MILLIMAN REPORT

WUI Data Commons Phase 2: Criteria for Success and Plan for Phase 3 Pilot

Prepared for the California Fire Chiefs Association

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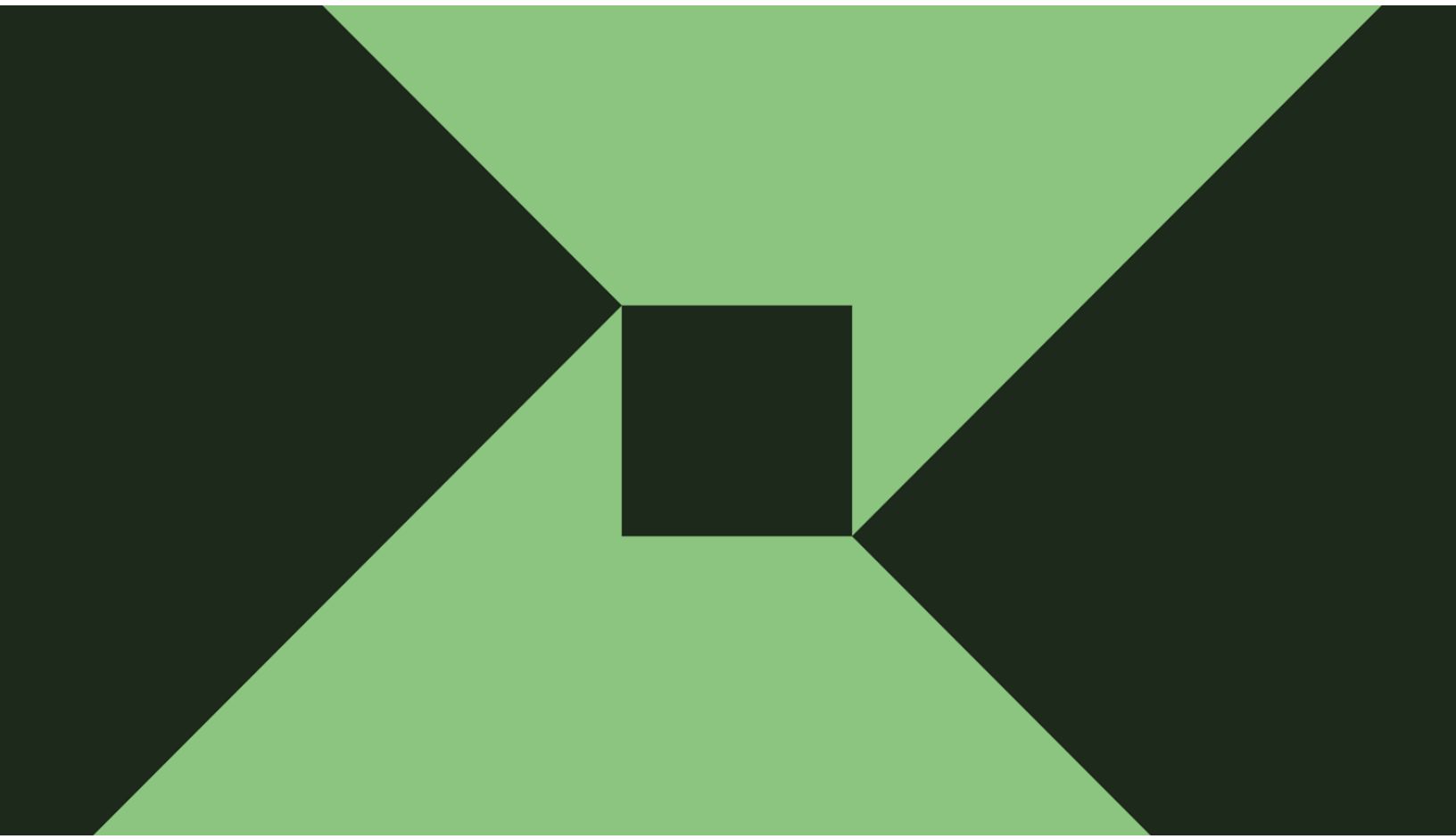

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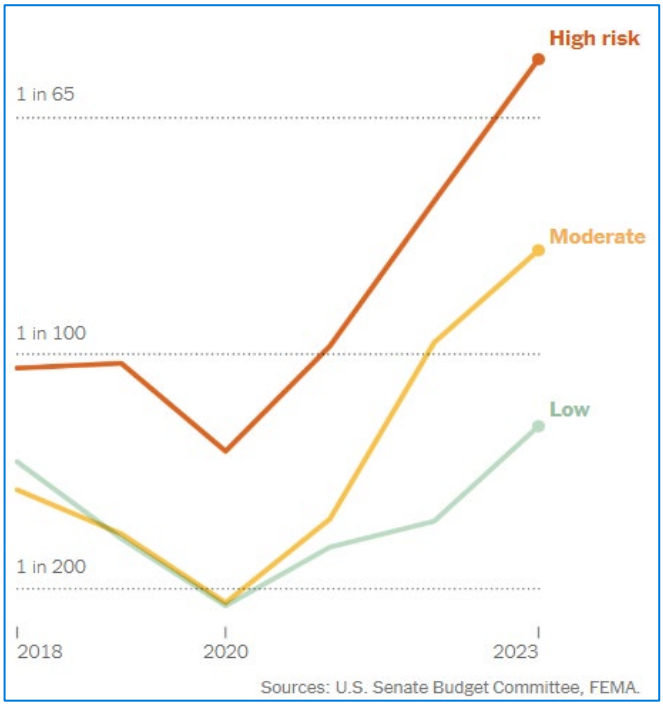
Background and purpose of report

Currently, multiple areas of the United States are facing devastating losses and insurance crises due to increasing urban conflagrations, particularly in the wildland urban interface (WUI). For many homeowners in the WUI, property insurance coverage has become unaffordable or unavailable. As shown in Figure 1, the proportion of homeowners being issued nonrenewals in wildfire-impacted areas has been increasing significantly since 2020, especially in high-risk areas.[1] Fire science experts and fire professionals have recommended property mitigation actions to reduce losses and stabilize the insurance market in WUI communities.

Figure 1: Proportion of Homeowners Issued Nonrenewals in Wildfire-Impacted Areas



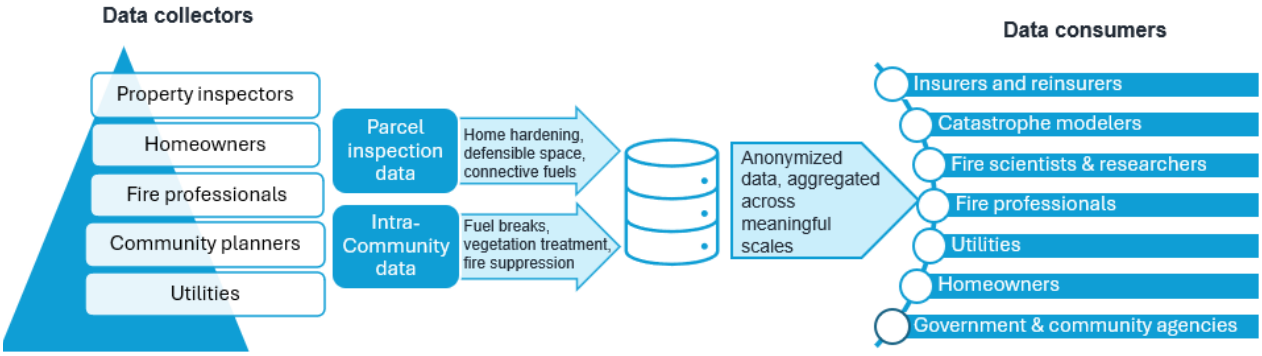
Consistently reducing vulnerability to these events requires sustained individual and collective action. While certain techniques, such as establishing noncombustible zones around buildings, are known to enhance the resilience of homes against wildfires,[2] there is no practical way for states to effectively monitor and enforce such actions. Thus, while many communities and homeowners have already undertaken some amount of mitigation, these have generally proven insufficient to meaningfully reduce community vulnerability to wildfire loss or result in improved insurance availability and affordability.

Effective mitigation requires careful prioritization to achieve the greatest risk reduction with limited resources, yet it is difficult to conduct a meaningful cost-benefit analysis using the current state-of-the-art wildfire catastrophe models. These models, which the insurance and risk management industries rely upon heavily in assessing wildfire risk, struggle to quantify the beneficial impacts of wildfire mitigation efforts, due in large part to a lack of crucial mitigation-related data that reflects the complex interactions involved.[3]

Critical parcel- and community-level mitigation data is currently collected sporadically by different entities and at different times and resolutions.[4] The WUI Data Commons (WDC) is a public-private initiative designed to systematically collect and store previously inaccessible wildfire mitigation and suppression data, while providing controlled access to a variety of users. The WDC's long-term goal is to support a wide range of research and operational initiatives by leveraging multiple data sources to address key data gaps.

Figure 2 shows the conceptual layout of the WDC. Data may be collected at the parcel and community levels by various types of stakeholders. Within the WDC, data is anonymized and aggregated across meaningful scales, to then be used by these and other stakeholders.

Figure 2: WUI Data Commons Conceptual Layout



The WDC project is being conducted via a multiphase process.

- In Phase 1, funded by the Insurance Institute for Business & Home Safety (IBHS), Milliman and IBHS surveyed prominent insurance industry stakeholders and compiled parcel-level data elements to be included in the WDC. Results were published in March 2024.[5]
- Phase 2, described in this report, was conducted by Milliman on behalf of the California Fire Chiefs Association (CalChiefs) and funded through Grant GBMF12004 from the Gordon and Betty Moore Foundation. CalChiefs was established with goals that include achieving advancements in research and development to support an all-risk approach to fire and emergency medical services within California to better serve local communities and organizations. In Phase 2, conducted from July 2024 through June 2025, Milliman brought in the perspectives of insurance and noninsurance stakeholders to identify their needs, the ideal attributes of a host entity, and initial community-level data specifications, laying the groundwork for future phases.
- Phase 3, a WDC pilot, will foster collaborations among the insurance industry, communities, insurance regulators, and fire services by creating a working WDC while researching the value of this data to these stakeholders. The WDC pilot will include 30–50 communities in up to seven states, in collaboration with the Western Fire Chiefs Association (WFCA). Phase 3 is planned to launch in the second half of 2025, contingent on receiving funding.
- Assuming Phase 3 is successful, future phases would entail expansion of the WDC and establishment of a permanent management structure for a public-private partnership. After several years of expansion, the goal of a full-scale WDC is to encompass parcel- and community-level data across the entire Western United States. This may be achieved through a contributory model if the number and types of data collectors is expanded. The cost, challenges, and support needed to expand will be more fully defined as part of Phase 3.

Throughout Phases 1 and 2, the WDC has been promoted in an educational context to create alignment and deepen knowledge of mitigations to combat wildfire risk. The WDC idea has been endorsed by the California Department of Forestry and Fire Protection (CAL FIRE) Risk Modeling Advisory Workgroup, California's Little Hoover Commission,[6] and IBHS.

WUI Data Commons Phase 2 findings

GOALS

The goals of Phase 2 were:

1. Define requirements for expertise and governance for the entity that will host the WDC.
2. Define operational and business requirements for the WDC.
3. Understand existing options and make recommendations regarding host entity/entities.
4. Draft a plan for the WDC pilot (Phase 3).

To meet these goals, Milliman conducted meetings and interviews with industry subject-matter experts and synthesized their ideas and research into a formal plan for Phase 3. This report contains details on the information collection process and the resulting plan for Phase 3.

KEY FINDINGS

The key findings of Phase 2 are:

- The rationale of the WDC centers on three key principles: increasing data availability, enhancing transparency, and fostering alignment.
- The WDC should help create alignment in the wildfire mitigation standards set by states, their fire services, and the insurance industry, so that homeowners receive clear communication on wildfire mitigation priorities.
- The WDC should focus on data that is difficult to obtain, rather than compete with readily available data.
- The WDC should be able to process and compile both parcel-level and community-level data.
- There should be verified, inexpensive, easy-to-operate technology that can be used by homeowners and/or trusted third parties to inspect their homes and provide data to the WDC.
- The WDC must facilitate varying levels of data aggregation, permissions, and access dependent on user type to maintain homeowner data privacy.
- The WDC should be managed by a public-private, nonprofit organization with deep insurance expertise that can operate in multiple state jurisdictions. The management organization can then oversee multiple entities serving different purposes, such as data specification, collection, verification, standardization, and housing.
- A WDC pilot is needed to navigate complex issues concerning data ownership, legal matters, antitrust issues, data privacy, and economic concerns. Building a smaller-scale WDC through this pilot will support the discovery of solutions to these issues and demonstrate the value of the WDC before it expands to full scale.

METHODOLOGY AND PROCESS

The WDC will be used by insurers, modelers, communities, homeowners, fire professionals, utilities, researchers, and government organizations. To ensure the WDC is designed to adequately serve these stakeholders, Milliman hosted a yearlong series of discussions to collect information, suggestions, opinions, and concerns. Milliman collected the information that will be used to develop the Phase 3 plan through interviews with subject-matter experts, research, and presentations.

Subject-matter expert discussions and interviews

- Held seven subject-matter expert meetings that included about 100 individuals representing catastrophe (CAT) modelers, consumer advocates, community groups, fire professionals, data collectors, and advisory organizations.
- Held small group meetings with consumer advocates and community groups to discuss legal and permissions concerns.
- Held small group meetings with fire service professionals, data collectors, and IBHS to discuss community-level mitigation specifications.
- Interviewed five CAT modelers individually to understand the most useful design of a WDC for their use cases.
- Worked with the Personal Insurance Federation of California (PIFC) to collect feedback from member insurers to understand the most useful design of a WDC for their use cases.
- Held meetings with several governmental and community organizations and aligned efforts to understand their current data collection and their role in the WDC: California Fire Safe Council (CFSC), National Association of Insurance Commissioners (NAIC), California Governor's Wildfire and Forest Resilience Task Force, WFCA, Catastrophe Resiliency Council (CRC), Wildfire Science & Technology Commons (WSTC), and IBHS.
- Met with three potential inspection-technology vendors: FireAside, Wuuii, and FireBreak.
- Had one-on-one conversations with about a dozen insurers and reinsurers.
- Worked with a select team of experts to develop a plan for Phase 3.

Research

- Researched existing contributory databases' structure, governance, access, and cost.
- Researched and identified potential host entities for the WDC.

