design a survey to better understand who is displaced, what their needs are, how long their existing services/funding will last, and what will be needed to support them over time (e.g., housing, community services).
- Philanthropic organizations and local governments should support impacted communities in planning events geared towards reconnecting displaced residents and supporting local businesses.

C - 6. Rebuild Community and Civic Infrastructure with Disaster-Readiness

- City and County departments, school districts, and places of worship should reconstruct community-scale electricity infrastructure to include DERs, community-scale micro-grids with battery storage, and EV-to-micro-grid enabled charging.
- The City and County should provide neighborhood-level cisterns that can capture rainwater that can be used as a water source for firefighting.
- The City and County should expand tree canopy to shelter and cool residents during extreme heat events.
- Both the County and the City of Los Angeles should create streamlining and exemption opportunities for

community, institutional, and civic facilities that plan to rebuild in a sustainable and resilient manner, but cannot take advantage of streamlining benefits available through the "like-for-like" rebuild designation. The Governor should also direct the Office of Land Use and Climate Innovation (LCI) to create a CEQA exemption for these types of projects.

- Los Angeles Unified School District, Pasadena Unified School District, charter schools, private schools, and Palisades Charter High School should rebuild schools as disaster recovery centers. The Los Angeles County Department of Parks & Recreation and the City of Los Angeles Department of Recreation and Parks should ensure that parks are rebuilt with large cisterns and direct release systems.
- Philanthropic foundations and individuals and Community Development Finance Institutions (CDFIs) should provide initial or bridge funding to write-down the cost of including resilience features in the rebuilding of civic infrastructure.

C - 7. Create Places of Refuge from Fast-Advancing Fires

- Local governments should work with school districts, recreation authorities, and non-governmental organizations with community-serving facilities to develop places of refuge from fire within neighborhoods designated as High and Very High FHSZs.

C - 8. Expand, Accelerate, and Implement Climate and Resilience Planning

- The City of Los Angeles and County of Los Angeles should implement key resilience and fire plans that have been developed over the past decade. Additional planning should create actionable roadmaps that move towards the implementation of resilience projects.
- Philanthropic funding should support continued resilience planning at the neighborhood level.
- All local General Plans, Area Plans and Community Plans in the region should continue to meaningfully integrate sustainability and resilience.

C - 9. Implement Evacuation Planning and Community Scale Mitigation

- Local governments should support community-level planning processes for both evacuation and wildfire mitigation.
- Local governments should identify neighborhoods with limited exit routes for evacuation and work with them on neighborhood-scale evacuation planning.
- Los Angeles-area local governments in High and Very High FHSZs should be required to prepare Community Wildfire Protection Plans (CWPP) through a public process.

C - 10. Improve Decision-Making and Communications for Wildfire Alerting and Evacuation

- Fire districts across the Los Angeles region, along with CalOES and CAL FIRE, should develop and test playbooks for wildfire alerting and evacuation for all local- and state-designated High and Very High Fire Hazard Severity Zones.

C - 11. Update Disaster Recovery Act to Facilitate Future Fire Rebuilding

- The State should encourage and enable local jurisdictions to plan for effective recovery before a disaster by creating a "reconstruction authority" that can be activated when disaster strikes.
- The State Legislature should amend the Disaster Recovery Reconstruction Act to clarify the powers such a "reconstruction authority" should ideally possess.

Finance (F)

F - 1. Establish Partnerships to Coordinate and Leverage Funding to Accelerate Rebuilding

- The City and County, along with other partners, should create a consortium to raise catalytic capital for blended finance solutions–via the proposed Authority or in coordination–to help low to moderate income families return to their homes and neighborhoods, rebuild resilient multifamily rental and for sale housing, and drive investment into community assets for an equitable, sustainable recovery.
- Through the proposed Authority or in coordination with it, the City and County should explore the use of public-private partnerships (P3s) to accelerate the delivery of infrastructure, housing, services and infrastructure.

F - 2. Launch a "LA Resilient Rebuilding and Reconstruction Fund" Philanthropic Campaign

- The State, County of LA and City of LA should partner with the Authority to jointly launch a "LA Resilience Rebuilding and Reconstruction Fund" philanthropic campaign, aiming to secure aiming to raise and or aggregate $200 million over the next 12 to 24 months to leverage and unlock $2 billion in private sector and complementary (e.g., CDFI) resources. If not managed by the Authority, a fund administrator should be appointed to oversee grantmaking, reporting, and accountability.

F - 3. Develop a Housing Financing Product to Provide Soft Second Mortgage Products

- The Governor should direct HCD to create a soft second mortgage product to help the most vulnerable and low-income homeowners cover gaps not met by insurance, SBA, or FEMA aid to better preserve affordability while integrating fire- and climate-resilient upgrades.

Governance and Accountability (G)

G - 1. Establish a Regionwide Resilient Rebuilding Authority or Equivalent Governance Structure

- The Legislature, the Governor, the City of LA, and County of LA should create a multi-jurisdictional Resilient Rebuilding Authority (RRA) to coordinate long-term recovery across Los Angeles County, the City of Los Angeles, and other affected cities (e.g., Malibu, Pasadena, Sierra Madre), with a focus on equitable and climate-resilient rebuilding.

- The Legislature and the Governor should provide the RRA with the extraordinary powers to align policies, funding, and regulatory processes across key sectors including housing, infrastructure, community services, environmental resilience, and workforce development—ensuring consistent and accelerated implementation of recovery efforts.
- In establishing the RRA, the State and local governments should ensure shared governance and inclusive representation by incorporating decision-makers from local governments, tribal nations, community-based organizations, and directly impacted residents. This participatory structure would help restore trust and ensure accountability to frontline communities.
- The RRA would embed equity and transparency into the RRA's mandate, including:
  - Public-facing dashboards to track recovery metrics, funding flows, and project delivery.
  - Equity impact assessments to guide program design and adjustments.
  - Clear accountability frameworks with community oversight.
- State and local partners should work with philanthropy to provide startup funding while providing staff to be seconded initially to establish the RRA with sufficient budget for staffing, funding, and authority to lead recovery in coordination with federal and state agencies, ensuring that local jurisdictions and communities are not left to manage complex, cross-sector recovery alone.
- If a formal authority cannot be established, another intergovernmental structure(s) with a comparable scope, authority, and commitment to equity, climate resilience, and cross-jurisdictional coordination should be formed.

G - 2. Establish a New Regional Fire Control District Focused on Prevention and Risk Reduction

- A county-wide ballot initiative should be passed by the voters to create a new Fire Control District (or expand an existing special district) dedicated exclusively to wildfire prevention, vegetation management, public education, and community risk reduction across jurisdictions vulnerable to urban-interface fires in the region.
- The ballot initiative should structure the district as a standalone entity–or an alternative in form of a joint powers authority (JPA)--capable of integrating city, county, tribal, and special district jurisdictions, allowing for shared governance and multi-jurisdictional operations with community representation. It should also assign the district with a proactive, non-emergency role, complementing traditional fire departments by focusing on pre-fire strategies such as:
  - Defensible space inspections;
  - Landscape transformation and invasive species removal;
  - Community wildfire protection planning; and
  - Public outreach and evacuation readiness.
- The initiative should also provide the district with dedicated revenue sources, potentially including parcel assessments, special taxes, or state/federal grants, to ensure sustained funding for prevention efforts; ensure equitable service delivery, prioritizing high-risk and historically underserved communities in both fire-prone wildland-urban interface areas and dense urban environments vulnerable to embers and smoke; and align the district's functions with regional recovery and climate resilience goals, integrating efforts with public works, housing, environmental management, and emergency planning.

RECOMMENDATIONS FOR URGENT ACTION IN THE NEXT THREE TO SIX MONTHS

In the aftermath of the LA fires, communities face a range of urgent challenges. In response, the Commission highlights the recommendations below that need urgent action in the next 3 to 6 months to expand federal support, protect public health, ensure the safety of workers and residents, and help in the rebuilding. These actions are critical to restoring trust, accelerating rebuilding efforts, and safeguarding the well-being of those affected.

= Urgent Action

G – 1. Establish Resilient Rebuilding Authority for the Eaton and Palisades Burn Areas

IR – 1. Expansion of Federal Debris Removal Program

IR – 2. Standardize Soil Testing and Remediation

C – 1. Promote Cohesion, Connection, and Consensus by Supporting Community-Led Recovery Efforts

C – 2. Ensure Worker Health and Safety During Cleanup

C – 3. Provide Health Screening for Organized Groups of Volunteer Responders

C – 4. Expand Accessible Mental Health Services

B – 2. Extend Chapter 7A Applicability to Entire Eaton Burn Area

B – 4. Create Statewide Standards for Smoke Remediation

V – 1. Conduct Post-Fire Tree Assessments Before Removal

V – 8. Replant and Restore the Burned Wildlands

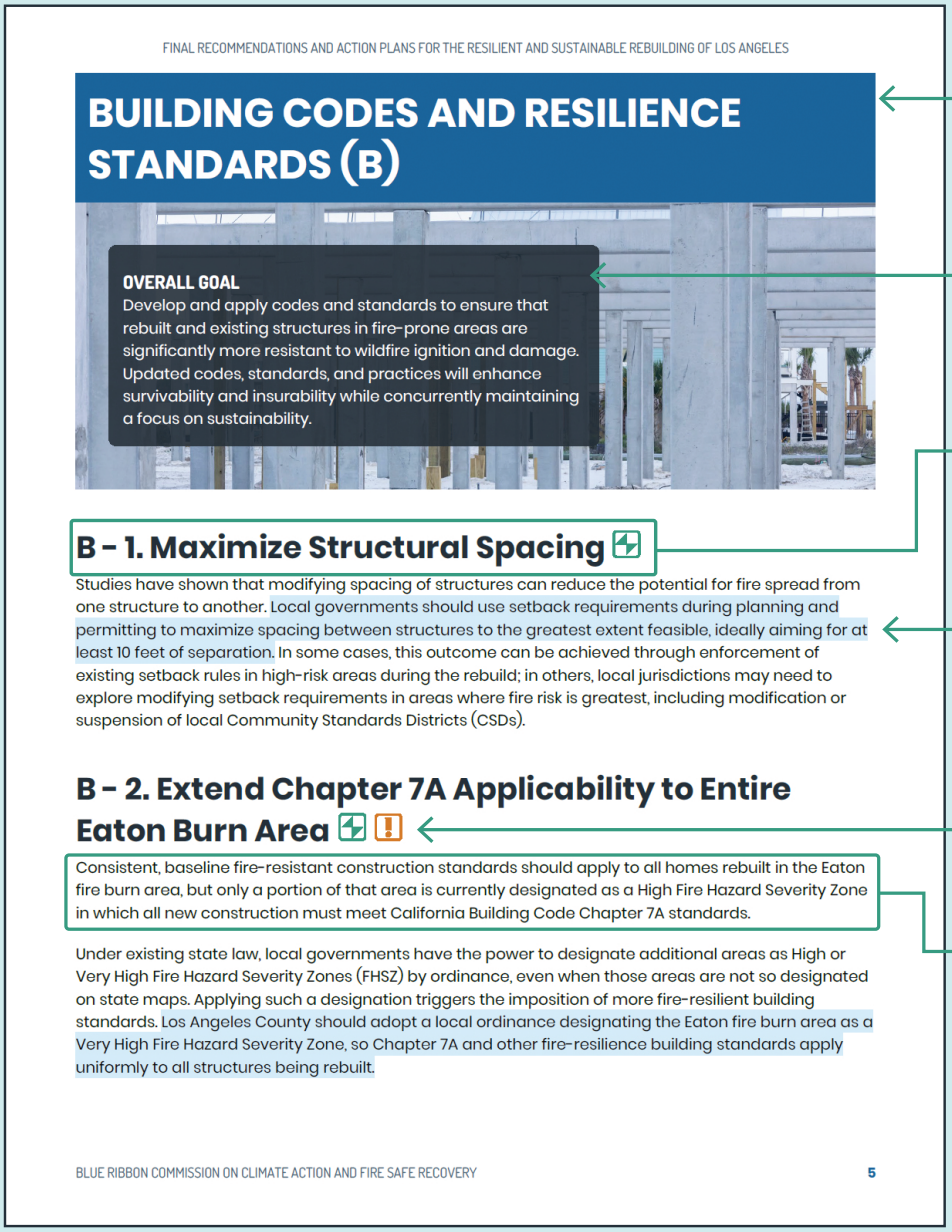
Near-Term State Budget and Legislative Action Needed

Below are the Commission recommendations that require legislative action and support from the Governor. The Commission urges the Legislature and Governor to support these actions:

- **Creating and providing initial funding for a Resilient Rebuilding Authority for areas impacted by the January 2025 fires (G-1).** Empowering the Authority would enhance accountability in the rebuild; streamline the process to rebuild safe, sustainable neighborhoods; and provide a pathway for cost-impacted residents to return to their communities faster. State funding would be required to establish the Authority and enable initial property purchases; possible sources of funding include Proposition 4 or a revolving loan administered by the California Infrastructure and Economic Development Bank.
- **Providing technical and financial assistance to the County of Los Angeles to implement a systematic and standardized soil testing and remediation program for all January 2025 fire-impacted properties (IR-2).** Testing results showing exceedances of state risk-based soil contamination standards for residential properties post-federal cleanup, and the lack of uniform testing requirements for all parcels in the burn area, have contributed to displaced residents' concerns about returning to, and rebuilding in, their fire-affected neighborhoods. State funding to support uniform testing and remediation standards can help mitigate public health risks and accelerate economic recovery of the impacted communities.
- **Funding development of a public wildfire catastrophe model (I-3).** The State should fund the research and development necessary to build a public wildfire catastrophe model for the state as well as specific projects to promote public data collection, public communication, training, and educational opportunities that expand and strengthen connection between the public and wildfire risk mitigation.
- **Providing income-based, stackable financial incentives for resilient rebuilding.** The Legislature and Governor should explore providing income-based cash incentives and/or tax credits to support residents of the areas impacted by the January 2025 fires in rebuilding all-electric, installing distributed water and energy systems, installing backup water systems, and utilizing fire-safe materials and landscaping. The State should also expand grants (EPIC, SGIP) for fire-zone microgrids, DERs, and VPPs.

Recommendation Action Plans

How to Read the Recommendation Action Plans



FINAL RECOMMENDATIONS AND ACTION PLANS FOR THE RESILIENT AND SUSTAINABLE REBUILDING OF LOS ANGELES

BUILDING CODES AND RESILIENCE STANDARDS (B)

OVERALL GOAL
Develop and apply codes and standards to ensure that rebuilt and existing structures in fire-prone areas are significantly more resistant to wildfire ignition and damage. Updated codes, standards, and practices will enhance survivability and insurability while concurrently maintaining a focus on sustainability.

B – 1. Maximize Structural Spacing

Studies have shown that modifying spacing of structures can reduce the potential for fire spread from one structure to another. Local governments should use setback requirements during planning and permitting to maximize spacing between structures to the greatest extent feasible, ideally aiming for at least 10 feet of separation. In some cases, this outcome can be achieved through enforcement of existing setback rules in high-risk areas during the rebuild; in others, local jurisdictions may need to explore modifying setback requirements in areas where fire risk is greatest, including modification or suspension of local Community Standards Districts (CSDs).

B – 2. Extend Chapter 7A Applicability to Entire Eaton Burn Area

Consistent, baseline fire-resistant construction standards should apply to all homes rebuilt in the Eaton fire burn area, but only a portion of that area is currently designated as a High Fire Hazard Severity Zone in which all new construction must meet California Building Code Chapter 7A standards.

Under existing state law, local governments have the power to designate additional areas as High or Very High Fire Hazard Severity Zones (FHSZ) by ordinance, even when those areas are not so designated on state maps. Applying such a designation triggers the imposition of more fire-resilient building standards. Los Angeles County should adopt a local ordinance designating the Eaton fire burn area as a Very High Fire Hazard Severity Zone, so Chapter 7A and other fire-resilience building standards apply uniformly to all structures being rebuilt.

BLUE RIBBON COMMISSION ON CLIMATE ACTION AND FIRE SAFE RECOVERY 5

Action Plan
The name of the particular action plan and its abbreviation. Find a list of all of the action plans below.

Overall Goal
The overall goal for the action plan is mentioned on the action plan's initial page.

Recommendation Name
The recommendation name is numbered and can include icons.

Specific Action
Highlighted text indicates the specific action(s) for that particular recommendation.

Action Icon

Recommendation Context
Non-highlighted text provides context relating to the recommendation and the specific action(s)

Action Plans

(IR) Immediate Recovery Needs
(B) Building Codes and Resilience Standards
(V) Vegetation, Urban Landscapes and Wildlands
(I) Insurance Reforms for Resilient Communities
(L) Land Use and Workforce
(E) Energy System Resilience and Modernization
(W) Water System Resilience and Safety
(C) Community Resilience, Equity and Health
(F) Finance
(G) Governance and Accountability

Action Plan Icons

Recommendations listed with the following icons either are associated with the creation of a resilient rebuild authority, a focus on fire mitigation, or a recommendation that requires urgent action. Not all recommendations will have an icon associated with them.

= Rebuild Authority Focus

= Fire Resilience Focus

= Urgent Action

IMMEDIATE RECOVERY NEEDS (IR)

OVERALL GOAL
Address immediate recovery needs by addressing critical priorities for debris removal, soil testing, continued interagency coordination, and housing recovery.

IR – 1. Expand the Federal Debris Removal Program to Cover All Properties in the Burn Areas

Many categories of property are generally not eligible for inclusion in the U.S. Army Corps of Engineers (USACE)-led Private Property Debris Removal (PPDR) program. These include commercial properties, public and nonprofit properties, and multifamily rental properties owned by for-profit entities without a single owner-occupied unit, such as apartment complexes and mobile home parks.

Some property owners have been allowed to apply to the PPDR program, and their eligibility has been considered on a case-by-case basis. In these instances, property owners must provide justification for the use of federal funds on their cleanups, such as demonstrating that debris on the property poses a public health risk and that the commercial owner might not be able to complete the debris removal independently. For example, Tahitian Terrace Mobile Home Park in Pacific Palisades has been allowed into the PPDR, but the Palisades Bowl—an adjacent mobile home park with roughly 170 homes—is still excluded.

Given the dense urban environment of these communities, all properties that are not cleared present a risk to adjacent properties and impede overall community recovery. Therefore, the Federal Emergency Management Agency/USACE Phase 2 Debris Removal Program should encompass all properties within the burn areas—including nonprofits, churches, mobile home parks, nonowner-occupied housing, and commercial properties. Recovery efforts should prioritize properties that are suitable for temporary housing and other recovery-related uses, including construction staging areas and worker housing.

FEMA, USACE, the California Governor's Office of Emergency Services (CalOES), and other agencies that are part of the federal debris clearance program should work together to extend access, and should work with property owners, insurers, philanthropy, and other potential funders to identify additional sources of funding as needed.

IR – 2. Standardized Soil Testing and Remediation

While the state of California has long-established risk-based screening levels for a number of contaminants in soil, no parcel-specific soil testing is required or recommended for residential properties within the burn areas at present. However, testing from various parties has consistently shown that over 20 percent of properties scraped by federal cleanup crews still had lead levels exceeding the California state standards for residential properties. These results, and the lack of uniform testing requirements for all parcels in the burn area, have contributed to displaced residents' concerns about returning to, and rebuilding in, their fire-affected neighborhoods. If parcel-specific soil testing is not conducted, the state and Los Angeles County will not be able to identify and address unsafe properties, which poses a serious risk to public health and the economic recovery of the impacted communities. The state should provide technical and financial assistance to LA County to implement a systematic and standardized soil testing and remediation program for all properties within the Eaton and Palisades burn zone.

In addition to testing and remediation efforts, the Los Angeles County Department of Public Health should provide clear public health guidance to returning residents and others (e.g., insurers, property owners) with consistent standards for evaluating and remediating airborne, water-borne, and soil risks in fire zones.

IR – 3. Continue State and Federal Involvement in Interagency Recovery Coordination

FEMA and CalOES established the Interagency Recovery Coordination (IRC) structure in accordance with federal and state recovery frameworks following the Jan. 7 fires. The IRC is helping to provide an important element of multilevel agency coordination and communication, planning, action, and resources among the federal government, state, County and impacted cities. At a minimum, this IRC structure should continue with ongoing support and participation by federal and state agencies until the Resilient Rebuilding Authority is established, or the County, City of LA, and other impacted cities establish some other long-term recovery multilevel agency coordination entity. Doing so will help enhance a more consistent policy and coordinated service delivery for all residents of impacted communities.

IR – 4. Coordinate Near- and Long-Term Housing Recovery

The California Department of Housing and Community Development (HCD) has a critical role coordinating any federal Community Development Block Grant Disaster Recovery (CDBG-DR) funds that may be appropriated for this disaster by Congress.

However, if there is a delay in the provision of CDBG-DR funds or even in the absence of federal support, HCD has amassed crucial knowledge from recent wildfires and other disasters across the state that will be invaluable to the Palisades and Eaton fire recovery zones. HCD has important expertise in determining unmet community recovery needs, especially with respect to both near- and long-term

housing. HCD can—and should—convene housing development stakeholders to create as much regulatory efficiency as possible and attract more investment capital to reconstruction. HCD can also play a critical role liaising between the housing community and the California Department of Insurance regarding insurability of housing.

Building on Governor Gavin Newsom's Executive Order N-9-25, which, among other things, directs "state departments to support local governments as they develop temporary housing plans to help provide necessary shelter for those immediately impacted by the firestorms," the Governor and Legislature should support HCD's sustained involvement in the fire recovery and reconstruction. Appoint a senior HCD official to continue to support local near- and long-term housing recovery efforts and help bring to bear all available resources, including, but not limited to, funding and technical assistance, to communities impacted by the Jan. 7 fires.

IR – 5. Limit Exemptions to Owners of Record or Immediate Family Members

Exemptions to the applicability of state and local laws, including for "eligible projects" in the City of Los Angeles and "like-for-like" rebuilding projects in the County of Los Angeles, should only benefit the owner of record on Jan. 7, 2025, or a family member of the owner of record on that date. Given that the intent of early policymaker actions, such as City executive orders and County resolutions, was to remove barriers to burn area community members' ability to rebuild as quickly as possible, streamlining benefits should not extend to speculative developers who buy land from property owners looking to sell.

BUILDING CODES AND RESILIENCE STANDARDS (B)

OVERALL GOAL
Develop and apply codes and standards to ensure that rebuilt and existing structures in fire-prone areas are significantly more resistant to wildfire ignition and damage. Updated codes, standards, and practices will enhance survivability and insurability while concurrently maintaining a focus on sustainability.

B – 1. Maximize Structural Spacing

Studies have shown that modifying spacing of structures can reduce the potential for fire spread from one structure to another. Local governments should use setback requirements during planning and permitting to maximize spacing between structures to the greatest extent feasible, ideally aiming for at least 10 feet of separation. In some cases, this outcome can be achieved through enforcement of existing setback rules in high-risk areas during the rebuild; in others, local jurisdictions may need to explore modifying setback requirements in areas where fire risk is greatest, including modification or suspension of local Community Standards Districts (CSDs).

B – 2. Extend Chapter 7A Applicability to Entire Eaton Burn Area

Consistent, baseline fire-resistant construction standards should apply to all homes rebuilt in the Eaton fire burn area, but only a portion of that area is currently designated as a High Fire Hazard Severity Zone in which all new construction must meet California Building Code Chapter 7A standards.

Under existing state law, local governments have the power to designate additional areas as High or Very High Fire Hazard Severity Zones (FHSZ) by ordinance, even when those areas are not so designated on state maps. Applying such a designation triggers the imposition of more fire-resilient building standards. Los Angeles County should adopt a local ordinance designating the Eaton fire burn area as a Very High Fire Hazard Severity Zone, so Chapter 7A and other fire-resilience building standards apply uniformly to all structures being rebuilt.

B – 3. Enhance Chapter 7A with the Insurance Institute for Business and Home Safety (IBHS) Standards

Insurability of rebuilt structures is a significant concern for areas impacted by the January 2025 fires. While existing Chapter 7A building standards are intended to provide some resistance to fires, the additional mitigation actions and stricter material choices specified by the Insurance Institute for Business and Home Safety (IBHS) Wildfire Prepared Home Plus standard (e.g., metal gutters/guards, noncombustible eaves/walls, dual-pane tempered windows, limits on accessory structures) will achieve a higher level of fire resistance. The Commission encourages the use of the IBHS Base and Plus levels in reconstruction. By building to the Base or Plus levels of the Wildfire Prepared Home standard, homeowners will increase the likelihood they will be able access more affordable insurance—especially once the California Department of Insurance (CDI) completes the Sustainable Insurance Strategy (SIS)—as well as provide critical benefits in better protecting the home and neighborhood. The Commission has also made recommendations elsewhere for providing income-based incentives to cover additional costs for resilient rebuilding such as the IBHS Plus standard, as well as the need for the creation of a robust offering of soft seconds to cover the overall often significant gap between insurance payments and cost of rebuilding.

To increase structure survivability and support insurability—and attendant home value retention—the Los Angeles County Board of Supervisors, Los Angeles City Council, and other local municipalities with jurisdiction over some portion of the burn area (e.g., Malibu, Sierra Madre) should adopt local ordinances amending building codes to incorporate specified IBHS standards for new construction and major renovations in high-risk areas. Such standards will provide both a higher level of fire resistance for rebuilt structures and will ensure entirely new construction in high-risk areas is built to the safest standards.

B – 4. Create Statewide Standards for Smoke Remediation

As smoke and ash infiltrated homes within and adjacent to the burn zones, chemicals and particulates were absorbed into furniture, walls, and other indoor surfaces and continued off-gassing for weeks to months. Although research on long-term health effects from exposure to smoke- and ash-damaged homes is ongoing, it is well understood that the smoke composition from urban conflagrations such as the LA fires is particularly toxic, and clear standards for smoke remediation are necessary to protect returning residents. In response to the LA fires, California Insurance Commissioner Ricardo Lara announced a new Smoke Claims and Remediation Task Force, charged with recommending science-based standards, best practices for smoke restoration of homes and personal property, and enforcement tools to CDI. This followed a bulletin issued in March that required insurers to fully investigate and pay legitimate smoke damage claims. The recommendations for uniform standards for inspecting, testing, and remediating properties with smoke damage, and standards for determining the health safety to occupants of damaged structures, should then be adopted as regulations and thereby enforced by the appropriate state agencies.

B – 5. Create Programs for Third-Party Contractors to Review Permits

Rebuilding must occur at a faster pace than typical regulatory processes. Accelerating the pace of rebuilding will help create a sense of certainty about the rebuild timeline, restore a sense of neighborhood and community as quickly as possible to encourage those impacted to return, and produce much-needed housing units, businesses, and community institutions.

Prior to the 2025 fires, extensive permitting review and inspection delays were already the norm due to high caseloads for the City and County Building and Safety and Public Works staff. These delays are now compounded by projected significant budget shortfalls in the 2025-2026 fiscal year. For these reasons, applicants seeking to rebuild fire-damaged or destroyed homes, businesses, and institutions need another option to complete review and inspection requirements. Both the City and County of Los Angeles plan to offer self-certification programs, but the scale and scope of these processes is uncertain. Self-certification may only be available for specific and finite components of the permitting review process. It is also unclear at this time how successful this option will be due to its historically limited use around California, architects' understandable hesitation to incur the liability associated with self-certification, and implementation questions. Third-party plan check and inspection reviewers, however, have been used successfully for years in California local government (e.g. Marin County, Santa Cruz County, City of Santa Cruz, Sonoma County).

Drawing on these existing successes, the County and City of Los Angeles and the other affected cities of Malibu, Pasadena, and Sierra Madre should immediately establish processes—the County through the Department of Public Works and the City of LA through the Department of Building and Safety—to create a preapproved list of third-party reviewers who can provide plan check and inspection services. The County and City should offer all fire rebuild applicants (regardless of whether the project is "like for like") the opportunity to engage a third-party reviewer from the list to conduct plan check review and inspections, provided the applicants meet certain eligibility requirements. Eligibility requirements should include training in resilience and sustainability practices as a precondition for qualifying as a third-party verifier. Finally, the County and City should establish processes to regularly audit a defined percentage of applications reviewed by a third-party entity.

After an initial six-month period, if the third-party review tool proves successful, the City and County should consider opening up this option to all pipeline (i.e., already in either an entitlement or plan check process) housing development projects to replenish the housing supply as quickly as possible.

B – 6. Require Training if Third-Party Review and/or Self-Certification Are Allowed

Local jurisdictions are considering implementing self-certification and/or third-party review programs for licensed architects and contractors. To the extent they are implemented, local permitting authorities must ensure certifying professionals have adequate awareness of and training about resilience and safety standards.

Accordingly, the building and planning departments of both the City and County of Los Angeles should require and facilitate mandatory completion of specialized training from accredited organizations (e.g., American Institute of Architects (AIA), U.S. Green Building Council (USGBC), community colleges) covering resilience/sustainability best practices (including Chapter 7A, Zone 0, fire-resistant and sustainable materials/design) and local building/zoning codes as part of qualifying for self-certification or as a third-party verifier.

These trainings also should be made available more broadly to expand the number of licensed professionals equipped to work with resilient building design and construction. Barriers, including the cost of and access to course materials, will need to be removed.

B – 7. Increase Education Around Sustainable Design Practices and Materials

Educating residents on the benefits of high-performance resilient rebuilding is important to complement professional training. Education around sustainable design practices and materials will increase awareness and community health by building a pathway to construct homes with improved air quality, reduced toxic exposure, and lower utility bills.

All-electric construction eliminates indoor combustion and its associated health impacts, while Passive House design improves indoor air quality and reduces energy demand by up to 90% through triple-paned windows and smaller mechanical equipment. Both approaches support long-term community health and lower utility expenses. Utilizing Red List-Free Materials will improve occupant health and reduce the impacts of toxins from future wildfire disasters. These practices would leverage lower embodied carbon materials such as nature based materials (stone, clay, wood), regionally-produced materials, low-carbon concrete, fire-treated natural fiber insulation, material reuse, and more.

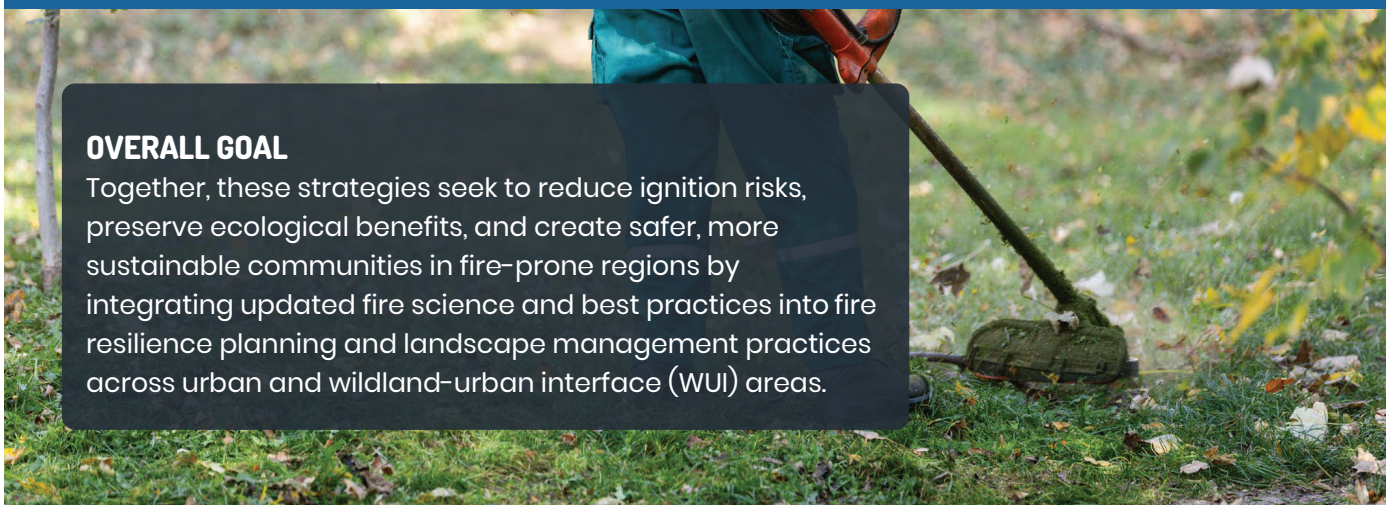
Provide residents—along with architects, engineers, and contractors—education materials and access to education as well as incentives around sustainable design strategies. These include building electrification, Passive House design, and lower embodied carbon, toxin-free materials. Utilities should work in partnership with existing organizations (e.g., USGBC, AIA) to provide education to homeowners and encourage the use of related information sources (e.g., "The Build Show," "This Old House," the Property Brothers).

B – 8. Implement Wildfire Protection Retrofit Program

A number of structures survived the fires, but remain susceptible to future fires because they are not built to the most fire-resistant standards. These structures also imperil newly rebuilt structures, even when they meet more rigorous standards, by creating areas of vulnerability to fire within neighborhoods. Either at the state or the local government level—and ideally through an LA County Fire Control District—should establish a comprehensive retrofit program to reduce the overall wildfire risk within communities by bringing remaining structures up to better standards.

A comprehensive retrofit program that is potentially modeled after the California Wildfire Mitigation Program, California Earthquake Brace + Bolt (EBB) program, and local seismic retrofit ordinances would ideally combine requirements, incentives, education (such as the USGBC California Wildfire Defense Certificate programs), and financial support for homeowners, renters, and contractors to complete necessary retrofits. In High and Very High Fire Risk Severity Zones and adjacent areas (e.g., within 1 mile), local governments should develop plans to retrofit surviving homes and high-risk communities with baseline wildfire protections (e.g., Class A roofing, metal gutters/guards, ember-resistant vents, noncombustible base-of-wall material, dual-pane windows, defensible space/Zone 0 compliance).

VEGETATION, URBAN LANDSCAPES, AND WILDLANDS (V)



OVERALL GOAL
Together, these strategies seek to reduce ignition risks, preserve ecological benefits, and create safer, more sustainable communities in fire-prone regions by integrating updated fire science and best practices into fire resilience planning and landscape management practices across urban and wildland-urban interface (WUI) areas.

V - 1. Conduct Post-Fire Tree Assessments Before Removal

Mature trees often exhibit fire-resilient properties, including thick bark and high canopies that can help reduce heat and ember exposure. Trees also contribute to cooler microclimates and soil stability, which are both important for resilience before, during, and after fires.

Blanket policies to remove trees after wildfires result in removal of burned trees that have potential to recover and provide critical ecosystem services and advance urban forestry and community goals. To prevent this from happening, response agencies, like the City of LA's Urban Forestry Division, Office of Forest Management, or City Plants, should implement procedures for local arborists certified in Tree Risk Assessment Qualification (TRAQ) to carry out assessments of tree species, location, and recovery potential before any removal of fire-affected trees.

V - 2. Update Fire Hazard Severity Zone (FHSZ) Maps for Urban Conflagration Scenarios

Wildfires that become urban conflagrations are occurring more frequently with devastating consequences. The application of building standards and defensible space regulations needs to account for the distinctive nature of these conflagrations and the ways that the built environment and different types of vegetation may contribute to or hinder fire spread.

Accordingly, Fire Hazard Severity Zone (FHSZ) maps need updating with the best available science to account for how vegetation and structures interact to affect fire ignition and spread in Local

Responsibility Areas. CAL FIRE should continue to advance its leadership in identifying Fire Hazard Severity levels on a statewide basis by updating maps every five years, as required, and incorporating more features of the built environment. State-level agencies and task forces, like the California Natural Resources Agency, CAL FIRE, and the California Wildfire and Forest Resilience Task Force, should ensure fire mitigation efforts statewide are responsive to emerging scientific knowledge of fire behavior in complex urban, WUI, and wildland landscapes.