Presentations

Milliman presented interim findings to promote awareness and gather additional feedback at various industry conferences, including those hosted by the following entities:

- CalChiefs Wildfire Risk Reduction Pilot
- California Forward Insurance Design Sprint
- California's Little Hoover Commission
- California Metro Fire Chiefs Insurance Symposium
- California State Association of Counties
- California State Senate Committee on Insurance
- California Utility Wildfire Mitigation Symposium
- Colorado Fire Commission
- Greenbelt Alliance
- International Association of Fire Chiefs WUI Conference
- Joint Insurance/Utilities Industry Working Group
- Metropolitan Fire Chiefs Association
- PIFC
- Red Sky Summit
- Reinsurance Association of America
- Stanford Woods Institute for the Environment
- United Policyholders
- U.S. Forest Service Coalitions & Collaboratives
- WSTC

An anonymized summary of the information collected can be found below.

INTERVIEW SUMMARY

INFORMATION	CONSUMER GROUPS	FIRE SCIENCE PROFESSIONALS	INSURANCE INDUSTRY	CAT MODELER
Governance and Expertise	Must be functional in multiple states. Academic institution suggested; some didn't prefer due to lack of ability to be countrywide and consideration of expertise. NAIC can be adviser but will not host the data. A group of advisers from different types of entities should serve on the governing board.		Must be functional in multiple states. IBHS can help determine process standards and data specification but will not host the data.	The host should not be a CAT modeler vendor, a consultant, or a state or federal agency. Host should not be a private company because it may go bankrupt. Ideal hosts are IBHS or the National Oceanic and Atmospheric Administration Ideal attributes: nonprofit, neutral party, unaffiliated with making money on risk transfer. Academic institution suggested; some didn't prefer due to lack of ability to be countrywide and consideration of expertise. Platform should be cloud-based. Prefer wildfire modeling expertise so that host can identify issues and errors easily.

INFORMATION	CONSUMER GROUPS	FIRE SCIENCE PROFESSIONALS	INSURANCE INDUSTRY	CAT MODELER
Use Cases	Support the development of public CAT model. Serve as the exchange between communities and insurance industry. Improve mitigation monitoring and mitigation prioritization within communities. Increase homeowner engagement and education.	Improve fire science and life safety. Create alignment in mitigation standards. Allow for more grant funding for mitigation efforts. Understand how to improve data collection to be more useful for the insurance industry.	Feed data into IBHS Wildfire Prepared Neighborhood and Wildfire Prepared Home certification processes. Drive down the cost of inspection. Quoting and pricing, acceptability, CAT modeling, better risk models, assessing the quality of mitigation efforts and perhaps where opportunities for better mitigation exist. Looking at the changes in a property's profile or community's profile over time could be a consideration for underwriting. The data could become a feature when buying or selling real estate.	Meet requirements of new regulations passed for mitigation data to be considered within the model in order to use the model for insurance pricing. Supplement/verify data that is currently being used in CAT models. Create secondary modifiers in models. For most, the data would not be used to update model versions, since this process doesn't happen as frequently and would need a large amount of data coverage to have an impact on the model. Determine risk scores.
Cost	Insurance companies need to pay for access to the data. Homeowners should be able to access their own data for free.	Access should be free for fire professionals.	Companies may be required to provide data to the data commons to have access to other data. Costs to fund the data commons need to be reasonable.	Currently some CAT modelers buy data, so having to pay a cost would not be shocking.
Security and Access	Consider separating data into what is visible from street (public) and what is not (private). A homeowner should have full access to their own parcel-level data, but not any other parcel-level data. Consider operating like a credit bureau: providing any data used to differentiate insurance rates. Public agencies are subject to public records acts (exception if in public interest).	Communities should have access to determine strategic plans to improve.	IBHS will need access to all data to verify certifications. Homeowners/communities can see aggregated data on how many homes have IBHS certifications. California Consumer Privacy Act (CCPA) privacy issues need to be resolved.	Suggestion to have username/password access. Data must be easy to extract.

INFORMATION	CONSUMER GROUPS	FIRE SCIENCE PROFESSIONALS	INSURANCE INDUSTRY	CAT MODELER
Coverage	Would suggest following what CAT modelers want as far as coverage. Coverage will be dependent on the homeowners' willingness to provide data. Ideas to increase homeowner willingness and thus coverage: - Social motivators to increase homeowner participation include kudos from fire chiefs and encouragement from neighbors. - Increase in real estate value is a monetary motivator to increase homeowner participation. - Provide enhanced coverage as a reward for providing data. - Operate like good driver programs. - First focus on homeowners who will have something to gain (will receive a discount vs. a surcharge) to begin/inspire data collection.	CAL FIRE data doesn't cover all homes in California; is limited to specific jurisdictions. Multiple states should be represented.	~70% of community is ideal.	The coverage will determine the use case: More aggregated data can feed into fixed parameters; more granular data can be used as a dynamic modifier. More granular data is preferred by some companies that would like to do their own risk assessment vs. just relying on IBHS certifications. On the other hand, some CAT modelers prefer more aggregated data to account for homeowner privacy. All communities need to be modeled, not only the ones that have substantial collected data. ~85% consistency across the state. Matters more to have the data for WUI communities, but also don't want to look only at WUI communities. Aggregated data should identify the types of structures included (residential only, condos, multifamily, commercial, etc.) Data can be aggregated by census block.
Recency	Concern with how temporary the status of certain mitigation data is (vegetation, wood piles, etc.).			Need live access to data, not just a one-time download. Data shouldn't be static. Data updates for defensible space need to be often enough for modelers to use confidently. Data should be geospatial and time oriented. Should be an "environmental twin" reflecting what is in the environment today.

INFORMATION	CONSUMER GROUPS	FIRE SCIENCE PROFESSIONALS	INSURANCE INDUSTRY	CAT MODELER
				Historical records of data entries will be kept and accessible.
Standardization	Data must be in a format that the insurance industry will use; otherwise there is fear that they will ignore it.	CAL FIRE, Wildfire and Forest Resilience Task Force, Oasis Loss Modelling Framework, and other entities have data standards that can translate to the WDC. No need to reinvent the wheel.	It is important that data is standardized to be compatible with IBHS. AI potential for normalizing data across different sources.	Standardization should be done on property address, if collected. There should be a unique ID at the property level and community level. Duplicates of the unique ID should be assessed for accuracy and removed where determined to be unnecessary. Determine process for missing values and range of acceptable values.
Collection and Specification	Consider methodologies of one vendor: Inspection can be done by anyone with artificial intelligence (AI) assistance, report is given to resident and reviewed by fire agency, then maps to third-party schema (like IBHS). Fire safe councils are collecting data. Would suggest following what CAT modelers want as far as detail.	Inspection data can be collected from homeowners via an app that needs to be very easy to use and includes 360° cameras so nothing is hidden from capture. Consider reflecting data on utilities.	Individual parcel information needs to be detailed. For example, siding materials, roofing materials, enclosed spaces under decks, etc. For community information, the more the better. Specifics on fuel mitigation and other efforts would be best. Inspection data can be collected by fire professionals. Best data sources include federal, state, and local government entities (e.g., CAL FIRE, CA Office of Emergency Services, CA Dept. of Parks and Recreation, CA Dept. of Fish and Wildlife, National Park Service, U.S. Forest Service, U.S. Fire Administration, local building departments).	Percent of homes with IBHS certifications, defensible space, roof type, vents, neighborhood control measures, distance from WUI, building density, fuel data, utility plans, mitigation plans, regrowth analysis. Would trust any specs CAL FIRE suggests. Would suggest following what IBHS does. Federal government data is trustworthy. CAL FIRE data is trustworthy.

INFORMATION	CONSUMER GROUPS	FIRE SCIENCE PROFESSIONALS	INSURANCE INDUSTRY	CAT MODELER
Auditability	Date, time, and source should be included in each piece of data. Specific vendors can be qualified, then audited routinely. There should be a correction process available to homeowners who believe the data for their parcel is inaccurate.	Fire science professionals can assist in data verification.		There should be an available point of contact/support line for reporting errors. Individual companies may still seek their own data, which can serve as an internal auditing system. Source of data should be identifiable: ideally include data dictionary describing each data field, data types, expected fill rates. Consider a “confidence” level for data, detailing how confident the user who input the data is on its accuracy (e.g., is it an assumption based on year built for building codes, is it modeled, etc.).
Challenges	Concern with antitrust and political affiliation. There needs to be complete alignment on what the WDC is used for. Need validation that if data is given, insurers will use it and provide coverage. No use cases should be allowed that violate homeowner privacy rights. Homeowners are not willing to have inspections done if inspections will increase nonrenewals or rates. It would be beneficial if we could tell the homeowner how their data will be used, how their insurance might change due to the data collection, or what they need to do to have better insurance options. Consider mandatory recognition and reward by insurance companies based on mitigation efforts. How will access be determined for renters or mobile-home owners?	There needs to be consistency in the standard of mitigation required. Fire districts can enforce stricter ordinances than CAL FIRE, so there is misalignment from homeowners’ understanding. CAL FIRE can’t do inspections on areas that aren’t required to be inspected by CAL FIRE standard. Issues on collecting data regarding Zone 0. Need to understand what data specifications influence change in CAT models. How will “community” be defined? Will data storage be an issue?	Funding expectations (e.g., who pays, how much will it cost; it must be reasonable). Participation should be voluntary, not mandatory. The level of obligations prescribed (particularly on their intellectual property). Equity of data contributions and prospective participation as opposed to retrospective data contributions. Expectations for consumer education and process to get homeowner and community participation. CCPA privacy issues need to be resolved. Many unanswered practical questions about retention,	The data commons will reduce uncertainty but not eliminate it. Need to better understand how data commons will be funded and what the cost to CAT modelers will be. Concern with how consumer advocates will react.

INFORMATION	CONSUMER GROUPS	FIRE SCIENCE PROFESSIONALS	INSURANCE INDUSTRY	CAT MODELER
	Ownership of data, ability to create derived products for commercial purposes.		update schedules, access control, governance, etc.	

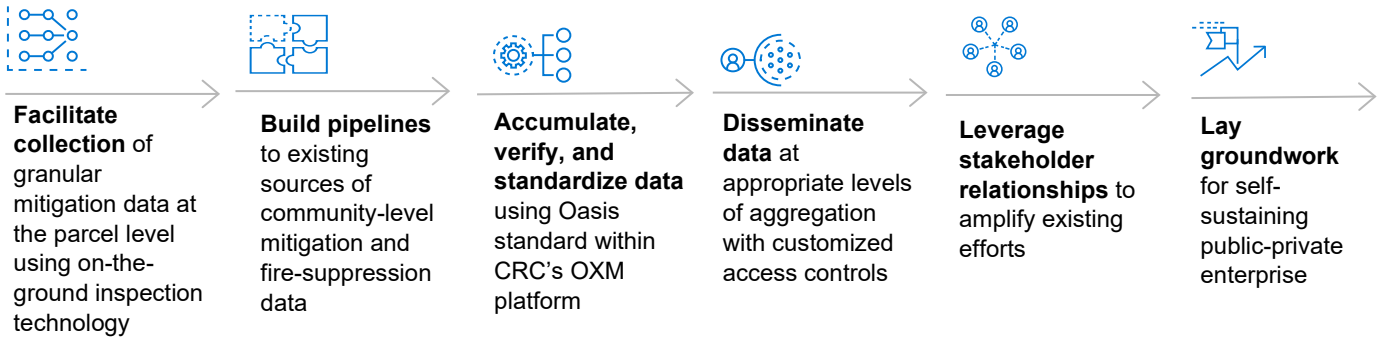
WUI Data Commons Phase 3 plan

Phase 2 concluded with a thorough proposal for the Phase 3 plan, described in detail in this section.

PLAN OVERVIEW

Phase 3 will focus on fostering collaborations among the insurance industry, communities, insurance regulators, and fire services through the creation of a working WDC while researching the value of this data to these stakeholders. The WDC pilot will include 30–50 communities in up to seven states. Parcel-level data from these communities will be collected using on-the-ground inspection technology through a process managed by WFCA, with the support of local fire services. Community-level data will be synthesized from credible existing organizations. The data will be hosted in CRC's Open Exposure Model (OXM) platform after being accumulated, verified, and standardized. Within the OXM platform, there will be access controls and aggregation tools to protect individual consumer privacy. Specific access at different levels will be granted to stakeholders including fire services, communities, homeowners, modelers, utilities, insurers, and scientists.

Figure 3: An Overview Schematic of Phase 3



This process sets the WDC on the path of becoming a consistent, verified, easy-to-access data source for parcel-level and community-level data, creating the potential to develop a much more informed view of the wildfire risk within a given community.

The core research questions to be addressed in the WDC Phase 3 are:

- How far can the WDC drive down the cost of collecting meaningful, verifiable parcel-level inspection data at scale using the best available AI and machine-learning technology?
- How far can the WDC drive up the value of parcel-level data by aggregating it with available community-level data, facilitating multiple use cases, and synthesizing it to best serve these uses?
- Can the entities managing the WDC prove that the selected technology platform is sufficient for maintaining data integrity, controlling access, and scaling up?
- Is there a foundation for a self-sustaining, permanent public-private effort to maintain and expand the WDC?

As shown in the interview summary above, various stakeholders identified complex challenges that will need to be addressed. In Figure 4 we narrow down the crucial challenges and offer suggestions for addressing them in Phase 3.

Figure 4: Challenges to address in Phase 3

Challenge	Proposed action
Need to increase homeowner willingness to allow inspections.	WFCA will be a neutral party providing education and encouragement as they guide the inspection process.
Homeowner privacy and data protection concerns.	Thoroughly control parcel-level data access (self, community, fire services only) and create privacy policy for others to obtain individual data only with homeowners' consent.
Request for mandate of insurers to either reflect mitigation effort within rates or provide information on how the homeowner can improve their efforts.	Continue conversation with insurers and state insurance regulators on potential uses of the WDC as well as its limits.
Address consistency issues among local, state, and insurer mitigation standards.	WFCA has proposed providing a model ordinance adopting either IBHS Wildfire Prepared Home or Safer from Wildfire[7] (California only) to ensure coordination of exterior hazard abatement standards with insurance industry.
Define WDC funding and user cost requirements.	Use Phase 3 to determine cost to build a full-scale WDC, demonstrate specific value to targeted funding sources such as insurers and CAT modelers, and develop robust plan for ongoing data collection.
Insurer reluctance to contribute data to the WDC.	The WDC will initially be filled with data collected from WFCA's inspection data collection process and pre-compiled community mitigation data from entities such as CAL FIRE and WSTC. Discussions will continue to address if and how insurers will contribute data.
Residents'/communities' reluctance to contribute data to the WDC due to concerns that more accurate data will result in an increase in modeled wildfire risk; related concerns over derived products using data.	Restrict insurer use of Phase 3 pilot data to noncommercial purposes. Identify legitimate future uses of WDC in the insurance context during Phase 3.
Need to understand how CAT models will take in data. (Will there be a time lag to build the data into the model? Will the data collected be enough to affect CAT model output?)	CAT modelers will be asked to participate in the pilot so we can further understand this challenge.

If Phase 3 successfully addresses these challenges and demonstrates the value and feasibility of a WDC, the remaining phase(s) of work will require determination of ownership, funding, and control for expanded participation and use.

COLLABORATORS

To build the WDC, data needs to be specified, collected, reviewed, standardized, aggregated, and hosted. Given the complexity of not only the data itself, but the associated educational needs, privacy concerns, and technical challenges, the implementation will be executed by a team of experts from various fields to ensure the comprehensive functionality of the WDC. Separate teams will be responsible for various project tasks. The output will be disseminated among diverse stakeholders, including those from the insurance industry, fire departments, regulatory bodies, and local communities. Users will be surveyed to understand their requirements for data specificity

and aggregation. This collaborative approach ensures that diverse perspectives are considered, thereby establishing a robust foundation for the WDC to serve as a reliable single source of intelligence.

Western Fire Chiefs Association

WFCA, a geographical division of the International Association of Fire Chiefs, led by a board of directors that includes representatives from 11 states and territories, will serve as the project lead for Phase 3. WFCA will spearhead efforts to collect data, assist in developing detailed data specifications for effective aggregation, ensure the successful accomplishment of project objectives, coordinate activities among participating state and local fire agencies, and oversee the selection of pilot communities and technology vendors.

Milliman

Milliman is a global consulting and actuarial firm that leverages deep expertise, actuarial rigor, and advanced technology to develop solutions for a world at risk. Milliman provides independent, trusted advice to help clients in the public and private sectors navigate urgent, complex challenges—from extreme weather and market volatility to financial insecurity and rising health costs. Working on behalf of communities, builders, fire services, government agencies, and insurers, Milliman is helping to enable sustainable insurance markets in wildfire-exposed communities. Milliman will bring a team of actuaries, GIS specialists, and data scientists to assist in project fulfillment; offer guidance on insurance data specifications, quality, and aggregation; engage with stakeholders; and produce a comprehensive report detailing project findings.

Institute for Business & Home Safety

IBHS translates science into actionable insights to inform the insurance industry, prevent avoidable suffering, strengthen homes and businesses, and support thriving communities. Through comprehensive research and testing, IBHS develops innovative strategies and building practices aimed at reducing the risk of wildfire damage. Notable initiatives include the Wildfire Prepared Home certification[8] and the Wildfire Prepared Neighborhood designation,[9] which set standards for enhancing fire resilience and promote proactive community-wide measures to safeguard against wildfires. IBHS will provide expert guidance on identifying critical data and defining precise data specifications.

Wildfire Science & Technology Commons

WSTC is a University of California, San Diego, initiative funded by the National Institute of Standards and Technology (NIST). WSTC's mission is to empower a diverse community of professionals with unprecedented access to high-quality data, predictive models, computing resources, and expertise across disciplines. Their Wildfire Commons platform enables collaboration to accelerate technologies and strategies that enhance wildfire resilience, preparedness, and response. WSTC is composed of team members from the University of California, San Diego; the San Diego Supercomputer Center; and affiliate collaborators from federal government, industry, and other fields. Over the last decade, WSTC's multidisciplinary team has formed significant partnerships with data providers, science communities, fire practitioners, and government organizations to solve problems in wildland fire. WSTC will build pipelines to community-level data for the WDC.

Catastrophe Resiliency Council

CRC is a nonprofit whose mission is to collaborate with risk- and insurance-focused parties to create a healthy, competitive risk marketplace that promotes resilience against natural catastrophes. CRC will host the data on its newly built OXM platform and provide technology administration and support.

Oasis Loss Modelling Framework Ltd.

Oasis provides an open-source platform for developing, deploying, and executing catastrophe models. The data collected for the WDC will be standardized based on Oasis modeling standards.

Troutman Pepper Locke LLP

Troutman is a law firm that helps clients solve complex legal challenges and achieve their business goals in an ever-changing global economy. They have extensive experience in serving the insurance and reinsurance industry and will provide legal support in executing contracts for stakeholder participation in Phase 3.

Inspection technology vendors

The inspection technology vendors listed in Figure 5 (FireAside, FireBreak, and Wuuii) have committed to Phase 3 and will be evaluated with respect to their ability to collect the specified data in the selected neighborhoods. These vendors all offer parcel-level home inspection solutions using advanced technology such as machine learning, AI, remote sensing, and data-driven software.

Other collaborators

Phase 3 will engage a wide range of collaborators from diverse sectors. Those listed in Figure 5 have expressed their commitment as of the date of this publication. We have received strong interest from additional entities and anticipate securing commitments from a broader group once Phase 3 is funded.

Figure 5: Entities Expressing Support for Phase 3 (letters of support included in appendix)

At the outset of the project, contracts outlining the roles and responsibilities of all collaborators will be established, with legal experts involved to address relevant privacy and ownership issues. Milliman will confirm participation with various collaborators involved and set up expert review teams and contact points for the tasks requiring stakeholder feedback. WFCA and Troutman will negotiate and finalize the necessary contracts, ensuring stakeholders can participate in the pilot program, while addressing concerns related to data privacy, data sharing, and other relevant issues.

USE CASES

Primary use cases

Phase 2 interviewees identified the following three primary use cases as offering significant benefits to all stakeholders.

1. *Use case 1: Capture and maintain crucial data needed by community leaders to monitor and prioritize mitigation and fire-suppression activities.* Having access to parcel- and community-level mitigation data will allow community leaders to understand their community's progress with respect to mitigation and how to prioritize future mitigation efforts. The data can be used to improve resource allocation, support grant

proposals, educate residents, monitor compliance with relevant ordinances, and funnel resources to areas most in need. It can also be used by fire protection leaders to understand where to stage resources during and after an event. Further, having access to the impacts of regional-level mitigation data will allow community leaders to understand the risk implications of actions taken by surrounding communities. Phase 3 will include the production of data summary reports with meaningful aggregations and metrics, to demonstrate and increase the value of the data collected in community decision-making.[10]

2. *Use case 2: Support and document IBHS Wildfire Prepared Home and Wildfire Prepared Neighborhood designations.* Grounded in extensive scientific fire research, these IBHS programs delineate specific preventive measures that homeowners and communities can take to protect against wildfire. Guided by IBHS experts, the WDC project team will create data specifications intended to support the level of detail needed to document these actions. Once IBHS has reviewed inspections and determined that a home or neighborhood has qualified for an IBHS Wildfire Prepared designation, that information can be added to the WDC as well. IBHS's designations are a trusted and verifiable source for insurers seeking to assess whether a home or neighborhood has taken action to reduce wildfire risk. As more neighborhoods and communities achieve and maintain the conditions to effectively reduce wildfire risk, the improvements should ultimately be reflected in insurance pricing, creating more affordable options for homeowners.
3. *Use case 3: Facilitate incorporating mitigation impacts into catastrophe models.* A common complaint of regulators and consumers is that CAT models used by insurers do not sufficiently reflect actions that have been taken to reduce wildfire risk. Recently, California[11] and Colorado[12] have promulgated regulations allowing insurers to use CAT models within the rate-making process only if the model takes into account parcel-level and community-level mitigation efforts. Some CAT and risk models can incorporate some mitigation efforts, but data availability at a meaningful scale remains a challenge. A permanent, widely used WDC can provide modelers with the consistent, reliable, primary-source data needed to incorporate mitigation actions. Making this data available through the WDC would increase the accuracy of model prediction, improve the ability to perform cost-benefit analyses for more complex mitigation scenarios, and allow for insurance rates to better match price to risk and thus incentivize effective action at the home and neighborhood level. The availability and incorporation of this data will also reduce community uncertainty regarding how mitigations are viewed and valued.

Additional potential use cases

Phase 3 is intended to demonstrate a WDC that can support all three of the primary use cases. In addition, during the Phase 3 pilot, the subject-matter experts will evaluate the potential for the WDC to support additional use cases, such as:

- Supporting and improving existing insurer processes
    - Reducing cost of inspection data
    - Serving as a central access point for homeowners to see inspection data
    - Understanding risk profile of properties and neighborhoods for underwriting
    - Understanding changes in community profiles over time
    - Verifying actions qualifying for discounts
    - Improving and modifying risk scores
    - Understanding aggregate exposure

- Supporting and improving existing processes for utilities
    - Planning for power shutoffs
    - Target mitigation
    - Consequence modeling

- Assisting government entities (federal, state, county) that need visibility into wildfire risk at a higher level
    - Informing effective policy
    - Evaluating grants
    - Providing cost-benefit analysis to prioritize resources
    - Monitoring activity

- Providing consistent, valuable pre-fire data for scientific research into urban conflagration
    - Integrating with other data sources, such as earth observation data
    - Enhancing understanding of the cross-scale interactions of wildland fires at local levels

BENEFITS

Benefits of the WDC

The WDC will provide the following benefits to all stakeholders:

- Drive down the cost of collecting granular, valid, and comprehensive data that changes rapidly and requires on-site inspections.
- Reinforce meaningful actions by communities and homeowners to mitigate risk by making them visible and usable to insurers and CAT modelers.
- Overcome bias to inaction due to conflicting requirements and messaging around mitigations that matter.
- Facilitate impactful, effective collective action via aggregated views and benchmarking.
- Enable targeted prioritization of mitigations to better allocate scarce resources for maximum impact.
- Reduce risk to lives and property on a lasting basis by preparing communities for fire.

Phase 3 as a force multiplier

One of the WDC objectives is to foster collaboration among the insurance industry, communities, insurance regulators, and fire services. The WDC pilot output will support collaboration and alignment with these separately funded external efforts:

- *Multi-State Strategic WUI Mitigation Alignment Project:*[13] Through a separately funded project, WFCA coordinates ongoing discussions between key stakeholders, including state fire chiefs organizations, insurance commissioners, state fire marshals, and state insurance trade associations, to achieve agreement on a unified WUI mitigations standard. This includes developing implementation strategies and maintenance standards for state WUI codes. The states actively participating in this effort are Arizona, California, Colorado, Idaho, Nevada, Oregon, and Washington. These same states have committed to work with WFCA and be a part of the WDC. WFCA will also ensure the longevity of the WDC effort and promote a full-scale WDC by being a messaging platform to promote wildfire mitigation alignment to fire services. In doing so, it will leverage the technology vendor relationships developed for the WDC effort to enable local services to conduct inspections with verification and share results with residents. WFCA will provide model ordinances based on IBHS' Wildfire Prepared Home designation (or California Department of Insurance Safer from Wildfire in California).
- *Mitigation makeovers:* In conjunction with participating state and local fire services, WFCA will create detailed plans for "mitigation makeovers" that will allow implementation of mitigation with the use of external funding or grants (outside of the scope of Phase 3). WFCA will communicate opportunities for mitigation makeovers to homeowners in pilot neighborhoods who agree to pre-mitigation and post-mitigation inspections. If a homeowner is interested, WFCA will oversee the development of mitigation plans and approve them when those plans meet IBHS Wildfire Prepared Home standards. WFCA will assist in implementing mitigation plans given external funding or grants. Then, WFCA will facilitate post-mitigation inspection using the same technology vendor as for pre-mitigation.
- *IBHS Wildfire Prepared Home evaluation/designation:* The WDC pilot will be designed to facilitate IBHS Wildfire Prepared Home designations. IBHS will first determine how many homes in selected neighborhoods are close to meeting the Wildfire Prepared Home standard. Then, IBHS will use WDC output to review parcel-level inspection data for the pilot neighborhoods and determine if data is sufficient to support evaluation of new Wildfire Prepared Home designations. If it is not, they will assist

in process improvement to ensure data adequacy. IBHS will be able to enhance their evaluation process by using WDC output to document and/or supplement its inspections, which ideally will save time and effort and allow for more designations to be assigned as appropriate.

- *IBHS Wildfire Prepared Neighborhood pilot:* IBHS is planning to pilot five to 10 Wildfire Prepared Neighborhood designations and will coordinate this process with the WDC. IBHS will review community-level data hosted in the WDC for the pilot neighborhoods and ensure that the data is adequate to evaluate Wildfire Prepared Neighborhood designations. Supporting the introduction of this designation will promote its recognition in both community planning and in the insurance industry, encouraging robust mitigation and documentation.
- *Insurance fairs:* The project team will leverage the relationships and expertise of participating insurance departments, community groups, and consumer groups to bring insurers and reinsurers' attention to the WDC pilot neighborhoods. We will encourage these groups to organize "insurance fairs" using WDC output of pre- and post-mitigation-makeover data and reports to promote awareness and insurance availability. This effort would not imply a commitment by participating insurers to underwrite any specific number of policies.

The alignment of data and its users through the WDC fosters a continuous cycle of improvement, enabling the tracking of mitigation progress, driving prioritization and implementation, and refining the value of mitigation efforts. Ultimately, the WDC can serve as a valuable source to promote a forward-looking approach to wildfire science and community adaptation.

DATA SPECIFICATION

Data fields and acceptable values

To build a reliable database that serves as a single source of intelligence and facilitates coordination across diverse fields, a comprehensive data specification is needed. This specification will incorporate ideal inputs, information that deepens the understanding of vulnerability to conflagration in the built environment, and indicators for identifying opportunities to improve mitigation, drawing on insights from collaborators and building on research previously conducted in Phase 1 and Phase 2. The data specification will leverage existing resources and meet the following considerations and requirements:

- Data must be relevant and actionable to ensure it supports practical decision making.
- Data must support the development of a unified standard that addresses the needs of all stakeholders.
- Data privacy and ownership must be explicitly addressed.

Guided by IBHS, detailed parcel-level data specifications will be defined based on the input data specification for IBHS Wildfire Prepared Home, starting from the draft data specification created in Phase 1. Detailed community-level data specifications will be defined based on the input data specification for IBHS Wildfire Prepared Neighborhood. Milliman and WFCA will provide expert opinions and solicit feedback from volunteer subject-matter experts including insurers, reinsurers, risk model vendors, and inspection technology vendors to further enhance the data specification.

Parcel-level data will be collected in a tabular format and all geospatial information will be included in shape file formats. For some user output (e.g., CAT model input data), data will need to be aggregated. An optimal level of data aggregation needs to be determined to preserve consumer privacy while allowing useful geographical specificity. Any aggregated data should reflect the structure types that are included (i.e. residential only, multifamily, commercial, etc.)