V - 3. Develop and Apply Zone 0 Standard for All Burn Areas

Combustible fuel sources immediately adjacent to homes can act as fuel for ember-driven ignition. It is well-documented that eliminating certain combustible materials close to homes can reduce fire risk.

Accordingly, the Los Angeles County Board of Supervisors, the Los Angeles City Council, and all local governments with territory designated as Very High FHSZs should develop and adopt comprehensive local defensible space ordinances specifically addressing Zone 0 (0–5 feet from structures). Consider and explore the same action to develop future plans for High FHSZs as well, in particular once the Fire Control District is in place to support related planning and mitigations if adopted. These standards should apply to all structures being rebuilt in the burn areas and to all designated at-risk communities.

Local defensible space ordinances should incorporate detailed requirements such as prohibiting ember-ignitable landscaping and mulch and addressing potential hazards from overhanging trees. Additional requirements could include requiring noncombustible gates and fences near structures and restricting outbuildings unless they are built to Chapter 7A standards. However, it is critical that these ordinances emphasize the implementation of permeable, noncombustible surfaces within Zone 0 for continued rainwater infiltration. Additionally, these Zone 0 ordinances should allow existing, mature, well-maintained, and well-irrigated trees, if they are trimmed within an acceptable distance of the roofline and leaf litter is frequently removed.

V - 4. Implement Defensible Space Requirements for a Fire-Resilient Urban Canopy

In rebuilt and at-risk communities, the state and local governments should encourage and support landscapes that balance fire safety with ecological and aesthetic value. Healthy vegetation and soils contribute to fire resilience. Native trees and other vegetation can reduce wind and ember exposure while offering other benefits including heat mitigation and critical wildlife habitat in urban and suburban areas. To enhance fire resilience while preserving urban tree canopy, updates to defensible space regulations in Zones 1 and 2 (5–100 feet from structures) should prioritize establishment of healthy, well-maintained trees and fire-resistant native plant species.

CAL FIRE (for State Responsibility Areas) and the Los Angeles County and municipal Fire Departments (for Local Responsibility Areas) should develop and implement consistent defensible space standards for properties in High and Very High FHSZs. Make regulations uniform to reduce confusion and facilitate regional implementation. In particular, the City of Los Angeles should adopt the same defensible space

definitions as the County and state: up to 100 feet, rather than 200 feet. While reducing the presence of combustible material very close to structures has been shown to increase a structure's likelihood of survivability, the best available science has validated that the maximum benefit for fire resilience extends only to 100 feet from structures. Regularly update regulations based on emerging fire science, especially regarding the role of living vegetation in ignition and fire spread.

V – 5. Promote Water-Efficient and Resilient Landscaping and Water Capture

Drought-prone Southern California experiences both water scarcity concerns and significant fire risk. State and local agencies should work together to advance the dual goals of water conservation and fire resilience by promoting hydrated plants and on-site water storage for suppression.

The California Department of Water Resources, Los Angeles County Department of Public Works (LACDPW), the City of Los Angeles Bureau of Sanitation and Environment (LASAN), and all cities with high fire hazard areas should coordinate to advance a number of initiatives that will promote efficient water use and fire resilience:

- Within six months, the above agencies working with academic and landscape experts as well as nongovernmental organizations (NGOs) such as the Theodore Payne Foundation and the California Native Plant Society shall develop and apply a plant species scoring system that integrates water efficiency, fire resistance, and urban greening goals. The final scoring system report should include recommendations on how to effectively implement the system to reduce fire risk and potable water consumption while improving climate resilience and urban biodiversity. The system should incorporate into a strengthened, simpler, more enforceable Model Water Efficient Landscape Ordinance (MWELO).
- Implementation of incentives—including through Low Impact Development (LID) ordinances—for rainwater capture systems, cisterns for irrigation and emergency fire suppression, and vegetated bioswales placed within Zone 1 to act as ember moats when soaked during Red Flag Warning Days.
- Replacement of impervious surfaces such as concrete with permeable materials to improve water retention and reduce runoff.

V – 6. Require Landscape Plan Review for Defensible Space

A resilient rebuilding effort will require efficiently ensuring landscaping compliance with defensible space and ignition-resistant material requirements while incorporating native and drought-tolerant plants and strategic tree canopy early in the design and permitting process.

Los Angeles County and all cities with high fire hazard areas should require submission and review of landscape plans as part of the building permit process for new construction and significant landscaping projects to demonstrate compliance with local defensible space ordinances (including Zone 0), use of ignition-resistant materials, and reduced water use while supporting a healthy tree

canopy. If self-certification is allowed for landscaping, local governments should work together to ensure contractors have received adequate training about drought-tolerant, native, and fire resilient plants. As defensible space ordinances evolve, an adaptive framework that reflects the unique landscapes of the Los Angeles region and incorporates the latest fire science and climate data should guide assessment of regulations and compliance.

In parallel, local governments should implement programming to increase public awareness about the benefits of native plants (including sample plant palettes), reducing wildfire risk, conserving water, and increasing biodiversity. This educational programming should include how to properly place strategic tree canopy and well-irrigated shrubs, as well as maintenance best practices that will reduce wildfire risk.

V – 7. Reduce Spread of Highly Flammable Invasive Plants and Protect Biodiversity

Degraded ecosystems increase fire risk, as invasive annual grasses and non-native species that replace healthy chaparral are more likely to ignite and promote fire spread.

The LA County Agricultural Commissioner and LA County Weed Management Area should work together—in consultation with wildland managers including state parks, the National Park Service, local conservancies, resource conservation districts (RCDs), and local parks agencies—to develop and fund an Early Detection/Rapid Response Program within the burn areas to target high-priority invasive plant species (e.g., Arundo, fountain grass, pampas grass) to prevent reestablishment. Removing invasive plants reduces future fuel loads and ignition sources, helps restore biodiversity in open spaces, and facilitates lower costs over the long run.

As part of rebuilding efforts, prioritize the ecological restoration of open spaces to encourage the regrowth of California native plant communities and ensure that highly flammable invasive plants do not take over these spaces. Further, avoid replacing highly flammable trees, and prioritize planting species such as live oak. Responsible agencies should immediately replant areas bulldozed during firefighting with appropriate native species, and provide follow-up care until establishment. Design the restoration approach for long-term ecological health and erosion control.

V – 8. Replant and Restore the Burned Wildlands

Restoring the wildlands within the perimeters of the Eaton and Palisades fires will require careful coordination, ecological sensitivity, and long-term commitment. This effort will require following restoration guidelines established by state or federal owners, depending on location, and tribal consultation with local California Native American tribes who are listed on the California Native American Heritage Commission (NAHC) and LA County Harms Report. The burn areas include beloved recreational areas that are heavily used by residents across the LA region, and restoration is necessary to safely restore access and prevent further damage to ecosystems.

Resource agencies such as California State Parks, the National Parks Service, the Resource Conservation District of the Santa Monica Mountains, the Santa Monica Mountains Conservancy, the City and County

of Los Angeles Departments of Parks and Recreation, and other relevant agencies should complete an assessment of damages to sensitive species and habitats within six months. The assessment should determine species and habitat loss as well as appropriate site-specific recovery strategies that include elements such as revegetation, erosion control, invasive species removal, and restoration of watersheds to protect the water quality and supply for people and wildlife.

Restoration efforts should prioritize areas disturbed during firefighting, especially where bulldozers created fire breaks or access roads. Recontour, decompact, and add erosion control materials so native plants can reestablish themselves and closely monitor these locations for invasive plants. To prevent road damage and erosion from rains, return any roads that were widened or in-sloped to provide fire access to their previous state. Focus restoration efforts on road edges and other areas where non-native plants enter wildland habitat, and in areas undergoing type conversion from native shrublands to annual grasses or invasives such as mustard and fountain grass. Reversing this conversion from native to invasive species is an important fire prevention and mitigation strategy.

Resource management agencies working with academics should assess the habitat damage in and adjacent to the burn zones to coastal estuaries and nearshore habitats within six to nine months. Habitats include kelp forest, rocky intertidal, eelgrass and surfgrass, beaches, and coastal lagoons. Based on the assessment, develop a habitat restoration/enhancement plan with cost estimates within one year. The Southern California Coastal Water Research Project and the Los Angeles Regional Water Quality Control Board should develop a model riparian and coastal water monitoring program to determine: 1) ongoing water quality, habitat and public health impacts of fire debris and associated runoff pollutants on marine life; 2) the prevalence and scale of harmful algal blooms; and 3) effects on riparian, estuarine, coastal, and marine habitats.

Each affected area should have site-specific restoration , including elements such as revegetation, erosion control, restoration of watersheds to protect the water quality and supply for people and wildlife, and assessments of the impacts on sensitive wildlife species.

V - 9. Manage, Restore, and Maintain Habitat Quality

The LA region consists of many different habitats, microclimates, and a complex topography. This requires site-specific strategies to reduce fire risk while protecting ecosystems, instead of a one-size-fits-all clearance approach to vegetation management after fire. The key is to "manage, not clear," following County guidelines that balance fire safety with soil and habitat protection.

Following the rapid assessment detailed in recommendation U - 11, resource agencies (California State Parks, the National Parks Service, Resource Conservation District of the Santa Monica Mountains, Santa Monica Mountains Conservancy, City and County of Los Angeles Departments of Parks and Recreation, and other relevant agencies) should develop a restoration plan within a year for the wildland areas within the fire perimeters and those closely adjacent. These agencies should identify riparian habitats that have been degraded or are vulnerable to fire-augmented sedimentation and erosion, and develop restoration and short- and long-term habitat and sensitive species protection strategies six to 12 months, prioritizing strategies for the most vulnerable habitats.

Different habitat types require different management approaches:

- Plant oak woodlands where they naturally occur, typically not on south-facing slopes.
- Coastal sage scrub and chaparral areas should retain living shrubs and branches while removing dead wood. When restoring disturbed sites, focus on south- and west-facing slopes.
- Native grasslands are particularly vulnerable to competition from invasive species that pose a greater wildfire recurrence and spread risk. A concerted focus on removal of invasive grasses in native grasslands is critical.
- Riparian zones act as natural fire buffers. In areas bordering homes, manage edges to prevent ground fire from climbing into the canopy. Remove deadfall but retain structure to avoid soil erosion and water quality issues.

Over-clearing exposes soil, damages water quality, and invites more flammable invasive species. Smart, habitat-specific management is essential to reduce fire risk without degrading the landscape. Wildland resource managers should meet at least annually to improve coordination, consistency, and efficacy of habitat management approaches.

To prevent wildfires and urban fires at the WUI, LA County, and the cities of LA, Malibu, Pasadena, and other cities in or adjacent to High or Very High FHSZs should develop, approve, and implement policies to reduce ignition risk in wildland areas within six months. Agencies should ensure policies apply on Red Flag warning days and consider including (but not limiting policies to) closing public access to wildland areas, prohibiting outdoor smoking within a quarter mile of the WUI, and prohibiting outdoor barbecuing, outdoor fires, and use of wood-burning fireplaces within a half mile of the WUI. In addition, augment local firefighting crew resources in high-risk areas on red flag warning days. Finally, develop a program to increase ignition and remote fire detection surveillance cameras—joined by drones for detection and potential immediate response for difficult-to-reach areas and high wind events—and develop and implement visual inspections within one year.

INSURANCE REFORMS FOR RESILIENT COMMUNITIES (I)

OVERALL GOAL
Stabilize insurance markets by promoting and rewarding fire risk reduction and enable recovery by providing affordable insurance products that meet people's needs as well as ensuring future insurability.

I - 1. Advocate for Insurers and the FAIR Plan to Support Resilient Rebuilding

In compliance with the Safer from Wildfires program of the California Department of Insurance (CDI), the California FAIR Plan and other insurers have begun offering premium discounts for policyholders who adopt wildfire risk reduction measures. This includes discounts for policyholders who maintain defensible space, meet a series of structural hardening measures, or are located in a Firewise USA Community. While this is important to reward policyholders and communities that invest in risk reduction, insurers and the FAIR Plan should do more to incentivize investment in fire risk reduction.

Discounts should also be applied for IBHS structure and neighborhood standards. The Community Rating System of the National Flood Insurance Program provides a community-scale discount model worth studying for application to communities at risk from fire hazard. The program should also offer no- or low-cost endorsements to pay for home hardening at the time of a substantial loss and offer grants to expand wildfire mitigation. This would follow the approach of the California Earthquake Authority, which offers earthquake retrofit grants as well as a premium discount of up to 25% for properly retrofitted homes.

I - 2. Provide Means-Tested Premium Assistance for Low- and Moderate-Income Households

As the Jan. 7 fires have shown, the high costs of insurance have burdened California households and led some to forgo coverage altogether or to insure only up to the amount that their mortgage provider requires. CDI should adopt a state-level policy for private insurance or the FAIR Plan to provide means-tested, sliding-scale insurance premium assistance to households based on income. Such premium assistance requires public sector funding. This would allow for the true cost of risk to be priced to align

incentives in markets, while providing support only for those who otherwise would not be able to afford coverage.

I – 3. Support State Efforts for Greater Public Oversight and Integration of Risk Reduction into Insurance-Sector Models for Underwriting and Pricing

The Commission urges prompt and full implementation of the Insurance Commissioner's 2023 Sustainable Insurance Strategy. The strategy will allow insurers to use catastrophe risk models to underwrite and price wildfire risk in the state. It also requires insurers to account for wildfire mitigation in rate-setting. To ensure further progress, the state should support data access and transparency for policyholders, community fire specialists, and insurers; work with the catastrophe modeling vendors to develop standards for pricing and accounting for fire mitigation measures; and encourage more research and field studies documenting losses avoided associated with different mitigation measures.

In addition, to support greater transparency in fire insurance underwriting and pricing, CDI has been investigating the development of a public catastrophe model for wildfires that will be used to benchmark insurers' risk assessment and rate-setting. A publicly accessible wildfire model can be a valuable source of open, transparent risk data for wildfire safety efforts across the state—serving state agencies, local governments, organizations, and consumers as a tool for disaster scenario planning, mitigation, and assessing individual risk profiles to protect lives and homes from catastrophic wildfires.

The state should fund the research and development necessary to build a public wildfire catastrophe model as well as specific projects to promote public data collection, public communication, training, and educational opportunities that expand and strengthen connection between the public and wildfire risk mitigation.

I – 4. Protect Residential Renters from Losses with Household Renter Insurance

In Los Angeles, 53% of residents are renters, one of the highest rates in the nation. More than one in 10 households affected in the Eaton and Palisades fires were renters. A significant portion of these households are paying more than 30% of their income in rent, leaving them with little to no funding for emergencies. Considering the high costs of housing, these households face significant challenges finding housing if they are displaced by fire or other disasters.

Rental insurance is a relatively low-cost expense to safeguard a rental household's belongings and provide support for temporary housing and additional liabilities if disaster strikes. It is a risk-management tool that also protects the public sector's financial exposure, due to the financial costs borne by the public sector when these households are displaced.

To protect households from displacement, CDI should research current rental insurance take-up rates and explore renter-specific insurance regulations, in consultation with tenants' organizations, that meet this need. If CDI issues regulations, develop financial subsidy facilities to support extremely low-income households unable to cover the additional cost.

The Commission acknowledges that due to concerns about cost of coverage and other factors, many homeowners and property owners have insured their property to cover the value of their mortgage. While not a formal recommendation, we encourage CDI to explore ways to educate home and building owners and drive toward a future where they are incented and able to affordably purchase sufficient coverage for the full reconstruction value of the property.

LAND USE AND WORKFORCE (L)

OVERALL GOAL

Prior to the January 2025 firestorms, the Los Angeles region was already experiencing a severe housing shortage. Given it will take years to rebuild many of the single-family homes lost to the fires, the affected cities and the County of Los Angeles should pursue all efforts to build as many new single and multifamily housing units as possible.

L – 1. Allow for Increased Density in Commercial Areas and Corridors

The Los Angeles region faced significant housing shortfalls even prior to the January fires. As rebuilding occurs, both the City and County of Los Angeles should take steps to facilitate multifamily and mixed-use (residential over commercial) development in locations where it is most appropriately sited.

Increased density may not be appropriate in certain Very High Fire Hazard Severity Zones (FHSZs) served by substandard width and/or hillside streets. Although mixed-use and/or multifamily residential may already be permitted in the Palisades and Altadena areas, due to specific zoning overlays in both areas, the corresponding design and development standards may deter or preclude the viable development of such residential uses in these areas. Additionally, although "like-for-like" rebuild projects in the City and County are eligible for certain exemptions—such as from the California Environmental Quality Act (CEQA), the Palisades Village Specific Plan, and the California Coastal Act—those exemptions do not apply once a change of use (e.g., introduction of residential for former commercially developed sites) is proposed, even if floor area is not increased.

Given this, the City and County should encourage the development of multifamily and mixed-use projects in areas that can best accommodate them, such as in commercially zoned and multifamily-zoned lots and on lots located along commercial corridors, by:

- Ensuring multifamily residential use is expressly permissible.
- Assessing the applicable zoning and development standards and design requirements for fire-impacted sites zoned for commercial and multifamily residential, and identifying options for expeditiously reviewing and processing applications for multifamily residential and mixed-use development projects in fire rebuild areas that have been identified as suitable for accommodating greater density and that adhere to applicable development standards or utilize an available affordable housing incentive program (such as the State Density Bonus Law).

To this end, create an expedited process with defined timelines for completion of review, and where applicable, scheduling for public hearings.
- Creating incentives for fire hardening and resilient development in exchange for deviation from certain development standards or design requirements.
- Exploring, for purposes of eligibility for specified exemptions, broadening the definition of "Eligible Project" in the City and "like-for-like" project in the County to include multifamily residential or mixed-use projects that comply with a site's base floor area, setbacks, and height, but which seek to introduce residential uses or increased density on a site that do not match up with what existed before the fires.
- Encouraging continued use of density bonus laws in appropriate locations. In particular, the County should revise and more narrowly tailor its Jan. 28, 2025, motion requesting that the Governor suspend application of the State Density Bonus Law "for five years in fire-impacted areas to allow like-for-like rebuilds and retention of community character" (BOS Recommendation #30.d). Instead, use of the State Density Bonus Law program should continue to be supported for lots zoned commercial or multifamily residential and which are located along specified commercial corridors which are most suitable to accommodate greater density.

L - 2. Create Temporary and Permanent Housing Opportunities in the Burn Areas

Families are currently displaced from their homes in the burn areas, separating communities and straining existing, limited rental stock. The lack of available rental units makes it difficult for displaced individuals and families to find affordable housing on a temporary basis while they await a permanent housing solution. Families with children face further difficulty finding affordable rental housing near their work, schools, and support networks, often leaving them with the tough decision to relocate elsewhere. It is challenging to determine how many renters were displaced as many renters resided in single-family homes, not traditional apartment buildings. Federal and state emergency officials' analysis of available apartments in LA County shows more than 5,600 apartments listed at prices within the limits of the Federal Emergency Management Agency (FEMA) reimbursements, but national and local disaster relief advocates contend that public agencies are overlooking realities on the ground.

Within both burn areas, the Cities of Los Angeles, Pasadena, Sierra Madre, and Malibu and the County of Los Angeles should work to reduce the wait time for displaced residents to return to their neighborhoods by:

- Ensuring Section 8 voucher holders, who rely on tenant-based assistance, can remain in their neighborhoods to maintain stability for work, schools, and family
- Permitting alternative home types to be used as temporary housing on affected lots. As one alternative, allow fire-impacted homeowners to construct and move into an Accessory Dwelling Unit (ADU) on their property before the primary home is rebuilt. Governor Newsom's Executive Order N-9-25 permits this as a matter of state law through January 2028, but depending on the timing of residents' returns, an extension to this provision may be needed. Additionally, local jurisdictions should ensure their planning and building departments process permitting applications and certificates of occupancy consistent with the Governor's order. Other alternative home types that could be used as temporary housing include farmstays, bed-and-breakfast inns, resorts, retreats, camps, recreational vehicles (RVs), and moveable tiny homes,

among others. Executive Order N-9-25 suspends a number of state law requirements that would normally be barriers to the use of these kinds of structures through January 2028; again, depending on the timing of residents' returns, an extension to these suspensions may be needed. Furthermore, local utilities and municipal public works departments should coordinate to prioritize flexibility for utility service so residents are rehoused, including allowing for mobile service for pump-out of onboard sewage tanks for sanitation.
- Develop an inventory of vacant rental units families can move into.

In addition, FEMA should reevaluate the need for and consider implementing the federal Direct Lease program to supplement FEMA temporary housing subsidies. The Direct Lease program can lease properties not typically available for long-term stays, such as corporate and vacation rentals. It provides a necessary backstop for people suddenly in need, especially if they can't find a landlord that's willing to take the FEMA subsidies.

L – 3. Build Workforce Housing for Construction Workers and their Families

Providing affordable housing options will help incentivize contractors and workers to come to Los Angeles, which is critical, given the lack of available workforce to meet labor needs for the rebuild. Workforce housing deserves priority, especially that housing starts declined in the first quarter of 2025. This slump is an indication of a local capacity gap.

The City and County of Los Angeles can both push for quick construction of alternative housing types—which could include modular, prefabricated, and other quick, low-cost assembly methods—on property owned by government and religious institutions. This will enable public lands to become anchors or nodes of development, will signal the visible commitment of government and civic institutions to the recovery effort, and will help to address the shortage of construction workers in the region.

Existing state and local laws already enable the use of such properties for housing. AB 2295 (2022) authorizes public school districts to build housing on their land, SB 4 (2023) authorizes religious institutions to do the same, and the City of Los Angeles Executive Directive 3 (2023) expedites housing development on all City-owned parcels of land. Both the City and the County should develop programs and expedited approval processes to promote the construction of worker housing on such property, with a goal to produce an initial set of units by Jan. 7, 2026, to house the workers who will build replacement housing in the burn areas.

The City and the County should do this by:

- Mapping eligible properties and approaching government entities and religious institutions that hold available land with a preapproved list of housing typologies and an expedited permit process to encourage construction.
- Offering tax credits for developers to construct modular rental housing on these properties. If implemented, the proposed Resilient Rebuilding Authority would be able to assemble lots and convey them to developers.
- In Altadena, expanding the County Land Bank pilot program to assemble four to five larger sites for rental worker housing.

L – 4. Expedite Workforce Training for the Rebuild and Landscape Restoration

The Los Angeles region is already facing a shortage of construction workers, which federal immigration enforcement actions have exacerbated, chilling the industry. Rebuilding homes, businesses, and infrastructure and restoring native habitats destroyed in the firestorms will require a vast construction and landscaping workforce. The rebuilding efforts require immediate attention to workforce capacity and availability.

To rapidly develop a construction and habitat restoration workforce with the capacity to meet the scale needed for the rebuild and restoration effort, the City of Los Angeles Economic and Workforce Development Department (EWDD), or its successor agency, and the County Department of Economic Opportunity (DEO) should establish or enhance partnerships across the public and private sectors.

The EWDD and DEO should do this by:

- Working with local and regional construction companies to develop a bench of preapproved vendors to tap into existing talent pools.
- Working with the construction trades to develop accelerated training programs focused on essential skills, and collaborating with vocational schools like the Los Angeles Trade-TechnicalCollege and the Los Angeles Community College District to create fast-track certification courses.
- Implementing a mix of in-person and online training to accommodate different learning styles and schedules to make it easier and quicker for individuals to participate.
- Recognizing existing labor shortages, and, along with local elected officials, continuing to lobby state and federal policymakers for targeted workforce immigration reforms to retain critical workers.
- Working with community organizations to ensure protections for undocumented workers and recent immigrants.

L – 5. Create Voluntary Transfer of Development Rights Programs

Some properties are not suitable for rebuilding due to their topography, substandard emergency vehicle access, limited number of vehicular ingress/egress routes, and/or adjacency to fire-prone wildlands/undeveloped parklands and open space. Owners of some of these properties may not be able to rebuild due to insurability issues and/or the steep costs and length of time to rebuild. Additionally, some community-serving/institutional facilities (e.g. schools, churches, day care centers, etc.) may own multiple parcels, contiguous or not, which were impacted by the wildfires, and may be exploring modified uses of those properties, including for housing, in light of the fires. Meanwhile, in both burn areas, there are properties that are suitable for accommodating greater density and floor area located along wider commercial corridors with sufficient infrastructure and emergency vehicle accessibility.

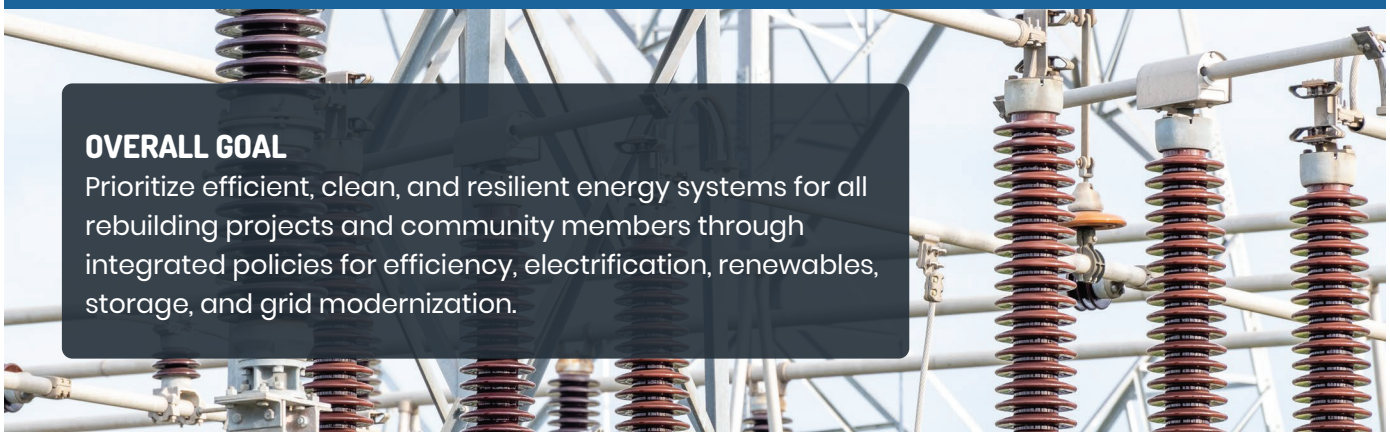
Various municipalities throughout California utilize transfer of development rights (TDR) programs to concurrently achieve two goals: to encourage the preservation of or retirement of development rights of certain types of properties with sensitive features, and to generate revenue either for the donor site owner or for public-serving priorities. The City of Los Angeles already has a Transfer of Floor Area Rights program in the Downtown core, and the County has a program to achieve limited transfer of development rights within the Santa Monica Mountains North Area Community Standards District, but neither jurisdiction has a program that can effectuate TDR for fire-impacted properties in the burn areas.

A voluntary TDR program would provide property owners with more options to sell their properties to an entity or entities that will either redevelop their property resiliently or retire the property's development rights and transfer them to a more suitable recipient site. It would also allow community-serving/institutional facilities to either retire the development rights of some of their fire-damaged parcels and transfer that development potential to their main property/campus to build back more resiliently, or to sell to an eligible recipient site in exchange for fair market compensation.

The City and County should each explore creating TDR programs for the burn areas by:

- Assessing other TDR programs throughout California to determine appropriate eligibility criteria for both donor and recipient sites, and to determine the form in which the transferred development rights will take (i.e. density and/or floor area and/or height and/or grading amounts, etc.).
- Engaging with a real estate market analysis firm to assess the likely demand for TDR programs and to prepare a formula for appropriately and fairly calculating the cost of purchasing development rights from a donor site.
- Conferring with impacted community-serving/institutional facilities to assess the benefits to them from being able to utilize a TDR program to transfer development rights between their own properties to enable the retiring of more sensitive sites to more suitable sites.
- Exploring ways for those availing themselves of a potential TDR program to be placed in a streamlined and non legislative process for individual transactions, as a lengthy approval process would deter the program's effectiveness.

ENERGY SYSTEM RESILIENCE AND MODERNIZATION (E)



OVERALL GOAL
Prioritize efficient, clean, and resilient energy systems for all rebuilding projects and community members through integrated policies for efficiency, electrification, renewables, storage, and grid modernization.

E – 1. Provide Energy Code Certainty, Accelerate Resilient and All-Electric Construction, and Educate Stakeholders

Energy-efficient, all-electric buildings powered by renewable energy provide multiple benefits, including reduced emissions, improved air quality, and resilience when paired with battery storage. All-electric homes can have lower construction costs than dual-fuel homes (a recent UC Berkeley study estimated $9,000 in cost savings) and can reduce utility bills. Solar and back-up batteries provide resiliency benefits in any power outage—including powering water systems for dousing properties in future fire risk events—while reduced gas infrastructure also provides seismic co-benefits by eliminating associated fire risks during earthquakes.

Integrating an all-electric approach into home design equips rebuilt homes to use the full spectrum of electric technologies: heat pumps for HVAC and water heating, solar, batteries, and vehicle charging. While these systems and technologies are proven and available, they are less familiar to designers, installers, and homeowners.

A number of actions at all levels of government and across utilities can facilitate retrofitting existing buildings to be more resilient and all-electric new construction:

- Prioritize schools for solar and battery storage installations to meet critical load in blackout events, and serve as informal community resilience centers in future crises.
- Ensure modular/factory-built homes meet local sustainability, resilience, and workforce standards through preapproved designs and standards.
- Develop and fund local incentive and education programs, working through state appropriations and utility programs.

- Foster regional partnerships across utilities, community groups, building contractors, and labor to reduce costs and simplify implementation for contractors and homeowners.
- Expand access and financial incentives, prioritizing low-income households by collaborating with utilities and nonprofits to leverage standardized plans/discounts.
- Improve access to training and incentives with contractors and the trades.

The Governor, Legislature, and California Energy Commission (CEC) should also provide clarity and certainty on the applicability of state energy codes by:

- Avoiding waivers to state energy codes and requirements.
- Confirming all buildings permitted before Jan. 1, 2026, are required to comply with or exceed the 2022 Title 24, Part 6 energy code and that buildings permitted after Jan. 1, 2026, are required to comply with the 2025 code.
- Affirming current requirements for solar, battery-ready, and all electric-ready building standards, and committing to future code updates.
- Directing the CEC to develop an AI agent to help architects, engineers, and homeowners educate themselves and navigate electric-ready, solar, battery storage, and other all-electric home elements.

The County of Los Angeles should:

- Create a County-level fast-track process for high-performance resilient rebuilding (e.g., distributed energy resources, all-electric, or holistic methods like Passive House) through streamlined permitting, preapproved designs, and other incentives, thereby creating a parallel option to what the City of LA established through executive order.
- Provide additional prioritization and support for like-for-like rebuilding that integrates enhanced resiliency and/or for those structures that require adjustments or variances. Doing so will encourage property owners and communities to access the related benefits (e.g., backup water and power, cost savings for all-electric homes).

A "fast-track" permitting and review process will accelerate the adoption of these highly efficient electric building systems and appliances during the critical rebuilding phase.

The City of Los Angeles should continue to implement with urgency the Mayor's Executive Order No. 5, which fast-tracks voluntary all-electric rebuilds, by directing the Los Angeles Department of Water and Power (LADWP) to provide additional assistance, education, and incentives to architects, engineers, contractors, and homeowners to build all-electric and other high-performance homes that provide resilience benefits (e.g., distributed energy resources, Passive House).

E - 2. Develop Preapproved Designs and Streamline Permitting and Interconnection

Permit review and approval time is a factor in the decision about whether to rebuild. These times can be extended when projects include less familiar design approaches, buildings systems, or materials. Providing preapproved designs, either for complete buildings or for specific systems or construction details that meet code standards, can speed up permitting, reduce cost increases, and ensure rebuilds

consistently meet high resilience and energy-performance standards. Alignment of these plans with rebates and tax credits can mitigate additional costs related to achieving increased resilience.

Several actions are available both locally and at the state level to support expedited permitting and interconnection for rebuilds. The County of Los Angeles and the cities of Los Angeles, Malibu, Pasadena, and Sierra Madre should:

- Add to existing and/or create new preapproved standard designs for solar, battery storage, and other related systems for rapid online permitting by working with their respective fire and building departments and the electric utilities.
- Work with the American Institute of Architects (AIA) and others to develop and publish a library of preapproved all-electric, solar, battery-ready, fire-resistant designs including highly efficient, healthy, and fire-resistant Passive House-style designs.
- Prioritize with urgency the adoption of automated solar/battery permitting (e.g., SolarAPP+).
- Offer expedited, fee-waived, bundled permits for rebuilds with clean energy systems.
- Create a master permit for all-electric whole home designs and for specific components (e.g., solar and battery storage) design and engineering.
- Provide interconnection transparency dashboards.

At the state level, the Governor should direct California Public Utilities Commission and CEC to confirm state incentive program eligibility (Self-Generation Incentive Program, TECH Clean California) for locally preapproved designs to support these local efforts. The Legislature and Governor should also support statewide standardization of heat pump permitting through executive action and legislation (e.g., SB 282). Finally, the CPUC and LADWP should adopt an emergency policy to expedite interconnection for rebuilds.

E – 3. Provide Dedicated "Resilient Rebuild" Incentives

Incentives are needed to make resilient rebuilding and clean energy systems financially accessible to all rebuilding residents, particularly those underinsured or facing resource constraints.

Through the state budget process, the Governor and Legislature should work together to appropriate substantial state funding for "resilient rebuild" incentives (e.g., distributed energy resources, backup water systems, all-electric buildings, and fire-safe materials) for new construction and retrofits. The budget should bolster and accelerate the Wildfire and Natural Disaster Resiliency Rebuild (WNDRR) Program or similar programs with dedicated funding for Altadena, Malibu, and Sunset Mesa (up to $54M via the California Regional Initiative for Social Enterprise) and Pacific Palisades (up to $56 million via LADWP and Pasadena Water and Power) provided an income-based sliding scale to provide additional incentives for those residents who need additional financial support.

The Governor and Legislature should also:

- Explore executive actions and legislation to allow stacking of state, local, and utility incentives for rebuilding in fire-torn areas and approve a permanent solar/storage property tax exclusion (i.e., SB 710).

- Provide tax credits or income-qualified cash incentives for all-electric rebuilding, including through the Resilient Rebuilding Authority, if established.

Similarly the City of Los Angeles, LADWP, County of Los Angeles, and Southern California Edison should all work to establish local, stackable rebate and incentive programs that complement and leverage state funds for qualifying systems (i.e., portion of Chapter 7A costs, heat pumps, batteries, etc.).

E – 4. Prioritize Strategic Undergrounding and Fire-Safe Infrastructure in an Equitable Manner

Overhead power lines have been responsible for igniting some of the state's most significant wildfires over the past decade. The strict liability associated with those ignitions has caused serious financial challenges for the state's utilities and has led to rising electricity rates. In addition, utilities are increasingly relying on Public Safety Power Shutoffs (PSPS) during wind and other weather events in an effort to avoid liability, leaving customers without power in ways that sometimes jeopardize their health and safety.

Undergrounding power lines drastically reduces the risk of wildfire ignition from those lines, but is hugely expensive. If regulators approve undergrounding the distribution grid and the utilities implement this approach, homes that remain intact may be expected to cover the related costs. Initial estimates range from $5,000 to $15,000 to trench and connect new underground systems to a home or commercial property. To the extent possible, these additional costs should be borne by utilities, and/or via funding provided via state budget (i.e., Legislature and Governor) and federal reimbursements. Alternative financing mechanisms beyond utility rate increases should be explored for undergrounding in the burn areas.

Utilities should take additional steps to reduce costs to ratepayers and improve safety, including co-locating fiber/broadband conduit when trenching and undergrounding, integrating needs for future electrification capacity when planning for undergrounding, and implementing safety measures like auto shut-off valves where gas infrastructure remains.