Figures 6 and 7 show a non-exhaustive sample data specification generated based on IBHS Wildfire Prepared Home and Wildfire Prepared Neighborhood input data specifications and the draft data specification created in Phase 1 and Phase 2 interviews. For a more detailed, exhaustive list, please refer to the IBHS Wildfire Prepared Home and Wildfire Prepared Neighborhood Technical Standards.

Figure 6: Parcel-Level Data

Sample Field Name	Sample Acceptable Values
Home type	Single family detached, townhome, condo, mobile home
Number of stories	Numerical
Defensible space	0–5 feet, 0–10 feet, 0–30 feet, 0–100 feet
Attached/detached structures	Gazebo, pergola, shed, deck
Gutter clearance	Yes, no
Roof type	Class A, B, C
Metal gutters	Yes, no
6-inch vertical clearance on exterior walls	Yes, no
Vents	≤1/8-inch metal wire mesh, >1/8-inch metal wire mesh, unenclosed
Working louvers on dryer vents	Yes, no
Combustible structures/decks	Yes, no
Hot tub within 10 feet	Yes, no
Debris under deck	Yes, no
Siding	Combustible, noncombustible
Propane tank within 30 feet	Yes, no
Eaves	Open, enclosed
Noncombustible dryer vent	Yes, no
Windows	Multipane, single pane
Exterior doors	Metal, fiberglass, solid hardwood, glass, storm door
Shutters	Combustible, noncombustible
Parallel fencing	Yes, no
Deck	Combustible, noncombustible
Roof age	Numerical
Distance to WUI	Numerical
Year built	Numerical
Building code met	Include all building codes
FireWise zone	Include all zone levels

Figure 7: Community-Level Data

GIS Layers
Drought and wind patterns
Building density
Parcel boundaries
Structure separation distance
Fire suppression response
Firefighter resource ability
External fuel types
Connective fuel types
Fuel break location
Mechanical and hand fuel reduction location
Prescribed fire location
Targeted grazing location
Tree planting location
Timber harvest location

Data coverage: Pilot neighborhoods

The goal of the full-scale WDC would ultimately be to acquire data for all communities in the Western United States if successful and economically viable. In Phase 3, Milliman and WFCA, with the assistance of IBHS and other collaborators, will identify 20 to 30 neighborhoods in California and 10 to 20 in other Western states for data collection. The selection process will prioritize neighborhoods that meet the following criteria:

- Neighborhood size of 100–800 homes.
- Mix of new-construction neighborhoods and older neighborhoods requiring retrofits.
- Neighborhoods with the majority of homes constructed under a wildfire-focused building code (e.g., Chapter 7A of the California Building Code,[14] International Wildland Urban Interface Code,[15] or National Fire Protection Association 1 Code,[16] with and/or without defensible space requirements).
- Located in relatively high-density areas with minimal exposure to adjacent structures outside the pilot community.
- Located in high-consequence geographies within WUI communities near points of entry that are more likely to initiate urban fire.
- Already have mitigations in place or show willingness to implement mitigation makeovers in accordance with best practices such as IBHS Wildfire Prepared Neighborhood or Safer from Wildfire framework. Priority will be given to communities that have identified resources for mitigation funding and implementation outside the scope of Phase 3. These collaborations will enable us to collect data and ensure that mitigation efforts are documented.
- HOAs or other groups willing to implement and enforce defensible space maintenance.
- Willing to provide data to the WDC for purposes of Phase 3.

Throughout the selection process, the team will consider feedback from subject-matter experts including IBHS, CAL FIRE, state fire chiefs associations, government agencies, community groups, and inspection technology vendors.

DATA COLLECTION

As identified in the last section, the two categories of data that will be collected are parcel-level data and community-level data.

Metadata will reflect the source of the data and the time and date it was collected. A data dictionary should be submitted by each data source for the standardizing entity to be aware of data fields, data types, acceptable values for each data type, and expected fill rates.

Parcel-level data: Inspection technology

While some parcel-level data can be collected from an aerial view, a data collection approach through home inspections is more thorough, since many of the mitigation efforts that matter cannot be seen publicly (i.e., they may be located under decks, fences, eaves, etc.). Inspection data must be collected by a trustworthy source to ensure thorough, accurate data. WDC data collection will focus on information that is difficult to obtain, rather than competing with readily available data. Parcel-level data that is not currently available in an adequate and accurate form will be collected for entire neighborhoods using inspection technology in partnership with local fire services.

This plan proposes that WFCA be the responsible entity for managing the parcel-level inspection data collection process for Phase 3. WFCA will select inspection technology vendors (with a goal of retaining at least three distinct vendors) that meet the following requirements:

- Data collected must satisfy data specification criteria defined by project team.
- Data collected must be verifiable and robust.
- Technology must facilitate upload of data collected to the WDC.
- Technology must provide a seamless and secure transfer of parcel-level data to third-party systems via the OXM platform as appropriate (i.e., sharing data with insurers' policy administration systems during the quote

process and with IBHS database for Wildfire Prepared Home and Wildfire Prepared Neighborhood certification).

- Vendors must agree to participate in the pilot and have the capability to inspect in the selected pilot communities within the timeframe outlined.

Through the selection process, the team will consider feedback from subject-matter experts including insurers, reinsurers, and risk model vendors.

WFCA will design a systematic approach to using inspection technology in pilot neighborhoods and will work with local fire services to oversee inspections for parcels in these neighborhoods. In addition to the inspection technology vendors, inspections may be completed by government agencies such as CAL FIRE. WFCA will coordinate messaging through its WUI Alignment Project and serve as the main messaging platform to encourage homeowner participation in inspections. Once inspections are complete, Milliman and WFCA will verify inspection data with local fire services for reasonability.

Community-level data: Pipelines

This plan proposes that the community-level data collection effort will be led by WSTC. Community-level data will be integrated with the assistance of WSTC and potentially other data contributors, leveraging their connections and building pipelines to existing datasets. WSTC will enable awareness of the WDC through their Marketplace, which is a platform for members to share innovative solutions and connect with experts across disciplines and domains. They will request and facilitate the transfer of community-level mitigation data from existing sources, such as California's Wildfire and Forest Resilience Task Force, CAL FIRE, and utility companies, extending up to five miles outside the selected pilot neighborhoods' boundaries. It is important to note that the WDC is not looking to replicate what is already available from datasets like LANDFIRE, but to build pipelines to data already collected to give it greater value. Additionally, WSTC will collaborate with Milliman, Oasis, and CRC to design an easily digestible format for community-level data within the WDC.

Data verification and quality control

Specified data sources will initially be vetted and approved by WFCA for parcel-level data and by WSTC for community-level data. Once approved, data sources can be used to contribute and update data routinely.

This plan proposes that Milliman will be responsible for the initial data quality controls and data cleaning for Phase 3. Milliman will take in the initial data from the approved source and have a process for checking for typos, outliers, and duplicates and ensuring that input values are within the range of acceptable values. If data from multiple sources regarding the same parcel/community don't match, a confidence level score will be given based on the data source and the data with the higher confidence level score will be used.

In a full-scale WDC, all data sources should be updated on a regular schedule, which would vary by data source and type. There will need to be a process that allows homeowners or other relevant entities to challenge data if it doesn't appear accurate to them.

DATA STANDARDIZATION AND HOUSING

This plan proposes that Oasis will be responsible for standardizing the data. Milliman will ensure all data is clean and in ideal condition and format to be fed into Oasis' data standardization process. Oasis uses open data standards (ODS), which are a backend standard output format designed to ensure transparency and improve interoperability. The use of this format will ease the input of the data into CRC's OXM platform, as Oasis and CRC already have tools built for collaboration. Milliman will provide a data specification and desired data standard to Oasis. Oasis will normalize and standardize all data sources.

This plan proposes that the WDC will be housed by CRC and standardized through their partner relationship with Oasis. CRC will import data standardized by Oasis into its OXM platform. Milliman will work with CRC to establish control, access, and tracking features within the OXM platform. Additionally, CRC will collaborate with risk model vendors to create an effective data flow process from the OXM platform. Throughout Phase 3, CRC will provide

ongoing tech services and administration of the platform. CRC will facilitate the build and download of data-driven wildfire risk mitigation assessment reports designed by Milliman and WFCA.

Introduction to OXM

The goal of OXM is to provide a platform that will enhance understanding of the distribution, character, and interactions of economic exposures at risk. The model suits the use of multiple constituencies, including academia, regulators, risk managers/public policy planners, and the insurance industry. OXM will allow them to work together to develop coordinated risk mitigation, management, transfer, and recovery strategies. OXM describes physical and economic exposures to loss from natural catastrophes. There are multiple proprietary U.S. exposure databases available for licensing through commercial risk analytics companies, each designed to work with their specific analytical tools and frameworks, and including proprietary intellectual property. OXM complements these offerings, providing a common frame of reference across constituencies, to accelerate innovation and solution development by offering the following:

- A database created from multiple commonly understood and accepted data sources describing physical assets exposed to natural catastrophe hazards, and including content relevant to economic and risk assessment/management analytics
- Availability to all in a commonly agreed format without dependency on individual separate technology licensing
- A transparent development process allowing users to understand the detailed content and associated nuances and caveats in applying the data in various analytical contexts
- Scalable content that may be accessed and applied at different levels of resolution from individual location to varying aggregation levels
- Ongoing maintenance, updating, and expansion of content and detail as critical use cases emerge and evolve
- A secure delivery, fulfillment, and support process

Examples of OXM applications of value for the WDC include:

- Community planning prioritization and resource allocation leveraging OXM analytics to address mitigation and preparedness through better understanding of the impact of climate factors
- Risk model and analytics development and comparison using OXM as a common ground
- Improved event response and recovery planning, including development of capital strategies and a richer understanding for underserved communities
- Insurance and capital solution development including improved insurance product offerings, community-level solutions, and change risk management (such as for transitions to carbon-neutral economies at scale)

ACCESS AND COST

The access to and cost of the WDC was a leading concern during the information collection process. Homeowners, communities, and consumer advocates expressed concerns about privacy and personal data protection. Insurers and CAT modelers expressed concerns about the reasonability of the cost for access to WDC and whether it will be fee based, subscription based, or contribution based. These intertwined topics are complex and require legal involvement, a cost estimation to build a full-scale WDC, and more defined upkeep requirements. The following are general guidelines for access and cost plans for a full-scale WDC based on stakeholder discussions and work to date:

- Homeowners and landowners will have free access to their own parcel-level and community-level data available on a specific consumer/homeowner user interface that is compatible with mobile use. Community-level data will include community mitigation features as well as aggregated data on the parcels within the community, such as how many households have IBHS certifications.

- Fire services and IBHS will have free access to all parcel-level and community-level data on a specific fire-safety user interface that has data readily available for download.
- Community groups will have free access to their community's parcel-level and community-level data on a specific fire-safety user interface that has data readily available for download.
- Insurance companies and CAT model vendors may obtain access to aggregated parcel-level data and all community-level data if they contribute data, pay a fee, and/or subscribe. Costs will be used to fund upkeep, data standardization, governance, etc. This data will be provided on a specific industry user interface that has data readily available for download. More granular data access can be provided to insurance companies and CAT model vendors after obtaining homeowners' permission.
- Other interested parties' access and cost will be worked out on a case-by-case basis.

The full-scale WDC should be valuable enough to stakeholders for it to become self-sustaining.

FEEDBACK AND DELIVERABLES

At the end of Phase 3, Milliman will host one or more demonstrations of the WDC for a selected expert panel displaying detailed aggregated data from pilot neighborhoods. Then, Milliman will design synthesized reports of detailed aggregated data from selected neighborhoods for the review of insurers, reinsurers, risk modelers, and utilities.

Milliman will interview the expert panels to collect feedback on the demonstration, reports, and the perceived utility of a full-scale WDC. Interview topics will include:

- Determination of best use cases of the WDC (e.g., pricing, underwriting, exposure management)
- Most desirable WDC output to fulfill use cases
- Consideration of contributory data model for future inspection data
- Expected decrease in inspection costs given full-scale WDC

The project team will analyze the data and feedback to develop the requirements and specifications for a full-scale WDC. With the support of expert collaborators such as Headwaters Economics, the team will determine full-scale WDC use cases that will increase the value of the data and drive costs down. The team will seek advice on the cost-sharing aspects of a contributory mechanism among insurers and others for future inspection data.

Then, Milliman, with the assistance of the collaborators, will prepare a report summarizing key success elements.

- Screenshots of platform accessibility
- Sample data exports
- Sample aggregated reports
- Sample wildfire risk mitigation assessments
- Discussion of industry and community feedback
- Discussion of mitigation makeover impact, including:
    - Number of new IBHS Wildfire Prepared Home designations/feasibility
    - IBHS Wildfire Prepared Neighborhood feasibility
    - Follow-up from insurance fairs
- Discussion of user feedback on overall magnitude of decrease in inspection costs
- Plan for a full-scale WDC

The report will be published on the WFCA and Milliman websites. Through WFCA and the Milliman Climate Resilience Initiative, it will be disseminated to a mailing list of thousands of contacts across the fire service, insurance, financial services, government, community, scientific, and academic sectors. Additionally, the project team will host a free and publicly available webinar on the findings.

Limitations

USE OF REPORT

The data and exhibits in this report are provided to support the findings contained herein, limited to the scope of work specified by CalChiefs, and may not be suitable for other purposes. Milliman is available to answer any questions regarding this report or any other aspect of our review.

DATA RELIANCE

In preparing this report, we relied upon the information provided by the interviewees. We did not audit, verify, or review the data and other information for sampling bias, reasonableness, and consistency. Such a review is beyond the scope of our assignment. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete. In that event, the results of our analysis may not be suitable for the intended purpose.

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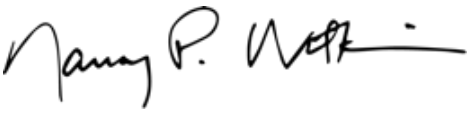
Closing

We greatly appreciate the valuable input of the many subject matter experts and stakeholders who contributed to this effort, and we look forward to beginning Phase 3.

Sincerely,



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Endnotes

[1] Flavelle, C., and Rojanasakul, M. (December 18, 2024). “Insurers are deserting homeowners as climate shocks worsen.” *The New York Times*. Retrieved June 26, 2025, from https://www.nytimes.com/interactive/2024/12/18/climate/insurance-non-renewal-climate-crisis.html.

[2] Hedayati, F., Stansell, C., Gorham, D., & Quarles, S. L. (2018). *Wildfire research: Near-building noncombustible zone* [Technical report]. Insurance Institute for Business & Home Safety. Retrieved June 26, 2025, from https://ibhs.org/wp-content/uploads/member_docs/Near-Building_Noncombustible_Zone_Report_IBHS.pdf.