E – 5. Strengthen and Modernize the Electrical Grid with Distributed and/or Bidirectional Energy Resources, Virtual Power Plants

The electrical grid must evolve to become more flexible, responsive, and integrated into the network of resilience measures. To capture the potential to install a large amount of solar and battery storage in front of and behind the meter, it is imperative that the electrical grid is robust enough to meet increased demand from all-electric buildings and EV charging.

Electric grid equipment and technology also should support future advanced functions such as the integration of distributed energy resources (DERs) like solar and batteries, microgrids, and the utilization of DERs via virtual power plants (VPPs) to enhance load management and demand response. Microgrids

can provide power to parts of a community, often at public or civic facilities, when there are utility grid disruptions. Microgrids use energy stored in batteries to provide backup power for critical facilities, cooling centers, or resilience hubs (e.g., California's Community Resilience Centers) to enhance community safety by providing safe shelter, cooling, power for home medical devices, medicine refrigeration, and cell phone charging. Where microgrids are feasible and provide neighborhood-scale backup power solutions, they can obviate the need for individual buildings to install solar and battery storage systems, thus lowering the portion of rebuilding costs that fall on individual property owners.

To enhance grid resilience, the state should expand grants (e.g., EPIC, SGIP) and incentives for fire-zone microgrids, DERs, and VPPs. Locally, LADWP, Pasadena Water and Power, and Southern California Edison should integrate high levels of DERs in service-scenario planning and in upgrades to distribution infrastructure in fire zones. The utilities should also prioritize rebuild zones in the burn areas for hosting capacity improvements such as:

- Installing smart controls/panels for load management.
- Ensuring zero emissions backup power for critical water infrastructure.
- Identifying and deploying microgrids at critical facilities like schools and community centers.
- Establishing VPPs by aggregating behind-the-meter DERs, including potentially across utility jurisdictions.
- Conducting advance planning for vehicle-to-grid (V2G) and vehicle-to-home (V2H) integration.

E - 6. Ensure Resilient Communication and Essential Services During Public Safety Power Shutoffs

In an effort to reduce liability associated with wildfire ignitions from downed power lines, utilities are increasingly relying on PSPS during wind and other weather events. However, maintaining the functionality of communication systems and essential services, such as medical care, fire suppression, and law enforcement, is critical during PSPS.

Operational communication networks are vitally important for issuing emergency alerts, evacuation orders, and general coordination during PSPS and disaster events. Backup power supplies—in particular, solar and storage tied to critical load that provides co-benefits during seismic events—are also critical for police and fire stations, medical care, and other essential facilities to operate through an extended PSPS period and disaster events. Utilities should coordinate with telecommunication and other essential service providers to ensure system resilience and that appropriate PSPS preparations and notification protocols are in place. Utilities should secure communications lines and equipment to a similar degree as the electrical system, including through strategic undergrounding and the use of fire-resistant infrastructure, while coordinating with essential service providers—particularly first responders and hospitals— to ensure PSPS readiness.

WATER SYSTEM RESILIENCE AND SAFETY (W)

OVERALL GOAL

Build climate resilience through upgrading and improving water infrastructure and best management practices primarily for the burn areas, but Countywide recommendations are also provided. The recommendations are intended to be consistent with LA County Water Plan's comprehensive goals and targets. In addition, the effort to build water systems and community climate resilience should be consistent with essential efforts to improve seismic resilience regionally.

W – 1. Assess Existing Conditions and Needs Before Rebuilding

Rebuilding for resilience requires an understanding of current conditions, points of failure, the extent of damage, and future needs and opportunities. The City, County, and affected water utilities should begin with a comprehensive evaluation to understand current system damage, ongoing vulnerabilities, and opportunities for improvement. This diagnostic phase is essential to establish a strong foundation for climate-resilient investments—one that addresses both the immediate impacts of wildfire and the long-term demands of reliable day-to-day water system performance. These entities should:

- Inventory fire-related damage to water infrastructure. All water utilities should quickly compile cost estimates of direct and indirect fire-related damage to water infrastructure. At-risk water system managers should identify additional capital infrastructure that will enhance climate resilience and prioritize it for construction. Water utilities should aggregate these estimates into a funding request to the State Legislature to cover damaged and needed water infrastructure, and federal agencies should consider these requests in disaster relief allocations. State and/or federal assistance is necessary because the impacted area includes small water utilities with modest revenue streams and historic cash flow issues.
- Evaluate progress on post-Woolsey utility resilience recommendations. LA County should inventory and report on the progress on the dozens of recommendations developed in response to the 2018 Woolsey fire. Understanding what has been completed—and what remains outstanding—helps avoid duplication, identify gaps and obstacles, focus resources effectively, accelerate stalled efforts, and improve coordination across agencies.

- Conduct a climate vulnerability assessment to identify at-risk infrastructure, prioritize hardening, and identify additional water infrastructure needs to increase resilience. The LADWP, the Los Angeles County Department of Public Works (LACDPW), and other agencies, as appropriate, should promptly lead a water infrastructure vulnerability assessment in the burn areas and areas adjacent to the wildland-urban interface, focusing first on areas identified in CAL FIRE's updated Fire Hazard Severity Zone maps. The assessment would cover public and community water systems, sewer systems, private onsite wastewater treatment systems (OWTS), and private wells.
- Assess the technical, management, and financial capacity of small water districts in vulnerable areas to build and maintain water system climate resilience. Some water agencies may lack the financial, technical, or management capacity to upgrade water systems to provide strong firefighting capacity and guarantee safe, reliable water to all customers during and after climate-driven disasters. A comprehensive assessment of these small water districts is necessary to develop further recommendations on needed actions to enhance water system and community climate resilience.
- Test flow rates and system capacity. As part of the water infrastructure assessment, utilities should perform flow tests to determine actual system flow capacity. Fire flow requirements have evolved over time, and older systems may have been built to a standard lower than would be currently required. System and flow requirements should be updated/upgraded as needed when new development occurs.
- Reassess equipment and water supply needs for periods when aircraft support is unavailable. The Los Angeles County Fire Department (LACoFD) and City of Los Angeles Fire Department (LAFD) should reevaluate the equipment and water supply needed to fight wildfires without relying on firefighting aircraft, which may be grounded during high wind events. Defining this demand is a critical first step toward coordinating with water agencies on how to meet any revised water supply needs.
- Site new or replacement water infrastructure outside of high-risk areas when feasible. LACoFD and LAFD should work collaboratively with water utilities to evaluate the locations of critical infrastructure like reservoirs, large cisterns, booster pump stations, treatment facilities and wells to reduce vulnerability.

W – 2. Response Actions to Reduce Exposure to Fire-Related Contaminants

Neighborhoods and water systems can be vulnerable across a number of dimensions during and after emergency or disaster events. State and local government actors can reduce this vulnerability by:

- Testing water systems for multiple contaminants before lifting health notices and improving water quality communications. The Legislature should revise AB 541 to provide clear guidance, requirements, and funding for water suppliers to test for wildfire-related contaminants in drinking water systems, especially where structures have burned. Local agencies should conduct volatile organic compound (VOC) testing at nearby fire hydrants, service lines, water meters, and other infrastructure when conditions are safe, analyzing VOCs using EPA Method 524.2 or 534.4, with a detection limit of 0.5 ppb or more sensitive. They should also test for VOCs such as trihalomethanes, dichlorobenzenes, dichloroethanes, dichloropropane, MTBE, TCP, EDB,

ethylbenzene, trimethylbenzenes, vinyl chloride, xylenes, styrene, and naphthalene. Agencies should make results of water testing public within seven days and not list water advisories until all tests confirm contaminant levels are below drinking water standards or equivalent. The law should include timelines for public reporting and communication tools that clarify the limits of parcel-level testing. By December 2025, the State Water Resources Control Board's Division of Drinking Water should launch a user-friendly online portal with up-to-date water quality information across affected systems. Additionally, water suppliers should be encouraged to share real-time updates through platforms like Watch Duty, with clearly organized and accessible data to support public awareness and safety.

- Protecting water infrastructure and watersheds through erosion control and nature-based solutions. Sediment buildup can severely impact the capacity of Los Angeles County Flood Control District's regional stormwater capture systems, local groundwater recharge projects, and riparian habitats and coastal waters. Local governments should strengthen hillside protection and erosion control to safeguard water infrastructure and watersheds from post-fire sedimentation and runoff caused by flooding and debris flows. Structural best management practices (BMPs) like jute netting, silt fencing, mulching, and hydroseeding should be prioritized in the short term. Vulnerability assessments should inform long-term strategies like targeted hillside replanting and the installation of debris flow barriers or basins . Local governments should also utilize nature-based solutions like reforestation, soil stabilization to enhance runoff infiltration, and stream restoration efforts.
- Developing a wildfire response plan that includes protocols for deploying mitigation measures to prevent contaminated runoff from entering surface waters after an urban conflagration. The LACDPW and the City of Los Angeles Bureau of Sanitation and Environment (LASAN) are best suited for this task. .
- Increasing the capacity of low-flow diversions so they can handle the first flush of pollution for the first two hours or .01 inches of a storm, ensuring that diversions are protected from excessive sedimentation, protecting pumps, and reducing the amount of debris entering the sewer system. The LACDPW and LASAN are ideally positioned to lead this effort.
- Developing, with state funding, a post-disaster surface water monitoring program by the end of the year to determine potential public health and aquatic life risks and the impacts of the climate disaster on aquatic life over time. Again, the Los Angeles County Department of Public Works and City of Los Angeles Bureau of Sanitation and Environment are most appropriate to coordinate this work.
- Developing statewide risk-based thresholds for recreational exposure to contaminants related to fires in water and sanitation within two years. This could be an joint effort for State Water Resources Control Board and Office of Environmental Health Hazards Assessment
- Equipping local and regional water infrastructure with reliable backup energy sources like solar, storage, or traditional fuel generators to ensure water can be pumped, treated, and distributed even when utility power is intentionally shut off as part of fire spread mitigation. For example, Las Virgenes Municipal Water District (LVMWD)'s water treatment plant in Malibu Canyon uses large solar energy backups during outages. This approach of bolstering energy resilience through distributed energy resources should also apply to homes and businesses in high-risk fire areas.

W – 3. Enhance Regional and Local Firefighting Capabilities

Protecting water supply and pressure for firefighting will require a coordinated regional approach, collaboration across agencies, and flexible access to alternative sources.

The LACoFD and the LAFD should collaborate with other agencies to update and align water infrastructure design fire protection standards for fire flow volumes, residual pressure, hydrant design and spacing, and other design factors; explore the use and deployment of temporary solutions—like portable high-pressure hoses, water tanks, and pumps—to quickly deliver water where it's needed most for firefighting; and coordinate refill locations, including identifying new locations as needed, for firefighting helicopters.

County and City governments should adopt new standards and incentives to increase distributed on-site water reserves for firefighting, encourage the use of external sprinklers in combination with on-site water storage, and facilitate strategic service shutdowns to protect water pressure during firefights. They should do this by:

- Requiring or incentivizing private properties to maintain accessible water supplies for emergency use and to install clearly marked draft lines (hose or pipe connection) from these water sources to the street to enable quick access by fire trucks. This includes private wells and small water systems.
- Integrating rainwater capture systems separate from the potable water system, such as cisterns, into home rebuild requirements under ordinances like the City of LA's Low Impact Development program. Cisterns can also be used to reduce potable water demand for landscape irrigation and should remain full during red flag fire risk events, but not refilled during fires. These systems, along with pools, should retain water on site for multiple uses—autonomous roof and vegetation dousing, backup fire suppression during power outages (via battery-operated pumps), and as a resource for firefighters.
- Developing standards for external residential sprinkler systems to ensure they are properly designed, built, maintained, powered independently (e.g., with off-grid energy sources), and drawing from an alternative water supply where feasible, such as a cistern or pool.
- Requiring easy-to-shut-off water valves located outside in areas easily accessible to firefighters. This should include an additional shutoff on the customer side of a water service meter operable without special tools or equipment or have automatic options like requiring subsurface thermal sensors on customer service lines that shut off water flow when extreme temperatures are reached.
- Finally, LADWP and other water districts should evaluate existing and potential additional connections with adjacent districts to share access to potable, recycled, and other water sources. Additionally, fire departments need early, frequent coordination with water utilities to ensure water-dropping helicopters can easily access water from out-of-service, non-potable reservoirs. LADWP's Encino, Stone, and Hollywood reservoirs are excellent examples of successful efforts.

W – 4. Protect Building-Scale and Property-Level Infrastructure

New water meters should be required for properties affected by structure fires and installed in insulated, composite vaults. Meters should remain in place until the replacement of the property service line, clear test results from fire-related VOC testing, or installation of a backflow prevention device by the public water system. Where possible and affordable, water utilities should also require copper piping in high fire risk areas to reduce potential drinking water contamination from melted plastic pipes. On all residential properties, proven, state-of-the-art backflow prevention devices should be required on water services to prevent contamination of the system post pressure loss. Alternatively, utilities such as LADWP should look for water meters with built-in backflow devices or standardize a meter/backflow combo that can become the standard domestic meter installation.

Given that larger water meters are now required for installation on homes to accommodate fire suppression, new meters should have the highest levels of accuracy to reduce nonrevenue water.

W – 5. Expand Resilience of the Wastewater System in Places Currently on Septic Systems

Numerous properties with septic systems were lost along the Pacific Coast Highway (PCH) in the City of Malibu in areas vulnerable to sea level rise and related climate impacts. Furthermore, recovery efforts in the Palisades and Altadena provide an opportunity to more affordably connect septic systems to sewers in the areas of greatest vulnerability.

The City of Malibu should evaluate existing septic or on-site wastewater treatment systems (OWTS) and pipes and consider various wastewater management and conveyance alternatives. As a first step, the City of Malibu should ensure within 90 days that damaged systems do not discharge to the Santa Monica Bay and nearby beaches. It should also assess how many systems are currently vulnerable to sea level rise and other climate impacts, and the cost to replace damaged and destroyed systems with OWTS that meet the City's build codes, Regional Water Quality Control Board requirements, and Coastal Act compliance. Once that assessment is complete, the City of Malibu, in collaboration with others, if necessary, should consider any of the following alternatives:

- Extending the City of Los Angeles' Coastal Interceptor Sewer (that currently goes to Coastline Drive at PCH/Sunset Mesa) to the western region of burned structures on PCH along Carbon Beach;
- Building a sewer that connects the burned areas and PCH development to the Civic Center Treatment Facility and increasing capacity at that facility as needed;
- Developing a working partnership with the LVMWD that would include new sewers and pumping stations; or
- Building new advanced OWTS that are resilient to sea level rise and other climate impacts.

The City should complete an alternatives analysis by midsummer and consider which burned properties and other properties should connect to the sewer systems.

If the City of Malibu does move forward with a sewer system alternative, the sewer system should be built in coordination with undergrounding power lines, upgrading communication cables, and strengthening water distribution infrastructure to minimize disruption on PCH. The City should assess any infrastructure planned to be sited along PCH for vulnerability to sea level rise, king tides, large waves, and storms. The California Department of Transportation (Caltrans) needs to work with Malibu to develop and implement a plan to protect PCH and associated wastewater and water supply infrastructure from sea level rise, storms, large waves, and extreme tide risks.

The City and County of Los Angeles should complete an assessment of the OWTS in the Palisades and Altadena burn zones, develop a sewer hook-up plan, and implement it for damaged systems. Those entities should also consider opportunistically funding sewer service extension to currently septic-reliant households in Altadena and Pacific Palisades.

W – 6. Leverage Partnerships and Financing to Enable Rapid Implementation

Ownership and responsibility for water resources are distributed across a complex set of jurisdictions and authorities that limit strategic investment in resilience. Local and regional systems are on their own financially to pay for the costs of being more resilient in the future, and thus, the options to finance greater resilience in the current system are generally enhanced direct user charges and property tax levies.

Partnerships and support can provide regional benefits. The Los Angeles County Department of Public Works, Pasadena Water and Power, the Metropolitan Water District, and LADWP should form partnerships to support smaller, more cost-constrained water utilities in the Altadena area and in or adjacent to Fire Hazard Severity Zones within the County, in alignment with the County Water Plan and the County's Small Water Systems Task Force. The county should advocate for the state to quickly provide funding for rebuilding damaged small water district infrastructure and climate resilience capital improvements.

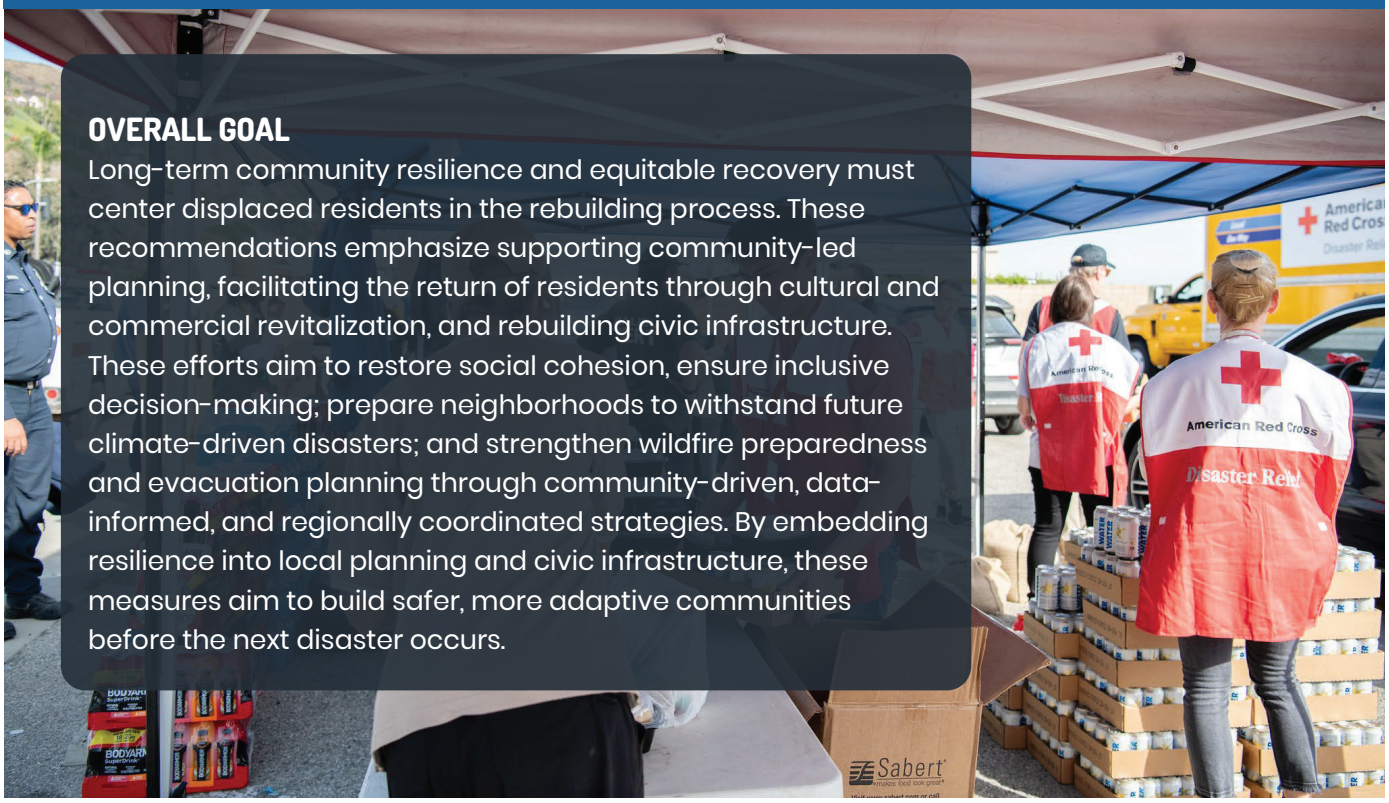
The County should help to support and clarify new and existing mutual aid agreements between water systems,such as the Public Water Agencies Group and the California Water/Wastewater Agency Response Network (CalWARN), to codify clear roles, responsibilities, and staff planning. These agreements should address intertie reliance, ensure sufficient staff support, and clearly delineate operation and maintenance roles and intervals between water systems and fire departments for key infrastructure.

State-level actions can help provide critical funds for important resilience needs as well, particularly for water systems vulnerable due to fire damage or risk. By early 2026, the State Water Resources Control Board (State Water Board) Division of Financial Assistance should consider both temporary and permanent financing assistance to systems with downgraded bond ratings (and, thus, financing abilities for new capital infrastructure) due to fire damage or risk. By the end of the 2025-2026 legislative session, the state (or the County) should evaluate the cost of fire insurance for water utilities and ways to ameliorate the affordability impact of this growing cost on ratepayers, including promoting existing or supporting new types of pooled insurance models. The State Legislature and agencies should avoid imposing new resilience mandates on local water utilities that are unfunded or have not been cost-vetted.

Finally, water utilities themselves should consider modifying their rate structures to more fairly distribute costs of service through differentiated charges. Instead of applying variable or fixed charges for fire resilience-related upgrades uniformly to all customers when such upgrades do not provide uniform benefits, water utilities should pursue flat fee or per-usage surcharges based on the degree of enhanced protection provided to certain customers by fire resilience infrastructure. To facilitate differentiating charges, utilities should incorporate measurement of parcel-level cost-of-service into the design of any system improvements. As an alternative to changing a utility's rate structure, the water systems, in conjunction with the County or the City of Los Angeles, can consider special assessments or utility user tax-type charges. If differentiating charges proves infeasible, utilities should provide rate assistance to low- and moderate-income customers to offset the cost burdens associated with resilience upgrades.

Starting as soon as possible, incentivize local- and regional-scale climate resilience and water pollution prevention projects through targeting funding from water districts for landscape transformation, the LA County Safe Clean Water Program for stormwater capture and pollution reduction, and state funding from Proposition bond funds.

COMMUNITY RESILIENCE, EQUITY, AND HEALTH (C)



OVERALL GOAL

Long-term community resilience and equitable recovery must center displaced residents in the rebuilding process. These recommendations emphasize supporting community-led planning, facilitating the return of residents through cultural and commercial revitalization, and rebuilding civic infrastructure. These efforts aim to restore social cohesion, ensure inclusive decision-making; prepare neighborhoods to withstand future climate-driven disasters; and strengthen wildfire preparedness and evacuation planning through community-driven, data-informed, and regionally coordinated strategies. By embedding resilience into local planning and civic infrastructure, these measures aim to build safer, more adaptive communities before the next disaster occurs.

Photo Credit: Los Angeles County

C - 1. Promote Cohesion, Connection, and Consensus by Supporting Community-Led Recovery Efforts

Community restoration—the process of restoring the bonds and connections among former residents to shape and facilitate the physical rebuilding of homes, apartments, shops, workplaces, and community facilities—will be crucial to ensuring an equitable, fire safe and resilient recovery.

The physical rebuilding of the burn areas will be uneven and take many years. Local officials will be called upon to make numerous decisions that will affect the future form, feel and character of the rebuilt communities. Deliberate, thoughtful, and long-term engagement of community members displaced and affected by the firestorms will be important to shaping the policy, practices, norms and outcomes of the rebuilding effort.

Myriad community-driven efforts are underway in the burn areas. These efforts have gathered important information, ideas, and resources. They have also been pivotal in the emotional recovery of the community. As the initial rush of outside support recedes and as those displaced and affected by the firestorms face prolonged strain on their time and energy, these homegrown efforts will require

resources and staff support to sustain their work. These conversations are safe spaces in which to discuss, debate, and work through thorny policy, urban planning, public realm, and community design issues. State and local governments should consult and codesign development, design, and investment approaches to rebuilding with community groups and coalitions that have emerged from the areas destroyed by the firestorms.

The philanthropic sector should provide multiyear staffing and support for community-driven recovery, visioning, design, and planning efforts to provide a safe space to address complex issues of policy and development—like the role of a Resilient Rebuilding Authority or whether targeted increases in density should be permitted in certain areas. Support should include operational funding and access to a consultant bench for facilitation, engineering, design, architecture, and policy analysis services. This will enable community members to have the agency and tools necessary to work together with local and state governments to shape key decisions.

C – 2. Ensure Worker Health and Safety During Cleanup

To protect often-vulnerable cleanup workers—especially those hired privately—and residents from exposure to hazardous materials and toxicants in fire debris, the state Division of Occupational Safety and Health (Cal/OSHA), Los Angeles County Public Health and City health departments should develop and distribute clear guidance materials providing detailed health and safety information that:

- Is available in multiple languages
- Is disseminated widely, both virtually and in person (via public meetings, mailers, online postings, etc.)
- Includes specific information outlining appropriate personal protective equipment (PPE)
- Explains where PPE can be procured or accessed, including, for workers, referencing established PPE distribution points

These agencies should also provide guidance materials to property owners managing debris removal and to their contractors.

C – 3. Provide Health Screening for Organized Groups of Volunteer Responders

Volunteer firefighters and recovery workers may experience exposures to toxic chemicals and other health risks and could accordingly require medical screening. However, these individuals may lack the medical resources available to professional responders. Free medical services and screening sign-ups should be offered for these volunteers, either at an existing location or a newly established one.

The California Fire Chiefs Association and the City and County Fire Departments should coordinate to create a formal program that would identify volunteers for screening, establish a screening location, and ensure future access to these services. The state may need to enact legislation to establish an ongoing program; philanthropic funding can help support both short- and longer-term needs.

C - 4. Expand Accessible Mental Health Services

A great majority of fire survivors report significant worsening of their mental health. The LA County Department of Mental Health (DMH), LA County Department of Parks and Recreation, philanthropic organizations, community-based organizations, places of worship, community clinics, and healthcare providers should collaborate to expand mental health services for affected communities.

Current efforts to promote social connectedness and cohesion that include integrated mental health support, whether led by government or community groups, need increased support and scaling up. Programs should address typical barriers to access by supporting mental health services specifically for uninsured workers and residents, and ensure culturally competent outreach and services reach undocumented workers and residents, potentially via community clinics. Service coordination should ensure targeted outreach to underserved communities and to scale existing successful community programs.

C - 5. Facilitate the Return of Displaced Communities Through Services, Art, and Commerce

As of the date of this report, many residents of the areas devastated by the January 2025 fires are apprehensive about returning home. Those whose houses remain standing do not wish to live in a denuded, depopulated landscape. Residents are also concerned about contamination in the soil surrounding their homes and in parks and the impact of potentially yearslong construction in their neighborhoods. Yet, despite these apprehensions, residents will choose to return in the not-too-distant future. State and local governments and philanthropic organizations should support that process by deepening an understanding of community needs and supporting community-driven efforts to revive social connection.

The California Governor's Office of Emergency Services (CalOES), the Los Angeles County Department of Public Health, and the Southern California Association of Governments should collaborate to codesign a survey to better understand who is displaced, what their needs are, how long their existing services/funding will last, and what will be needed to support them over time (e.g., housing, community services). These agencies should pool resources to hire researchers to produce an in-depth study of survey results and share the findings widely.

Philanthropic organizations and local governments should support impacted communities in planning events geared toward reconnecting displaced residents and supporting local businesses. These communities are well-known to be home to artists, performers, musicians, writers, and producers. Community-generated public events and installations of public art can help bring residents back together. Initially, these can take place in neighboring communities and later, when remediation and reconstruction benchmarks have been met, they can take place in the affected communities themselves.

Public events should also involve commerce, whether a storefront, a farmers' market, or a space activated with food trucks or street vending. Local governments should investigate whether Small

Business Administration funds can apply to such events and, as necessary, should amend local codes to facilitate these commercial activities. New programs should partner with existing local event organizers such as CicLAvia and Community Arts Resources, among many others. Houses of worship and service organizations can also play a crucial role in reconnecting communities.

C – 6. Rebuild Community and Civic Infrastructure with Disaster Readiness

The Los Angeles region will continue to face earthquakes and catastrophes exacerbated by climate change. The destruction of schools, places of worship, parks, libraries, community centers, and other community and civic infrastructure in the January firestorms presents a generational opportunity to rebuild community-scale civic infrastructure in ways that better prepare all communities to respond to, survive, and recover during and after such disasters.

City and County departments, school districts, and places of worship should reconstruct community-scale infrastructure to include DERs like solar, community-scale microgrids with battery storage, and EV-to-microgrid-enabled charging; neighborhood-level cisterns that can capture rainwater and be used as water sources for firefighting; and tree canopy to shelter and cool residents during extreme heat events. These systems will enable critical facilities to continue providing shelter, cooling, refrigeration, electricity, charging facilities, communications access, food distribution, potable drinking water, and firefighting water supply during power outages or periods of extreme grid stress caused by firestorms, heatwaves, earthquakes, and other disasters.

Rebuilding civic infrastructure with these features will effectively create neighborhood-level disaster response and recovery centers where residents, workers, and businesses can seek shelter during disasters, gain current information, access resources, receive assistance, and plan next steps. Furthermore, the fires destroyed well over two dozen schools and religious institutions and numerous other community facilities. Without the rapid restoration of these critical community hubs, many people will choose not to return to the communities from which they were displaced. All levels of government should facilitate the fast reconstruction of resilient community facilities.

- The California Legislature should pass urgency legislation to enable the formation of a Resilient Rebuilding Authority as outlined by this Commission. Once formed, an Authority can coordinate the planning and reconstruction of these facilities, can apply for grants and philanthropic funds, and can use its tax increment and bond financing capacity to support school districts, places of worship, parks departments, and other agencies.
- Both the County and the City of Los Angeles should create streamlining and exemption opportunities for community, institutional, and civic facilities that plan to rebuild in a more sustainable and resilient manner, but cannot take advantage of streamlining benefits available through the "like-for-like" rebuild designation. The Governor should also direct the Office of Land Use and Climate Innovation (LCI) to create a CEQA exemption for these types of projects. Eligible entities should include, but not be limited to public, private, and charter schools; childcare facilities; religious institutions and community centers; parks and recreational centers; libraries, day camps; public safety facilities; and nonprofit-operated museums and cultural centers. Both the County and the City should designate a specific "concierge" that can assess whether a project includes sustainable and resilient features and is superior to a "like-for-like" rebuild, and, if

a project is streamlining-eligible, can facilitate its expeditious review through both discretionary and ministerial approval paths. Additionally, many of these facilities were older and not subject to current on-site parking requirements. The County and City should evaluate options for these facilities to be able to maintain the same level of on-site parking that they provided before the fires, assuming they are not increasing the total floor area of their campus by more than 20 percent.

- The Los Angeles Unified School District (LAUSD), Pasadena Unified School District, charter schools, private schools, and Palisades Charter High School should rebuild schools as disaster recovery centers with localized cisterns, bioswales, bioinfiltration wells, and rain gardens that can support local climate resilience from drought and urban heat island impacts as well as provide adequate water storage for firefighting. Additionally, DERs and backup power storage will enable schools to serve as disaster recovery and cooling centers for any future climate or severe weather events. Schools should use the EPA's Disaster-Resilient Design Concepts to develop climate resilient campuses with onsite green infrastructure, water plaza, and water harvesting concepts. School districts and schools can collaborate with local partners to ensure ecological, educational, and equity goals are met. Drawing upon some of the lessons learned from the LAUSD and Project DROPS program, this model of rebuilding should focus on high schools with large field spaces. Plans should include reforestation redevelopment and consider tree canopy equity.
- The Los Angeles County Department of Parks and Recreation and the City of Los Angeles Department of Recreation and Parks should ensure that parks are rebuilt with large cisterns and direct release systems. These should be equipped with battery backup to serve as a water source for firefighters during emergencies. As a co-benefit, the cisterns can help manage rainwater on site and provide a sustainable irrigation source during regular, non-fire conditions.

Philanthropic foundations and individuals and community development financial institutions (CDFIs) should provide initial or bridge funding to write down the cost of including resilience features in the rebuilding of civic infrastructure. Funds can be repaid through long-term operational savings, Proposition 4 Climate Bond proceeds, Los Angeles County Measure W funds, or other financing, including potential proceeds received by the City or County from legal settlements related to the fires.

C – 7. Create Places of Refuge from Fast-Advancing Fires

In recent firestorm events, people could not evacuate quickly and would have benefited from having safe spaces nearby. A refuge should have more than one purpose and thus should factor into the design of all community-serving facilities, such as schools, libraries, community centers, senior centers, park gymnasiums, or other public and private facilities. The locations must be clearly marked and a formal part of evacuation planning by local law enforcement and transportation agencies. This includes ensuring access in times of need.

Local governments, in coordination with school and recreation districts and nongovernmental organizations with community-serving facilities, should develop places of refuge from fire within neighborhoods designated as High and Very High FHSZs, providing designated shelter-in-place options for those who cannot evacuate quickly. Funding could come from insurance and disaster funds, bonds,

parcel tax, a Resilience District, or from the proposed Fire Control District. Recovery and rebuilding efforts should incorporate places of refuge into the burn areas, and part of future development and planning over the next 10 years for other High and Very High FHSZs. One place of refuge should undergo construction and piloting in the next two years.

C - 8. Expand, Accelerate, and Implement Climate and Resilience Planning

The City of Los Angeles and Los Angeles County have a long history of climate planning, with a number of leading climate plans pioneering and integrating sustainability and resilience. Those plans have also been integrated with the City and County's General Plans through multiple elements, including the Safety Elements for both City (2021) and County (2022), and the respective Area or Community Plans. For example, the City's Safety Element already calls for the City to develop and implement pre-disaster plans for interim evacuation, sheltering, and public aid for disaster victims displaced from homes and for disrupted businesses, including using parks and other public facilities for shelter; to develop and establish procedures prior to a disaster for immediate reestablishment and maintenance of damaged on interrupted critical infrastructure systems and services; and to revise and enhance plans and programs as risk scenarios change due to climate change.

In 2018, Resilient Los Angeles called for the City to integrate resilience into community plans by 2028. Today, Los Angeles County and the City of Los Angeles are both incorporating sustainability and resilience into community planning. The West San Gabriel Valley Area Plan (2025) references a resilient and sustainable built and natural environment as part of its overarching vision. The County's Westside Area Plan (2025) calls for sustainable building practices as part of its guiding principles for the environment. The City's West Los Angeles 2023 Draft Community Plan Policy Document guiding principles include Climate Change Resilience.

Additional focus should be placed on implementing key resilience and fire plans that have been developed over the past decade. Any additional planning should create actionable roadmaps that move toward the implementation of resilience projects. Implementing already-developed plans would advance the sustainability and resilience of communities, both in recovery and rebuilding and for preparedness, social cohesion, and equity. The City and County are also aligning with FEMA National Disaster Frameworks for response and recovery, as well as implementing existing broader plans will help to fill some gaps.

By the end of fiscal year 2025-26, local elected officials should increase accountability measures for plan implementation. Universities, community foundations, or other local institutions should be engaged as partners to track the implementation of City and County plans that have previously been developed through a publicly accessible online tracker or annual scorecard. The amount of funding available for implementation of existing plans is also critical and any accountability measure or tracking tool should include it.

As local governments focus on implementing existing plans, philanthropy can fund continued resilience planning at the neighborhood level as impacted communities become ready to engage. Focusing on neighborhood scales for climate adaptation and resilience planning is critical as each neighborhood's risks and solutions differ. For the areas impacted by the January fires, this process is also critical for

building back community and social cohesion while mourning the loss of the people who are gone and the places forever changed.

While existing Area Plans and Community Plans have guiding principles focused on sustainability and resilience, the policy guidance is broad and lacks detail to implement projects. All General Plans, Area Plans, and Community Plans in the region should continue to meaningfully integrate sustainability and resilience. Through the process of Eaton and Palisades fire recovery planning, local governments should document more robust recovery planning tools and resources that can be applied to future disruptions and disasters such as fires, extreme precipitation, flooding, or earthquakes.

C - 9. Implement Evacuation Planning and Community-Scale Mitigation

Evacuation planning is a critical element of both personal and community preparedness. Preparing for and mitigating the impacts of future wildfire is also of key importance. Communities, especially those located in areas that may be more challenging to evacuate, have an opportunity to be partners in mitigating risk and creating individualized solutions. Local governments should support community-level planning processes for both evacuation and wildfire mitigation.

Evacuation Planning

The State of California created a series of additional requirements through SB 99 (2019), AB 747 (2019), and AB 1409 (2021), which were incorporated to the City of Los Angeles' General Plan Safety Element (2021) and the County's Safety Element (2022, updated in 2025). However, these requirements are focused on high-level planning and coordination and are heavily incident-dependent. These requirements include identifying neighborhoods with only one ingress/egress but appear to not require specific neighborhood-scale evacuation plans.

Local governments should identify neighborhoods with limited exit routes for evacuation and work with them on neighborhood-scale evacuation planning. These plans could include developing alternative routes through private properties and mechanisms for barrier removal (e.g., locked gates). Local governments should coordinate with adjacent jurisdictions and, where appropriate, Caltrans on communication protocols, traffic management and flow, and emergency services access. Shelter-in-place strategies also should be considered for when evacuation is not preferred or feasible. Neighborhood-scale planning can complement County/City incident-specific evacuation planning. Philanthropy, planning, engineering, and public safety consultants can help support these efforts.

Wildfire Mitigation Planning

Los Angeles-area local governments in High and Very High FHSZs should be required to prepare Community Wildfire Protection Plans (CWPP) through a public process. CWPPs are typically created by government agencies without public input; the planning process in Los Angeles should, instead, involve robust public engagement to produce plans tailored at the local scale and with a special impetus to develop plans for areas of the WUI that have not burned in many years. The planning process should involve sophisticated local engagement, providing residents with the knowledge to make informed

decisions. CAL FIRE and CalOES, in consultation with local governments, should select contractors and fund the planning process.

City and County fire planning agencies, Fire Safe Councils, and other nongovernmental organizations, community-based organizations, academic institutions, and other interested parties should also work together to develop a framework and implementation plan for a Regional Wildfire Mitigation Program. Because a Fire Protection District may take time to establish, these groups should coordinate to advance community-driven wildfire mitigation activities and planning efforts, begin the assessments needed to realize the Fire Protection District (e.g., identifying areas to establish vegetated buffers), and develop constituencies for the Fire Protection District efforts.

C - 10. Improve Decision-Making and Communications for Wildfire Alerting and Evacuation

Scenarios and playbooks for specific disaster scenarios are effective tools for emergency management and have been used in planning organizational responses to many other hazards, like earthquakes, floods, and hurricanes. The State of California has developed a suite of tsunami maritime and emergency management playbooks for the entire coast, and CalOES and FEMA have prepared a series of catastrophic plans for the state, but wildfires and urban firestorms are not among them.

During the January fires, there were issues with alerting and evacuation, including timeliness of alerting and evacuation decisions, communications among firefighters and with residents, the capacity of 911 call centers, and congestion along evacuation routes.

Fire districts across the Los Angeles region, along with CalOES and CAL FIRE, should develop and test playbooks for wildfire alerting and evacuation for all local- and state-designated High and Very High Fire Hazard Severity Zones. A prioritization scheme should be developed that considers factors such as fire hazard, population density and demographics, and evacuation route availability and capacity. Places of safe refuge (see above recommendation) and facilities with access and functional needs (AFN) and other vulnerable populations, such as nursing homes, hospitals, and schools, require consideration and incorporation into the planning, playbooks, and testing. New data and modeling on fire hazard, spread, and damage, and new tools for wildfire detection, alerting, and evacuation should also undergo evaluation and integration, as appropriate, into planning for alerting and evacuation decision-making and operations planning. An integrated platform enables identification of the most critical roads for evacuation and communities at high evacuation risk. Broadly, such an integrated model can guide decision-making for resilience (e.g., capital planning and budgeting), enhance community evacuation pathways accounting for updates to road conditions, and facilitate decision-making for resource allocation during wildfire evacuation scenarios in real-time.

FEMA Hazard Mitigation Grant Program funding may be used to initiate planning; additional funding sources could include the U.S. Forest Service, other state and federal agencies, and philanthropic foundations.

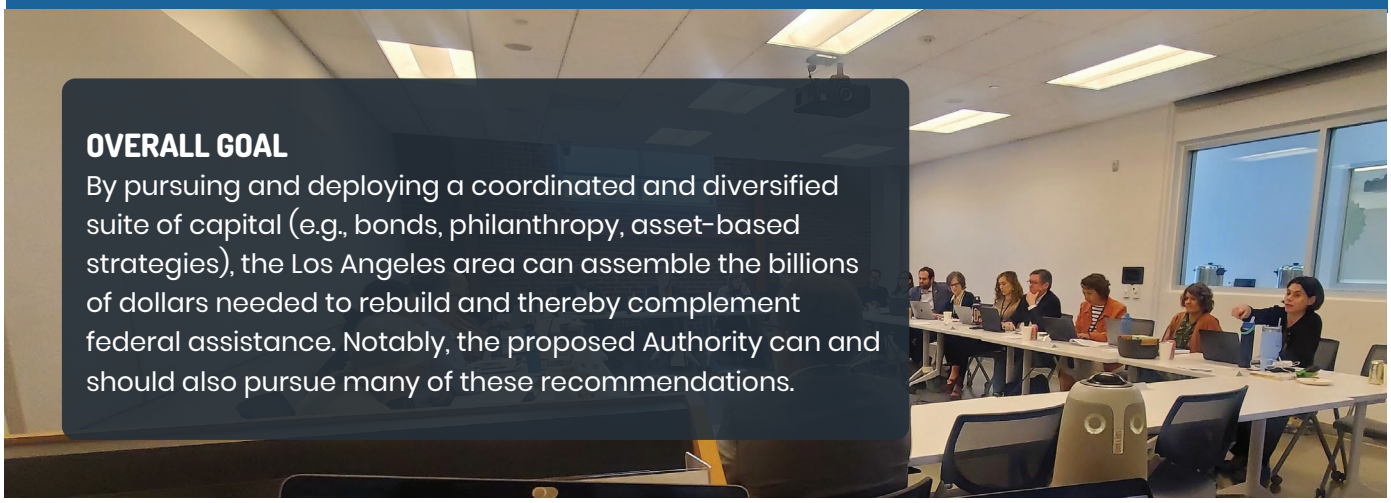
C – 11. Update Disaster Recovery Act to Facilitate Future Fire Rebuilding

California already has a law on the books, the Disaster Recovery Reconstruction Act, Cal. Gov. Code §§ 8877.1 et seq., that enables local jurisdictions, through the adoption of plans or ordinances, to establish "reconstruction authorities" for the purposes of rebuilding after a disaster event. That law was adopted in the wake of the devastating September 1985 Mexico City earthquake as an attempt to promote advance planning for natural disasters.

The Act would provide a powerful tool for local governments to prepare to respond to a disaster by setting up a governmental structure in advance—one like the Authority this Commission proposes—to manage the recovery efforts. However, the Act defines the powers such a "reconstruction authority" would hold by referencing the powers held by community redevelopment agencies, governmental entities that existed at the time the Act became law but have since been stripped of their powers by subsequent state enactment. As a result, it is questionable whether a "reconstruction authority" established today can possess the powers needed to successfully effectuate a recovery.

To encourage and enable local jurisdictions to plan for effective recovery before a disaster by creating a "reconstruction authority" that can be activated when disaster strikes, the State Legislature should amend the Disaster Recovery Reconstruction Act to clarify the powers such a "reconstruction authority" should ideally possess. Those powers should parallel those outlined in recommendation G-1 below and should require the appointment of two or more residents of the affected communities on the governing body of the Authority.

FINANCE (F)



OVERALL GOAL
By pursuing and deploying a coordinated and diversified suite of capital (e.g., bonds, philanthropy, asset-based strategies), the Los Angeles area can assemble the billions of dollars needed to rebuild and thereby complement federal assistance. Notably, the proposed Authority can and should also pursue many of these recommendations.

F – 1. Establish Partnerships to Coordinate and Leverage Funding to Accelerate Rebuilding

Either placed within the proposed Authority or alongside the Authority, the state, City of LA, and County of LA also should:

- Collaborate to designate a body that can manage the raising of capital, the coordination of funds and the identification of gap financing needs for rebuilding in order to better administer and coordinate various private and public sector funding streams coming into the region. Ideally, they should establish a formal consortium—via the proposed Resilient Rebuilding Authority/ies and/or in collaboration with local governments—that includes community development financial institutions (CDFIs), philanthropic organizations, lenders, and other partners to raise catalytic capital for blended finance solutions to better help low- to moderate-income families return to their homes and neighborhoods, rebuild resilient multifamily rental and for-sale housing, and drive investment into community assets for an equitable, sustainable recovery.
- Explore using public-private partnerships, or P3s, where the Authority or public agency can designate a private partner to deliver a public service, project, or facility that can maximize performance, minimize cost, mitigate risks, and speed timelines. The benefits of P3s include introducing innovative approaches and technologies while private companies take on additional risk based on their performance.

F – 2. Launch a "LA Resilient Rebuilding and Reconstruction Fund" Philanthropic Campaign

The state, County of LA, and City of LA should partner with the Authority to jointly launch a "LA Resilience Rebuilding and Reconstruction Fund" philanthropic campaign, aiming to raise and or aggregate $200

million over the next 12 to 24 months to leverage and unlock $2 billion in private sector and complementary (e.g., CDFI) resources by working in partnership with leading philanthropic organizations, corporations, and individuals. If the Authority does not administrate the fund, it should solicit proposals for an administrator of the LA Resilience Reconstruction Fund to manage grantmaking, recordkeeping, and reporting.

F – 3. Develop a Housing Financing Product to Provide Soft Second Mortgage Products

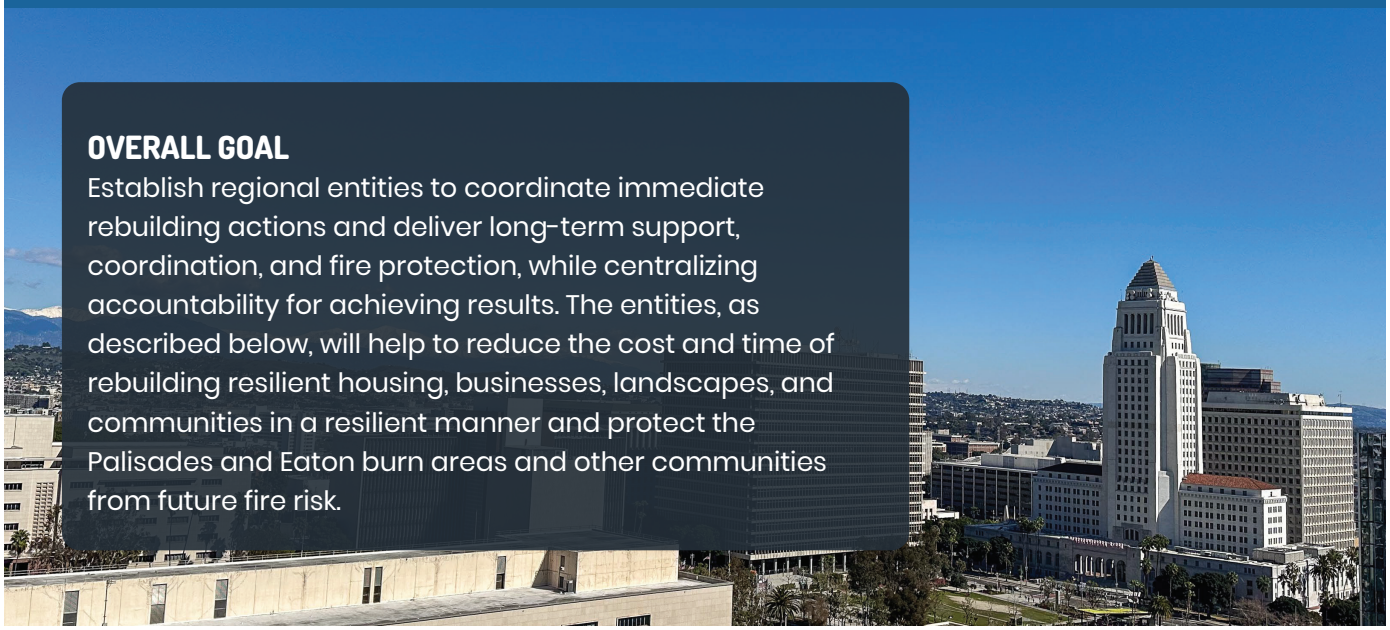
The Governor should instruct the California Department of Housing and Community Development (HCD) to develop a housing financing product to provide soft second mortgage products that will help low-income homeowners rebuild or repair homes with costs that insurance payments, SBA, and FEMA aid did not fully cover. Such a product could help preserve affordability by requiring affordability covenants for rentals or owner-occupancy for single-family homes. All investments and improvements in housing assets through this product should support fire-resistant and climate-resilient improvements.

Financial Benefit to Housing reconstruction: Quickly bringing shelter and revenue-generating assets back on line

Following the 2025 Los Angeles firestorms, at least 16,000 homes and other structures were damaged or destroyed. It is imperative to rebuild housing as quickly as possible to assure continued property tax revenue. For example, the average annual tax revenue generated by one home in Los Angeles County is $11K annually, annual tax revenue for 16,000 homes over a year is $181 million, and accrued tax revenue over 30 years is $5.44 billion. Not constructing these homes reduces the revenue for the City and County drastically.

Property taxes account for a significant portion of City and County budget revenue. While the exact percentage varies by location, property taxes are generally the dominant local government funding source. In 93% of localities, they represent the largest tax revenue source, and they account for 72% of total local government revenue.

GOVERNANCE AND ACCOUNTABILITY (G)



OVERALL GOAL
Establish regional entities to coordinate immediate rebuilding actions and deliver long-term support, coordination, and fire protection, while centralizing accountability for achieving results. The entities, as described below, will help to reduce the cost and time of rebuilding resilient housing, businesses, landscapes, and communities in a resilient manner and protect the Palisades and Eaton burn areas and other communities from future fire risk.

G – 1. Establish a Region Wide Resilient Rebuilding Authority for the Eaton and Palisades Burn Areas

Challenge and Background

Rebuilding neighborhoods at the scale of the Eaton and Palisades burn areas typically takes a decade, if not longer. Rebuilding sites one by one will take considerable time, be more expensive, and require substantial government agency staffing to support. A more coordinated, centralized approach can help better promote and leverage opportunities for shared neighborhood scale resilience measures and ensure vulnerable populations—including the uninsured, underinsured, seniors, renters, and people with unique access and functional needs—are protected.

Many of California's disaster planning frameworks encourage the use of special development authorities and districts to plan, manage, and finance rebuilding efforts after a disaster. Both California's Community Redevelopment Disaster Project Law and the Disaster Recovery and Reconstruction Act automatically confer broad and extraordinary powers to these types of special districts and authorities, while the National Disaster Recovery Framework calls upon state governments to set up these types of authorities prior to a disaster occurring, so the legal and fiscal tools are available to ensure recovery and rebuilding can be coordinated and swift. In fact, the currently adopted CalOES California Disaster Recovery Framework encourages the state government to "[c]reate a post-disaster recovery authority

for catastrophic-level incidents that operate immediately after a disaster and feature the legal and fiscal tools needed to ensure recovery."

Often the creation of these authorities post-disaster has been catalyzed by an infusion of federal resources, and the need to both coordinate and leverage the spending of those funds. The timing of this potential federal catalyst for rebuilding following the Jan. 7 fires remains uncertain; meanwhile with the demise of Redevelopment Agencies in 2012, local jurisdictions in California lack ready-made entities with the necessary powers and expertise to implement neighborhood-scale rebuilding efforts.

These challenges only underscore the need for a Resilient Rebuilding Authority for the Eaton and Palisades fire areas to help impacted areas, residents, and businesses rebuild, return, and recover. An Authority would streamline recovery efforts by providing a single point of accountability and help ensure a resilient and sustainable recovery that will ultimately result in enhanced property insurability and survivability.

Recommendation

The Commission urges the California Legislature to pass and the Governor to sign urgency legislation pursuant to the CalOES Disaster Recovery Framework enabling the creation of a Resilient Rebuilding Authority with broad and extraordinary powers to lead the recovery of the Eaton and Palisades fire areas. The associated state act would establish a new entity or entities with the powers and purpose detailed below. Failing such an action by the Legislature and the Governor, the Commission recommends the Legislature confer such powers upon an existing state or local agency with relevant land use, real estate development, and financing expertise. Once established, the Authority's governance body should hire a highly qualified management team led by an experienced CEO who would take immediate action on key priorities using the granted powers while developing a strategic short- and longer-term plan for financing the recovery, working with leaders in philanthropy, community development financial institutions (CDFIs), banks, and private funds to coordinate investments. Initial staffing for the Authority could be provided by seconded representatives of relevant state and local agencies who are managed initially by an interim executive director selected by the governing body. Start-up funding should be provided via a combination of local, state, and philanthropic resources with non-grant funding eventually being repaid through land resales, tax increment financing (TIF), transfer of development rights (TDR), and other financial mechanisms.

Authority Activities

The Authority would facilitate large-scale rebuilding, planning, land banking, logistics management, and contracting to reduce costs, increase efficiency, and ensure implementation of resilience and sustainability best practices. The Authority should have the power to undertake many activities, including:

- Using tax increment financing and other financing tools (e.g., Enhanced Infrastructure Financing Districts and/or Climate Resilience Districts) to fund resilient reconstruction of structures and infrastructure.
- Working with community-oriented financing institutions (e.g., community development financial institutions [CDFIs], credit unions, community banks) to enhance opportunities to offer affordable financing option(s) for residents lacking the resources to fully fund their individual home

rebuilding needs, ensuring there is patient, flexible capital available to all ranges of community stakeholders and maximizing resilience and sustainability outcomes.

- Establishing easements and/or purchase of available land at fair prices from homeowners and property owners in affected areas to bank land for reconstruction and other identified community needs, helping to avoid land speculation, and facilitating a coordinated and consistent approach to rebuilding. The Authority would then work with selected builders to build homes with resilient standards and make them available for "first looks" to former residents—or their families—who wish to return.
- Managing logistics for rebuilding, including security, vacant lot maintenance, transportation infrastructure for construction workers, material delivery, and street improvement sequencing.
- Issuing RFP(s) that are informed by community input, align with existing community and area plan, and require climate-resilient standards that result in contracting with experienced homebuilders to build higher-quality, more affordable homes.
- Coordinating bulk and discounted purchases of fire-resistant modular/prefabricated buildings and building materials, efficient electrical components (e.g., appliances, HVAC, solar, batteries), native plants and landscaping material, water systems and cisterns, and other items.
- Planning and implementing the rebuilding of neighborhood-serving retail districts through the purchase, assembly, entitlement, and financing of commercial and mixed-use corridors.
- Ensuring the rebuilding of replacement housing for apartment and other multifamily units destroyed or damaged in the fires at rents matching the affordability profile of the units lost in the Jan. 7 firestorm.
- Serving as a coordinating body for utility and infrastructure upgrades, while providing funds for upgrades and opportunities for bulk purchasing and master contracting.
- Coordinating with other public agencies to implement landscape-scale fire mitigation practices.
- Identifying opportunities to enhance evacuation routes when restoring commercial corridors and rebuilding housing supply.

Example: Building Back Vibrant, Locally Owned Commerce

As an example of the role and powers of the Resilient Rebuilding Authority, to help commercial areas recover, the Authority could purchase properties in the commercial districts and assemble and entitle development sites that can support ground level, neighborhood-serving retail with two to three stories of mixed-income and multifamily residential above, consistent with existing Community Plans. To make it feasible for displaced and other local businesses to return to the community, the Authority can hold the fee title to the properties and ground lease the parcels for development. The ground floor retail portions would be conveyed back to the Authority to hold in a commercial land trust established and operated by the Authority or create a nonprofit retail association or cooperative with local community members, displaced shopkeepers, and restaurateurs representation on its board. The Authority can dedicate a portion of the residential ground lease proceeds to be used to maintain stable rents for shopkeepers and retail tenants. The Authority can also set design standards and financially support the rebuilding and maintenance of the public realm to include street trees, bike lanes, and bus shelter infrastructure to leverage potential and future transit investments.

Powers Granted to the Authority

To pursue these objectives, the Authority should be empowered to:

- Accept funds from other government entities, philanthropy, and private sources
- Issue and/or sell bonds
- Incur and restructure debt
- Collect property tax increment
- Create, approve, and execute designs for development (e.g. specific plans)
- Acquire real property
- Sell property, including to existing nonprofits and land banks
- Make loans or provide funds or financial assistance to residents and businesses
- Pay for, in whole or in part, infrastructure improvements
- Execute trust deeds or mortgages
- Dispose of assets, including by sale or lease
- Enter into contracts
- Hire and contract for executive and operational staff

The Authority should not be granted eminent domain power in areas zoned R-1 as of Jan. 1, 2025, but should be granted that power in commercial corridors and multifamily-zoned areas. It should have the same ability as private landowners to alter individual property lines (e.g. lot consolidation and splitting). In exercising these powers, the Authority should be required, through either goals or mandates, to deliver housing options (both in terms of housing type and income availability) no less than what existed prior to Jan. 1, 2025.

Authority Governance, Accountability, and Staffing

The multi-jurisdictional nature of the two burn areas—comprising four cities and two supervisorial districts within unincorporated Los Angeles County—plus distinct socioeconomic, cultural, and historical characteristics, complicates the potential governing structure of the Authority, as does the need to ultimately provide accountability for the expenditure of federal, state, local, private sector, and philanthropic funds.

The Commission envisions several viable pathways to establishing a governance and accountability structure to facilitate an expedient, resilient recovery. In the Commission's view, the most promising of these is the legislative establishment of a newly established, state-chartered singular Authority, or an Authority for each of the burn areas, holding the distinctly enumerated powers outlined above, and with appointments made by the Governor, Legislature, and the affected local governments. Appointed individuals should have knowledge and experience of disaster recovery, real estate development, government financing, logistics, sustainability, or resilience, with at least two seats reserved for individuals who were residents, property owners, or business owners in the burn areas as of Jan. 7, 2025. It is the Commission's belief that such an Authority would be uniquely positioned to centralize accountability, streamline recovery efforts, elevate community-led visioning, and ensure resilience benefits for the rebuilt communities.

While the Commission prefers an Authority established by the legislature and Governor, alternatives could achieve some of the objectives outlined above but may be challenged to achieve them with the

same degree of coordination, efficiency, and accountability. Those alternatives would still require legislative action to authorize the powers needed, and include:

1) Granting the necessary new powers to an existing local or regional government agency, which would, in turn, stand up and house new internal divisions with the sole purpose of administering the recovery efforts in each burn area. These new divisions would be guided by input from Community Advisory Committees, with appointments by the Governor, Legislature, and the relevant affected city governments and the County of Los Angeles.
2) Providing the necessary new powers to a newly established Enhanced Infrastructure Financing District (EIFD) or Climate Resilience District (CRD) within each of the City of Los Angeles and the County (i.e., to serve affected unincorporated areas and smaller cities) to serve the affected areas with board appointments by the affected city governments and the County of Los Angeles. Such an EIFD or CRD could then contract with a nonprofit development corporation or corporations that would manage redevelopment efforts.
3) Granting the necessary new powers to a new Joint Powers Authority (JPA) established by the County of LA, City of LA, and other affected cities that would administer recovery in the burn areas through two subdivisions one for each of the primary burn areas with smaller communities included accordingly. In this case, the Legislature could specify that the JPA board must be composed of representatives of the Governor, Legislature, Los Angeles County, the impacted cities, and local residents. The Board would then be guided by input from Community Advisory Committees for each of the two subdivisions.

The Commission recognizes there are benefits and drawbacks to each of these options, or of any other variation of them, and calls on policymakers to quickly coalesce around a preferred pathway. The Commission is clear: Time is of the essence to create an Authority empowered to manage the rebuilding effort. The Authority must have broad and extraordinary powers to buy, assemble, hold, and convey land to spur rapid rebuilding. It must be held accountable for outcomes that benefit the public at large and the affected communities. Without such an Authority, land speculation will accelerate, rebuilding will be more costly and disorganized, and rebuilt areas will be less resilient.

G - 2. Establish a New Regional Fire Control District Focused on Prevention and Risk Reduction

Challenge

Relying on individual property owners—be they public or private–to maintain defensible, fire-safe conditions is important but inadequate to protect lives and property. Often, property at the dividing line between open space, where fires usually start, and urbanized areas, where they cause the most damage, is not managed to prevent fire from spreading. Continuously maintaining a vegetated buffer zone—ideally including native, ecologically appropriate, fire-resistant vegetation—could reduce the risk of fire transmission. Such a buffer zone requires integration into a fire mitigation strategy that includes retrofits of nearby structures to harden them to fire and community-level measures to reduce risks of fire ignition and spread.

Recommendation

To better protect lives and property by investing in regional wildfire mitigation strategies, Los Angeles County should establish a Los Angeles County Fire Control District with a sustained dedicated funding stream. The Fire Control District would implement landscape- and community-scale mitigation practices according to principles of adaptive management, adjust mitigation activities in an ongoing way to incorporate advances in fire science, and address interactions between the natural and built environments, including retrofitting nearby structures and supporting parcel-level maintenance of fire-resilient urban canopy. These actions would also help enhance and increase the insurability of homes and neighborhoods. The District should incorporate consideration of other hazards including heat, drought, and landslides into its design of strategies for addressing fire risk.

District Financing

An ongoing funding stream is essential to the Fire Control District's success in mitigating fire risk. A parcel tax or fee on properties, approved by voters, would be the most reliable source of funding to establish the District and maintain mitigation strategies. The newly established tax or fee would be assessed just on properties in the highest-risk fire zones, or on all property within the County with risk-adjusted fees assigned by severity of fire risk zones—using existing maps and, potentially, the publicly accessible wildfire catastrophe model currently under development, —recognizing that large fires have a countywide economic and social impact.

District Activities

The Fire Control District should coordinate with landowners to establish, develop, and implement context-sensitive fire risk mitigation strategies, much in the way the Los Angeles County Flood Control District keeps drainage channels and other parts of the flood control system well-maintained and operational. These strategies should include:

- Constructing and maintaining a "defensive" fire vegetated buffer zone between open space and private development in high-risk areas that can slow or stop the spread of wildfire flames and reduce radiant heat exposure to neighborhoods. The District could use City, County, and other planning processes and partnership with regional conservancies to identify strategic locations for buffer zones; prohibit connective fuels between parcels; and manage fuels in open spaces within communities; and allocate funding for ongoing maintenance of any buffer zones that are established.
- Facilitating community education about fire prevention in local- and state-designated Moderate, High, and Very High Fire Hazard Severity Zones. The District should coordinate with community groups to provide first-hand education on fire safety, such as performing defensible space inspections and recommending measures to create a fire-safe home. In addition, the District should coordinate with Fire Safe Councils, Firewise Communities, and other community groups to maintain buffer zones and help remove non-native flammable brush.
- Planting native, more fire-resistant California natives to assist in remediating contaminated soil in burn areas. Certain California native plant species—including California buckwheat, telegraph weed, and California bush sunflower—possess the capacity to absorb heavy metals from soil. This is not a substitute for the testing and removal of contaminated soil. However, phytoremediation can help restore the soil to health and beautify the landscape. In addition, by

reintroducing native plants, it can help make communities more resilient to fire in the longer term by reintroducing native plants to the landscape. Local nurseries, such as the Theodore Payne Foundation and Walqaqsh California native seeds, could supply both seed and saplings. The District should coordinate with philanthropic foundations and individuals and community organizations to plant recommended species in select burned areas, parkways, and open spaces. It should also work with local public works agencies to launch a communications campaign encouraging residents, including those in communities downwind of the fires that inherited fire-borne debris, to voluntarily plant recommended species.

District Governance

To execute fully on a coordinated fire mitigation program at the regional scale, the Commission recommends creation of a new local government agency that would be empowered to acquire land or easements and be assigned spending authority for a parcel tax or other dedicated funding stream. A singular agency would promote coordination and the Countywide approach needed to ensure the broad public benefits of mitigating the County's widespread fire risk, though other potential designs are possible, including a JPA.

Creation of the Fire Protection District is essential for the region's future. As a starting point, the state should fund a partnership among City and County fire and planning agencies; wildland managers; Fire Safe Councils and other NGOs; CBOs; universities; and other interested parties to develop the framework and implementation plan for a Regional Wildfire Mitigation Program. This partnership can build out the ideas and develop the constituencies and public support for the buffer zone and mitigation activity portfolio envisioned for the Fire Protection District. With adequate funding, the partnership can also support and coordinate community wildfire protection planning and begin the assessments needed to identify areas amenable to vegetated green buffers.

The partnership should include LA County's three existing Landscape Maintenance Districts as important contributors, which levy assessments in defined areas mostly for the purpose of planting and maintaining ornamental vegetation. Although these existing districts do not currently focus on fire mitigation, they do engage in some activities like brush clearance that are relevant to the District's scope and have relevant powers including land acquisition for open space. They can serve as a viable vehicle to pilot some of the projects or activities the Commission envisions for the Fire District and potentially be expanded to cover more area, though this would not produce the benefits of a countywide approach.

Finally, the District and the associated roles and funding source(s) would need to be approved by the voters. Although the District provides a countywide benefit with retrofits and wildfire risk reduction, the Commission recognizes the need to ensure such a countywide measure is supported by voters. As such, a ballot measure may be broadened to reflect the needs for mitigating extreme climate hazards beyond fire in its final formulation.

Appendix: Commission Working Groups

Working group leads are indicated by an asterisk.

Building Codes and Resilience Standards

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Vegetation, Urban Landscapes, and Wildlands

Cecilia Estolano*, Mark Gold*, Tracy Quinn, Ben Stapleton, Jonathan Parfrey, Roy Wright

Insurance Reforms for Resilient Communities

Laurie Johnson, Laurie Schoeman*, Roy Wright

Land Use and Workforce

Cecilia Estolano*, Ron Frierson, Veronica Padilla-Campos, Tracy Quinn, Donna Shen Tripp*, Laurie Schoeman, Ben Stapleton

Energy System Resiliency and Modernization

Marty Adams, Ted Bardacke*, Mary Leslie*, Rudy Ortega, Veronica Padilla-Campos, Fran Pavley, Matt Petersen*, Laurie Schoeman

Water System Resilience and Safety

Marty Adams, Ted Bardacke, Mark Gold*, Fran Pavley, Tracy Quinn*

Community Resilience, Equity, and Health

Marissa Aho*, Laurie Johnson, Mary Leslie, Rudy Ortega, Jonathan Parfrey*, David Wilson

Finance

Cecilia Estolano, Laurie Johnson*, Laurie Schoeman*, Jonathan Parfrey, Ben Stapleton

Governance and Accountability

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PART II

UCLA Research Context and Considerations

INFORMING RESILIENT REBUILDING FROM THE JANUARY 2025 LOS ANGELES FIRES

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Community engagement was a foundational pillar of UCLA's work, to bring the lived experiences and knowledge of fire survivors to the Commission and UCLA's analysis. The authors express appreciation to the Department of Angels—and their staff including Christine Kwon, Christian Esperias, and Andrew King—for partnering with UCLA and the Commission on community engagement meetings. The two

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The authors thank the more than 100 fire survivors and community stakeholders who shared their expertise, experiences, and perspectives at government events and community group meetings attended by UCLA researchers and those who participated in UCLA-hosted meetings and interviews. See the Appendix for a list of those who participated in these meetings with Commissioners and UCLA Researchers. A myriad of community groups have sprung up to address recovery needs in innovative ways, founded by survivors who dedicate countless hours to their community. The authors recognize their community leadership and hope that this report helps advance their community-driven recovery.

As a land grant institution, UCLA acknowledges the Gabrielino/Tongva peoples as the traditional land caretakers of Tovaangar (Los Angeles basin, So. Channel Islands).

Disclaimer

The analysis expressed in this report is that of the authors and not necessarily that of any of the contributors, reviewers, or community participants, nor does it represent the University of California, Los Angeles as a whole. Reference to individuals or their affiliations in this report does not represent their endorsement of the report's contents.

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Part II: Table of Contents

Executive Summary

As partner to the Blue Ribbon Commission, UCLA sought to provide rigorous and actionable research support and to engage and elevate the voices of communities impacted by the fires.

The catastrophic Los Angeles firestorms of January 2025 served as a critical turning point for the Southern California region, causing widespread destruction, displacement, and loss of life. In the fires' wake lie challenges at every scale.

Tens of thousands of Angelenos face the daunting task of rebuilding homes and businesses, often without adequate insurance to cover the expense. Communities with deeply rooted histories seek to restore the connective threads and diverse populations that made them unique. And alongside the urgency of bringing back what was lost lies recognition that the region must fortify itself for a future in which climate change pushes fire into urban communities more regularly.

As partner to the Blue Ribbon Commission on Climate Action and Fire Safe Recovery, UCLA's role was twofold: to provide Commissioners with rigorous, up-to-date, and actionable knowledge from leading subject matter experts, and to engage and elevate the voices of communities impacted by the fires. UCLA's goal was to ensure that the Commissioners could consider this information, along with their own expertise and guidance from other stakeholders, as they formulated their policy recommendations.

Here we offer a summary of the most relevant knowledge curated, consolidated, and presented by UCLA to the Commissioners. It foregrounds the distinctive characteristics of the fire-impacted communities—their topographies, compositions, and cultural histories—that will inform all aspects of rebuilding and how communities adapt to living with escalating future risk. It outlines the broader backdrop of the region's fire vulnerability, existing policies, and opportunities for building resilience to fire and other hazards. It offers lessons from other fire recovery experiences and examines the design of governing entities that could lead rebuilding and fire resilience efforts. Most importantly, it reports on the goals, concerns, and priorities shared by fire survivors as they engaged in conversations about recovery and rebuilding.

This report is a companion piece to the Commission's recommendations and provides broader context and considerations that informed those recommendations. Outlined here are areas of scientific consensus, areas where ongoing debates are underway, gaps in research, and questions on which policies must balance distinct—and sometimes competing—values. Taken together, the research and community voices that informed the Commission's work underscore a fundamental imperative for leaders: the powers and authorities available to government demand that it take on an outsized role in recovery, but only through cooperative and engaged partnership can it restore the trust needed to guide the region to equitable resilience.

Los Angeles can no longer afford to be reactive in the face of growing climate-driven threats, as we learned at too high a cost in January 2025. We offer this work as a starting point to help policy makers contextualize the recommendations from the Blue Ribbon Commission and take actions necessary to restore communities in the short term and prepare for the dynamic risks of an uncertain future.