[3] Brinkmann, P., Watkins, N., Webb, C., Evans, D., Usan, G., Glavan, M., Zhang, L., et al. (2022). *Catastrophe models for wildfire mitigation: Quantifying credits and benefits to homeowners and communities*. The Casualty Actuarial Society. Retrieved June 26, 2025, from https://www.casact.org/sites/default/files/2022-10/RP_Cat_Models_for_Wildfire_Mitigation.pdf.

[4] CAL FIRE Risk Modeling Advisory Workgroup. (2023). *Risk Modeling Advisory Workgroup report*. California Department of Forestry and Fire Protection. Retrieved June 26, 2025, from https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/committes/risk-modeling-advisory-workgroup/final-risk-modeling-advisory-workgroup-report-october-10-2023.pdf.

[5] Watkins, N., & Lim, S. G. (March 2024). *WUI Data Commons Phase 1: Stakeholder interview summary*. Milliman. Retrieved June 26, 2025, from https://edge.sitecorecloud.io/millimaninc5660-milliman6442-prod27d5-0001/media/Milliman/PDFs/2024-Articles/7-24-24_IBHS-Phase-1-Report.pdf.

[6] Little Hoover Commission. (2025). “California’s home insurance market needs urgent reform.” Retrieved June 26, 2025, from https://lhc.ca.gov/californias-home-insurance-market-needs-urgent-reform/.

[7] California Department of Insurance. (n.d.). “Safer from wildfires.” Retrieved June 26, 2025, from https://www.insurance.ca.gov/01-consumers/200-wrr/Safer-from-Wildfires.cfm.

[8] Insurance Institute for Business & Home Safety. (2025). *2025 Wildfire Prepared Home technical standard*. Retrieved June 26, 2025, from https://wildfireprepared.org/wp-content/uploads/WFPH-Technical-Standard.pdf.

[9] Insurance Institute for Business & Home Safety. (2025). *Wildfire Prepared Neighborhood technical standard, version 2025*. Retrieved June 26, 2025, from https://wildfireprepared.org/wp-content/uploads/Wildfire-Prepared-Neighborhood-Standard-2025.pdf.

[10] Watkins, N., Bradford, G., Munch, T., Winnacker, D., Frievalt, F., & Mahmoud, H. (2024). *Community mitigation and modeling: Rancho Mission Viejo*. Milliman. Retrieved June 26, 2025, from https://edge.sitecorecloud.io/millimaninc5660-milliman6442-prod27d5-0001/media/Milliman/PDFs/2024-Articles/11-8-24-Community-Mitigation-and-Modeling.pdf.

[11] Use of Catastrophe Models. (2025). California Code of Regulations, Title 10, Section 2644.4.5. Retrieved June 26, 2025, from https://regulations.justia.com/states/california/title-10/chapter-5/subchapter-4-8/article-4/section-2644-4-5/.

[12] Concerning Tools to Assess Risk for the Purpose of Underwriting Property Insurance Policies. (2025). H.B. 25-1182. Colorado General Assembly. Retrieved June 26, 2025, from https://leg.colorado.gov/sites/default/files/2025a_1182_signed.pdf.

[13] Portteus, M. (n.d.). “Multi-State Strategic WUI Mitigation Alignment Project” [Powerpoint presentation]. The WFCA Ignite Symposium. Retrieved June 26, 2025, from https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwfca.com%2Fwp-content%2Fuploads%2F2025%2F02%2FMatthew-Portteus.pptx&wdOrigin=BROWSELINK.

[14] Materials and Construction Methods for Exterior Wildfire Exposure. 2010 California Building Code, Chapter 7A. Retrieved June 26, 2025, from https://www.hcd.ca.gov/building-standards/state-housing-law/wildland-urban-interface/docs/2010-part-2-cbc-ch7a.pdf.

[15] International Code Council. (2023.) 2024 International Wildland Urban Interface Code, Index. Retrieved June 26, 2025, from https://codes.iccsafe.org/content/IWUIC2024P1/index

[16] National Fire Protection Association. (2025). NFPA Codes and Standards. Retrieved June 26, 2025, from https://www.nfpa.org/for-professionals/codes-and-standards.

Appendix

LETTERS OF SUPPORT

April 17th, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

As a founder of Abundance Network, this letter is to express our support for the WUI Data Commons (WDC). Abundance Network helped launch and partners closely with California YIMBY and Megafire Action.

This initiative is providing an invaluable service to California public leaders as the state makes difficult decisions at the intersection of housing policy, fire preparedness, and managing insurance risk. We plan to help bolster WUI Data Commons fundraising efforts to support Phase 3 of this work.

It is critical to policymakers that this work is adequately supported.

Sincerely,

Zachary Rosen
Founder, Abundance Network
zack@abundancenetwork.com

14 May, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

American Forest Foundation

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

As the Director of Climate Finance with the American Forest Foundation (AFF) working on wildfire resilience solutions for family forest landowners in the US, I am writing this letter to express AFF's support for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman.

Should we be afforded the opportunity to participate, AFF would be in a position to:

- Leverage current and pending grant funds conducting forest health treatment at scale in Tuolumne County, California, one of the most at-risk firesheds in the US;
- Provide complimentary fire and risk modeling capabilities that extend and strengthen home hardening investments by treating surrounding Wildland Urban Interface (WUI) areas, mitigating transmission of wildfire risk transmission to nearby communities;
- Enable sharing of community mitigation data;
- Quantify co-benefits of interventions including avoided carbon emissions, permanent carbon removal from biochar generated by forest health treatments along with water quantity and biodiversity co-benefits.

We would like to support the WUI Data Commons given AFF's commitment to unlocking the potential of family forest landowners to both help prevent catastrophic wildfire and mitigate large-scale emissions from such destructive fire. We celebrate this important initiative and look forward to working in partnership with the WUI Data Commons to contribute to these objectives.

Sincerely,

Jillian Dyszynski
American Forest Foundation
jdyszynski@forestfoundation.org

American Property Casualty Insurance Association℠
INSURING AMERICA apci.org

March 27, 2025

Jeff Meston
Executive Director
California Fire Chiefs' Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

The American Property Casualty Insurance Association is the primary national trade association for home, auto, and business insurers. APCIA promotes and protects the viability of private competition for the benefit of consumers and insurers, with a legacy dating back 150 years. APCIA members represent all sizes, structures, and regions—protecting families, communities, and businesses in the U.S. and across the globe.

This letter is to express our **support** for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman to help ensure its success.

The increased frequency and severity of major natural disasters, such as wildfire, is a significant concern to the property casualty insurance industry. Since 2020, U.S. insurers have incurred $505.9 billion, in 2024 dollars, according to Aon. This represents 73% of global insured natural catastrophe losses and marks the costliest 5-year period ever for U.S. insurers. This is prior to the recent fires in Los Angeles, which industry estimates suggest have resulted in $35 to $50 billion in insured losses.

APCIA would like to participate in the WUI Data Commons project because we believe the project will help communities understand the importance of mitigation and provide insurers, and the firefighting community, with an important tool to better understand the risk in these communities. Our industry recognizes that as more communities are hardened, this should result in a meaningful decrease in losses, which should translate to more affordable and available coverage for consumers. The WUI Data Commons will serve as an important tool to help identify properties and communities that have taken the actions necessary to mitigate their risk from wildfire.

As APCIA represents over 60 percent of the homeowner's market in California, we will work with our member companies to support mitigation efforts. APCIA can further support the effort by helping to design communications toolkits and resources, using WDC data. Also, our members, and others in the insurance industry more broadly, look forward to the leveraging data that the WDC may provide to help create greater visibility of individual and community risks that have achieved critical mitigations that matter.

Sincerely,

Mark Sektnan
Vice President State Government Relations
American Property Casualty Insurance Association

ARIZONA FIRE CHIEFS ASSOCIATION
3370 N. Hayden Rd, Ste 123 - 270
Scottsdale, AZ 85251
800-781-8520

www.azfirechiefs.org

March 31, 2025

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

I am President of the Arizona State Fire Chiefs Association. This letter is to express our commitment to support the development of the WUI Data Commons (WDC) effort. Our State Fire Chiefs Association will support and participate in the development and management of the WDC through the Phase 3 WDC pilot described by Milliman.

Our involvement in several aspects of Phase 3 includes:

- Coordinate participation of other fire service groups
- SME in areas including identifying meaningful data, technology vendors and contributing to the selection of neighborhoods for the pilot
- Assist in coordinating the transfer of data from inspections into the WDC
- Assist in designing meaningful reports for community understanding

The WDC, is integral to ongoing projects and efforts the WFCA is engaged including the Multi-State WUI mitigation alignment project, WUI Fire Protection Score, Wildfire field decision making tool, plus other efforts.

Sincerely,

Jake Rhoades
President
Arizona Fire Chiefs Association

CALIFORNIA FIRE CHIEFS ASSOCIATION

808 R Street, Suite 209 • Sacramento, CA 95811
Off: 916-923-9455 www.CalChiefs.org

March 31, 2025

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

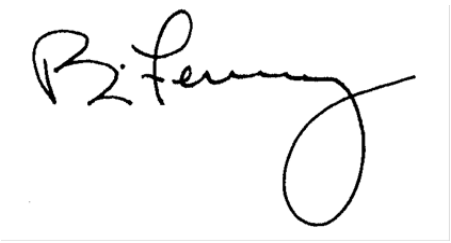
I am Brian Fennessy, representing the California Fire Chiefs Association. This letter is to express our commitment to support the development of the WUI Data Commons (WDC) effort.. California is already working on a parrell track with Milliman utilizing our subject matter expert Chief Dave Winnacker and our Metropoitan Fire Chiefs Section to continue to develop the WDC pilot described by Milliman.

Our involvement in several aspects of Phase 3 includes:

- Coordinate participation of other fire service groups
- SME in areas including identifying meaningful data, technology vendors and contributing to the selection of neighborhoods for the pilot
- Assist in coordinating the transfer of data from inspections into the WDC
- Assist in designing meaningful reports for community understanding

The WDC, is integral to ongoing projects and efforts the WFCA/CFCA is engaged including; the Multi-State WUI mitigation alignment project, WUI Fire Protection Score, Wildfire field decision making tool, plus other efforts.

Sincerely,



Brain Fennessy. President
California Fire Chiefs Asssocition
Brian.Fennness@calchiefs.org

DEPARTMENT OF FORESTRY AND FIRE PROTECTION
OFFICE OF THE STATE FIRE MARSHAL
P.O. Box 944246
SACRAMENTO, CA 94244-2460
(916) 568-3800
Website: www.fire.ca.gov

April 30, 2025,

Frank Bigelow
Deputy Director
Community Wildfire Preparedness & Mitigation
CAL FIRE office of the State Fire Marshal
P.O. Box 944246
SACRAMENTO, CA 94244-2460

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

My name is Frank Bigelow, the Deputy Director of Community Wildfire Preparedness and Mitigation. Our office oversees the implementation of Public Resources Code 4291, defensible space inspections and data collection for the State Responsibility Area as well as being required to develop other defensible space training, collection tools and data commons for local governments. Public Resources Codes 4291.5 &4291.6 required the department to implement a Qualified Entities Program for the use by "Qualified entities" meaning the following entities that have completed the program developed and received a certification, pursuant to Section 4291.6 Counties, state conservancies, special districts, and other political subdivisions of the state. Members of the California Conservation Corps, the Board of Commissioners under California Volunteers described in Section 8411 of the Government Code, local conservation corps, resource conservation districts, fire safe councils, and Firewise USA organizations, University of California fire advisors, Registered Professional Foresters and entities or individuals deemed appropriate by the director. Government Code 51189 directs the State Fire Marshal to develop a model defensible space program to be made available for use by cities, counties or a city and county in the enforcement of defensible space provisions. Through a joint powers authority CAL FIRE and CAL OES have implemented the California Wildfire Mitigation Program to develop a comprehensive wildfire mitigation program that focuses on cost-effective structure hardening and retrofitting to create fire-resistant homes as well as defensible space and vegetation management activities. The Office of the State Fire Marshal collects over 250,000 defensible space inspections annually and this letter is to express our support for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman.

Our involvement in several aspects of Phase 3 includes

- SME in areas for meaningful and standard data collection, retrofits and state requirements.
- Provide and assist with public education materials related to Defensible Space and Home Hardening.
- Assist in designing meaningful reports for Community Understanding.
- Assist in coordinating the transfer of data from inspections into the WDC.

The WDC is integral to ongoing efforts that CAL FIRE is engaged in related to defensible space and home hardening mitigations, data collection and inspections to create more resilient communities.

Sincerely,

Frank Bigelow

Frank Bigelow, Deputy Director
Community Wildfire Preparedness & Mitigation
CAL FIRE office of the State Fire Marshal

March 18, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

Dear Chief Meston,

I am writing to express support of the WUI Data Commons effort and interest in partnering on the next phase.

The California Fire Safe Council (CFSC) is a nonprofit organization that operates statewide to support, empower, and mobilize communities to live safely with wildfire. CFSC supports a network of local Fire Safe Councils (FSCs) across the state conducting the boots on the ground efforts for wildfire mitigation and preparedness.

CFSC has a variety of projects and ongoing/ planned efforts in community and parcel mitigation that may present great opportunities for model communities. Also, CFSC coordinates a network of FSCs that can be leveraged to support outreach, identify other model communities, host insurance fairs, support messaging, etc. CFSC is also developing a spatial database of FSC activity that may provide helpful data for this effort.

This effort strongly aligns with CFSCs mission to support communities in living safely with wildlife, and we are excited to explore future collaborations.

Sincerely,

Jacy Hyde
Executive Director
California Fire Safe Council
jhyde@cafiresafecouncil.org
Cell: 279.599.3044
cafiresafecouncil.org
730 I St. Suite #236
Sacramento, CA 95814

CAL POLY

Wildland-Urban Interface FIRE Institute
College of Agriculture, Food and Environmental Science

Office: 805-756-3000
ffrieval@calpoly.edu
https://fire.calpoly.edu

June 17, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

My name is Frank Frievalt; I serve as the Director of the Wildland-Urban Interface FIRE Institute at Cal Poly San Luis Obispo. This letter is to express our support for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman.

Institute involvement, within scope offered in the Phase 3 plan and scope, could include leveraging stakeholder relationships and laying the groundwork for self-sustaining public-private enterprise (especially related to, where appropriate, alignment of private sector business practice with public sector policy in WUI communities).

Our support/desire to participate is limited/conditional based on funding and scope of participation. I can offer internally faculty/staff support up to $20,000 with no additional external support. With external donor support and/or grant support (e.g., NSF FIRE Program, February call for proposals) we would only be limited by the funding amount, scope of work, and period of performance.