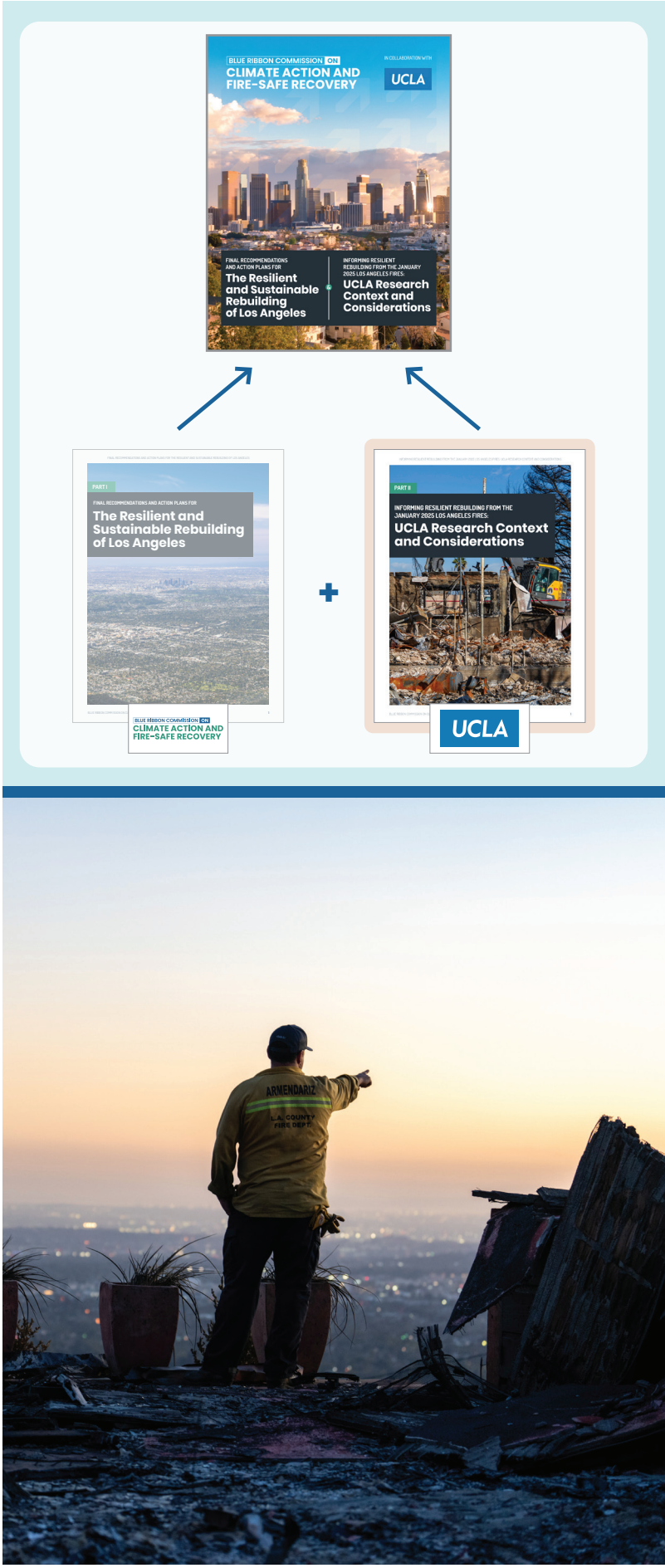


Photo Credit: Los Angeles County.

Introduction

Before the Los Angeles firestorms ended, it had already become clear that they would be a turning point for the Southern California region. The devastating impacts of one of the most destructive natural disasters in U.S. history have touched all aspects of life in the LA region, uprooting communities, destroying livelihoods, ravaging the natural environment, and taking lives.

Recovery will not be fast, nor simple. In 24 days, the fires destroyed what had taken decades—and in some cases, a century—to build: homes, infrastructure, people's sense of security.

As residents and their representatives began coming together to begin the long road to recovery, two inextricably related questions began surfacing repeatedly: *how could this have happened* and *how can we prevent it from happening again?*

We live in a fire-prone region, a truth becoming less ignorable in a changing climate fueled by the burning of fossil fuels. Future fires are inevitable; the scale of death, displacement, and destruction we saw in January 2025 is not.

Photo Credit: Los Angeles County

Combining Academic Expertise and Practical Experience

In February 2025, LA County Supervisor Lindsey Horvath announced the formation of the Blue Ribbon Commission on Climate Action and Fire Safe Recovery and its partnership with UCLA.

The Commission, composed of 20 volunteer civic leaders with a range of professional backgrounds, was tasked with developing a comprehensive set of recommendations to guide the LA region's recovery efforts, with a focus on improving resilience in the face of climate-driven disasters, like extreme heat, longer droughts, floods, and fire.

UCLA partnered with the Commission to provide research and engagement support. Over the next several months, the UCLA team worked closely with the Commissioners as they narrowed down issue areas in working groups, investigated possible policy paths, and drafted their recommendations.

UCLA leveraged expertise from across the campus and beyond, assembling more than 40 leading scholars from a diverse array of fields, plus an outstanding group of staff and students to collectively provide research and engagement expertise and programmatic support.

The core UCLA team organized convenings for Commissioners to meet with subject matter experts and compiled myriad detailed legal and policy briefs and research syntheses to inform and respond to Commissioners' priorities. The team sought to learn from post-disaster rebuilding efforts in other communities and from the research efforts of other groups in the region working on different aspects of rebuilding from the LA fires. UCLA also led an engagement process with impacted communities, first serving as messengers between community-led processes and the Commission, and eventually working with the Department of Angels to host convenings for the Commissioners to hear directly from survivors of the Eaton and Palisades Fires.

The Commission's recommendations are informed by this partnership, but ultimately reflect solely the views of the Commission. Commissioners drew on UCLA's and other academic research to augment their own professional expertise and applied their own independent judgment to policy tradeoffs surfaced through research and community engagement. The Commission's recommendations represent the culmination of a process that, at every step of the way, incorporated up-to-date, relevant knowledge from experts at UCLA and beyond.

Complex Policies, Limited Time Frame

Photo Credit: Los Angeles County

Still, an important reality that shaped both the logistics and the substance of UCLA's collaboration with the Commission was a very limited timeframe.

Policy and politics often move faster than academic research. That is especially true in the immediate aftermath of a disaster. It was important for the Commission to release its recommendations in time to inform critical policy pathways that take shape in the months following a disaster. UCLA's goal was to deliver high-quality information rapidly to augment and refine the Commission's thinking; the time-constrained nature of the process also leaves more questions to be explored in the future.

Reflected in these pages is a high-level summary of context and considerations that were in front of Commissioners as they developed and refined their recommendations. This report is not an exhaustive review of all the topics for which the UCLA team provided research support, nor is it–nor could it be–a comprehensive discussion of all the issues that will come into play while rebuilding after the firestorms and retrofitting the region for resilience.

Results from this partnership set the table for the future in two ways. First, the Commission's policy recommendations provide a guidebook for city, county, state, and federal decision makers to take actions that will help accelerate equitable rebuilding and advance climate action and resilience to future fire. Second, the rapid-pace research synthesis and new relationships forged among scholars to deliver that synthesis helped identify critical gaps in knowledge about the science of fire mitigation in the LA region and the optimal design of institutions that can reduce the region's vulnerability to fire and other climate-amplified hazards over the long term. While this report represents the completion of our short-term partnership with the Commission, UCLA researchers intend for this to be the beginning of a longer process of collaboration to implement a research-informed, community-guided strategy for a more resilient Los Angeles.

Guiding Principles

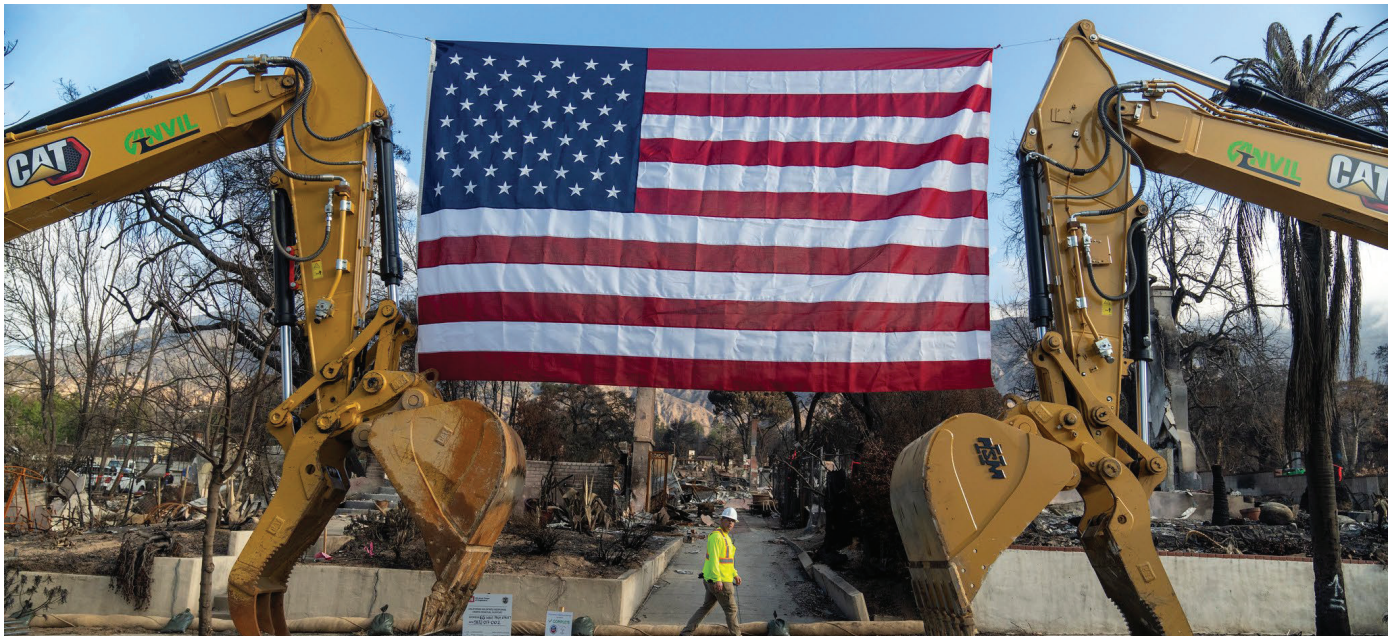
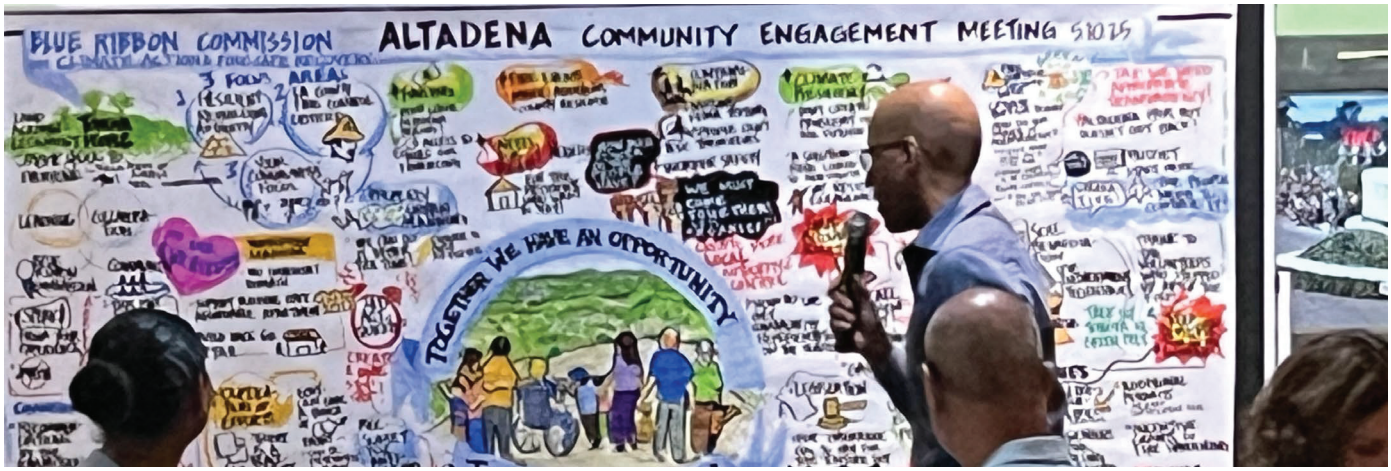


Photo Credit: Los Angeles County

The following principles guided UCLA's work in supporting the Blue Ribbon Commission.

- **Resilience:** Improving the capacity of people, communities, and the natural environment to withstand fire and mitigate its urban spread.
- **Sustainability:** Lessening exposure to fire and other climate-amplified hazards over the long term by reducing greenhouse gas emissions.
- **Equity:** Responding to the needs of those with least capacity to mobilize resources for fire resilience and recovery.
- **Insurability:** Building mutually reinforcing systems through which actions by residents and communities to protect themselves from fire enable access to affordable and adequate insurance coverage.
- **Informed by science:** Advancing the best context-specific current knowledge about fire risks and promoting adaptive policy that adjusts to new information and evolving conditions.
- **Informed by community priorities:** Learning from and accountable to the experiences of those immediately affected by the fires.

Community Engagement: Learning From Fire-Impacted Communities



UCLA engaged in a three-month effort to understand shared goals, common concerns, and top priorities of residents and local organizations related to recovery and rebuilding in communities impacted by the Palisades and Eaton fires. The approach taken by UCLA and the Commission involved going directly to where community members impacted by the devastating fires of January 2025 were meeting, and seeking to foreground their priorities in the Commission's recommendations. There were two phases to this community engagement.

First, the UCLA team conducted qualitative research. This included listening to survivors and other community members ask questions and make statements:

- publicly in meetings and events hosted by a government entity;
- quasi-publicly at community events hosted by local groups and non-profit organizations; and
- privately in volunteer interviews and one-on-one meetings with UCLA researchers.

UCLA researchers attended 23 government-hosted meetings, participated in 14 community events, and conducted 17 private interviews. Although this research was primarily carried out between March and May, the team also reviewed publicly available recordings of government-hosted events from January and February. The UCLA engagement team regularly updated Commissioners on the broad themes and concerns they were hearing from community members as well as specific details relevant to recommendations under consideration by the Commission's working groups.

The engagement process culminated with meetings that brought together community leaders with Commissioners for both groups to learn from one another. Community members provided feedback on the initial recommendations proposed by the Commission and discussed broader concerns and priorities for their communities' futures. Quotes from these meetings and from interviews with UCLA researchers are provided anonymously in this report in order to protect the privacy of fire survivors.

Collective Action and Shared Goals

A diversity of perspectives exist within and across the communities devastated by the Eaton and Palisades fires. Summarizing a multitude of goals, visions, concerns, and priorities on complex topics is fraught with challenges.

First, it is important to emphasize the leadership of fire survivors. They are organizing themselves into community groups and collectives to help each other recover and rebuild, individually and collectively. Dozens of groups have sprung up to address recovery needs in innovative ways, founded by survivors who dedicate countless hours to their community. These efforts often come on top of a full-time job, and the additional equivalent of a full-time job spent navigating the complicated and time-intensive recovery process at an individual level.

Common goals expressed by survivors include rebuilding in a way that balances urgency, safety, affordability, and sustainability. At the same time, tensions among the goals can occur. For example, mandates to improve safety and affordable insurability can add on to a long list of requirements for homeowners hoping to rebuild quickly.

> *"There is a tension between building back better and building back fast."*
>
> - Palisades resident

> *"The disaster creates a golden opportunity to build a green belt with indigenous plants."*
>
> - Malibu resident

Residents are putting forth innovative ideas and bold, nuanced visions for their community's future. They are envisioning sustainable and connected communities, for example, with more sidewalks, safe places to bike, and green spaces for gathering.

Common Concerns and Top Priorities

Community concerns and priorities are summarized below, starting with the most foundational and cross-cutting, followed by those that are particularly time sensitive, and finally other top priorities for long-term recovery (see the Appendix for the latter).

1. **Improving Trust in Government and Preparing for Change:** Community trust in government is a topline concern that impacts other concerns and priorities. Residents want the government to do more to support their long-term recovery. At the same time, many are deeply skeptical of county and city institutions and want more community control and accountable representation. Foundationally, residents want local governments to acknowledge that current systems did not protect them and that as the climate changes, disasters will become more frequent and severe, requiring agile government systems that can learn from and adapt to changing community needs and climate conditions.

> *"Regional entities should be preparing for a fire that is 3, 5, or 10 times worse than what happened. We need to keep one foot in addressing challenges and opportunities of today while preparing for the very different challenges and opportunities of the future."*
>
> - Altadena resident

2. **Ensuring Services to Prevent, Respond to, and Recover from Disasters:** Per the above, a key concern for fire survivors deciding if they should return is whether adequate government systems are in place to ensure their safety. Residents note strong feelings of frustration around government's communication, coordination, and services before, during, and after the fires. Some residents are uncertain about returning unless they receive more assurances that the government will 1) more proactively maintain public lands to lower the risk of future fires, 2) address theft and improve police protection in the burn areas, and 3) improve emergency response systems to protect them during any future disaster.

> *"We need a reliable foundation of fire prevention and response services. They are baseline requirements for community safety and a precondition for rebuilding."*
>
> - Sunset Mesa resident

3. **Addressing Soil Contamination and Labor Protections**: Residents are worried about soil contamination and the absence of systematic testing from state and federal agencies, which is in contrast to what has occurred after other major fires. The uncertainty about whether the land itself is safe poses a barrier to rebuilding, as many fear long-term health risks. Property owners are urging both widespread soil testing and remediation. Additionally, there is concern that the contaminated soil could harm the health of workers involved in debris removal and reconstruction efforts.

> *"Workers need to be trained and given proper equipment."*
>
> - Palisades resident

4. **Combating Land Speculation and Ensuring Community Control:** The stress, uncertainty, and financial strain of rebuilding is resulting in the selling of land to corporate entities. Residents raise concerns about predatory real estate speculation, and the resulting loss of community. Particularly in Altadena, there is a strong desire to preserve Black and Brown homeownership. Local non-profit organizations, community land trusts, and land banks are combating land speculation through their initiatives to purchase land and keep it within the community. These organizations are raising capital and making important progress, but without sustained funding such as from the government, are unable to acquire land at a scale commensurate with deep-pocket corporate entities. Residents have also expressed concern that renters and those with standing but unlivable homes are not receiving enough assistance from the government, again underscoring the desire for community-led recovery backed by streamlined and coordinated government support.

> *"Communities should be empowered to lead recovery and resilience efforts."*
>
> - Altadena resident

5. **Rebuilding Safely, Sustainability, and Affordability.** Community members express support for fire-resistant and sustainable rebuilding measures, but they are concerned this might increase costs. Residents are calling on the government to provide direct financial support to rebuild for fire resistance

> *"We need explicit direct assistance…to rebuild with fire-resistant, electrified homes."*
>
> - Altadena resident

and insurability (e.g., to meet the state's Chapter 7A and Zone 0 standards) and for sustainability and climate action (e.g., to meet solar panel requirements and go all-electric). Community organizers are looking into bulk purchasing to address supply-chain issues and lower costs for building materials and household supplies. Many non-profit organizations are providing other forms of assistance.

6. **Coordinating Entities Proposed by the Commission.** In meetings with community members, Commissioners presented proposals for two new local entities: a Resilient Rebuilding Authority and a Fire Control District. Residents expressed interest in and urgency around both as mechanisms to fund community priorities at scale, including to combat land speculation and to coordinate fire mitigation measures, such as vegetated buffer zones and building retrofits. Community members' suggestions for the proposals as drafted in the Commission's initial recommendations included incorporating strong community representation on the governing board for the Resilient Rebuilding Authority and ensuring financial and decision-making transparency for the Fire Control District.

See the Appendix for more information about the aforementioned themes and the following other community priorities:

7. **Making Water and Energy Infrastructure More Resilient**
8. **Combating Land Speculation and Ensuring Community Control**
9. **Balancing Land Use Considerations**
10. **Increasing Fire Resilience With Defensible Spaces**

The Appendix also includes more details about UCLA's process for community engagement and the meetings where community leaders shared feedback on the Commission's initial recommendations and draft action plans.

Context and Considerations

FRAMEWORK FOR CHANGE

The Blue Ribbon Commission on Climate Action and Fire Safe Recovery was formed as an independent body by LA County Supervisor Lindsey Horvath to "develop a comprehensive set of recommendations to ensure Los Angeles County's recovery efforts are designed to withstand the realities of a changing climate." This report offers background material, built on a large body of accumulated scientific research, to set the context for the final recommendations developed by the Commission.

First, it is important to define some key terms. What does a "fire safe recovery" "designed to withstand the realities of a changing climate" mean?

Fire is a natural part of the Southern California landscape, inevitable and necessary for maintaining the region's ecosystems. "Fire safe" refers to accepting this natural occurrence of fire and reducing, as much as possible, its harmful impacts to people, our communities, and the natural environment.

Eliminating all risk is impossible; however, it is possible to make the LA region more resilient by improving the capacity of people, communities, and the natural environment to withstand fire and mitigate harm from its spread into urban areas.

Because the changing climate is an important factor driving the frequency and intensity of wildfire, and the patterns by which fire moves across landscapes and into urban areas, becoming more fire safe also demands "climate action." That means making design choices in the built environment that reduce emissions of climate-warming greenhouse gases, along with consideration of a broader set of climate-amplified hazards, including heat, drought, and floods.

Fire risk in LA County is shaped by natural systems of chaparral and grasslands; human systems encompassing not just our built environment and landscaping but also social and economic conditions; and a changing climate that brings increased heat and more variable precipitation, creating fuel conditions that are susceptible to fire ignition and spread during the region's high wind events.

No single set of actions is adequate to address the interactions among these systems. Risks and response options arise from the choices made by governments, businesses, and civil society at many

scales, from individual households to city, county, state, and national levels. An individual family's fire risk will depend on the design and materials of their home and landscaping, the design and materials of the other homes in their neighborhood, the firefighting and emergency response assets available locally, the management of infrastructure and park lands many miles away, and the financial and technical resources brought to these layers of protection from throughout the region, the nation, and the world.

Coordinated steps by many actors across jurisdictions and sectors of society can significantly improve fire resilience and ready the region for a changing climate. Taken together, such improvements would enable communities rebuilding after the 2025 LA firestorms to preserve what they find most valuable while transforming their ability to live with and thrive amidst fire and a changing climate. Most of the steps would also help enhance the region's earthquake safety, as many of the issues at play in fire resilience–building retrofits, utility hardening, emergency preparedness and evacuation, insurance coverage, and rebuilding–are earthquake issues, too.

Enabling Transformation

The recent Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment report identified five enabling factors for transformational climate adaptation: technology, knowledge and capacity, finance, governance, and catalyzing conditions. Transformational adaptation, which re-aligns human and natural systems in a changing climate so all systems can thrive, is necessary to enable LA County and its rebuilt communities to live with fire. Action towards such adaptation is enabled when these five factors coalesce.

In the context of fire safe and resilient recovery, **technology** refers to a wide range of often novel problem-solving applications, from new building materials to modular construction techniques to sensor systems that shut down errant power lines before they start fires. **Knowledge and capacity** refers to widespread understanding of fire risks and best practices for addressing them and the ability of organizations at all scales, from households to governments, to work together to implement these best practices. Near-term investments in resilience yield longer-term benefits not only in economic terms, but also in avoided human suffering. **Finance** refers to making funds available for such investments. Often, such finance is not available because of misaligned incentives or failures to design enabling institutions. **Governance** refers to re-aligning the organizations and institutions at multiple scales to orient public, private, and civil society actors toward societal goals.

Fear of change and a status quo bias can inhibit coordinated action. But a large-scale disaster can create the catalyzing conditions needed to spur learning and change.

Time Horizons for Transformation

Alongside the task of enhancing the region's resilience to fire risk lies the urgency of rebuilding communities where thousands have lost homes, businesses, schools, and loved ones. Disasters can catalyze learning and policy change, but they can also aggravate inequality and dismantle a community's social infrastructure -– a source of resilience itself. Long delays in rebuilding take a toll on the health and well-being of survivors. A fire safe recovery requires policies, institutions, and financial support that enable the return of displaced residents to a community more hardened against future fire risks.

A fire safe recovery therefore demands a staged approach that encompasses the immediacy of equitable rebuilding along with longer-term actions to mitigate fire risk. Science and social science can inform strategies across the trajectory of recovery. As the risk landscape evolves in response to changes in natural and human systems and the impacts of climate change, so too will science evolve and progress, teaching us more about best practices for fire resilience and the governance and finance approaches that can work best in LA County.

That we will learn more in the future is a constant of the human experience; the promise of new information is rarely a good reason to delay needed action. Rather, the potential for learning opens up opportunities for adaptive governance and design, in which near-term steps are organized to maximally benefit from future improvements in knowledge.

The demands of rebuilding are immense. Policy makers and leaders across the public, private, and non-profit sectors must spend much of their time and attention focused on day-to-day management of the process. But rebuilding also offers leaders an opportunity to lift their gazes and take actions that shift the longer-term trajectory of the region. In our research support to the Blue Ribbon Commission, we aimed to identify policy leverage points in which incremental near-term actions can facilitate and lock in longer-term beneficial change.

Key Concepts

Two concepts–**risk and resilience**–are critical to the Commission's approach to fire safe recovery.

Risk is what we seek to reduce. Risk is the potential for adverse consequences for human or ecological systems, recognizing the diversity of values and objectives associated with such systems. The concept provides a framework for understanding the increasingly severe, interconnected, and often irreversible impacts of climate change on ecosystems, biodiversity, and human systems; differing impacts across regions, sectors, and communities; and how to best reduce adverse consequences for current and future generations. In the context of disaster management, risk is a product of the dynamic interactions among hazards, including wildfire but also heat, drought, floods, earthquakes, and other events that could cause damages and loss of life; the exposure of human and ecological systems to that event; and the vulnerability of affected people and assets to harm from the event. Actions to reduce hazards, exposure, or vulnerability all help reduce risk.

Resilience is the condition to which we aspire. Resilience is the capacity of human and ecological systems to cope with a hazardous event, trend, or disturbance, responding or reorganizing in ways that maintain their essential function, identity, and structure while also allowing for learning and transformation.

TRACING THE LA FIRES

Photo Credit: Los Angeles County

Over three weeks of continuous burning, the January 2025 LA fires damaged or destroyed more than 18,000 structures, claimed at least 29 lives, and forced nearly 200,000 people to evacuate, scarring the LA landscape and traumatizing vast numbers of Angelenos. Extreme fire weather intensified by climate change, concurrent ignitions, and vulnerabilities in urban infrastructure and the built environment all contributed to these fires becoming the most destructive in the region's history.

The Palisades Fire erupted during the morning hours of January 7 in the vegetated recreation area of Temescal Canyon, a popular hiking area near the Pacific Ocean. Later that day, about 30 miles away, the Eaton Fire ignited in the Eaton Canyon area, another cherished recreation area north of Pasadena. Fueled by high winds, both fires rapidly expanded overnight into urban areas. By January 8, the Palisades fire reached 15,832 acres while the Eaton fire expanded to 10,600 acres. The coinciding fires placed substantial strain on the region's suppression resources, limiting firefighters' ability to contain the fires' spread. Water supply was one of many constraints, with pressure dropping at some hydrants while firefighters battled the fires.

Smaller, secondary fires ignited while the Palisades and Eaton fires were still burning. Among LA County's eight fires within a few days were the Hurst Fire in Sylmar, the Sunset Fire in the Hollywood Hills, the Woodley Fire in Sepulveda Basin, and the Kenneth Fire in the West San Fernando Valley, the last of which spread rapidly to reach over 1,000 acres. These secondary fires, which consumed approximately 1,930 acres in total, were extinguished by January 16. Although minimal damages were reported from these fires, they put tens of thousands of residents under evacuation orders or notices and created additional demand on strained firefighting resources.

After three and a half weeks of continuous suppression efforts, firefighters reported full containment of both the Palisades and Eaton fires on January 31. The fires left immense damage in their wake, each ranking among the most destructive fires in California history. The Palisades Fire had burned through 23,448 acres of the Pacific Palisades neighborhood of LA city, the city of Malibu, and the unincorporated community of Sunset Mesa, destroying 6,833 structures and damaging an additional 973. The Eaton Fire caused even more harm as it spread across 14,021 acres, destroying 9,418 structures and damaging 1,073, mostly in the unincorporated community of Altadena, but also reaching into the nearby cities of Pasadena and Sierra Madre. Even among those whose homes survived, thousands were displaced, some for days and others for months, as utility service was restored and residents ensured the baseline safety of their return. Smoke and soot exposures caused a spike in hospital visits regionwide, and soil and indoor contamination reached far beyond the burn scars, with unknown long-term health effects.

At least 29 people died in the fires, 17 in Eaton and 12 in Palisades. Nearly all were seniors or had disabilities, and most died in their homes.

Communication and Evacuation

The fires exposed key evacuation vulnerabilities including road network design, communication, and multimodal coordination. Congestion occurred in the Palisades because of neighborhood design: extensive street networks and cul-de-sacs that all funnel onto a single main road. The Palisades evacuation highlighted the risks of bottlenecks in canyon neighborhoods, and also brought to light critical gaps in pre-disaster coordination and management that could have reduced the risks associated with inadequate evacuation routes.

The timing of alerts was another key challenge in the Palisades evacuation. Residents did not receive consistent communication during the early stages of the fire; many chose to evacuate on their own before an official order was issued. The lack of traffic coordination contributed to gridlock on the neighborhood's few arterial roads, leading residents to abandon cars along important corridors, which in turn created additional challenges for fire response vehicles.

Despite road design and geography that is better suited to evacuation, the Eaton fire resulted in higher fatalities than the Palisades Fire, particularly in West Altadena. On the night of January 7th, delayed evacuation alerts left West Altadena residents uncertain for hours about whether they should leave their homes. Many chose to evacuate independently, driven by the visible threat of flames blocks away. Some reported seeing no fire trucks as they fled, despite their neighborhoods being engulfed in flames. Evacuation decisions typically follow a chain of command: first, fire personnel and sheriff's deputies assess the fire's movement and projections; then the Office of Emergency Management issues alerts; finally, officials on the ground ensure the evacuation is carried out. In West Altadena, however, numerous reports indicate that officials on the ground instructed residents to leave hours before any electronic alerts were sent.

Power outages in Altadena further complicated evacuation efforts. Many utility poles were destroyed, and other lines were intentionally de-energized as safety precautions for firefighters. The resulting lack of electricity left residents with limited ways to receive updates, as they were unable to watch the news or access the internet. According to the PBS WARN Database, officials did not send alerts to parts of West Altadena; even if they had, it remains unclear whether all residents would have received them because of the outages.

Investigations are underway to determine the cause of delayed evacuation alerts for the Eaton fire. Residents have noted that evacuation efforts in neighboring cities such as Pasadena, Arcadia, and La Cañada seemed to be more effective. Unlike these incorporated cities, which have their own municipal governments, Altadena is an unincorporated community governed by the LA County Board of Supervisors. Unincorporated communities lack the political representation, and often an equivalent level of service delivery, experienced by their neighbors in incorporated cities. As a consequence, residents often feel a mix of pride in their independence and resentment about their neglect (Anderson, 2008; Purifoy, 2021; Edgeley et al., 2020). Many Black residents in Altadena expressed feeling abandoned and overlooked during a moment when their lives were at risk. The delayed evacuation orders and alerts have underscored both physical and social vulnerabilities, particularly among historically marginalized communities.

CURRENT AND FUTURE FIRE RISK

Climate Change and Wildfire Hazard

The LA firestorms ignited during a confluence of risk factors that arose from both natural variability and a changing climate. A roughly one-in-20-year Santa Ana wind event coupled with a roughly one-in-50-year dry start to the rainy season created the ideal conditions for destructive fire. Near-record wind speeds, reaching up to 100 miles per hour, spread fire through extremely low-moisture vegetation. If ignitions occur during a Santa Ana wind event, large wildfires often follow.

The overwhelming majority of wildfire ignitions in Southern California are attributable to human activity (Andreozzi et al. 2023; Chen & Jin 2022), especially during the Santa Ana season. Power infrastructure, especially transmission lines, presents a particular challenge, contributing to ignitions either through line damage (falling lines, conductor slaps, and faults) or utility circuit malfunctions (overloads and arcing). In high-wind conditions, power lines are at a much higher risk of failure. Whether power lines had a role in igniting any of the January 2025 fires is under investigation.

The sequencing of climate-related events intensified the LA fires. Two consecutive extreme wet years allowed vegetation to build up. The wet years were followed by an unusually hot and dry summer, and then an unusually dry start to the wet season. These latter two factors made the vegetation highly flammable (Madakumbura et al. 2025; Swain et al. 2025). This sequence fits into a larger pattern of intensifying climate "whiplash," swings between heavy precipitation during wet years and severe heat and drought during dry years. Climate whiplash is associated with heightened fire risk and may be growing more common as climate change accelerates, though the precise effects of climate change on California's variable precipitation patterns is not a settled research question (Williams et al. 2024). The drying effect of the preceding warm hot summer is likely to be directly traceable to a warming climate.

Climate change may be shortening and sharpening California's precipitation seasonality, concentrating more precipitation in fewer winter months (Luković et al. 2021; Swain 2021). Warming temperatures reduce the moisture content of vegetation and human-made structures, generating dry fuels (Pierce et al. 2013; Williams et al. 2019). Warmer, drier fall and spring seasons, coupled with extremely wet winters, offer the "worst of both worlds," encouraging grass and brush buildup following rainy winters and subsequent vegetation drying. This cycle creates extremely flammable, dense landscapes. A final ingredient is the region's dry Santa Ana winds that push downslope from the desert out to the ocean, gaining speed as they move through narrow passes and canyons. These winds regularly occur during October through March, which historically has also been the region's wet season. By delaying the onset of winter precipitation, climate change may be making it more likely that Santa Ana winds arrive while vegetation is still dry and highly flammable.

Urban Firestorms

The January 2025 LA firestorms represent an emerging type of catastrophic event in which wildfire transforms into an urban conflagration after spreading into a densely populated area. Both the Palisades and Eaton fires ignited on steep wildland hillsides and were driven by winds towards dense neighborhoods where fire began to spread primarily from structure to structure, rather than through vegetation. This pattern has been observed in several suburban and urban settings in recent years. In 2017, the Tubbs Fire began as a wildfire in rural Napa County, spreading through vegetated areas for three hours before reaching populated suburban neighborhoods in Sonoma County and the city of Santa Rosa. The fire ultimately caused the deaths of 22 people and destroyed 5,700 structures, approximately 5% of the city's housing stock. Similarly, the 2021 Marshall Fire in Boulder County, Colorado began as a wildland fire in grasslands, but rapidly transitioned into a highly destructive urban conflagration that destroyed more than 1,000 structures.

Destructive fires at the Wildland Urban Interface (WUI) often occur during extreme wind events, which transport embers over considerable distances, igniting fires ahead of the main fire front. During the LA fires, embers ignited spot fires two to three miles in front of the established fireline in every direction. This nonlinear fire progression puts further strain on firefighting efforts as unpredictable spot fires ignite. High winds can also carry embers over traditional fuel breaks like highways, as seen in the Tubbs and Marshall fires, as well as in the 2018 Woolsey Fire that jumped the Ventura Freeway in LA's San Fernando Valley.

When fires spread from wildlands into built areas, various ignition mechanisms interact dynamically, promoting fire spread throughout communities. Wind-driven embers can land and ignite, especially where combustible materials have accumulated on or near structures. Close structure spacing, flammable features like fencing, and continuous vegetation leading up to structures allow ignition through direct flame contact. Because fire in the built environment burns hotter than pure vegetation fire, ignition can also occur through radiant heat. Burning homes thus become a vector for damaging or destroying neighboring structures (Knapp et al., 2021). Faced with multiple pathways to ignition, suburban WUI neighborhoods are highly vulnerable to fire spreading into their community, particularly in the face of extreme fire conditions.

Los Angeles Fire Vulnerability

Angelenos are highly exposed to the rising hazard of urban firestorms. In 2020, 20% of LA County's 3.5 million housing units were located in the WUI (Mockrin et al., 2023). The most populated WUI areas are predominantly situated in the foothills of the ranges that run east to west, including the Santa Monica, San Gabriel, Verdugo, and Santa Susana Mountains, but the WUI reaches into other hilly enclaves as well, including Palos Verdes Hills and Puente Hills. Housing in the WUI overwhelmingly consists of single-family homes, often built along narrow canyon roads or perched on ridgelines amid dense brush, bringing people and property into close proximity with fire-prone environments and creating evacuation challenges when fire arrives. Much of the area destroyed in the Palisades fire fits this profile. But fire risk reaches beyond these known hazard areas. Most of the relatively flat, densely populated, gridded neighborhoods of Altadena that were devastated in the Eaton fire have not been designated as high-hazard areas in the state fire agency's most recent mapping effort.