We would like to support and participate in the WUI Data Commons because it is the best, perhaps only way, to provide a systemic picture of WUI community risk through data risk variables that inform the catastrophe modeling needed to accurately price risk. The need to accurately price risk, especially as it changes, exists for both the public and private sectors. Similarly, the current disconnect between our public and private sectors in risk mitigation assessment can only be reconciled through a common operating picture of the actual conditions in WUI communities, as described through a uniform data set. For all the present “hands and feet” in the form of disparate “programs”, they lack the essential enabling “brain and spinal cord” that is the data commons. Lastly, the WUI Data Commons is directly aligned as an enabling capability within our mission to help create the most fire resilient communities in the world

Sincerely,

Frank Frievalt
Director, WUI FIRE Institute

July 15, 2025

c/o Jeff Meston

Executive Director

California Fire Chiefs Association

808 R Street, Suite 209

Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

On behalf of CSAA Insurance Group, I am writing to express our support for the WUI Data Commons (WDC) and interest in participating in the Phase 3 WDC pilot described by Milliman.

CSAA provides AAA-branded homeowners insurance in Northern California and is one of the largest insurance companies in the state. For more than 50 years, we have helped our customers prevent, prepare for, and recover from life's uncertainties, including wildfire risk.

In fact, we have invested heavily in support of responsible forest management and sponsored numerous resilience and innovation efforts focused on reducing property-level wildfire risk. Recent examples include a wildfire-resistant landscape design contest with UC Berkeley, the sponsorship of building-materials demonstration burns with the Insurance Institute for Business and Home Safety (IBHS), and the ongoing wildfire science research efforts underway at the Wildfire Interdisciplinary Research Center at San Jose State University. Notably, we were also one of the first carriers in the state to offer insurance premium discounts for wildfire defense.

We continuously challenge ourselves to find innovative ways to serve members and communities with care and compassion, and the WUI Data Commons is clearly aligned with these core values. Through our participation in the WDC, we intend to share our deep California knowledge and expertise, and partner in bridging the gap between mitigation actions and insurance availability.

Sincerely,

DocuSigned by:
Laurna Castillo
0582182D62D04CA...

Laurna Castillo
Senior Vice President
Personal Lines Product Management
CSAA

CALIFORNIA
WILDFIRE & FOREST RESILIENCE
TASK FORCE

June 12, 2025
c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

Subject: **Wildland Urban Interface (WUI) Data Commons Letter of Participation**

To Whom It May Concern:

I write to express our support for the WUI Data Commons and our commitment to participate in Phase 3 of the WUI Data Commons pilot described by Milliman. In 2021, Governor Gavin Newsom established the California Wildfire & Forest Resilience Task Force, bringing together an unprecedented coalition of federal, state, local, tribal, and private interests to improve the health of the state's forests and the safety of WUI communities. To facilitate planning, coordination, and access to information, the Task Force has developed the California Landscape Metrics (CLM). The CLM represent a wealth of data on our forests and wildlands that is free to use and frequently updated. Community-specific wildfire resilience data is an important next step in the development of the CLM. The availability of authoritative community resilience data will further enhance planning effectiveness and coordination to achieve landscape and community protection. Furthermore, it is critical that data standards, collection methods, and vulnerability classifications collected in individual communities can integrate into statewide datasets that are open and readily available for use by agencies, planners, and emergency response teams.

If this project is funded, the Task Force will commit to participate in Phase 3 of the WUI Data Commons and to align this work with ongoing state initiatives and regional partnerships. The Task Force is in support of the goal of Phase 3 to conduct small-scale tests of data gathering, aggregation, and standardization to inform the cost, capacity, and coordination needs of a statewide effort. This process will also serve to expand the collaborators into a multi-stakeholder process, improving data consistency and cost efficiencies, which are primary objectives of the Task Force.

I look forward to engaging in the implementation of Phase 3 and to facilitate the coordination between this work and broader statewide community resilience efforts.

Sincerely,

Patrick Wright

Patrick Wright
Director

Email: Patrick.Wright@gov.ca.gov
phone: (530) 314-3595
https://wildfiretaskforce.org/

Catastrophe Resiliency Council

Affiliated with THE INSTITUTES

April 17, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

My name is Christopher McDaniel and I am the President of the Catastrophe Resiliency Council. We are the driver of resilience for the Risk and Insurance industry in the face of catastrophes and climate risk. This letter is to express our support for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman.

We believe the Catastrophe Resiliency Council is uniquely positioned to participate in WUI through our Open Exposure Model (OXM) platform. OXM provides the following benefits:

- The ability onboard exposure, mitigation and peril data from multiple disparate sources
- The capability to allow users to define an online footprint of how they would like to have data normalized across multiple disparate data sets
- The ability to normalize data across multiple disparate data sets
- The ability to display normalized data in a graphical format with multiple filters and layering for a robust view of the data
- The ability to output the data in an Oasis OED format so that it can be loaded into external models and applications

Our desire to participate is conditional based on the ability to make the integration and presentation of WUI data cost neutral to the Catastrophe Resiliency Council. This can be achieved through coverage of direct cost and an annual licensing plan for ongoing costs.

We would like to participate in the WUI Data Commons because we believe having one source of aggregated exposure, mitigation and perils data is key to ensuring the resiliency of the Risk and Insurance industry.

Sincerely,

Christopher G. McDaniel
President
Catastrophe Resiliency Council

City
of
Boulder
Fire Department

2967 BLUFF STREET BOULDER, COLORADO 80301 (303) 441-4431 MCNUTTD@BOULDERCOLORADO.GOV

April 1, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

I am writing on behalf of the City of Boulder Fire-Rescue's Community Risk Reduction Division to express our strong support for the WUI Data Commons (WDC) and our interest in participating in the Phase 3 WDC pilot described by Milliman.

As the Community Risk Reduction Senior Program Manager for the City of Boulder Fire-Rescue, I oversee the wildfire home assessment program, community preparedness efforts, and risk reduction strategies. With my team of three Community Risk Reduction Specialists, we work to bridge the gap between individual parcel-level mitigation and broader community resilience.

Our department is committed to identifying and prioritizing mitigation efforts with the greatest impact, preparing communities to receive fire safely, and bridging the gap between parcel-level mitigation efforts and insurance modeling. We recently updated our Community Wildfire Protection Plan (CWPP) in 2024, further refining our strategies for wildfire risk reduction and community preparedness.

Our involvement in wildfire mitigation efforts is comprehensive and data-driven. We are currently updating our Wildland Urban Interface (WUI) code to include a required 0-5 foot noncombustible zone around homes in the designated WUI, aligning with best practices for reducing structural ignition risk. In collaboration with Dr. Hussam Mahmoud at Colorado State University, we are conducting an urban conflagration model for the entire city to better understand and mitigate large-scale fire risks. Additionally, our department utilizes Fire Aside software for data collection and homeowner grant administration, with over 500 assessments completed since the program's launch in November 2023. We also actively conduct mitigation work on Open Space lands adjacent to vulnerable communities to reduce wildfire risk at the landscape level.

Beyond direct mitigation efforts, we recognize the increasing challenge of insurance non-renewals. Our team is well-resourced, with three dedicated Community Risk Reduction Specialists conducting Detailed Home Assessments (DHAs) and supporting broader community-level mitigation efforts. Voter-approved Climate Tax funding specifically supports our wildfire mitigation initiatives, reinforcing the city's commitment to long-term resilience. Furthermore, we are partnering with Xcel Energy to educate homeowners about power safety shut-offs and mitigation strategies.

We believe participation in the WUI Data Commons aligns with our goals and can help refine our strategies for effective mitigation and risk reduction. However, our participation is limited by our need to continue using the Fire Aside platform for data collection and grant administration. While we have some staff time and resources to dedicate to the pilot, additional funding would be necessary to expand our level of engagement.

We strongly support the WUI Data Commons initiative and look forward to exploring opportunities to contribute to this important work.

Sincerely,
Danielle McNutt
Community Risk Reduction Sr. Program Manager
City of Boulder Fire-Rescue
mcnuttd@bouldercolorado.gov
303-441-4431

March 19, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

My name is Brad White, I am the Fire Chief of Grand Fire District #1 and the President of the Colorado State Fire Chiefs. This letter is to express our support for the WUI Data Commons (WDC).

The WUI Data Commons presents an important and unique opportunity to concurrently increase community wildfire resiliency across Colorado while creating an environment in which uncertainty regarding the availability of insurance is greatly reduced. We have been briefed on the success of the phase 2 pilot as well as the framework for the phase 3 pilot. We are confident that the WDC is the path forward to managing the wildfire crisis and ending catastrophic loss.

In addition to our support for the WDC, the CSFC will also be able to help socialize the concept of the WDC and connect communities wanting to participate.

Sincerely,

Brad White
President
Colorado State Fire Chiefs

2205 W. 136th Avenue
Suite 106, #408, Broomfield, CO 80023
www.cofirechiefs.org

cotality
Intelligence beyond bounds™

May 3, 2025

WUI Data Commons

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

To whom it may concern

Cotality is committed to helping customers in property insurance, real estate, and mortgage banking make better-informed decisions with data and analytics. Our wildfire catastrophe risk models help insurers navigate the significant uncertainty of financing damage from catastrophic events—an issue made more urgent by the dramatic increase in wildfire losses over the past decade. We are dedicated to delivering the most accurate and actionable risk insights available.

Achieving this level of insight requires high-quality, granular risk data at both the community and parcel levels. The WUI Data Commons (WDC) initiative is an important step toward improving that data landscape. I am writing to express strong support for the WDC project and an interest in participating in the Phase 3 pilot described by Milliman.

Wildfire risk is broadly acknowledged, yet there remains limited consensus on which specific mitigation actions are most effective at the individual home level. The WDC dataset can improve our ability to quantify risk at a parcel level and identify targeted mitigation strategies.

As a partner in the WDC pilot, Cotality can contribute to and benefit from advanced loss sensitivity studies—analyses that explore the value of WDC data and highlight opportunities for future data enhancement. This collaboration would further our shared goal of improving parcel-level wildfire risk assessment.

The desire to participate is contingent upon non-commercial access to the full WDC dataset.

The current trajectory of wildfire losses in California and the western U.S. is unsustainable. By enabling more accurate, localized risk assessments, the WDC project supports smarter decisions and a safer, more resilient future. We are eager to collaborate and contribute to this vital initiative.

Tom Larsen

AVP, Product Marketing
TLarsen@cotality.com

Cotality
3001 Hackberry Rd
Irving, TX 75063

cotality.com

May 26, 2025

% Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface Data Commons Data Contributor

On behalf of Fire Aside, I write to indicate our support and intention to participate in the WUI Data Commons ("WDC") Phase 3 pilot as described by Milliman.

Fire Aside, Inc. is a Marin California based company founded in 2019 with the mission of helping residents understand the specific attributes of their home and then prioritize the ROI on those actions to increase their resilience. Fire Aside has scaled and is now used by Fire Agencies, Fire Safe Councils, and HOAs in 22 California counties as well as in 10 other states outside of California.

From the first inspection completed on our platform, we have invested in and focused on methods to collect fine grain data about resilient and vulnerable attributes on every parcel, normalize those across the system, and track mitigation behaviors by parcel. This is why today we are able to support multi-state and regional analysis of risk, as well as provide data to inform multiple academic efforts that are modeling wildfire and urban fire spread.

It is our sincere belief that residents and neighborhoods are investing in mitigations for which they do not receive credit by those that price risk. A major reason for this in our analysis is the lack of visibility to the mitigation efforts and a means to compare activity and community behavior at scale until now. Therefore, Fire Aside supports the large scale effort to increase access to standardized residential data on defensible space & home hardening in the WDC with the expectation that the following considerations will be addressed in any post pilot expansion:

<u>Data Controls</u>

- Fire Aside (on behalf of our agencies and their residents) must be able to track all access to the data and retain the right to remove access at all times.
- The WDC must be able to handle resident updates, corrections and appeals consistent with Fire Aside existing SLAs around these actions.
- Sufficient alignment with the Fire Aside data scheme on Defensible Space & Home Hardening with the WDC standards to support scaling.
- Maintain neighborhood anonymization consistent with Fire Aside agreed standards with our customers.

- No derivative, synthetic, AI or similar product is created or trained on the data without prior approval.

Sustainable Economics

- Ongoing value to residents through access to additional insurance providers and/or long-term stabilization of rates with credit to those where the community has mitigated risk.
- Demonstration of enough value by those who benefit from the data to offset the costs of contributing to the WDC.

Stakeholder Participation

- As the WDC is created and evolves, participants from data consumers to data contributors must have an active participation in governing rules and decisions.

In summary, it is clear that the current process is unsustainable and it is time for a new approach. We believe the WDC provides a path for residents covered by Fire Aside partners to demonstrate their proactive actions at Defensible Space & Home Hardening (while encouraging more) such that we can help the insurance industry price these proactive risk reduction actions accordingly.

Sincerely,

Jason Brooks
CEO

FireBreak

FireBreak Risk Solutions, Inc.
344 Thomas L Berkley Way
Oakland CA 94612

June 30, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

This letter confirms FireBreak's enthusiastic support for the WUI Data Commons (WDC), and our intention to participate in the Phase 3 WDC pilot described by Milliman.

FireBreak incentivizes home hardening by linking it to insurance availability and cost. Residents use our technology to self-inspect and receive mitigation advice. When they harden their homes and re-inspect, they qualify for insurance. In this process, FireBreak scalably generates otherwise-missing data on property conditions that cannot be obtained from standard sources.

As resources to the WDC pilot, FireBreak brings our in-house expertise in fire assessment and modeling, inspection technology, and image-generative AI.

Specifically, in Phase 3 of the WDC pilot, FireBreak intends to participate as follows:

- Make the various components of our technology available at the parcel-level:
  - Inspection technology (app) for inspections by residents or third-parties
  - AI engine for generating mitigation advice
  - AI engine for converting images into property condition data
  - Data on property conditions
- Leverage our technology for observations and data collection at the community level.
- Participate in outreach and communications resources and events.
- Explore integration of WDC data into our technology and value proposition.
- Collaborate with other project participants to expand the reach of the WDC pilot.

FireBreak's support and participation is conditional upon reaching an appropriate balance between data sharing, allowing its use for public benefit, with data privacy, allowing participants to protect their competitive advantage and residents to maintain control over sharing their property condition.

FireBreak supports the WDC project not only because it will underpin sustainable insurance and real estate markets by creating and maintaining reliable, accessible property-level data, but also because it will directly benefit FireBreak by accelerating widespread adoption of data like ours.

We reiterate our support for the WDC Phase 3 pilot and we eagerly look forward to participation.

Signed: 

Kate Stillwell, CEO and Co-Founder of FireBreak Risk

HEADWATERS ECONOMICS

P.O. Box 7059
Bozeman, MT 59771
https://headwaterseconomics.org

May 19, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

On behalf of Headwaters Economics, I am writing to express our support for the Wildland-Urban Interface Data Commons (WDC) initiative and to affirm our interest in participating in the upcoming Phase 3 WDC pilot.

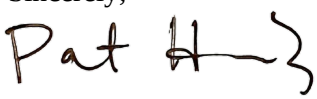
The challenges posed by increasing wildfire risk demand a collaborative, data-informed approach that aligns local knowledge, research, technology, and policy. We believe the WDC offers a critical foundation for that collaboration by promoting open, transparent data collection and sharing, enabling communities and stakeholders to act decisively and effectively.

As an organization committed to improving community decision making around increasing wildfire risk, Headwaters Economics supports the goals of the WDC Phase 3 pilot including:

- **Collecting granular data** that empowers both local communities and decision-makers to understand and reduce wildfire risk.
- **Identifying perceived and real barriers to wildfire mitigation**, from policy and governance challenges to behavioral and economic obstacles.
- **Facilitating effective community action** by leveraging consistent, accessible data to inform strategies, build trust, and prioritize interventions.

We are enthusiastic about the opportunity to contribute to and benefit from the WDC's collaborative framework. We look forward to the opportunity to work together in advancing this vital work.

Sincerely,



Patty Hernandez
Executive Director
patty@headwaterseconomics.org

May 5, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs' Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

My name is Stephen Brandt, Chief Development Officer at InnSure Corp. This letter is to express our support for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman.

InnSure is currently conducting insurability planning Pilot Projects in Firewise counties in California as part of the Cal Fire/CWMP Home Hardening project.

Our participation would include utilizing and contributing to the WUI Commons through the InnSure Insurability Planning process and our simulator tool TCOR. Through the process and tool we will use the data standards combined with specific community data to inform scenario-based adaptation and mitigation strategies. This will allow us to identify the corresponding insurance market value analysis and contribute these new data sets to the WUI Commons for further advancement of the standards.

Our support / desire to participate is limited based on appropriate funding.

We would like to support and participate in the WUI Data Commons because data and standards are critical components to our goals of lower the risk of wildfires in communities while closing protection gaps and increasing overall resilience.

Sincerely,

Stephen J Brandt
Chief Development Officer
InnSure Corporation
Steve@innsure.org

Insurance
for
Good

March 26, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

I am the founder of Insurance for Good. Our mission is to support communities and the public sector in harnessing risk transfer as a force for social and environmental good. This letter is to express our support for the WUI Data Commons (WDC) and express our desire to participate in the Phase 3 WDC pilot described by Milliman.

We are currently working on how to fund and finance greater investments in wildfire mitigation. We are eager to connect this work to the WUI Data Commons initiative. We would like to leverage our network and efforts at funding mitigation investments to support the mitigation makeovers and insurability fairs proposed by Milliman.

We believe this work is essential to helping create thriving communities in the face of wildfire risk that have lower losses, safer residents, and stable insurance, housing, and mortgage markets.

Sincerely,

Carolyn Kousky
Insurance for Good
carolyn@insruanceforgood.org

April 24, 2025

c/o Jeff Meston

Executive Director

California Fire Chiefs Association

808 R Street, Suite 209

Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

My name is Ian Giammanco, I am the Managing Director of Standards and Data Analytics at the Insurance Institute for Business & Home Safety (IBHS). IBHS is an *independent*, 501(c)(3) nonprofit scientific research and communications organization supported by property insurers, reinsurers, and affiliated companies. IBHS's building safety research leads to real-world solutions for home and business owners, helping to create more resilient communities.

This letter is to express our support for the WUI Data Commons (WDC) and the Phase 3 WDC pilot described by Milliman.

IBHS continues to support the WDC initiative as it has a direct connection to the data necessary to assess at scale IBHS' Wildfire Prepared Home and Neighborhood construction standards and the mitigation actions contained within those standards. IBHS can support Phase 3 of the WDC pilot through subject matter expertise, development of data schema, and assisting in the testing of specific data collection cases.

Sincerely,

Ian Giammanco, PhD
Managing Director for Standards and Data Analytics
Insurance Institute for Business & Home Safety

MARIN WILDFIRE PREVENTION AUTHORITY
INVESTING IN A FIRE ADAPTED MARIN COUNTY

1600 Los Gamos Drive, Suite 345
San Rafael, CA 94903
marinwildfire.org

MWPA

Bolinas Fire District
City of Larkspur
City of Mill Valley
City of San Rafael
County of Marin
Inverness Public Utility District
Kentfield Fire Protection District
Marinwood Community Services District
Muir Beach Community Services District
Novato Fire Protection District
Sleepy Hollow Fire Protection District
Southern Marin Fire Protection District
Stinson Beach Fire Protection District
Town of Corte Madera
Town of Fairfax
Town of Ross
Town of San Anselmo

March 31, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

I write to express support for the WUI Data Commons (WDC) and our desire to participate in the Phase 3 WDC pilot described by Milliman. Marin Wildfire, a joint powers authority in Marin County, CA, consists of 17 member agencies with fire management responsibilities, covering nearly 520 square miles and established by a voter-approved parcel tax in March 2020. These tax revenues provide over $20 million annually, managed and distributed by Marin Wildfire based on the priorities outlined in the Marin County Community Wildfire Protection Plan (CWPP) and other guiding documents. About 18% (60,000 acres) of Marin County falls within the Wildland Urban Interface, and a significant portion falls in high fire severity areas.
Marin Wildfire is working to create fire resilient communities using a data- and science-driven approach and sound ecological practices. Our member agencies plan and implement vegetation management activities (see https://www.marinwildfire.org/vegetation-management), residential defensible space and home hardening evaluations and grants to help with mitigation efforts (see https://www.marinwildfire.org/fire-resistant-homes), community education, and reliable evacuation and warning systems.

To track progress towards fire resilience, Marin Wildfire collects an unprecedented amount of data on our fire mitigation activities, and we have used this data to model the effect of our prevention activities on fire behavior. Modeling helps to validate our approach, prioritize maintenance efforts, quantify treatment benefits and allocate funding effectively. Similar to other public, private and research organizations, Marin Wildfire's ability to be efficient in reducing fire risk is contingent on the availability of detailed data.

Marin Wildfire therefore supports a robust and large-scale effort to collect data on all fire prevention activities, under the following conditions:

For data collected on residential or improved parcels (with a structure):

All data must be standardized using a data schema consistent with IBHS standards but must allow for additional local data collection needs and considerations.
Residents must be able to review their parcels' data, and a process for corrections and updates (including subsequent mitigation) needs to be in place. Any corrections or updates must be reviewed by local fire prevention professionals.
Residents must be able to review the log of searches for which their parcel's data was accessed.
Residents must be able to identify how and when each datapoint on their parcel was reported to the WDC (on-site inspections must indicate the inspector's affiliation, aerial imagery, self-report, other). Residents should only have access to their own parcel's data, but should be able to see aggregated mitigation / fire risk for their community.
Users of the WDC data must commit to timely updates based on any resident updates (in particular mitigations implemented) and especially before any pricing increases, non-renew or cancellation decisions.
Similar to financial credit scores, the WDC must be sufficiently dynamic to reflect changes in the data at regular intervals.

For data collected or unimproved parcels (no structure, where larger scale vegetation management activities take place):

Vegetation management activities must be represented in the WDC through polygons on a map, and show the exact boundaries of treatment. Overall number of acres treated without geo-location is not sufficient. Polygons should represent the areas actually treated, not those areas planned, permitted, or approved for treatment.

WDC data for vegetation management should indicate, for each instance of treatment or maintenance effort, (a) the type of treatment performed (thinning, mowing, mastication, grazing, prescribed burn, etc) and (b) the fuel or vegetation type in which the work occurred. If the project type is mowing, crews likely did very little to reduce risk in pockets of forest or shrubs; conversely, if the project type is thinning, grass fuels were probably unaffected. This type of information can be combined with a GIS analysis to assess the fuels that were mitigated, and those in which residual risk likely remained unchanged. Description of the type of treatment applied can be standardized.

WDC data for vegetation management should include the initial treatment date and the date(s) of any subsequent maintenance efforts. If treatment and maintenance efforts

occurred on multiple dates, multiple polygons should be included to show the extent and type of work performed at each interval.

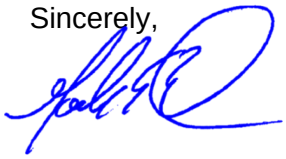
Standard schemas like CalVTP/Landfire can provide an accepted schema for reflecting vegetation management attributes.

WDC data should include unplanned disturbances (plant disease, tree mortality/infestation, wildfire, etc). Vegetation management activities have demonstrable risk reduction benefits; however, unplanned disturbances may increase or decrease the risk depending on type, size, location, and severity. In many cases, wildfires can create substantial risk reduction benefits to adjacent communities by removing fuel loading. As an example, Landfire catalogues these disturbances and their role in changing fuel composition.

Marin Wildfire foresees contributing to the WDC by:
Providing data on our own mitigation activities, subject to the contingencies outlined above (for improved parcels in particular)
Leverage our network / funding to support mitigation makeovers / insurability fairs
Evaluate WDC output for our agency's use, to the extend WDC data is collected through means other than our own defensible space and home hardening evaluation program.

Marin Wildfire would like to support and participate in the WUI Data Commons because the availability of large-scale standardized data is key to cost-effective and impactful fire resiliency. Transparency regarding the use of fire-related data is essential towards a solution for California's insurance crisis. Finally, timeliness and a dynamic exchange of data between the implementation of fire-resilient activities and the integration of the data reflecting these efforts in modeling efforts (whether for insurance, re-insurance or programmatic needs) is necessary to move past the current status-quo.

Sincerely,



Mark Brown
Executive Officer

05/21/2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

My name is Charles Toney and I am the Chief Actuary at the Mercury Insurance Group, the 3rd largest homeowners writer in the state of California. This letter is to express our support for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman.

I can envision Mercury participating in at least these ways:

- Evaluate WDC output for our company's use
- Provide community mitigation data from our platform

Our support / desire to participate is limited/conditional based on the project being viable for the California market.

We would like to support and participate in the WUI Data Commons because our corporate vision is to work with communities to improve their resilience to perils such as wildfire. To do this, we need a good understanding of the baseline and of the improvements that have been made over time. This requires multiple views of detailed data on each community. With that information, we could assist property owners to improve their properties and we could have the confidence to be more open in communities. After all, if a community as a whole has taken steps to reduce risk, this means that individual homes will be significantly safer than a similarly mitigated home in a less prepared neighborhood. Good community data will assist with that.

Sincerely,

Charles Toney, FCAS MAAA
Vice President, Chief Actuary

555 West Imperial Highway, Brea, CA 92821 92711 | Office (714) 671-4618, Cell (714) 493-7162

March 26, 2025

Milliman

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

I am the President of the Nevada Fire Chiefs Association. This letter is to express our commitment to support the development of the WUI Data Commons (WDC) effort. The Nevada Fire Chiefs Association will support and participate in the development and management of the WDC through the Phase 3 WDC pilot described by Milliman.

Our involvement in several aspects of Phase 3 includes:

- Coordinate participation of other fire service groups
- SME in areas including identifying meaningful data, technology vendors and contributing to the selection of neighborhoods for the pilot
- Assist in coordinating the transfer of data from inspections into the WDC
- Assist in designing meaningful reports for community understanding

The WDC is integral to ongoing projects and efforts the WFCA is engaged in including the Multi-State WUI mitigation alignment project, WUI Fire Protection Score, Wildfire field decision making tool, plus other efforts.

Sincerely,

Dave Cochran, President
Nevada Fire Chiefs Association

Fire Chief, City of Reno
cochrand@reno.gov
775.721.5330

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Melanie A. Kenderdine
Cabinet Secretary

Benjamin Shelton
Deputy Secretary

Laura F. McCarthy
State Forester

April 15, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

I am writing to express the support of the New Mexico Forestry Division for the WUI Data Commons (WDC) and our request to participate in the Phase 3 WDC pilot described by Milliman. The Forestry Division is a state agency within the New Mexico Energy, Minerals and Natural Resources Department. We have responsibility for wildfire management and suppression on 43 million acres of state and private lands and we provide technical assistance to all forest landowners including state trust lands, tribes, nations and pueblos, local governments and the national forests.

The New Mexico Legislature just concluded their 2025 session and passed several landmark bills to address the growing threat of wildfire to communities and the rising number of uninsurable homes and properties. These include House Bill 175 Wildfire Buffers Act that provides dedicated state funding to map the need for buffers around densely populated aeras and Senate Bill 33 Wildfire Prepared Act that creates the state's first home hardening program. Our support for the WDC and desire to participate in the Phase 3 WDC pilot arises from the clear direction from our state legislature to strategically address

The objectives of the Wildfire Data Common and the plan for the Phase 3 pilot are strongly aligned with our objectives as a state. I serve as the Chair of the New Mexico Fire Planning Task Force which includes the New Mexico Superintendent of Insurance and state, local and municipal government agencies and federal agency representation. We discussed the WDC and Phase 3 at our April 4 meeting and the task force members expressed their strong interest in supporting the pilot.

We are excited to learn about the technology to collect granular mitigation data at the parcel level and will contribute pilot areas and support data collections efforts. We want to participate in the development of mitigation messaging, and we have interest and capacity to organize insurability fairs with local stakeholders and partner organizations. The legislature appropriated a total of $40 million for mitigation – some for fuels reduction and buffers, some for home hardening – and we hope to use that funding in ways that leverage outcomes for the pilot effort.

Sincerely,

Laura McCarthy
State Forester
Fire Planning Task Force Chair

CC: Melanie Kenderdine, Cabinet Secretary
Alice Kane, Superintendent of Insurance

Oasis Loss Modelling Framework Ltd.
Borough Yards
13 Dirty Lane
London
SE19PA
United Kingdom

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

London, 15 April 2025

To Whom it May Concern

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

We are Oasis Loss Modelling Framework, an open source catastrophe modelling platform, free to use by anyone. We are a not for profit company and our team believes passionately in empowering more people around the world to better understand risk and uncertainty. This letter is to express our support for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman.

We would provide a transform methodology and schema into Oasis curated Open Data Standards, which includes property based open exposure data (OED) so it's either usable in GXM or other applications. Oasis would also review any additions required to OED as part of this work and would treat these requests as part of any change request through its technical and other steering groups https://github.com/OasisLMF/ODS_OpenExposureData.