Compounding the high exposure to fire risk is the physical vulnerability of properties. Research clearly demonstrates that hardening structures through use of fire-resistant materials and design on exterior features including roofs, vents, eaves, windows, and walls is a critical factor in resisting ignitions and increasing the odds of structure survival after a fire (Syphard & Keeley, 2019; Troy et al., 2022; Affif et al., 2025). California has gone farther than any other state in incorporating these elements into building standards in areas considered to be at high fire hazard. The state began introducing fire-resistant building codes for construction of new homes in the 1990s, then strengthened those requirements with introduction of the Chapter 7A standards of the California Building Code, which went into effect in 2008. These advances in construction materials and standards have a positive effect on building survivability; a California home built after 2007 is about 40% less likely to be destroyed than one built in 1990 facing the same risk (Baylis & Boomhower, 2021). Yet nearly 90% of LA County's housing stock was built before 1990, before introduction of any fire-resistant codes. Fewer than 5% of homes destroyed in the Palisades fire and almost no destroyed Eaton homes were built after 2008 (Rumbach & McTarnaghan, 2025).

Once buildings ignite in densely developed areas, close spacing between structures can lead to rapid neighborhood-wide fire spread. Structures themselves constitute major fuel sources, once ignited, and can create a contagious effect that sets neighboring homes alight. In the Marshall Fire, housing density and spacing were highly impactful on home survivorship, with radiant heat identified as a key spread factor (Metz et al., 2024). The devastating 2023 Lahaina Fire in Maui demonstrated how density can interact with wind, as narrow streets and closely spaced buildings created wind channels that allowed fire to flow through the community (Ehrke, 2024). Density is not destiny, however. Denser developments allow easier access by fire suppression crews, and risks from density can be offset with structure hardening and potentially with design elements such as staggered setbacks (Syphard et al., 2017). In populous and housing-scarce regions like LA County where development in the WUI is already well-established, density alone is not the most important consideration; rather, the primary concern is landscape-level development patterns for how buildings intermingle with surrounding open space (Syphard et al. 2013).

A final element in properties' physical vulnerability is vegetation that can ignite from flying embers and propel fire spread. Dry vegetation, along with dry fencing and auxiliary structures on a property that can act as fuel, are incontrovertible hazards that accelerate fire burning into and through populated neighborhoods. Less certain is the impact of maintained, high-moisture vegetation, even in close proximity to structures. In developed areas where trees and plants are typically well-irrigated, vegetation can act to absorb radiant heat and catch embers, potentially reducing structure-to-structure fire spread (Moritz et al., 2014; Escobedo et al., 2025). Evidence about the aggregate effect of parcel-level vegetation on structures' vulnerability to fire in the Southern California urban context is mixed; science is advancing alongside the rising incidence of wildfire reaching into urban areas. Recent findings suggest value in maintaining defensible space for fire mitigation as well as for the protection and access it provides for firefighters, but do not provide clear guidance on optimal distance for defensible space or types of vegetation that might be most appropriate at different distances to mitigate fire risk (Syphard et al., 2017; Syphard & Keeley, 2019; Syphard et al., 2021; Mockrin et al., 2022; Escobedo et al., 2025).

COMMUNITIES IN THE FIRE PATHS

Photo Credit: Los Angeles County

Disasters upend the social fabric of affected communities and exacerbate existing social disparities. The physical vulnerability of the built environment in the areas burned by the January firestorms interacted with social and economic conditions that shape the capacity of individuals and communities to respond to the destruction.

Population Diversity

Although both the Eaton and Palisades fires reached across neighborhoods and jurisdictional boundaries, the majority of survivors are from the communities of Altadena and Pacific Palisades. Before the fires, these were thriving, multigenerational communities with robust local economies. Each has distinct social vulnerabilities, but also financial resources and strong senses of place that could provide a strong footing for recovery (Ong et al., 2025a; Rumbach & McTarnaghan, 2025).

The fires struck places that were relatively prosperous. Median incomes were substantially higher than in LA County as a whole, especially in the Palisades. Homeownership was widespread; the proportions of impacted households who were renters–22% in Altadena and 26% in the Palisades–are less than half the rate countywide. Yet these aggregate numbers mask economic diversity in Altadena, which exhibited unusually high levels of inequality; while a quarter of households had incomes over $250,000 per year, another quarter was earning less than $65,000. More than one in six Altadenans lived at less than twice the poverty level, making them eligible for many public safety-net programs.

Altadena is the home of a historically Black, culturally vibrant community where 82% of Black households are property owners. This high ownership rate is in part a product of segregation and redlining, which deflated home prices and enabled Black families to purchase Altadena homes even while being shut out of homebuying elsewhere through deed restrictions and other discriminatory housing policies (Ong et al., 2025b). Many of these homes have remained within families across generations. Altadena is notable for its racial diversity: 18% of Altadenans are Black, 27% are Latino, and nearly six in ten Altadenans have a racial or ethnic identity that is not white.

The Pacific Palisades is less racially diverse, with 80% of residents identifying as white. Fire's disruption reaches beyond its impact on residents, however, and touches a workforce that was over one-third Latino (González et al., 2025). The Palisades does not have the wide economic inequality seen in Altadena, but still the fires destroyed many modest homes, including several hundred residences in two mobile home parks. Mobile home owners can face high barriers to rebuilding, starting with long delays in securing debris removal and continuing with insurance payouts and the restoration of park

infrastructure. Among owners of higher-value Palisades properties, household wealth was significantly concentrated in those long-held, high-value properties, increasing owners' vulnerability to fire's impacts, especially given that many of the homes were uninsured or underinsured. Like Altadena, the Palisades is a highly stable community, with a high proportion of seniors (approximately 25% in both communities, compared to 14% countywide). Seniors are particularly vulnerable to short-term effects of disasters, facing challenges in their ability to evacuate and to cope with immediate response needs, and their trajectories for longer-term recovery and rebuilding are distinct from younger adults and families.

Renters' Vulnerability

Renters face acute risks from fire. Pre-existing housing burden costs and a region-wide lack of affordable rental units suggest that many renters displaced from Altadena and the Palisades may be left housing insecure or unable to find commensurate housing.

Half or more of residents from both communities experienced rent burden, spending more than 30% of their income on housing costs. More than a quarter of Altadena renters were extremely rent-burdened, paying at least half their income on rent. Renters, especially those facing cost burdens related to housing, face high risk of displacement and economic insecurity after disasters. The high costs of rent leaves households with little flexibility for saving, buying renters' insurance, and addressing other necessities. Nationally, just 40% of renters carry insurance, compared with 88% of homeowners (Insurance Information Institute, 2023; Harvard Joint Center for Housing Studies, 2022). When fire strikes, most tenants therefore have no protection for personal property, liability, or additional living expenses.

Damage to Local Businesses

The Pacific Palisades and Altadena were home to robust local economies that supported livelihoods for residents and workers from other parts of the region alike. More than 1,100 private businesses were located in Altadena, including 849 microbusinesses that had fewer than 10 employees (Ong et al., 2025a). Microbusinesses made up the majority of businesses within the Eaton Fire burn zone and experienced the highest destruction rates. The Palisades Village, highly affected by the fire, was a bustling commercial center in which most businesses were damaged or destroyed. The Village was a hub for grocery and household goods, dining, and open space, providing residents and visitors with both economic and social infrastructure.

In community meetings, residents of both areas consistently expressed support for mixed-use redevelopment in commercial areas. Palisades residents specifically advocated for affordable housing above businesses in the Village, and proposed hotel development and prefabricated solutions for mobile home residents. In the Eaton burn area, many residents expressed interest in mixed-use redevelopment near major transit corridors. In both communities, there have been calls to revisit zoning frameworks to loosen height and design standards, allowing flexibility that would enable community-serving mixed-use projects, including affordable housing for seniors and the local labor force.

Concentration of Housing Wealth

Because of extreme housing scarcity and economic inequality in the LA region, home ownership and home value play a disproportionate role in personal wealth, even within wealthy communities. In the Pacific Palisades and Altadena where current median home prices are $3.10 million and $1.26 million, respectively, the high prices represent, in many cases, long-term residency more than current household income. By limiting reassessment increases, California's Proposition 13 enables long-term residents to have lower user costs for a high-value property, producing a lock-in effect on housing mobility (Ferreira, 2010). Both communities had relatively low turnover in ownership, with median sale dates of destroyed properties being more than 15 years ago. Especially in Altadena, many of the properties had been passed intergenerationally.

Where property wealth does not align with current residents' other assets, these high values can limit people's options for recovery and rebuilding. Rebuilding costs have risen faster than insured values, leaving many without the payouts needed for full recovery. As insurers pull back or cap coverage, homeowners face significant rebuilding shortfalls, putting pressure on families who lost their homes and may not be able to afford rebuilding in the current, higher-cost context. Ultimately, financing gaps for rebuilding threaten to displace middle- and lower-income populations and disrupt generational wealth building. Residents whose wealth was significantly tied to their homes will be most affected and most vulnerable to displacement.

Insurance and Rebuilding

Insurance coverage is a critical driver of household- and community-level recovery (You & Kousky, 2024; Billings et al., 2022). Even among those with relatively high levels of social and economic privilege, insurance coverage can be a driver of inequality post-disaster, separating those who have support to return and restore their lives from those who must exhaust their personal resources, including retirement savings, leaving them more financially precarious (Rhodes & Besbris, 2022). For those who are less privileged, retirement or other savings may not be an option, and people turn to friends and family or credit card debt to cover expenses.

Climate-amplified natural disasters, coupled with rising rebuilding costs, have fundamentally reshaped California's insurance landscape. Following the 2017 and 2018 wildfire seasons—the two most damaging in the state's history until the LA fires, producing an underwriting loss equivalent to double the total underwriting profit generated from 2001 to 2016 (Riggs et al., 2025)—private insurance carriers started to retreat from California. Since 2022, seven of the top 12 insurers have paused or restricted new business.

The retreat is most visible in high-fire risk areas. Although private insurers account for 96% of the overall market in LA County, their presence is notably lower—and declining—in the Palisades and Eaton fire burn areas. From 2020 to 2023, the Palisades saw a 36% drop in new policies, while the Eaton fire area experienced a 28% decline. Alongside sinking rates of new policies, insurers are starting to decline renewal of existing policies; State Farm alone dropped almost 70% of its Pacific Palisades policies in 2024. Homeowners who can access private insurance have seen rising premium prices, particularly in very high risk areas, where insurance prices rose by 80% from 2015 to 2022.

Homeowners in fire-prone areas increasingly rely on the California FAIR Plan, a last-resort syndicated insurance pool that provides limited coverage, typically capped at $3 million, at expensive rates. As

private insurance has become harder to find in very risky areas, or prohibitively expensive, the state's FAIR Plan has expanded substantially. As of 2022, the Palisades and Eaton burn areas already had high percentages of properties insured under the FAIR Plan, and FAIR coverage has risen since that time. In the Palisades alone, policy counts grew to 1,430 in September 2024, an 85% increase from 2023.

California's insurance market instability reflects a historic failure to incorporate climate risks and a market structure that fails to promote and reward investments in risk reduction. Insurers' fire losses are driving premium hikes for policyholders across the state. Additional premium costs and coverage restrictions provide some limited market incentive for new buyers to avoid high-risk areas, but existing residents have historically had no price incentive to harden properties or support public investments in risk mitigation measures.

The state is beginning to move toward a regulatory model that creates those incentives. Under the Department of Insurance's Sustainable Insurance Strategy, a new regulation allows major insurers to use probabilistic catastrophe modeling in rate-making in exchange for expanding coverage in fire-distressed areas of California. The models are required to account for mitigation efforts, but the private models used by insurers lack the transparency needed for property owners and communities to evaluate the return on investment for mitigation. Early efforts are underway to develop a public model that could be used for decision making and also serve as a mechanism for advancing fire risk mitigation science. Ultimately, with fire disaster costs rising so quickly, stabilizing the insurance market will involve higher premium costs, at least for those living in high-risk areas. Without attention to offsetting those costs for low-income households, more will be priced out of the insurance market, contributing to inequity in recovery when fire arrives.

For the thousands of Angelenos who have lost their homes, many do not have any or enough insurance coverage to cover the cost of rebuilding. Rates of uninsurance and underinsurance are difficult to estimate. Countywide, roughly one in ten homes are uninsured (Davis & Shepard, 2025). On average, insured households have higher incomes and savings; those with mortgages are also more likely to be insured (You & Kousky, 2024). Lower-income seniors or owners of inherited properties are therefore the most likely owners to be facing recovery without any insurance. Many more are underinsured, not only because of insurance market disruption but also because of failure by insurance agents to ensure that coverage levels keep current with skyrocketing property values and rebuilding costs. Here too, those with longer tenure in their homes are likely to be most affected.

Gaps between insurance coverage and costs are important to account for when considering added resilience- and climate-related requirements during the rebuild of properties destroyed in the LA firestorms. For those covered by a full replacement cost insurance policy, the expense of meeting requirements does not need to be paid out of pocket; California requires "law and ordinance coverage," or the provision of adequate coverage to comply with updated building codes. Strengthening resilience standards could even reduce costs for insured owners over the long term as actuarial practice and insurance premiums increasingly incorporate mitigation actions. For the large portion of owners who are uninsured or underinsured, new requirements could add to the hurdles and costs associated with rebuilding.

Hardening buildings is one of the most critical protections against fire risk, but it is difficult to estimate how much hardening is enough. There is not enough post-fire evidence to calculate the return on investment, whether for individual owners or for the strained insurance market, for different levels of hardening standards. The efficacy of current Chapter 7A standards on structure survivability is well

established, creating a strong justification for extending those standards to all areas demonstrated to be vulnerable to fire. Under current policy, more than 40% of destroyed homes would not be required to adhere to Chapter 7A standards in rebuilding, all in the Eaton burn area. The added cost of meeting Chapter 7A standards is estimated at $30,000 for a 2,000-square foot home (modestly larger than the 1,572-square foot median size of homes destroyed in the Eaton fire), likely less than 3% of total rebuild cost (Hernandez, 2025). Upgrading standards to higher levels of protection recommended by the Insurance Institute for Business & Home Safety (IBHS) adds additional expense–nominally for the Wildfire Prepared Home standard, but much more for the Prepared Home Plus standard, which doubles the added cost for hardening (Barrett et al., 2022). IBHS laboratory and demonstration research validates the protectiveness of these protocols, but their impacts on structure survivability in urban fire settings is not known, precluding analysis of return on investment or aggregate social benefits from their adoption.

In the abstract, there may be readiness to pay costs for enhancing resilience: after the fires, a UC Berkeley/Los Angeles Times poll found 80% of LA County voters backed tougher building codes to make homes fire-resistant, even if that raises construction costs. In practice, coming on top of other real expenses, added costs for these features can sometimes feed public resistance to new requirements (Ellery et al., 2023).

Rebuilding in a Housing Crisis

The Eaton and Palisades fires brought new strain to a housing market already in crisis. Housing costs in the LA area are among the highest in the nation, creating severe rent burdens and leaving homeownership out of reach for most households. Inadequate housing supply also contributes to pervasive homelessness. For the tens of thousands of people displaced by the fires, scarce housing added uncertainty, complication, and expense in the weeks following the fires; among those who had recorded official changes of address within the first four months, more than half ended up in neighborhoods at least a half-hour drive away (Kaysen et al., 2025). But the impacts of housing undersupply reached beyond immediate survivors, as the added demand from those displaced sent rents rising regionwide.

The housing crisis is a central part of the risk landscape that shapes policy decisions about rebuilding. The devastation brought by the fires begs the question of whether it is appropriate to build homes and businesses in areas demonstrated to be exposed to fire risk. Yet retreat from fire-prone areas is not a straightforward proposition even in theory, let alone in practice, as it involves trading off housing supply for protection from a risk that is difficult to delineate in space and dynamic over time (Koslov & McConnell, 2024). Roughly two in ten properties in LA County are located in the WUI. Ruling out these areas from current and future post-disaster rebuilding would add substantial constraint on already scarce housing supply, reducing housing security, which is the leading predictor of positive recovery outcomes at individual and community scales.

Risk associated with severe housing undersupply begs the opposite question of whether fire-affected neighborhoods should be rebuilt to accommodate more housing than previously. Added density through lot splits, accessory dwelling units, and small multiunit buildings could help with the region's housing affordability problem while also providing income that property owners might need in order to rebuild at all. But added density increases the number of people in fire-prone areas, expanding overall exposure and adding to congestion on evacuation routes. Density also can increase the hazard of structure-to-structure fire spread. Fire-resistant construction helps mitigate fire spread risks, and

community-level mitigation measures may offer additional protection if coordinated at the neighborhood level.

Beyond the objective implications of how a higher-density rebuild would affect fire safety, there are equity considerations in planning for added density in fire-impacted communities when other communities throughout the county have failed to meaningfully increase their housing supply. This question is especially relevant in Altadena, where the community's diversity and high rates of Black homeownership are entwined with the history of redlining and systemic discrimination. Ultimately, the question of density in rebuilding entails consideration of multiple, potentially competing, priorities: the ramifications for fire risk, the social risks of housing insecurity, recognition of historic and ongoing inequities, and the role of the rebuild as part of a comprehensive regional housing strategy. Regardless, housing pressure will increase in the short term, regionwide, because of displaced residents and the temporary workforce who will come into the area for the rebuild.

Rebuilding Workforce

The fires' impacts reach beyond those who lived and worked in the affected areas. Another set of challenges relates to workers who are critical for cleanup and rebuilding. These workers are disproportionately immigrants, both documented and undocumented, who are vulnerable to worker exploitation because of linguistic barriers, legal precarity, and economic vulnerability, among other reasons. Immigrants comprise an estimated 41% of the construction workforce statewide (Siniavskaia, 2024), and are likely even more highly represented among day laborers hired for cleanup. Unscrupulous employers can use immigrants' status and their fear for family members as leverage to subject them to dangerous working conditions. Past experiences with disaster recovery bear out these concerns; researchers in disaster areas have observed upticks in worker exploitation, trafficking, and worker safety violations (Barrick et al., 2025). The climate of fear created by recent federal immigration enforcement actions exacerbates this situation, lowering the likelihood that workers will report violations. In the months following the January 2025 fires, journalists and scholars observed widespread evidence of immigrant workers engaged in cleanup without proper protective equipment, and being exposed to contaminated soils and ash through gardening and housekeeping work (Reyes-Velarde & Kuang, 2025).

LESSONS FOR RECOVERY AND REBUILDING

Photo Credit: Los Angeles County

Recovery from large-scale fire disasters is often a slow, arduous process that places significant strain on affected residents and communities. In the short term, survivors focus on coping with the mental and physical health effects of the trauma and on securing housing and economic stability. As their attention shifts to longer-term rebuilding and possible return, they face substantial financial and administrative burdens, or "dollar costs" and "time costs."

The dollar costs of rebuilding are often the largest barrier to return. On top of the gap created by uninsurance or underinsurance, permitting costs and localized spikes in demand for labor and materials increase the financial strain on residents. Those who seek to rebuild homes and businesses also face substantial time costs in navigating complex administrative processes to access aid from different sources, make insurance claims, and negotiate with builders and permitting agencies – typically with no experience and insufficient information. These tasks demand time and effort from families during a period when they are grappling with the disruption and trauma of losing their home and continuing to manage temporary living and schooling arrangements. Lack of confidence in whether aid will actually materialize can also cause hesitancy, leading people to delay time-critical steps. When these delays are prolonged, expiration of temporary aid can permanently lock residents out of rebuilding (Stephenson, 2024).

These complex logistics extend to community rebuilding. Local governments that already operate under tight fiscal constraints are called on to coordinate and carry out an array of activities to facilitate recovery. Administrative and operational challenges can delay the clearing of hazardous material and repair of critical infrastructure. In areas with difficult topography or limited road capacity, traffic bottlenecks make it difficult to move personnel and materials. Lack of coordination between hazard removal and infrastructure restoration then becomes a barrier to residents' rebuilding efforts. The scattering of residents, influx of real estate investors, loss of community gathering spaces, and additional burdens borne by community-based organizations all add to the challenge of coordinating recovery actions and enabling a community-centered rebuilding process.

Pre-existing social conditions shape the vulnerability of individuals and communities to fire impacts and their avenues for recovery. Those with higher incomes have resources that reduce their risk and enhance their capacity to recover, including reliable vehicles for evacuation, quality health care, higher levels of insurance coverage, and experience in navigating complex financial transactions. Economic

insecurity and housing precarity can send people on a different recovery pathway, where inadequate information impedes access to resources that could help close the capacity gap, leading to loss of social support networks and eventual displacement (Lambrou et al., 2025). Racial and ethnic minorities, immigrants, and Indigenous people often face additional barriers to accessing government and private support and feel a lack of trust in the communications and resources they are able to access.

Although these challenges and disparities are seen consistently across fire recovery settings, recovery outcomes vary widely, both across communities and across individuals. To tackle these challenges and advance an effective, resilient, and equitable recovery, Los Angeles can draw upon lessons learned from the Tubbs, Marshall, and Woolsey Fires – recent events that have notable similarities to the January 2025 LA firestorms, and which demonstrate how sound policymaking can lead to better recovery outcomes.

Fire Analogues: The Tubbs, Woolsey, and Marshall Fires

The Tubbs fire (Sonoma County, CA, 2017), the Woolsey Fire (LA and Ventura Counties, CA, 2018), and the Marshall fire (Boulder County, CO, 2021) are particularly useful learning events to inform LA's recovery, for several reasons:

1. *Similar fire characteristics.* Like the LA fires, all three of these fires occurred during high wind events in drought conditions. Following ignition due, at least in part, to electrical utility infrastructure, wind-driven embers quickly spread the fires into developed areas historically not considered at high risk of fire damage. Each resulted in large-scale destruction.
2. *Similar policy challenges.* In the wake of each fire, policymakers were faced with the challenge of how to facilitate rebuilding when residents were facing widespread financial strain. Like LA, the affected regions also considered questions of how to approach fire-resistant building standards, land use policy, energy codes, and disaster preparedness during the recovery process.
3. *Innovative policy approaches.* Local governments and NGOs instituted several innovative strategies to streamline the recovery process and improve coordination and communication.
4. *Measurable successes.* Though not without room for improvement, recoveries following both the Tubbs and Marshall fires exceeded the typical rate. Three years post-fire, over 80% of homes destroyed by the Tubbs fire had been rebuilt, as had about two-thirds of Marshall fire homes, compared to the national average of 25% after five years.

Lessons Learned

Streamlining Reconstruction

In the wake of all three fires, policymakers sought to reduce the onerousness of permitting processes, with actions including:

- Waiving fees for critical steps such as discretionary planning, demolition, and temporary housing permits.
- Adopting new planning procedures to frontload administrative tasks and mandate three-year approval timelines.

- Partnering with local builders to create a "menu" of pre-approved home designs, allowing residents to avoid time-consuming custom design and permitting steps.
- Contracting with private firms to open additional permitting centers and expand capacity.
- Creating designated development zones with streamlined planning and design requirements.
- Simplifying permitting processes for public infrastructure, as with residential construction, and incorporating planned improvements or upgrades as part of the rebuild process.

Overall, these measures are credited with accelerating rebuilding. Where permit costs remained high, they stymied rebuild progress, even when paying the permit costs would unlock additional financial aid (Stephenson, 2024). Successful streamlining takes a coordinated effort by all relevant entities: for example, slow application processing and coordination failures by an electrical utility then created bottlenecks on solar system hookups and service connections during the Marshall fire recovery (Kohler, 2023).

Building Standards and Codes

The general dilemma facing policymakers in this area is how to balance two competing priorities: facilitating a speedy and affordable rebuild process, and holding to regulations and standards that promote future fire safety and other goals, such as energy efficiency. Following the Tubbs, Woolsey, and Marshall fires, policymakers prioritized accelerating the rebuild, forgoing opportunities to enhance resilience. Faced with the option to expand Chapter 7A requirements to the Coffey Park area post-Tubbs, the City of Santa Rosa elected not to do so, citing cost concerns and predicting that the fire was a one-off event (Kasler & Sabalow, 2019; Schmidt, 2020). The latter assertion was criticized by experts, and went against the recommendations of several firms involved with the rebuild (Froman, 2021; Kasler & Sabalow, 2019).

Among jurisdictions affected by the Marshall Fire, only unincorporated Boulder County adopted updated fire-resistant construction codes, expanding ignition-resistant building requirements to a broader area that included the fire area, and kept its energy standards in place. Two incorporated cities affected by the fires either weakened standards or made no changes. Despite some policy lenience, a majority of Marshall Fire rebuilds have adopted fire-resistant features and contemporary green building codes, including where they were not required. Incentives helped to motivate adoption of these features, even while incentive programs were hindered by unclear communication with potential recipients (Ellery et al., 2023).

Financial Incentives and Financing Options

State and local governments and philanthropic organizations all have sought to provide financial support for housing following fire events. In some cases, new efforts were focused exclusively on fire-related rebuilding; in others, governments used the fire as a catalyst to adopt more ambitious efforts to address long-term housing needs. Almost all of the programs focus on reducing felt-dollar costs, primarily (though not exclusively) for residents, via various financial mechanisms:

- Expanded financing availability through low-interest loans and forgivable loans and grants. Examples include Sonoma County's Energy Independence Program, focused on financing fire safety; the CalHome Disaster Assistance grant won by Santa Rosa Housing Authority to fund rebuilds in Coffey Park; the Sonoma County Housing Fund, which provides loans for affordable housing creation; and Colorado's Housing Recovery Program, which provides loans for rebuild

and mitigation efforts that are forgivable for low-income households. Some programs were designed to reach beyond the immediate rebuild, such as the Renewal Enterprise District established by Santa Rosa and Sonoma County, which combined new financing options and streamlined permitting processes to foster long-term development. Federal programs – most notably several FEMA-administered programs, various Small Business Administration loans, and Community Development Block Grant-Disaster Recovery (CDBG-DR) Funds – have been foundational financial resources for these housing assistance efforts.

- Tax credits, tax exemptions, and rebates. Post-Marshall fire, Colorado state and local governments were particularly active in this area, offering sales and use tax exemptions for construction materials, permit valuation adjustments to increase tax refunds, and electrification rebates for disaster-affected homes.
- Discounted, deferred, or waived fees for permitting and utility services, such as those offered through Santa Rosa's High Density Multi-Family Residential Incentive Program.
- Philanthropic efforts by organizations such as the Community Foundation of Sonoma County, which provided grants to nonprofit organizations, and efforts by groups like the Catholic Charities of California and UndocuFund for Fire Relief in Sonoma County to target aid to particular at-risk populations (renters and undocumented families, respectively).
- Coordinated incentives. In Colorado, the Disaster Recovery Program established by the Impact Development Fund (a community development financial institution) created a centralized pipeline to funnel financial aid from multiple different programs and sources to affected households while requiring only a single application. The program staff made determinations on applicant funding eligibility and distributed funds to applicants or contractors, effectively negating the need for residents to juggle multiple application processes and greatly reducing time costs.

Community Coordination and Communication

The City of Santa Rosa has been lauded for its community-centered approach to recovery following the Tubbs fire. A "block captain" system arose organically and promoted constructive engagement between residents and local officials (Kirkham et al., 2025). Santa Rosa officials connected residents directly with critical expertise, established an ad hoc rebuild committee to meet weekly with city recovery personnel, and held more than 250 public rebuild and recovery meetings. The city also created a public-facing data tool for tracking recovery progress. Nonprofit organizations boosted these efforts; the Community Foundation of Sonoma County's disaster case managers program offers one example. Nonprofits played a critical role in building connections across recovery agencies and ensuring responsiveness to community needs (Miller & Mach, 2022).

Recovery Outcomes

Policy decisions after the Tubbs, Woolsey, and Marshall Fires helped accelerate rebuilding, resulting in more rapid recovery than is the case in many post-fire settings. Flexible use of diverse funding sources, partnership with community-based organizations, and coordination across sectors were key contributors to positive recovery outcomes.

Resilient recovery has not been even, however. In most cases, fire-devastated communities have rebuilt without consistent fire-hardening or clean energy improvements. Following a familiar pattern after

disasters, property ownership and income have played a large role in shaping people's ability to recover and return to the community after the Marshall Fire. Among those who lost homes in the fire, lower-income households were more likely to be underinsured, and consequently were less likely to make fast progress in rebuilding (Rumbach et al., 2023). One year post-fire, renters were much more likely to have moved and more likely to have left the area. Rising housing costs were a key driving factor in this displacement. Moreover, renters were more likely to be uninsured or underinsured and less likely to be engaged in or feel supported by local decision making processes (Dickinson et al., 2024).

Experiences in these three and other fire-impacted communities reveal that post-fire recovery is most successful when it is community-led and staged to provide support over a long recovery timeline. Short-term investments to build community cohesion can help stabilize and reconnect neighbors with one another. After meeting people's immediate needs for stability and care, the social networks reinforced through the short-term response can anchor a rebuilding that prioritizes equity and the restoration of shared spaces. The social infrastructure that emerges through the rebuild can then support institutions and practices that increase resilience over the long term.

PLANNING FOR INFRASTRUCTURE AND EVACUATION

The fire risk landscape calls for a rethinking of the infrastructure that powers our communities, delivers water across the dry LA region, and keeps us connected with one another. Energy, water, transportation, and communications systems need to be hardened to withstand escalating fire hazards in order to perform as designed, while the demands of responding to fire—along with other climate-amplified and seismic hazards—creates new expectations for these systems that reach beyond their original designs. On top of the requirements for resilience, transformation of energy and transportation systems is essential for reducing climate change that is amplifying fire and other risks.

Energy

California's energy system planning is attempting to address competing and entangled priorities, many of which are exacerbated by climate change: minimizing utility-related wildfire ignition, increasing system resilience and ability to withstand fire exposure, supporting the rise in peak electricity demand, managing system losses, transitioning to renewable generation sources, and addressing growing energy affordability concerns (Sathaye et al., 2012). Leading strategies to reduce utility-related wildfire risk and strengthen resilience emphasize continuous improvement. This means not attempting radical changes to the system's architecture, but rather ensuring that the architecture incorporates the latest technologies (e.g., smart meters) and is well maintained.

Grid Hardening

The electricity grid's historical architecture, designed to transport power unidirectionally from a few large generator stations to many smaller consumers, is dependent on transmission infrastructure carrying large loads at high voltages across expansive remote lands and a distribution grid delivering to end users. Wildfire risk is an inherent weakness in that design, and the risk is rising as aging infrastructure gets exposed to higher temperatures (Brenner, 2020). In an effort to mitigate that risk–and the strict liability associated with utility-caused wildfire ignitions–utilities increasingly rely on public safety power shutoffs, or PSPS, de-energizing lines during adverse weather conditions to reduce the potential for ignition. But PSPS can leave customers without power during the very weather conditions that can lead to an emergency event, when access to electricity-powered communications and other infrastructure is critical.

Hardening and/or redesigning the grid to reduce utility-related wildfire risk must take into consideration the impacts on utility reliability, implications for natural resources and human health, environmental and subsurface conditions, resilience to fires and other hazards, and investment costs. Fires directly damage distribution and transmission lines, while contributing to transmission capacity losses as well. Some grid hardening strategies also provide benefits during fire events, include undergrounding (burying above-ground electric lines and other infrastructure), insulating and spacing above-ground lines, strengthening power poles, and improving operations like inspection frequency, vegetation management, and protocols for de-energizing lines during high fire risk periods. These strategies, which can be combined with advanced prevention and detection methods, are typically costly and have long lead times, and their effectiveness can be difficult to verify. Southern California Edison, one of the two major utilities that serve LA County, has said that its protocols have reduced catastrophic wildfire risk by 85%, but that assertion to investors is currently being litigated (Petersen, 2025). Regardless of effectiveness, implementation of these strategies across the state is already a strong upward driver of electricity rates.

Growing recognition of the energy system's contribution to fire risk has prompted calls for more widespread undergrounding, which is often presented as the only strategy which can reduce nearly all fire risk. Pacific Gas & Electric reports that undergrounding can reduce 99% of the risk of wildfire ignition from electrical equipment, while better insulating lines with protective covering offers 62% risk reduction (PG&E, 2023; Beam, 2023). Undergrounding transmission lines, which is uncommon in the United States, raises questions about rights of way and maintenance costs associated with finding and repairing faults in buried infrastructure. In the LA region, transmission lines run through vast areas of public lands; the feasibility, ecosystem impacts, seismic risks, and costs of burying transmission lines are not known. For distribution lines, coordinating undergrounding across energy, water, and communications infrastructure in the rebuild of burned areas could streamline access and reduce costs. Distribution undergrounding would nevertheless be extremely costly, the expense for which would likely be shared across the entire utility service area. The fairness of socializing these costs is brought into question due to the discrepancy between who bears the expense of undergrounding relative to who benefits.

Building Electrification

The build out of grid infrastructure and subsequent need for grid hardening depends on future residential electricity demand. All-electric rebuilding is likely faster and cheaper than reinstating dual fuel systems, and, combined with distributed energy resources, can support resilience during electric service disruptions (Kosmala-Dahlbeck et al., 2025). But all-electric rebuilding requires a solid understanding of energy demand. Pre-fire consumption can be used as a baseline for post-fire demand, but must be contextualized by pre-fire efficiency and electrification efforts. New UCLA research finds that pre-fire Altadena single family electric energy use intensity (kWh/sqft) was over 17% greater than in the Pacific Palisades, and for multi-family, 51% (Sheinberg et al., 2025). This difference is likely attributed to variations in climate, appliance age and efficiency, and building vintage and construction.

For rebuilding in Altadena, pursuing high-efficiency all-electric new construction with the same square footage as the damaged property would decrease electricity consumption by an estimated 40% relative to pre-fire consumption. Minimum-efficiency all-electric appliances in new construction offer a lower level of benefit, reducing total energy consumption by 22%. In contrast, in the Pacific Palisades, where pre-fire residences had lower energy use intensities, increasing the share of electric appliances would result in somewhere between just 2% lower and 34% higher total electricity consumption

(depending on appliance efficiency), because there is less opportunity for efficiency gains. In all cases, however, electrification decreases overall energy use intensity (EUI), as electricity is a more efficient fuel than natural gas.

While high-efficiency building electrification can greatly reduce overall building EUI, efficiency gains cannot always, and have not historically, offset significantly larger building sizes that require more electricity overall to operate. Despite stricter building codes and improvements in building materials and appliances, building energy consumption in California has increased over the past decades as buildings have trended larger, especially in high income neighborhoods (Fournier et al., 2019).

Distributed Energy

The above discussion assumes a continued predominant reliance on imported electricity. Moving to a more decentralized system with distributed energy resources would be a substantial paradigm shift in the power sector, requiring extensive distribution grid modernization efforts including advanced meters, sensors, relays, automated switches, and storage systems. All of these components involve costs to both the utility and the consumer. A more distributed system could enhance resilience in the case of disasters, and contribute additional electricity resources to the grid. At the same time, the costs would likely be to the customer in installing the systems and to the utility from a diminished consumption from the grid, which would lessen aggregate utility revenues.

The California Energy Code currently requires 100% solar adoption for new construction. If implemented in the rebuilding zones, this would represent a dramatic increase in local solar. In the Eaton Fire region, 4 kW systems per single family residence would readily offset estimated annual consumption (Sheinberg et al., 2025). This holds true even with increasing share of electric appliances. The 4 kW system default may not be suitable for households that use less electricity. Further, SoCal Edison customers are incentivized to install battery energy storage systems with net billing tariffs. This would reduce the amount of electricity exported to the grid, as well as households' reliance on purchased electricity. In the Palisades, there are relatively fewer single family residences, but with greater square footage. UCLA research findings show that 4 kW systems per residence would be insufficient to offset annual electricity consumption. However, the electricity expected to be drawn from the grid is still drastically reduced with across-the-board solar adoption, and slightly larger systems (approximately 6 kW per home) would make up the difference.

Gas Infrastructure

While the focus of both policy makers and the public has been on electricity infrastructure, the gas system is not without risk, in terms of accidents involving gas pipelines, service disruptions, and intensified building fires. During the LA fires, fuel pipelines carrying gasoline and other fuels from California to the Las Vegas Valley were temporarily shut down for over a day due to fire-related power outages (Seba & Khan, 2025). Meanwhile, natural gas pipelines reportedly remained connected days after fires had reached homes, producing "seven to eight foot-tall walls of flames" (Promoting and Improving Safety and Efficient Pipeline Infrastructure 2025).

However, the potential for an accelerated transition away from natural gas in the burn areas has ramifications for the customers with surviving homes who are still expecting service from the existing pipeline network. As the gas customer base is expected to shrink, the costs of maintaining the network remain. For example, if homes are rebuilt with electric space and water heating, but maintain gas for

cooking and other less energy-intensive end-uses, it is estimated that gas demand for damaged and destroyed buildings could shrink as much as 83% below the pre-fire baseline (Sheinberg et al., 2025). Decommissioning these branches of the system, preceded by a neighborhood-scale transition away from natural gas, will reduce the risks of gas rate hikes, as well as help meet the state's climate goals and provide safety benefits. Managing gas risks requires a cohesive strategy to incentivize all-electric new construction and the comprehensive electrification of existing buildings.

Water

The challenges faced by local water suppliers in some ways parallel those faced by electric utilities. Their core responsibility is to provide reliable service, safely, at an affordable price. As fire hazards rise, they seek to harden infrastructure to withstand fire exposure, while also pursuing resilience measures to respond to other climate-amplified hazards like drought and flooding. And like electric utilities, they face growing pressure to redesign their systems to help reduce the region's vulnerability to fire. A key difference between water and energy utilities is that locally, they are quite fragmented rather than centralized; there are about 200 community water systems in LA County alone, ranging in size and complexity.

Water for Firefighting

Local water supply systems provide water for everyday or structural firefighting, but they have not been designed or expected to maintain adequate supply or water pressure to support fighting wildfires or large-scale fires that start in wildland and spread to urban areas (Pierce et al., 2025). There are no regulatory guidelines for urban water systems to provide wildfire support; the minimal guidelines that do exist for water system fire response focus on fire's impacts on water supply and infrastructure, rather than vice versa.

The rising risk of wildfire-initiated urban conflagrations demands consideration of how water systems can better support firefighting needs. Opportunities exist for planning and design improvements that would bolster water systems' ability to manage supply assets and water pressure under emergency conditions. Partnerships with property owners and neighborhoods who seek to make their own investments in localized water assets for fire response could help ensure that these investments are designed to provide co-benefits such as stormwater capture and not to draw down public water supply during fire events.

However, water is only one element of wildfire-fighting; experts agree that no water system could have "stopped" the LA fires, and efforts to build the capacity needed for suppression of wildfire-ignited urban conflagrations would be extremely costly, energy-intensive, and a strain on the region's water resources. There are three categories of potential major capacity enhancements for water systems to fight wildfires: hyper-local water supply, hyper-local distribution system infrastructure hardening and demand responsiveness, and enhanced power (Sowby & Porter, 2024; Pierce et al., 2025). Large-scale investments in any of these measures involve tradeoffs between the value of fire readiness and the value of other priorities for urban water systems. Because state fiscal rules limit water systems' flexibility in how they distribute the costs of system improvements, all ratepayers may have to share the costs of fire-readiness investments, even if those investments largely benefit only part of a water system's service area (Mukherjee et al., 2016). Enhancing capacity for fire response ultimately could jeopardize

affordability of water service to meet basic needs, especially where costs are spread across small customer bases.

While large water systems like the LA Department of Water and Power might find avenues to make significant investments in improving their ability to supply water for fighting urban firestorms, these investments are not likely to be possible for the many small water systems serving high-fire risk communities. Ultimately, there are hard limits on what can be expected for water systems' fire-readiness, given the limiting physics of water and its movement through pipelines and across rugged landscapes where wildfire fighting often occurs.

Drinking Water Contamination

As systems use water supply to help fight wildfire, and as fires contaminate upstream water sources, water suppliers also face impairments to drinking water quality, which threatens their mandate to maintain reliable water delivery to communities. Fire can also introduce dangerous levels of contaminants through its impacts to distribution systems and private premise plumbing. This is largely, but not exclusively, due to a loss of pressure that allows fire contaminants like ash, soot, and smoke to infiltrate the water supply through damaged pipes and open hydrants (Proctor et al., 2020; Whelton et al., 2023).

Burned or melted water infrastructure — including some storage tanks, distribution pipes, meters, and domestic well infrastructure — can also release dangerous levels of volatile organic compounds (VOCs), like benzene, and semi-VOCs into drinking water supplies. In response to the water contamination risks, at least 9 of the 11 LA County water systems impacted by the fires issued a variety of "Boil Water," "Do Not Drink," or "Do Not Use" advisories over the first four months post-fires (Pierce et al., 2025).

Most if not all systems affected followed lessons learned based on the experience from recent fires, which in the last few years have been developed to address water quality restoration issues. All system-controlled drinking water quality issues were reported to be resolved by all affected utilities four months after the fires began (James and Haggerty, 2025). However, many questions and opportunities for improvement in speed, coordination, communication and restoration of consumer confidence in tap water remain across Los Angeles.

Evacuation

Evacuation procedures have been a common source of criticism in the aftermath of major fire events. Severe, wind-driven conflagrations like the LA fires can overwhelm emergency services' capacity to gather intelligence and take evacuation actions in real time. The logistics of the evacuation process itself is often daunting for residents; limited road capacity and simultaneous ingress of firefighters can create traffic blockages, especially in topographically challenging areas like the Palisades.

Overcoming these challenges requires local governments and emergency services to engage in comprehensive advance planning, accompanied by proactive, concrete steps to ensure that infrastructure and institutional capacity are adequate to respond to a worst-case fire scenario. Effective preparation involves in-depth evacuation scenario planning; hardening of critical infrastructure and advance placement of resources; and a traffic modeling and management strategy. Communications

are complementary to all other aspects of evacuation planning, as they aid in managing the flow of evacuees and directing them to pre-placed resources.

Strategic infrastructure hardening and improvements may help facilitate a faster evacuation process and protect lives. Expanding road capacity through widening or new connections may be infeasible in canyon neighborhoods or require encroachments on private property. A more practical option might be to reduce vehicles on the road through infrastructure improvements that allow pedestrians to reach pickup points that have easier egress options. Hardening of cell towers and power systems helps preserve the integrity of communications that are essential to managing evacuating traffic. Heat-resistant shelter-in-place structures and temporary refuges and staging sites can further strengthen the system, providing additional short-term options for evacuees.

Often more cost-effective than hard infrastructure upgrades are improvements to planning, coordination, and resource placement. Advance planning that incorporates transportation modeling and simulation can help identify neighborhood-level traffic patterns and design coordinated routes and procedures for egress. Although evacuations rely overwhelmingly on personal automobiles, incorporating multi-modal transportation and directives to maximize vehicle occupancy into plans and ongoing communication with residents can be critical for saving lives from fast-moving fires. As wildfire simulation models advance, they can be integrated with road network and other infrastructure planning models to help city planners and emergency responders manage evacuation scenarios in real time and plan capital investments over the longer term (Jana et al., 2025).

Understanding disparate levels of vulnerability among residents in neighborhoods exposed to fire risk can inform strategies to reduce fire fatalities. Elderly, frail, impaired, and disabled people are heavily overrepresented in deaths from fire (Gilbert & Butry, 2018; Mijal & Willey, 2022; Willey, 2023). Addressing the evacuation needs of these groups may involve incorporating transit access via shuttles or carpools into evacuation planning for those who cannot drive; ensuring availability of paratransit or healthcare transport options; and training and certifying personnel to act as drivers and medical caregivers in an evacuation scenario (Ji and Bills 2025).

INSTITUTIONS FOR RECOVERY AND REBUILDING

A key challenge during disaster recovery is to design processes and institutions that can speed rebuilding while providing accountability and minimizing the inequities that emerge from recovery processes (Johnson & Olshansky, 2017). Managing recovery in urban settings requires coordinating the activities of overlapping jurisdictions with different levels of organizational capacity, different laws and policies, and different demographics, land values, and housing and infrastructure quality. Strong leadership, deep technical expertise, effective communication and collaboration capabilities, and robust funding support are necessary to tackle these complex, multifaceted problems and advance a cohesive disaster recovery strategy. The sequential nature of the recovery process, where activities are predicated on those that came before, requires constant management to stage activities and balance the needs of individual households with those of the broader community.

Entities formed to manage recovery vary in their structures and powers. A coordinating agency can facilitate data sharing, communication, and resource logistics, and can help resolve inconsistencies among recovery service providers. The National Disaster Recovery Framework (NDRF) and its model for assigning Recovery Support Functions (RSFs) creates linkages across different levels of government and with private and community partners within identified domains of responsibility. These RSF structures, in turn, benefit from an entity that helps them coordinate with one another. At the other end of the powers spectrum is an agency with redevelopment powers that can provide centralized and comprehensive leadership for rebuilding by harnessing financial resources and directly leading construction projects within a defined area.

By many accounts, state and federal agencies have been coordinating their immediate response activities to the LA fires as prescribed. As early recovery tasks like debris removal conclude, there is uncertainty about how long-term recovery and rebuilding will be managed and financed. The form in which federal-state interagency coordination and the RSF structure will continue is currently unclear. In the aftermath of a disaster, CDBG-DR appropriations from Congress typically provide flexible funding to fill recovery and rebuilding gaps not covered by insurance or other federal and state disaster programs. The timing of these appropriations has varied widely after past disasters, sometimes taking months or even years before funds are obligated, but concern is mounting that federal recovery assistance will be slower and less robust than for prior disasters. In that context, the creation of a long-term recovery and rebuilding entity is all the more important, as it may need to catalyze funding and fill governance gaps to a greater degree than in a typical post-disaster setting. The following offers some considerations related to institutions for recovery and rebuilding.

Redevelopment Authorities

Redevelopment authorities are often part of major post-disaster rebuilding efforts (Johnson, 2014). These agencies have been empowered with a broad range of authorities–including property acquisition and banking, contracting, financing, and land use regulation–that can be used to control rebuilding costs and minimize land speculation. The financial backbone of redevelopment is tax increment financing (TIF), which allows the agency to issue bonds for up-front project development costs and repay them with the additional tax revenue generated by the gains in property values in the project area. In the recovery context, agencies often reinforce TIF with post-disaster government and philanthropic support funds.

TIF is a fitting instrument for funding fire rebuilding, because it directs part of the property value increase achieved through recovery back to recovery activities. However, because the Eaton and especially the Palisades burn areas are disproportionately wealthy relative to the county and the city as a whole, using TIF has the effect of capturing tax revenue for the benefit of the relatively well-off rather than spreading it around for projects and services that benefit the broader population. Equity concerns about TIFs have been on the rise in places like Chicago where TIF districts have proliferated to fund a range of development activities (Tresser, 2025). California law already permits time-limited uses of TIF, such as Enhanced Infrastructure Financing Districts (EIFDs) and Climate Resilience Districts (CRDs); limiting the time frame during which tax increment can be captured in fire-affected communities may enable effective recovery of those areas while helping to ameliorate concerns that wealth will be captured there over the longer term. While tools like TIF that catalyze local contribution to rebuilding costs can potentially reinforce inequity, the forces driving inequity in uncoordinated rebuilding are at least equally strong.

Currently, California does not have a policy instrument for localities to set up a redevelopment agency for this purpose. Historically, redevelopment powers were held by community redevelopment agencies (CRAs), created by state law in the mid-1940s to promote redevelopment of "blighted," or disinvested, property in urban areas. After years of controversy mostly related to competition over tax revenues with school districts and other local governments, CRAs were dissolved by the Legislature in 2011. In February 2012, CRAs ceased operating, and successor agencies were created to wind down their obligations and activities.

One current California law does create a mechanism for redevelopment agencies to play a role in post-disaster rebuilding, but it cannot easily be applied to rebuilding from the January 2025 fires. In 1986, while CRAs were still operational, the Legislature passed the Disaster Recovery Reconstruction Act. This statute enables local jurisdictions to prepare in advance for a disaster event by establishing "reconstruction authorities," with powers largely parallel to CRAs, for the purposes of rebuilding after the event. Because the Act requires a plan or ordinance creating the authority to be adopted by the local government prior to the event (which neither the County nor the City of Los Angeles had adopted), and because the CRA powers referenced in the Act have since been stripped from CRAs, the Act does not clearly enable creation of a "reconstruction authority" with redevelopment agency powers to respond to the destruction caused by the January 2025 fires. Legislation would therefore be required to create an authority with the full scope of redevelopment agency powers, and could define a scope and governing body suited to current needs in the Eaton and Palisades burn areas.

Public Financing Authorities

Carrying out the functions of a reconstruction authority without housing the full set of powers in a single entity would require layering of different institutions. Under California law, two other public financing authority types with TIF powers are CRDs and EIFDs. In most cases, appointees of the local legislative body will make up the majority of a CRD or EIFD governing board. It is possible to combine other financing instruments with TIF districts, such as Community Facilities Districts (also known as Mello-Roos Districts) that allow additional property tax to fund a specified infrastructure project, with voter approval. The CRD or EIFD could then contract with a nonprofit development corporation (NPDC) to carry out land purchases and contracting. Neither the financing authority nor the NPDC would have land use authority, so modifications of zoning or density in specified corridors would not be achievable through this structure. They also would not have power to oversee the permitting of redevelopment and reconstruction, and would have restrictions on use of their funds. More generally, creating multiple layers of governance dilutes accountability as functions are spread across multiple agencies; it would also likely complicate the recovery process and potentially slow down rebuilding efforts due to the need to align different timelines and accommodate the pace of different agencies.

Case Studies of Special Purpose Agencies for Redevelopment and Rebuilding

Agencies created for large-scale redevelopment or post-disaster rebuilding efforts can vary widely in their governing structures. These agencies have also creatively tapped into different sets of public and private funds and possessed differing levels and breadth of powers. Three case studies of special purpose redevelopment authorities offer lessons on the impacts of these design features. The jurisdictional and event-related contexts in which each one of these entities has been utilized are unique, and all have distinct organizational structures and levels of land ownership and control, but all have exercised powers that are much broader than those possessed by a CRD or EIFD acting alone.

Lower Manhattan Development Corporation

The Lower Manhattan Development Corporation (LMDC) was formed in 2001 to facilitate the reconstruction of Lower Manhattan after 9/11. Its parent corporation, Empire State Development (ESD), is a statewide economic development organization with extensive history and experience facilitating large-scale real estate development, typically by creating subsidiaries such as LMDC to work directly with developers, business leaders, and community members. Both LMDC and ESD have boards appointed by elected officials. LMDC also convened numerous advisory councils to represent various constituencies and stakeholders affected by the 9/11 attacks and by rebuilding.

LMDC performed a coordinating role for the rebuilding effort: facilitating design and construction on the World Trade Center site, which was owned by the Port Authority of New York and New Jersey; overseeing infrastructure projects led by the city; administering economic development programs sponsored by ESD; distributing federal grants to the community, cultural, and human services providers; and assisting with affordable housing programs administered by the city. Much of the real estate development that took place after 9/11 was financed by the Port Authority and through private capital raised by developers. LMDC's primary funding source was a pair of federal CDBG appropriations totaling $2.78 billion. The organization has downsized substantially after spending down federal funds and completing

the September 11 memorial and surrounding rebuilding, but it remains in existence as a conduit for new grant distribution.

The LMDC case study highlights the pros and cons of a governance model in which the state and local governments are orchestrating the rebuilding while lacking direct control of land. Close involvement from state and local elected officials resulted in delays and controversies for project delivery. However, this involvement also allowed LMDC to leverage administrative and monetary support from both levels of the government. The professional real estate development expertise at ESD empowered LMDC to coordinate the activities of public and private stakeholders. Although LMDC did not directly control the land for redevelopment, the land was centrally owned by the Port Authority, which worked closely with LMDC.

Transbay JPA

The Transbay Joint Powers Authority (TJPA) is a California joint powers authority created in 2001 to design, build, operate and maintain a new transit center in San Francisco. During the 1989 Loma Prieta earthquake, the Transbay Terminal, a former bus terminal, and a nearby segment of the state freeway were severely damaged. A decade later, San Francisco voters passed Proposition H to develop a regional multimodal transportation hub on the Transbay Terminal site. In 2001, TJPA was created to facilitate reconstruction by leveraging multiple public resources. Its governing board is made up of representatives from agencies and local governments that operate services through the transportation hub, reflecting the joint nature of the project.

Initially, the San Francisco CRA oversaw the execution of the redevelopment plan along with TJPA. When CRAs were dissolved in 2011, the San Francisco Office of Community Infrastructure and Investment (OCII) took over the responsibility. Both the CRA, and later the OCII, had land use regulation powers over the former freeway parcels, which had been transferred by the California Department of Transportation (Caltrans) to facilitate rebuilding. Financing of the Transit Center project came from numerous sources. Most relevant for fire rebuilding are the Mello-Roos Community Facilities District, revenues from the sale of publicly owned land, and joint development agreements with private developers. Approximately one quarter of the funds for the first phase of the project (over $515 million out of $2,260 million) came from the sale of the former Caltrans parcels for mixed-use developments. TJPA added to the value of this land by increasing the allowable density and expanding allowable land uses. TJPA also entered into a joint development venture with a private development company to build the Salesforce Tower adjacent to the Transit Center, which provided additional funding for the project.

Cincinnati Center City Development Corporation

The final case, the Cincinnati Center City Development Corporation (3CDC), is not an example of post-disaster rebuilding, but offers unique lessons as a large-scale redevelopment effort led by a private NPDC, with extensive political and financial support from the city. 3CDC was created in 2003 to lead the revitalization of a distressed, historically Black urban core neighborhood, Over-the-Rhine. The board is made up of corporate leaders, all 30 of whom must contribute annually to 3CDC's operating costs. A 12-member Executive Committee makes the most critical investment decisions.

3CDC reported investing over $2 billion dollars in the first 20 years of operation. Funding sources included a combination of public, private, and philanthropic dollars. The initial investments came from funds created by contributions from corporations led by Procter & Gamble ($45 million) and the federal

New Markets Tax Credits ($50 million) program. 3CDC leveraged these and other funding sources, along with TIF, to finance the redevelopment projects. City-administered TIF districts straddle the Over-the-Rhine neighborhood and the central business district, allowing tax increment dollars from the central business district to be used for the revitalization of Over-the-Rhine.

3CDC's redevelopment efforts have been touted as extremely successful. It has restored over 210 buildings, built 48 new ones, and created and improved parks, public spaces, and parking garages in both Over-the-Rhine and the central business district. The civic spaces reimagined by 3CDC have become popular destinations for both locals and tourists. The organization has also been aggressively purchasing historically significant properties and tapping into the federal Historic Tax Credit to rehabilitate and repurpose these properties. Observers have attributed 3CDC's success to the nimble governance that results from private business leadership and to its aggressive acquisitions, despite lacking eminent domain power, that allowed the organization to have significant control over redevelopment design. However, there are also clear downsides to the private sector-led revitalization model 3CDC represents. Most importantly, 3CDC's dependence on the private sector, and Procter & Gamble in particular, raises questions about the replicability of the model as well as its accountability to community members.

Post-fire Rebuilding

The urgency of action needed for post-fire rebuilding in LA is unquestionable. Without some coordinating entity, many owners will have no option except to sell to real estate speculators, spurring displacement, disintegration of previously thriving communities, and post-disaster gentrification.

The cases above illustrate how an authority created for a specific purpose can be empowered to enable a comprehensive approach to rebuilding that is impossible with only existing tools and mechanisms. In the Eaton and Palisades areas, the immediate challenge is not executing large projects on large parcels, but rather coordinating activities across thousands of small parcels in order to enable return by existing owners and implementation of a community-led vision of recovery. A rebuilding authority with powers comparable to California's now-dissolved CRAs streamlines this task by bringing together a diverse set of financing tools with land acquisition, permitting, and land use powers. By concentrating powers in a new entity, a rebuilding authority would have fewer checks than an entity like a joint powers authority (JPA) that requires ongoing negotiation and consent among its member agencies; it also would avoid the friction of reorganizing and redirecting an existing agency to a new purpose. Clear directives in its authorization; a time-limited focus on recovery; and a strong community voice in governance would narrow the authority's discretion and help orient it toward advancing resilience and community priorities.

RETROFITTING FOR FUTURE FIRE

Photo Credit: Los Angeles County

As Los Angeles confronts a monumental rebuilding task, it does so with recognition that a fire of similar nature – if not more dangerous, given climate trends – will occur again. Fire has been an integral part of Southern California's ecology for millennia, but now poses unprecedented risks to human populations. Arriving on the heels of other major urban conflagrations, the LA firestorms demonstrate the importance of fire mitigation for the region's public safety.

LA County has taken wildfire risk seriously in its planning activities, incorporating critical fire-adapted community and social vulnerability principles into its General Plan and Hazard Mitigation Plan. However, the county is an outlier in its lack of a county Community Wildfire Protection Plan (CWPP) to coordinate and prioritize fire mitigation activities (Zhang et al., 2025). A process for developing a CWPP for the county's unincorporated areas is underway, as is a process for developing a CWPP for the City of LA. CWPPs provide an organizing framework for fire planning, and the process of developing a CWPP can help raise the salience of fire readiness and strengthen stakeholder relationships that contribute to effectiveness in fire response (Jakes & Sturtevant, 2013). But CWPPs are limited in scope and authority– they are not well-suited to the spatial extent of the region's fire vulnerability, and they do not have regulatory effect or dedicated funding.

For Los Angeles to substantially reduce its vulnerability to fire will require sustained commitment and regional coordination. Homes, businesses, and infrastructure throughout the region are not hardened to fire; vegetation and brush are not consistently maintained to minimize fire risk; the importance of changing behavior to avoid ignitions is not salient in the public's consciousness; evacuation plans are postponed or grow stale. Because the nature of fire risk varies widely across ecosystems and built environments, the relative priority and best approach to any of these challenges depends on local context. But coordination of context-specific actions allows streamlining, cross-learning, and investments in projects that offer landscape-scale risk reduction. Mitigating the region's fire risk will be costly, but so are the consequences of failing to do so.

Models for regional strategies to mitigate the risk of urban firestorms and regional entities to coordinate those strategies are only starting to emerge. The following offers some considerations related to risk-reduction actions, institutions, and financing mechanisms to inform future fire planning, including formation of a county Fire Control District.

Community-Scale Strategies for Risk Mitigation

The foundation for mitigating fire's risk to urban areas of Los Angeles is a layered approach that encompasses ignition prevention and detection, structural hardening, vegetation management at parcel and landscape scales, evacuation preparedness, and integrated community protections (Moritz et al., 2022). Some of these actions have been discussed elsewhere in this report. The following addresses a few in more depth and the importance of regional coordination.

Retrofitting Structures

Improving structural fire resistance is not confined to rebuilding destroyed homes. Hundreds of thousands of structures in the county's WUI are, like those that burned, highly vulnerable to fire ignition and ready fuel for fire spread. Wholesale refurbishing of structures to meet modern building standards would be disruptive, logistically onerous, and costly, but evidence on structural risk factors could inform priorities for focused hardening and retrofit programs. Research on fire-affected structures has identified eaves, window panes, and vent screens as particularly important to lowering a home's risk of burning (Syphard and Keeley 2019), and these features are conducive to minimally invasive retrofits. Non-flammable eaves and ember-resistant vent screens are especially important focus points, given their role in making homes more resistant to ember-based ignition–a key factor in wind-driven fires that transition into urban conflagrations. Moreover, these elements can cost a few thousand dollars per home to upgrade, significantly less than major features like roofs or exterior walls (IBHS 2021). Fire hardening of existing properties thus far has not been a high policy priority; California's Wildfire Mitigation Program, enacted in 2019, has to date only completed 31 home retrofits (CalOES 2025).

Defensible Space

Strategic landscape planning that distances fuel from structures provides undeniable protections for individual homes, neighborhoods, and firefighting crews, particularly when integrated at the community scale (Syphard et al., 2014; Syphard et al., 2017; Gollner et al., 2025). Defensible space requirements represent a core strategy to enhance wildfire resilience in Los Angeles and throughout the state. However, the application of defensible space policy carries tradeoffs and is complicated by lack of scientific consensus.

As described earlier in this report, science is still advancing to identify the varying effects of different vegetation on fire risk in urban conflagrations and how those effects might depend on the specific built environment context (Gollner et al., 2025; Syphard et al., 2017; Quarles et al., 2010). Vegetation varies in flammability not only across type, but also over time with weather and maintenance (Bethke et al., 2016). Vegetation that is protective or neutral at one point in time may become fuel at another, and vice versa. Vegetation also offers many benefits unrelated to fire risk, serving as a source of heat protection and carbon sequestration, protecting soil health and native habitats, and facilitating recreation. These tradeoffs complicate the value of vegetation clearance for household and community climate resilience (Keeley et al., 2005; Syphard et al., 2006). There is a research gap in measuring how the health and quality of life benefits of vegetation balance against any contribution that vegetation might make to fire vulnerability.

Defensible space regulations are designed to reduce structural exposure to fuels through tiered vegetation management strategies extending some distance from the structure. Defensible space is

typically divided into three zones: Zone 0 (0–5 ft), Zone 1 (5–30 ft), and Zone 2 (30–100 ft). Each zone serves a distinct purpose in reducing fire damage and thus requires different fuel modification strategies. Zone 0 strategies are intended to reduce the risk of structure ignition from proximate threats, such as ember accumulation at the base of a structure or structure-to-structure fire spread. Actions focus on the complete removal of combustible materials, including vegetation, mulch, wooden structures, and synthetic lawn, from the immediate area around a structure. Defensible space in Zones 1 and 2 disrupts fire pathways by creating discontinuity among plantings, eliminating fuel ladders, and removing dead vegetation (Valachovic et al., 2021).

Properties become subject to defensible space requirements according to California's Fire Hazard Severity Zone (FHSZ) mapping framework, which is not designed to measure fire risk in urban built environments. The FHSZ framework assesses the likelihood and potential behavior of fires based on static physical conditions like slope, vegetation, fire history, and climate. Designations in non-wildland areas reflect the risk of flame and ember intrusion from fire in adjacent wildlands rather than the probability or behavior of fires caused by human ignition in non-wildland zones. California's FHSZ areas are designated by either state or local government responsibility for fire protection.

California currently takes a blanket approach to fuel management requirements within defensible space zones. All property owners in the State Responsibility Area, and owners in the very high hazard zone of Local Responsibility Areas, must meet specific sets of requirements for vegetation management in each zone. Local jurisdictions may adopt additional requirements, but must at least enforce the basic requirements set out by the state. The state has long had regulations for Zones 1 and 2. Legislation in 2020 required the Board of Forestry to adopt regulations for Zone 0; as of spring 2025, the agency is in the midst of carrying out a rulemaking process for its draft Zone 0 regulations.

A blanket approach of consistent statewide restrictions for each defensible space zone offers several advantages. It simplifies enforcement; monitoring parcel-level vegetation that varies in condition over time is difficult and costly. Consistent regulations, especially those that center vegetation clearance, make it more feasible to use tools like LiDAR and aerial monitoring, which may boost compliance. A blanket approach may make it easier for insurance providers to incorporate defensible space protections into their coverage decisions. Providing a set of consistent state regulations also reduces the burden on low-capacity local governments to develop their own regulations.

Yet this blanket approach misses the opportunity to tailor requirements to local contexts. Regulatory frameworks that embrace a more context-specific approach to defensible space may offer a pathway to maintain the co-benefits of vegetation without increasing fire risk. Coupled with incentives and education, defensible space requirements could reduce fire vulnerability by promoting vegetation that is less susceptible to becoming fuel. This approach could also accommodate the wide variations in topography, ecosystems, and the built environment, across and within communities, including by creating requirements catered for urban neighborhoods in high-risk areas with small lot sizes that are increasingly susceptible to flames. This type of flexible framework is more difficult to implement and enforce, yet may have fewer unintended long-term consequences, including for fire. Building tools for more fine-grained monitoring of vegetation conditions is a ripe area for scientific innovation. Current state policy allows local jurisdictions to adopt additional rules on top of the state's minimum requirements, but limits the flexibility of localities to craft policies that respond to local conditions and enforcement capacities.

The tradeoffs associated with defensible space cannot be remedied solely through scientific advancement. They also relate to Angelenos' tolerance for different forms of risk, both visible and less visible, and their willingness to bear financial and societal costs of increased fire safety. Because Los Angeles currently sits in the earliest stages of recognizing the severity of its fire hazard, community conversations and community approaches will be vitally important in setting the region on a path toward resilience.

Buffering from Fire

A large-scale intervention that could be part of a comprehensive regional fire mitigation strategy is the establishment and maintenance of a vegetated greenspace buffer (VGB) along the WUI between urban and open space areas. A vegetated area of relatively low flammability has the potential to absorb radiant heat without combusting, typically because the vegetation has higher foliar moisture. In contrast to traditional fuel treatments, greenspace buffer vegetation may be a means to slow or even stop fire spread (Cui et al. 2019). A secondary benefit is that greenspace buffer vegetation may also block ember travel; however, this is less likely to be effective if the buffer is not relatively close to the assets at risk. Greenspace buffers can also provide firefighters a safe place to work.

There is a gradient in VGBs that ranges from relatively natural (e.g., stands of high-moisture native vegetation) to tailored for specific human needs (e.g., exercise, agriculture), depending on whether the buffer is located on the open space side of the WUI versus more developed areas. For example, if an open space area is valued for its natural aesthetics and various ecosystem services (i.e., related to habitat, carbon, erosion, nutrient and water cycling), a VGB could be designed to support those goals. In LA County, stands of high-moisture native coast live oak trees have widespread potential application on the open space side of the WUI without producing net loss of native functioning habitat (Mayes et al. 2024). Riparian stream corridors could also serve as high moisture greenspace buffers (Susskind et al. 2023). These open space buffers would be strengthened when paired with VGBs on the developed and more urban side of the WUI. Natural greenspace buffers are also an option in more developed/urbanized environments, as are buffers composed of vegetation that supports food production or recreational uses, especially if water supplies are available for irrigation.

Different VGBs will vary in effectiveness under different environmental conditions (e.g., topographic positions, wind speeds, moisture levels). As a rule, wider and more moisture-rich networks of greenspace buffers are expected to function better, but also require more land, water, and ongoing maintenance. Maintenance is critical: all vegetation can burn if it becomes dry enough, meaning that these spaces can become fuel if not hydrated sufficiently, or if surface and dead materials are not removed. Invasive species of plants, many of which are relatively flammable, can also reduce a buffer's effectiveness. Long-term care and water needs are thus crucial considerations in siting and designing VGBs.

Most existing greenspace buffers were created for purposes like food production or recreation, and the fire protection they provide is an ancillary benefit. Building a VGB from existing developed and open space land is fraught with logistical complications as well as design questions related to both the developed and the open space sides of the WUI. Parts of the Eaton and Palisades burn areas may or may not be well suited to a VGB; immediate assessment of the mitigation potential for such an intervention within these burn footprints might allow acquisition of key parcels before rebuilding on those parcels proceeds.

Institutions for Fire Mitigation

Effective fire protection and mitigation is the product of multiple interlocking systems at different scales, necessitating a coordinating entity that can prioritize investments and create synergies across different strategies. A regional entity that is informed by community preferences and works with scientists, firefighters, local officials, and other stakeholders could develop fire mitigation approaches that are responsive to the LA context while building institutional knowledge and capacity that can also assist in addressing other climate-amplified hazards (e.g. drought, heat, flood). This entity could be designed with mechanisms that allow management techniques to adapt as science progresses.

Marin Wildfire Prevention Authority

A useful model for informing a new Fire Control District for LA County is the Marin Wildfire Prevention Authority (MWPA), established in 2020 to coordinate among fire protection member agencies to plan, fund, and execute wildfire risk mitigation and preparedness work in Marin County. The MWPA is a JPA funded by a parcel tax approved by Marin County voters through Measure C in March 2020.

Measure C built upon Marin County's longstanding interest and efforts in fire safety. Marin established one of the first fire safe councils in the US in 1991 and has implemented fire mitigation practices over subsequent decades. The 2017 Sonoma County fires motivated Marin to evaluate its own fire preparedness. In its 2019 report, a Civil Grand Jury tasked with this evaluation recommended creating a countywide umbrella agency to fund, coordinate, and lead fire protection planning. This recommendation, coupled with significant public interest in the proposal and the critical support of local fire chiefs, spurred the campaign for Measure C (Powell, 2022).

The Civil Grand Jury recommended that the new entity be funded with a quarter-cent countywide sales tax. In response to opposition from taxpayer groups, as well as results from a poll of county residents, backers ultimately proposed a parcel tax with a ten-year sunset (Pera, 2020). The governing bodies for 17 of the 19 county agencies responsible for firefighting services agreed to sign on as members of the MWPA. Measure C ultimately passed with 71% support. Measure C sunsets after ten years and will be up for renewal by Marin County voters in 2030.

The MWPA organizes its operations across five geographic zones. Projects must have approval from at least 50% of member agencies, whose jurisdictions must represent at least 50% of the population within MWPA's service area. The Board of Directors and MWPA's committees each have representation from each member agency. As highlighted in a one-year update from the Civil Grand Jury, this governance model departs from the original recommendation for a unified agency that would have the authority to require members to be subject to its rules and policies.

The JPA agreement specifies MWPA spending distributions. MWPA dedicates 60% of proceeds to practices that directly impact wildfire risk mitigation including but not limited to vegetation management, wildfire detection, evacuation plans and alerts, public education, and grants. Within vegetation management spending, 80% of funds must be allocated within the operational zone from which the funding was generated. The JPA agreement allocates 20% of total funds to defensible space and fire-resistant structure evaluations. The remaining 20% goes to local-specific prevention efforts, distributed in proportion to revenue raised within each member agency's jurisdiction. Proportions are averaged over a five-year period, providing MWPA with the flexibility to fund large, or high-priority,

projects and redistribute funding more evenly in following years. This strict framework has restricted the agency's ability to add staff.

Community voice in the MWPA occurs through the Community Oversight Committee, which has dedicated representation from the five zones and specified constituencies (taxpayer group, environmental group, community-based organization, fire prevention group) and is charged with reviewing and reporting on the MWPA's spending annually.

The MWPA offers a potential model for regionally coordinated mitigation, with a structure that facilitates collaboration among fire agencies, local governments, and community stakeholders. Measure C parcel taxes provide the MWPA's funding base that enables it to fund and facilitate vegetation management, evacuation planning, public education, and defensible space projects. The JPA governance structure is an important limitation: by prioritizing geographic representation, it limits flexibility in setting project priorities and providing operational capacity for the authority to carry out its work. The pending sunset of Measure C also is a constraint. Importantly, the MWPA represents a vehicle for interest and organization around fire mitigation that predated formation of the authority; the dedicated funding stream essential to authority operations came about because of coalition-building and mobilization of broad public support.

LA County Landscape Maintenance Districts

Mobilization toward a countywide Fire Control District can build on the activities of existing government agencies and community-based efforts including Fire Safe Councils and Firewise communities. One entity that could be marshaled toward a larger role in fire mitigation is LA County's existing Landscape Maintenance Districts, which have important powers consistent with those necessary to carry out a countywide fire control strategy. These three districts, established through the Landscaping and Lighting Act of 1972, can levy annual assessments (subject to approval by a majority of parcel owners in the district), assess different fees in different zones based upon services provided, install and provide ongoing maintenance of landscaping, and acquire land for open space purposes.

There are practical limitations to using existing Landscape Maintenance Districts to fully pilot a Fire Control District. Although their activities include brush clearance and irrigation that are relevant to a regional fire mitigation strategy, they mostly focus on the ornamental and aesthetic aspects of landscaping. The existing districts also do not appear to hold and manage property themselves at present; doing so in this context would likely be a novel experience, and could come with increased assessment costs that parcel owners may be reluctant to shoulder. Overall, because fire protection-related services make up only a small portion of what these districts do, districts may require additional resources and capacities when focusing on undertaking fire mitigation projects with which they are not currently familiar. Yet as the region works toward a broader mitigation strategy, Landscape Maintenance Districts have existing powers that could be leveraged toward fire protection goals.

Funding Fire Mitigation

Both the MWPA and the Landscape Maintenance Districts raise questions about how the costs of fire mitigation activities should be distributed. Apart from specified exemptions, the Marin County parcel tax applies uniformly throughout the jurisdictions that are part of the MWPA; a sales tax to fund fire mitigation activities that was passed by Boulder County voters after the Marshall Fire similarly applies

countywide. However, the benefits of fire mitigation are not evenly experienced, especially in a large county like Los Angeles. Disaster avoidance is a net gain for all of the county and beyond, but the gain accrues disproportionately to those who live in high hazard areas. A revenue instrument that delineates assessment rates to account for the unequal benefits of public spending on climate resilience can help motivate public support for higher levels of spending (Mullin et al., 2019).

Risk-adjusted fees assigned by severity of fire risk zones may be a feasible instrument for funding a Fire Control District. The Government Code sections that establish local government authority to levy special taxes do not contain a uniformity provision. Where state statutes have required uniformity, courts have held that the tax can be assessed on square footage and accounting for differences in parcel uses, as long as the formula applied to all parcels in a zone is the same. There is a portion of the Government Code that specifically lays out the requirements for special taxes used for fire protection or prevention. The local agency levying the taxes may "establish zones or areas within the local agency and may restrict the levy of the special tax to those zones or areas." The Code specifically allows for variation of the tax by parcel, but based on the degree of fire protection and prevention services available in the affected area. If there were differences in the availability of services in different fire severity zones, and/or if services varied such that certain properties were better protected by the mitigation services being provided, that would seem to justify a differential assessment across parcels.

Cooperative Fire Preparation

As the region begins to confront the immense scale of its fire risk, the challenge will be to design and implement a cooperative approach to fire preparation with reinforcing institutions that build capacity for fire mitigation and reward where it occurs. Efforts to retrofit properties, engage in evacuation planning, maintain lower-fire risk plantings and remove flammable invasive species, and invest in infrastructure hardening and community-level mitigation measures like vegetated buffers: a cooperative, reinforcing system would offer incentives and support for all of these activities, and reward them with the security of property insurance and a sense of heightened safety. A serious response to fire risk requires the powers and authorities of government, but expansion of government authority without treating residents and community groups as partners in the effort could produce strategies that are overly restrictive, punitive rather than supportive, and detrimental to other values and uses that Angelenos derive from their landscapes. An approach that builds on existing efforts and advances trust as a core principle has the strongest prospects for producing resilience over the long term (Moritz et al., 2014).

Conclusion

This report is a snapshot of a broad effort by UCLA to compile research and community feedback to inform the LA County Blue Ribbon Commission on Climate Action and Fire Safe Recovery as it developed recommendations for concrete policy actions to advance resilient rebuilding in Los Angeles.

Planning for and undertaking an equitable, resilient recovery from the January 2025 firestorms will not be easy. As we have laid out in this report, balancing fire safety, climate action, and equitable recovery requires thoughtful consideration and tough decision making, in the face of uncertainty and real tradeoffs.

Our objective was to provide the Commission rigorous, accurate, and relevant research, access to community input, and other information vital for their consideration in drafting their recommendations.

This, we believe, is an essential start to what will be an ongoing process. We hope the information we have gathered, synthesized, and analyzed here will continue to provide context to elected officials, community leaders, residents, and other key decision makers beyond the scope of the important work of this Commission. Our work for the Commission also identifies critical gaps and opportunities for advancing research that can help support decision making into the future.

Pre-existing Vulnerabilities

Before the firestorms, our region faced tremendous social, structural, and environmental challenges: income and wealth disparity, housing unaffordability, aging water and power infrastructure, climate change-driven extremes in drought and deluge patterns, and interjurisdictional friction, to name only a few.

Like all disasters, the January 2025 firestorms have laid bare the depth—and highlighted the urgency—of the challenges that already existed.

Through UCLA's community engagement process, it also became abundantly clear that deep distrust of government exists at a time when robust government action is needed to mitigate the negative impacts this disaster will have on our communities. Fire survivors are organizing themselves to address community needs for relief, recovery and rebuilding—and are asking for improved coordination, communication, and support from the government as partners.

Preparing for Future Disasters

It is inevitable that our region will see future climate change-driven disasters. The impact of each such disaster, whether it be fire or flooding, will be amplified by—and will amplify—underlying systemic vulnerabilities.

Out of the destruction caused by the January 2025 firestorms, we have tried to shine light on what those underlying issues are and how they increase risks for Southern California's communities, and provide necessary context for mitigating these vulnerabilities in the future.

Any program for recovery has to address these issues head on, and we hope the context provided here makes that task easier for those who hold the levers of power, now and in the future.

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Appendix: Learning From Fire-Impacted Communities

This appendix provides a detailed overview of UCLA's community engagement efforts, along with the primary goals, concerns, and priorities shared by fire survivors. It also includes a summary of feedback on the Commission's *Initial Recommendations and Draft Action Plans*, which played a key role in shaping the final recommendations. First, this appendix acknowledges community stakeholders who shared their expertise, experiences, and perspectives with UCLA researchers and Commissioners.

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APPROACH

Over the course of three months, UCLA conducted qualitative research with fire-impacted communities to understand shared goals, common concerns, and top priorities of residents and local organizations related to recovery and rebuilding in communities impacted by the Palisades and Eaton fires. There were two phases to this community engagement.

First, UCLA researchers listened to survivors and other community members ask questions and make statements in the following contexts: 1) publicly in meetings and events hosted by a government entity, such as the County of Los Angeles or City of Los Angeles; 2) quasi-publicly at community events hosted by local groups and non-profit organizations; and 3) privately in interviews and one-on-one meetings with UCLA researchers.

The following lists the number of interviews, meetings, and events that a UCLA researcher(s) attended to listen and learn from communities impacted by either the Eaton Fire or the Palisades Fire.

Eaton Fire:

- Interviews: 9
- Community-organized meetings: 10
- Government-hosted meetings: 14

Palisades Fire:

- Interviews: 8
- Community-organized meetings: 4
- Government-hosted meetings: 9

Next, UCLA and partners at the Department of Angels organized convenings that brought together community leaders and Commissioners. These included:

- A focus group on April 17, in which community members from Altadena and the Palisades engaged with Commissioners about the challenges and benefits of all-electric home building post-fire;
- A presentation on April 24 at the Malibu City Council meeting on the Commission's recommendations related to water system resilience and safety;
- A meeting on May 5, in which 19 community leaders from the Palisades and Brentwood provided feedback on topline recommendations from the Commission;
- A meeting on May 10, in which 29 community leaders from Altadena and Pasadena engaged with the Commissioners on their top concerns and priorities; and
- A meeting on May 21, in which 9 community members from Sunset Mesa provided feedback on the Commission's recommendations and shared their top concerns and priorities.

COMMUNITY GOALS, CONCERNS, AND PRIORITIES

This section summarizes shared goals, topline concerns, and common priorities around recovery and rebuilding that UCLA researchers heard from multiple community members at multiple venues. Summarizing myriad perspectives on complex and sensitive topics is fraught with challenges. No fire-impacted community is homogenous. A diversity of perspectives exist within and across the communities.

The following is not an exhaustive list of perspectives nor a comprehensive list of topics that are top of mind in the fire-impacted communities. UCLA narrowed in on themes most relevant to the Commission's scope of long-term recovery and rebuild. Immediate priorities, such as immediate rent relief, received less attention due to the Commission's scope, not due to importance. UCLA researchers also acknowledge that those who have the time to participate in meetings about recovery and community rebuilding are more likely to be retired or have professional employment compared to those working less flexible, hourly-based jobs.

The challenges are enormous, and fire survivors are stepping up. They are organizing themselves into community groups and collectives to help each other recover and rebuild, individually and collectively. Dozens of community groups have sprung up to address community needs in innovative ways, founded by survivors who dedicate countless hours to their community. This is often on top of a full-time job and the equivalent of a full-time job spent navigating the complicated and time intensive recovery process at an individual level.

Common goals expressed by community members and groups include rebuilding in a way that balances urgency, safety, affordability, and sustainability. At the same time, tensions between the goals can occur. For example, mandates to improve safety can also add on to a long list of requirements for homeowners hoping to rebuild. Finding the right balance is critical.

"There is a tension between building back better and building back fast. But the real question is how do we do it right?" - Palisades resident

Residents also seek better balance with nature, as part of innovative ideas and bold, nuanced visions for their community's future. They are envisioning sustainable and connected communities, for example, with more sidewalks, safe places to bike, and green spaces to come together.

"The disaster creates a golden opportunity to build a green belt with indigenous plants." - Malibu resident

Improving Trust in Government and Preparing for Rapid, Profound Change

Community trust in government is a topline concern that impacts other concerns and priorities. UCLA researchers heard a push and pull: Residents want the government to do more to support their

recovery; yet, many are deeply distrustful of county or city institutions and want more community control and accountable representation. Trust in local institutions was impacted by communication and coordination with the public during and following the fire.

Foundationally, residents want local government leaders to acknowledge that current systems and services did not protect them and that under climate change, disasters will become more frequent and severe. They are calling for not only improved services and emergency response (see the following paragraph), but also fundamental changes in how government systems operate in order to more quickly learn from and adapt to changing community needs and climate conditions.

> *"The science says climate is worsening exponentially. Our [local government institutions] need to prepare for exponential change, with regular assessment and strategic corrections as time goes on."*
> - Altadena resident

Ensuring Security and Services to Avoid and Respond to Disasters, and Support Community-led Recovery

Many residents are quick to express frustration and even dismay about inadequate coordination across all stages of management. Specifically, frustration is expressed about the government's coordination around brush management before the fires, emergency response during the fires, and the steps required and services available for rebuilding after the fires.

Multiple communities noted that brush management seems to be irregular, with the public not aware of specific plans for preventative fire mitigation measures. Post-fire, communities were immediately confronted with unclear messaging and lack of transparency from governing bodies over debris removal, soil testing and clean-up, and confusing permitting processes. Residents are also very concerned about theft and thus want more security, with a heightened and more proactive police presence.

Perhaps most deeply felt is community concern about emergency response, including a lack of coordination around evacuation notices during the fires. In Altadena, some residents received a delayed evacuation order while others, especially in western Altadena, did not ever receive alerts or orders, contributing to tragic loss of life. In Palisades, poor cell coverage in certain areas combined with inaccurate evacuation alerts, meant some residents did not receive alerts or were mistakenly given alerts to evacuate. The evacuation process itself was traumatizing as the narrow streets and lack of exit points combined with minimal guidance from the City meant traffic was backed up for hours. Many residents left their cars and made their way by foot.

As natural disasters become more frequent and severe due to climate change, residents are calling for the improvement of emergency response capabilities as a critical investment in community resilience and public safety that can drive long-term economic development. Specifically, residents are urging local government agencies to adopt methods and approaches to protect lives, property, and essential infrastructure. This would involve improving alert and communication infrastructure, such as engaged coordination between multiple emergency service providers and community-based early warning networks with citizen participation. There are also calls to use technology for more advanced wildfire detection, monitoring, and firefighting abilities.

"We survivors who experienced inadequate emergency response, delayed rescue operations, and stress filled recovery tasks might make the rational decision not to return or rebuild." - Altadena resident

Addressing Soil Contamination and Labor Protections

Community members are very worried about the presence of highly toxic contaminants such as asbestos, carcinogens, and harmful metals like lead and cadmium in the soil. As such, residents are concerned over the long-term public and environmental health consequences if the soil is not properly remediated. Compounding these concerns is the lack of testing being conducted by local, state, and federal governing agencies, meaning residents are having to shoulder the financial burden of soil testing and data gathering on their own.

Because of concerns over toxins in the soil and the debris, residents and advocates are highlighting the need for stronger labor protections with an emphasis on immigrant workers. In fire-affected areas, workers are employed for a wide range of post-fire recovery tasks: cleaning homes with smoke damage, removing fire and structure debris, and replacing insulation in standing homes. Residents have witnessed instances of workers entering homes and handling hazardous materials without wearing masks or other personal protective equipment. In response, organizations like the Pasadena Community Job Center are providing personal proper equipment (PPE) and OSHA training to workers. However, the level of support needed for workers is greater than the resources available to meet these needs.

Community members are calling on local elected officials in the City and County of Los Angeles, and the State legislature to reinforce fair labor practices and ensure proper training and allocation of PPE (i.e. respirators, hazmat suits). Financial support is another key request to ensure workers could recover potential wage losses, for example.

"Workers need to be trained and given proper equipment." - Palisades resident

Making Water and Energy Infrastructure More Resilient

Residents are concerned that the repopulation of the burn scars, increased density, and future fires might cause additional stress on infrastructure severely damaged by the fires. For example, residents in the Palisades and Malibu noted the strain on local water supply, which some residents suggest could be eased by the installation of underground cisterns and the use of recycled water as an emergency water supply. Residents also expressed support for joint trenching and undergrounding projects for multiple utilities.

In Altadena, community members are concerned that septic and sewer systems will undergo changes due to rebuilding efforts. Additionally, residents of standing homes relying on Southern California Edison's (SCE) emergency power generators are concerned they will not have a stable energy supply as the company plans its efforts to underground infrastructure. Residents have expressed their desire for greater transparency from SCE on the company's Altadena Rebuild Plan and the specific areas of Altadena that would be impacted by SCE's infrastructure overhaul. Some residents are also wondering how SCE's planned projects will affect the community's rebuilding timeline.

"We have acute awareness that [our electric infrastructure] cannot be built back the same. We need to build back more resiliently, we need to underground [power lines]." - Altadena resident

Combating Land Speculation and Ensuring Community Control

Land speculation is a pressing concern for residents in areas impacted by the Eaton and Palisades Fires, with more pronounced fears in Altadena of permanent displacement and disaster gentrification. Lots in Altadena are being purchased quickly by developers and corporations, and, in some instances, before debris removal is completed. Community members have voiced alarm at the rate of lots being sold while people are still trying to find temporary housing and navigating permitting processes.

Residents of Altadena have expressed concern that renters and those with standing but unlivable homes are not receiving enough assistance from the government. There is also a strong emphasis on preserving Black and Brown homeownership, particularly within Altadena. Community land trusts, local non-profit organizations, and land banks are combating land speculation through their initiatives to purchase land to keep it within the community. These organizations are raising capital and making important progress, but currently not at the scale commensurate with corporate entities purchasing land. Additionally, some community members have expressed hope that there will be greater consideration of and involvement with vulnerable groups, such as elderly populations and renters, in future plans for community land banking and land trusts.

Further compounding concerns over land speculation is the number of residents who will be priced out of the rebuild or overwhelmed by navigating the tangle for government regulations required to rebuild. This has led to calls to provide direct financial assistance such as a subsidy rather than a reimbursement based system. Additionally, clarity and clear messaging over rebuilding to Chapter 7A, proposed Zone 0, or all-electric standards is crucial in helping residents make informed decisions.

"Disasters don't discriminate, but recovery does." - Altadena resident

Rebuilding Safely, Sustainably, and Affordably

Community members expressed deep concerns over their ability to finance the reconstruction of their homes. There are multiple reasons as to why residents are unable to rebuild including: being uninsured or underinsured, rising cost of building materials, and SBA loans maxing out at $500,000. Across Palisades and Altadena, even residents who are insured were frustrated at their respective insurance companies not following through on claims and not getting enough insurance payout to support a full rebuild. Furthermore, they have expressed concern over future affordability and would like more financial support to meet Chapter 7A standards, enabling them to rebuild in a more fire-safe and insurable manner.

Among Altadena residents, there is some confusion about the rebuild requirements, such as whether natural gas is allowed under Chapter 7A and whether solar panel installations are required for home rebuilds. Others who are aware that state requirements for solar panels have not been waived, are concerned about the cost, some calling for waivers and others calling for rebates and other financial incentives to meet such requirements. There is support for all-electric rebuilds for sustainability and resilience reasons, if financial assistance such as subsidies are available. Community organizers are currently looking into bulk buying efforts to lower costs on a number of items, including energy efficient

windows, refrigerators, etc. Several non-profit organizations are stepping in to cover the insurance gap and are assisting dozens of homeowners financially. In addition, residents are asking the County to consider waiving permit fees.

In Palisades, a coordinated effort to purchase building materials is underway to reduce supply-chain chokeholds and to reduce cost. While the Palisades is a relatively affluent community, it is heterogeneous, and includes seniors on fixed incomes and trailer park residents. Many homeowners have expressed financial limitations because the SBA loan max of $500,000 is not enough to rebuild, especially for those who were uninsured or on the Fair Plan. They would like to see more support from the state or city in rebuilding all-electric and/or to Chapter 7A standards.

"We need explicit direct assistance for low-income residents to rebuild with fire-resistant, electrified homes." - Altadena resident

Balancing Land Use Considerations: Finding the Right Level of Density, Mixed-use Development, Lot Splitting, and Housing Availability

Fire-impacted communities are considering questions surrounding density, mixed-use development, and housing availability. Many express interest in finding a balance to address the housing needs of renters and other displaced residents, while not making radical changes to density levels. Specifically, there is interest in commercial corridors having mixed-use development that includes new housing.

Palisades residents have proposed more mixed-use development in the Palisades Village, which could provide relatively affordable rental housing to seniors and the employees of local schools and businesses. In residential areas, however, Palisades residents predominantly want to maintain single family housing. There is also mixed support for SB 9, a state law that allows the construction of ADUs and lot-splitting. While SB 9 could be used as an option to help homeowners finance their rebuild, there are concerns over what increased density would mean for the character of the Palisades, risk management, and evaluation route congestion.

In Altadena, the West San Gabriel Valley Area Plan (a plan that has been in development before the fires) recently passed by the Board of Supervisors. This plan limits development in the foothills while directing future development to areas near major transit corridors. Altadena residents are supportive of more affordable housing, "but do not want to be the solution to LA County's housing crisis," in the words of one Altadena resident. Altadena residents would also like to maintain single family housing, while being open to ADUs (which were popular pre-fire) and lot-splitting as means for homeowners to afford to rebuild and avoid selling their land to a developer. However, many homeowners are unaware that lot-splitting is an option and education was cited as a concern.

"We need a variety of people, and a variety of housing for different people." - Palisades resident

Increasing Fire Resilience with Defensible Spaces

Residents are voicing their interest in community-wide strategies to increase fire resilience. Specifically, there is interest in the Commission's proposal for a Fire Control District that could finance and coordinate with public land owners on fire mitigation projects such as green buffer zones and fuel

reduction through brush clearance. There is a desire for the government to be held accountable by impacted communities for brush maintenance along with tailored, local decision-making that takes into account local conditions.

Residents have noted concern with what is perceived as the state's "one-size-fits-all" approach to defensible space. Specifically, there is concern that an urban area, such as the Palisades that is surrounded by chaparral vegetation, would be treated similarly or equivalent to a rural setting in a coniferous forest. Some residents are advocating for Zone 0 regulations to take into account scientific data that supports the retention of healthy, well-irrigated trees and other vegetation near homes at the wildland-urban interface.

"Nature-based land strategies are critical for equitable, long-term recovery."
- Palisades resident

COMMUNITY ENGAGEMENT MEETINGS

UCLA and the Department of Angels organized five meetings that brought together community leaders with Commissioners to learn from one another. This section summarizes key take-aways from those meetings, starting with a focus group that explored the challenges and benefits of all-electric homes (All-Electric Home Building Focus Group) as well as meetings that were held separately with Altadena, Malibu, Palisades, and Sunset Mesa residents to recognize the following jurisdictional distinctions:

- Altadena is an unincorporated community in Los Angeles County, adjacent to but separate from the incorporated city of Pasadena. As an unincorporated community, Altadena does not have an elected city council or mayor.
- Malibu is an incorporated city, jurisdictionally separate from the city of Los Angeles.
- Palisades is part of the city of Los Angeles.
- Sunset Mesa is also an unincorporated community, in between Malibu and the Pacific Palisades. As an unincorporated community, Sunset Mesa does not have an elected city council or mayor.

Post-fire All-Electric Home Building Focus Group

Organized by the Department of Angels, a focus group on April 17 brought together fire survivors and Commissioners to explore the challenges and benefits of all-electric home rebuilding. There was strong interest among survivors in all-electric rebuilds. At the same time, survivors raised concerns about switching from gas to electric appliances, with particular hesitation around adopting induction stoves; the cost and feasibility of undergrounding power lines; and the impact of seismic activity on the reliability of the electric grid. Participants stressed the need for authentic community engagement and education on electrification and its benefits such as zero emissions and cost savings over time for residents; the potential for microgrids and other community resilience systems; and the need for policies and programs to give survivors the financial incentives to rebuild all-electric.

Malibu City Council Presentation

On April 24, Commissioners presented their recommendations for water system resilience and safety at Malibu's City Council Work Session. Commissioners attended to discuss Malibu's unique water and sewer concerns (e.g. the high cost of moving from septic to a sewer system for homes on the Pacific Coast Highway, or PCH), and to encourage the Malibu's City Council to establish a 60-day Wastewater Taskforce with representatives from local water districts, community members, and outside experts.

The Commission's recommendations for water quality and sewer infrastructure received support from the Work Session group, which included council members and city staff. The Malibu Councilmembers noted that infrastructure projects have long timelines, and there should be consideration for the current and future needs of PCH residents once construction is underway. There was consensus on the importance of sewer connections, "but we've got to make sure that we're not penalizing the homeowners on the beach because we want to clean it up," in the words of a council member. The Commissioners emphasized how a Wastewater Taskforce could hone in on Malibu's topline concerns

(e.g. affordability, rebuild timelines) and enable future coordination for sewer infrastructure with local water districts and other key stakeholders.

(Following this presentation, Malibu's City Council decided to explore the option to connect PCH properties to the Hyperion Water Reclamation Facility. The Council approved the formation of a Sewer Ad Hoc Committee, including two appointed councilmembers, to provide input and guidance on plans for the potential new sewer system. On May 21, the Council approved expanding the City's existing engineering contract with Woodard and Curran to design a preliminary report for a new wastewater collection system along the PCH to Hyperion, along with exploring alternative options.)

Palisades Fire Community Engagement Meeting

On May 5, 19 community leaders from the Pacific Palisades (also referred interchangeably as Palisadians and fire survivors) participated in a facilitated discussion centered around two of the Commissioners' policy recommendations: the proposed Resilient Rebuilding Authority and the Fire Control District. To organize the meeting in a way that drew on community expertise, UCLA partnered with the Department of Angels to bring together a Citizen Advisory Committee. These community leaders advised UCLA on the meeting agenda, facilitation, location, and the invitation list.

Palisadians at this meeting expressed general support for the concept of the Commissioner's proposal for a Resilient Rebuilding Authority as a means to provide much needed coordination and funding for community priorities. Survivors favored separate Authorities for the Palisades Fire and Eaton Fire areas due to jurisdictional and governance differences among the fire-impacted communities. They were also supportive of a hybrid decision-making model for the Authority that would combine government and community leadership to ensure trust and accountability. Some Palisadians raised concerns about how the Authority would raise revenue and voiced opposition to any new taxes. Others noted their openness to tax increment financing if local revenues would remain for community benefit. In addition, Proposition 4 funds were raised as a viable funding source for the proposed Authority.

The Commissioners' recommendation for a Fire Control District also received support from Palisadians concerned with inconsistent brush clearance on public land. One Palisadian shared that her street may have been spared from the fire due to recent brush clearance on adjacent public land that happened only after she made multiple calls to government agencies to demand the maintenance take place. There was interest in having a centralized entity like the District to pool resources and ensure more regularly planned and coordinated vegetation management and other fire mitigation measures such as vegetated buffer zones. The survivors also noted the need for local water recharge systems such as cisterns to support the proposed green buffer zones. Similar to the Resilient Rebuilding Authority, some residents were strongly opposed to any new tax as a source of funding for the proposed District while others conveyed their support for a county-wide parcel tax.

Eaton Fire Community Engagement Meeting

On May 10, 28 invited community leaders from Altadena (also referred interchangeably as residents and survivors) participated in a facilitated discussion about the Commissioners' policy recommendations. In particular, the discussion centered on the proposed Resilient Rebuilding Authority and the Fire Control District. In partnership with the Department of Angels, UCLA invited selected community leaders to advise UCLA organizers on the meeting agenda, facilitation, location, and invitation list.

Many of the Altadena residents who attended the meeting on May 10 expressed strong interest in the proposed Resilient Rebuilding Authority as a means to scale funding for already existing community-led land banking initiatives. There was a sense of urgency for this type of action because of the fear of losing community control of land due to the high number of lots being quickly bought up by corporate entities. Survivors want Altadena lands to remain in Altadena hands.

At the same time, some survivors expressed concern about a government entity wading into what local, Black-led organizations are already doing to acquire and steward land in Altadena. To quell concerns and raise confidence, residents highlighted the need for community control of the Authority. Specific suggestions for community representation included having the Authority partner with local non-profits and creating an oversight board with the majority of seats going to community members.

In addition, residents expressed the need for the proposed Fire Control District, as a way to ensure the government takes coordinated measures to reduce the risk of future fires on public lands. There were also concerns raised about accountability and funding. Survivors noted that the proposed District would require prolonged community engagement and could not merely be a top down endeavor without coordination and accountability to Altadena residents. Several residents opposed using a new parcel tax to fund the District. If any taxes are to be added, survivors expressed the need for transparency over how the parcel tax would be spent.

Sunset Mesa Community Engagement Meeting

On May 21, 10 community leaders from Sunset Mesa (also referred interchangeably as residents/survivors) participated in a discussion with Commissioners. Residents expressed deep concern about the future of their small, unincorporated community. Specifically, survivors shared that community-led, group rebuild efforts face limited interest due to fears of future fire risk and lack of trust in government to help them recover and rebuild for long-term safety. As a precondition to rebuilding, residents stated the need for:

- Adequate fire prevention and response services, paid for by existing taxes. More specifically they asked for brush clearance around the perimeter of Sunset Mesa with year-round maintenance; upgraded water infrastructure and hydrants; and enhanced firefighting services that employ high-tech early detection and rapid response infrastructure.
- Security to ensure public safety and the protection of building sites and materials. They called for County-supported security around the clock for the duration of the rebuild period.
- Improved government coordination during the permitting and rebuilding process. Residents asked for a partnership with LA County that includes real-time coordination with residents to identify and fix bottlenecks, inconsistencies, and delays.

Residents expressed interest in the proposed Resilient Rebuilding Authority as a way to scale and streamline procurement of materials and supplies as well as manage logistics for rebuilding. Concerns about the unpredictability of costs—due to shortages, tariffs, and market demand—were raised as a reason for coordinated, bulk purchasing to reduce costs of rebuilding materials. Survivors also raised the need to manage rebuild logistics, including transportation infrastructure for construction workers and material delivery. Additionally, residents supported the idea of localized water infrastructure like cisterns to be used for firefighting, and the creation of fire-safe

buffer zones on public land. However, residents again expressed that they should not be asked to pay additional taxes to accomplish anything that the Commission is recommending.

REPRESENTATIVE QUOTES

Calls for Government to Better Prevent, Respond to, and Support Recovery from Disaster

"As natural disasters become more frequent and severe due to climate change, local government agencies must adopt methods and approaches to protect lives, property, and essential infrastructure."
- Altadena resident

"Regional entities should be preparing for a fire that is 3, 5, or 10 times worse than what happened. We need to keep one foot in addressing challenges and opportunities of today while also preparing for the very different challenges and opportunities of the future."
- Altadena resident

"We survivors who experienced inadequate emergency response, delayed rescue operations, and stress filled recovery tasks might make the rational decision not to return or rebuild."
- Altadena resident

"The evacuation from our neighborhood was chaotic. Sunset Boulevard, our primary evacuation route, was gridlocked while smoke from the fire rapidly advanced toward westbound traffic."
- Palisades resident

"We need a reliable foundation of fire prevention and response services. They are baseline requirements for community safety and a precondition for rebuilding."
- Sunset Mesa resident who goes on to write...

"We are in the middle of three jurisdictions and there is no coordination."
- Sunset Mesa resident

Recognizing Community Leadership in Recovery While Asking For Help

"We feel like we are doing this ourselves."
- Palisades resident

"Many of us are uninsured and all of us are underinsured. We need help with permit fees."
- Palisades resident

"Communities should be empowered to lead recovery and resilience efforts."
- Altadena resident

"We need organizing...We have to bring all of our groups together...to hold the County and everyone else accountable."
- Altadena resident

Shared Goals and Tensions for Resilient Rebuilding

"There is a tension between building back better and building back fast."
- Palisades resident

"We want to rebuild stronger, safer, and smarter — but we can't do it without [the County's] active partnership."
- Sunset Mesa resident

Visions for a More Sustainable Community

"The disaster creates a golden opportunity to build a green belt with indigenous plants."
- Malibu resident

"This is an opportunity to rebuild a more walkable, bikeable community with more sidewalks."
- Altadena resident

Combating Land Speculation and Ensuring Community Control

"Disasters don't discriminate, but recovery does."
- Altadena resident

"We are losing our community."
- Altadena resident

Addressing Soil Contamination and Labor Protections

"Workers need to be trained and given proper equipment."
- Palisades resident

"This is the first wildfire after which the government did not do systematic soil testing. We demand both systematic testing and remediation. Otherwise, how can we know it's safe to return?"
- Altadena resident

Making Water and Energy Infrastructure More Resilient

"We have acute awareness that [our electric infrastructure] cannot be built back the same. We need to build back more resiliently, we need to underground [power lines]."
- Altadena resident

"We need upgraded water infrastructure— hydrants that work and a water system with sufficient pressure and capacity to support home sprinkler systems."
- Sunset Mesa resident

Increasing Fire Resilience with Defensible Spaces

"We need more neighborhood pocket parks that provide multiple benefits: act as Temporary Refuge Areas, collect storm water with underground storage, promote habitats, create shade, sequester carbon and importantly provide open space and fire breaks."
- Altadena resident

"Nature-based land strategies are critical for equitable, long-term recovery."
- Palisades resident

"Statewide implementation of [Zone 0] guidelines does not help us... in an urban setting where houses are so close together. We're not a rural forest - we're in a tract of homes."
- Palisades resident

Rebuilding Safely, Sustainably, and Affordability

"We need explicit direct assistance for low-income residents to rebuild with fire-resistant, electrified homes."
- Altadena resident

"If we are more fire, wind, and flood effective, then we will get cheaper rates in insurance because we built for the future."
- Altadena resident

Balancing Land Use Considerations

"We need a variety of people, and a variety of housing for different people."
- Palisades resident

"We do not want to be the solution to LA County's housing crisis."
- Altadena resident

Acronyms and Abbreviations

3CDC - Cincinnati Center City Development Corporation

ADU - Accessory Dwelling Unit

AFN - Access and Functional Needs

AIA - American Institute of Architects

AI - Artificial Intelligence

BMP - Best Management Practice

BOS - Los Angeles County Board of Supervisors

CAL FIRE - California Department of Forestry and Fire Protection

CalOES - California's Governor's Office of Emergency Services

Cal/OSHA - State Division of Occupational Safety and Health

Caltrans - California Department of Transportation

CalWARN - California Water/Wastewater Agency Response Network

CBO - Community-Based Organization

CDBG - Community Development Block Grant

CDBG-DR - Community Development Block Grant Disaster Recovery

CDFI - Community Development Financial Institution

CDI - California Department of Insurance

CEC - California Energy Commission

CEO - Chief Executive Officer

CEQA - California Environmental Quality Act

CPUC - California Public Utilities Commission

CRA - Community Redevelopment Agency

CRD - Climate Resilience District

CSD - Community Standards District

CWPP - Community Wildfire Protection Plan

DEO - Los Angeles County Department of Economic Opportunity

DERs - Distributed Energy Resources

DMH - Los Angeles County Department of Mental Health

DROPS - Drought Response Outreach Program for Schools

EBB - California Earthquake Brace + Bolt program

EDB - Ethylene Dibromide

EIFD - Enhanced Infrastructure Financing District

EPA - United States Environmental Protection Agency

EPIC - California Energy Commission's Electric Program Investment Charge Program

ESD - Empire State Development

EUI - Energy Use Intensity

EV - Electric Vehicle

EWDD - City of Los Angeles Economic and Workforce Development Department

FAIR Plan - California Fair Access to Insurance Requirements Plan

FEMA - Federal Emergency Management Agency

FHSZ - Fire Hazard Severity Zone

GHG - Greenhouse Gas

HCD - California Department of Housing and Community Development

HVAC - Heating, Ventilation and Air Conditioning

IBank - California Infrastructure and Economic Development Bank

IBHS - Insurance Institute for Business and Home Safety

IPCC - Intergovernmental Panel on Climate Change

IRC - Interagency Recovery Coordination

JPA - Joint Powers Authority

LA - Los Angeles

LACDPW - Los Angeles County Department of Public Works

LACoFD - Los Angeles County Fire Department

LADWP - Los Angeles Department of Water and Power

LAFD - City of Los Angeles Fire Department

LASAN - City of Los Angeles Bureau of Sanitation and Environment

LAUSD - Los Angeles Unified School District

LCI - Governor's Office of Land Use and Climate Innovation

LID - Low Impact Development

LiDAR - Light Detection and Ranging

LMDC - Lower Manhattan Development Corporation

LVMWD - Las Virgenes Municipal Water District

MTBE - Methyl Tert-Butyl Ether

MWELO - Model Water Efficient Landscape Ordinance

MWPA - Marin Wildfire Prevention Authority

NAHC - California Native American Heritage Commission

NDRF - National Disaster Recovery Framework

NGO - Nongovernmental Organization

NPDC - Nonprofit Development Corporation

NRDC - Natural Resources Defense Council

OCII - Office of Community Infrastructure and Investment

OWTS - Onsite Wastewater Treatment System

P3 - Public-Private Partnership

PBS WARN - Public Broadcasting Service's Warning, Alert & Response Network

PCH - Pacific Coast Highway

PG&E - Pacific Gas and Electric Company

PPDR - Private Property Debris Removal program

PPE - Personal Protective Equipment

PSPS - Public Safety Power Shutoff

RCD - Resource Conservation District

RFP - Request for Proposal

RRA - Resilient Rebuilding Authority

RSF - Recovery Support Function

RV - Recreational Vehicle

SBA - United States Small Business Administration

SCE - Southern California Edison Company

SGIP - Self-Generation Incentive Program

SIS - Sustainable Insurance Strategy

SolarAPP+ - Solar Automated Permit Processing

State Water Board - State Water Resources Control Board

TCP - 1,2,3-Trichloropropane

TDR - Transfer of Development Rights

TIF - Tax Increment Financing

TJPA - Transbay Joint Powers Authority

TRAQ - Tree Risk Assessment Qualification

UCLA - University of California, Los Angeles

USACE - United States Army Corps of Engineers

USGBC - U.S. Green Building Council

V2G - Vehicle-To-Grid

V2H - Vehicle-To-Home

VGB - Vegetated Greenspace Buffer

VOC - Volatile Organic Compound

VPP - Virtual Power Plant

WNDRR - Wildfire and Natural Disaster Resiliency Rebuild

WUI - Wildland-Urban Interface

BLUE RIBBON COMMISSION ON

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UCLA

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