This work would be done pro bono.

We would like to support and participate in the WUI Data Commons because it is important for our members in the (Re)Insurance Industry and for modelling firms that use Oasis that we get greater transparency and standards into how we understand key wildfire risks that will support the whole Insurance ecosystem from policy holder to reinsurer.

Yours faithfully,

Dickie Whitaker
Chief Executive

Pacific Gas and Electric Company
300 Lakeside Drive
Suite 210
Oakland, CA 94612

May 12, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

Subject: **Wildland Urban Interface (WUI) Data Commons Phase 3 Letter of Participation**

To Whom It May Concern:

Pacific Gas and Electric Company (PG&E), incorporated in California in 1905, is one of the largest utility companies in the United States. The company provides natural gas and electric service to approximately 16 million people throughout a 70,000-square-mile service area in northern and central California. This letter is to express our support for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman.

At PG&E, we strive to embed risk management in every critical business process—making data-driven decisions to support safe, reliable, and affordable electric and gas service. To the extent applicable, PG&E is willing to provide data regarding our community level mitigation for inclusion in the WUI Data Commons. We are also willing to evaluate the potential for the parcel level data being gathered during the Phase 3 WDC pilot to better inform our own modeling and decision-making processes to target our own wildfire risk reduction investment.

We would like to support and participate in the WUI Data Commons because we understand the importance and necessity of accurate, reliable data, and the role it plays in planning for a future of wildfire resilience.

Sincerely,

E-SIGNED by Andrew Abranches
on 2025-05-13 00:15:16 GMT

Andrew Abranches
Sr. Director
Wildfire Preparedness Operations
Pacific Gas and Electric Company

Representing the Leading Automobile & Homeowners' Insurers

PIFC

Members:

STATE FARM

LIBERTY MUTUAL

PROGRESSIVE

MERCURY

NATIONWIDE

FARMERS

ALLSTATE

CONNECT
by American Family

KEMPER

INTERINSURANCE EXCHANGE
OF THE AUTOMOBILE CLUB
(Automobile Club of
Southern California)

CSAA INSURANCE GROUP

GEICO

Associate Members:

NAMIC

CHUBB

May 20, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

The Personal Insurance Federation of California (PIFC) is a statewide trade association that represents twelve of the nation's largest property and casualty insurance companies. These companies include State Farm, Farmers, Liberty Mutual Insurance, Progressive, Mercury, Nationwide, Allstate, CONNECT by American Family Insurance, Kemper, CSAA Insurance Group, Interinsurance Exchange of the Automobile Club (Automobile Club of Southern California), and GEICO as well as associate members NAMIC and CHUBB. Collectively, these insurance companies write the majority of personal lines auto and home insurance in California.

We are writing to express PIFC's support for the Wildland-Urban Interface (WUI) Data Commons project, a timely initiative that is designed to strengthen our state's ability to prepare for and respond to climate-fueled disasters. This collaborative effort has the potential to play a vital role in refining and validating risk models and empowering communities to take informed, effective mitigation action.

The WUI Data Commons (WDC) is intended to address long-standing gaps in how mitigation is tracked and valued. By creating a shared infrastructure for collecting, integrating, and analyzing data on mitigation actions—whether implemented at the parcel, community, or landscape scale—this project can help ensure that the most current and relevant risk reduction activities are visible to insurers and modelers.

The WDC initiative aligns with the Department of Insurance's forward-looking regulations on catastrophe modeling and the regulatory requirement that catastrophe models incorporate the best available scientific information on risk mitigation, including prescribed fire, forest management, nature-based flood risk reduction, and utility-initiated interventions. The WDC may help to operationalize these requirements, providing a scientific and transparent basis for model input and regulatory review.

As PIFC participates in WDC stakeholder meetings and workgroups to help inform and evaluate the project, it is important to recognize that insurers are subject to both state and federal antitrust laws, as well as various state privacy

laws. Additionally, the WDC project must continue to ensure that insurer participation is consensual and does not specify how and when insurers use the data from the project or require insurers to provide their proprietary data or intellectual property.

This initiative serves as a step toward fostering a more adaptive and equitable insurance system—one that rewards resilience, leverages science, and centers community safety. PIFC is pleased to support the WDC because of its potential to help California lead the nation in disaster preparedness, insurance innovation, and climate resilience.

Sincerely,

Seren Taylor
Vice President
Personal Insurance Federation of California

RedZone Software
1855 South 57th Ct, Suite 205
Boulder, CO 80301
www.redzone.co
303-386-3955

June 10, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface Data Commons (WDC) Letter of Support

To Whom It May Concern:

I am the Founder and CEO of RedZone, based in Boulder, CO, and am writing in support of the WDC initiative. I have led RedZone since 2002 in developing wildfire-focused insurance applications for risk management and response.

Today, our team at RedZone is advancing real-time wildfire spread modeling and a system for managing accumulated wildfire risk. As a wildfire mitigation advocate, I have the privilege to collaborate with the government and insurance sectors to implement technology-driven home assessments, empowering homeowners to reduce risk.

RedZone is a wildfire intelligence company that provides real-time detection, risk analytics, and mapping solutions to help communities, insurers, and emergency responders prepare for and respond to wildfire threats in California and throughout the Mountain West.

This letter is to express our support for the WUI Data Commons (WDC) and our desire to participate in the Phase 3 WDC pilot described by Milliman. Some of our goals for participation are listed below:

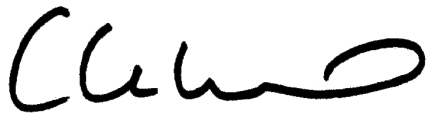
- **Evaluating WDC outputs** for integration into our wildfire modeling tools
- **Supporting communications and outreach** using WDC data
- **Providing community mitigation and wildfire risk data** from the RedZone platform
- **Collaborating on mitigation strategies** through data-sharing and tech integration

Our ability to participate is conditional on the participation of other key stakeholders from the public and private sectors.

RedZone Software
1855 South 57th Ct, Suite 205
Boulder, CO 80301
www.redzone.co
303-386-3955

We would like to support and participate in the WUI Data Commons because at RedZone, we focus on wildfire detection and risk analysis, especially in the WUI. The WUI Data Commons can help us and others by providing consistent, shared data that improves modeling, supports smarter mitigation, and strengthens collaboration across sectors.

Sincerely,



Clark Woodward
CEO, Founder
RedZone
(303) 956-9864

REINSURANCE ASSOCIATION OF AMERICA

April 7, 2025

Mr. Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Data Commons for Wildfire Urban Interface Areas

To whom it may concern,

The Reinsurance Association of America supports the initiative to create a Data Commons for Wildfire Urban Interface areas. We believe that this initiative will assist communities, state officials, first responder organizations and insurers with information to assess the best mitigation measures and the changing and growing risk of wildfire.

We commit to recommending to our members their participation and contribution to this initiative.

The Reinsurance Association of America is a national trade association representing reinsurance companies doing business in the United States. RAA membership is diverse, including reinsurance underwriters and intermediaries licensed in the U.S. and those that conduct business on a cross-border basis. The RAA also has life reinsurance affiliates and insurance-linked securities (ILS) fund managers and market participants that are engaged in the assumption of property/casualty risks. The RAA represents its members before state, federal and international bodies.

Sincerely,

Frank Nutter
President

Swiss Re

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

Swiss Re America Holding Corporation
175 King Street
Armonk,NY 10504
USA
Phone +1 914 828 8679
Fax +1 914 828 8679
www.swissre.com

June 10, 2025

Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern

I am the Head of Cat Perils Americas for Swiss Re based in Armonk, NY. My team is responsible for developing models and views of risk used in underwriting and risk management for the Americas region. This letter is to express our support for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman.

WDC has the potential to lead to better monitoring and prioritization of mitigation actions at community level, especially if coordinated with the ongoing efforts of IBHS (e.g., Wildfire Prepared Neighborhoods). Both cat modelling and re/insurance industries would greatly benefit from more transparent and standardized availability of mitigation data at parcel and community level. This information can be directly or indirectly incorporated into wildfire risk quantification models/tools and, in turn, increase confidence in such assessments. This will also contribute to ongoing industry supported initiatives, e.g. via IBHS, to reduce wildfire risk by better prioritization as well as recognition of mitigation efforts.

As a technical team focused on development and use of catastrophe models and costing tools for underwriting and risk management purposes within a re/insurance organisation, we can evaluate WDC output for our company's as well as the re/insurance industry's use. We can provide feedback on various aspects such as specification and format of the mitigation data to ensure fitness for purpose.

Damage and losses from wildfires have increased dramatically in recent years; however, we know that mitigation efforts at parcel and community levels can have profound impacts on wildfire risk. We strongly support efforts to promote and quantify the impacts of wildfire mitigation efforts, which will help improve wildfire resilience, risk quantification, and insurance pricing.

Yours sincerely,

Erdem Karaca
Head Cat Perils Americas
Swiss Re America Holding Corporation

TOWN OF VAIL

2399 North Frontage Road West
Vail, Colorado 81657
www.vail.gov

Fire & Emergency Services
970.479.2250
970.479.2176 fax

March 19, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

My name is Mark Novak, I am the Fire Chief in Vail, Colorado. This letter is to express interest in participating in the WUI Data Commons (WDC) phase 3 pilot.

The WUI Data Commons is an important and unique opportunity to simultaneously increase wildfire resiliency in the Town of Vail, motivate property owners to take action to reduce wildfire risk, and to decrease the uncertainty regarding the availability of insurance. Vail Fire and Emergency Services has been engaged in a number of wildfire mitigation activities for over 10 years. These activities include conducting defensible space evaluations on every property in Vail, conducting fuels reduction projects, providing curbside chipping and conducting prescribed fire activities. In 2021 the Town of Vail adopted a WUI code for new construction and substantial renovations. Despite these efforts, property owners it is becoming increasingly difficult to obtain and maintain insurance coverage.

As a result of ongoing wildfire mitigation activities, there are several neighborhoods that would be good candidates for participation in the WDC. Due to our confidence in the validity and utility of the WDC, it is without hesitation that we eagerly anticipate the opportunity to facilitate participation in the WDC.

Sincerely,

Mark Novak, Fire Chief

Troutman Pepper Locke LLP
600 Peachtree Street, N.E., Suite 3000
Atlanta, GA 30308

troutman.com

troutman pepper locke

Brian T. Casey
D 404.870.4638
F 404.806.5638
brian.casey@troutman.com

June 13, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

My name is Brian Casey, and I am a senior partner in the Insurance Transactional and Regulatory practice group of Troutman Pepper Locke, LLP, a large U.S. full-service law firm. This letter is to express my support for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman.

We have been engaged by Western Fire Chiefs Association (WFCA) to serve as outside legal counsel to the WDC project, working alongside Milliman in this endeavor. Our engagement will include (i) preparation of the data contribution and use agreement with participants who contribute wildfire risk data to the WDC and (ii) advising WCFA on various regulatory compliance matters.

We would like to support the WUI Data Commons because we believe that the WUI Data Commons can provide a great next step in enhancing the mitigation of wildfire damage risk for the benefit of all relevant stakeholders.

Sincerely,

Brian Casey, Partner
Troutman Pepper Locke
404.870.4638
brian.casey@troutman.com

United Policyholders
Empowering the Insured

April 24 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

I write on behalf of the non-profit insurance consumer organization United Policyholders to support the WUI Data Commons (WDC) initiative and express our intention to participate in the Phase 3 WDC pilot described by Milliman. We believe a WDC will significantly advance our organization's objectives and look forward to participating.

United Policyholders ("UP") is a 34 year old 501(c)(3) public benefit corporation based in California. We have been working diligently across the state since 2016 when we launched an initiative and working group to inform and assist property owners on hardening structures and creating defensible space as a strategy for protecting their homes and accessing insurance. Our initiative, branded as "WRAP,"[1] includes a working group that is about to have its 50th meeting and a website where property owners can click on their county and find risk reduction guidance and resources in their area.

The topics we've covered in our monthly meetings range from the Safer from Wildfires and IBHS Wildfire Prepared Home standards to the costs of the work required to meet those standards, to logistics of bond measure to fund mitigation grants, to insurers' current underwriting and renewal guidelines, to lessons learned from the L.A. Fires, to the winners of an IBHS/CSAA-sponsored [2] fire-resistant landscaping design contest.

---

[1] WRAP is an acronym for "Wildfire Risk Reduction and Asset Protection," the initiative through which UP is convening stakeholders and advancing parcel level and community-wide mitigations. We currently have over 897 individual stakeholders engaged in this initiative. See: https://uphelp.org/preparedness/wrap-resource-center/

[2] https://www.prnewswire.com/news-releases/uc-berkeley-ibhs-and-csaa-announce-winning-landscape-designs-that-can-reduce-wildfire-risk-302155509.html

917 Irving Street
San Francisco, CA 94122 415.393.9990
(415) 393-9990
www.uphelp.org

United Policyholders
Empowering the Insured

In addition to doing our own public outreach and education work and hosting and participating in events across the state, UP is coordinating with stakeholders, supporting the California Department of Insurance's Sustainable Insurance Strategy and helping advance legislative measures to increase mitigation grants and facilitate risk reduction statewide.

Our stakeholder partners include CalFire, CalOES, regional fire agencies, fire scientists, the Insurance Institute for Home and Business Safety, Firewise Communities and Fire Safe Councils, Rural County Representatives of California, the California Association of Realtors, risk reduction vendors and insurance companies and agents.

We plan to contribute to the WUI Data Commons initiative as follows:

- Continue updating and promoting our online WRAP Resource Center.
- Leverage our relationships with public officials, community organizations (including Fire Safe Councils) our WRAP working group network and existing grant funding to publicize and help facilitate mitigation actions.
- Use the Town Halls, public safety and preparedness fairs and public-facing events we're being invited to participate in on a regular basis to increase completed mitigations and related data input to the WDC.
- Help WDC with communications and be a conduit for completed mitigations data from our stakeholder partners.

United Policyholders ability to continue advancing home hardening, defensible space and community-wide actions is contingent on grant funding. We hope to have the opportunity to participate in the WDC project as a sub-grantee.

Sincerely,

Amy Bach, Executive Director

917 Irving Street
San Francisco, CA 94122 415.393.9990
(415) 393-9990
www.uphelp.org

UNIVERSITY OF CALIFORNIA, BERKELEY

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MICHAEL J. GOLLNER
Associate Professor and Deb Faculty Fellow
Mechanical Engineering Department

6105A ETCHEVERRY HALL
DEPARTMENT OF MECHANICAL ENGINEERING
BERKELEY, CALIFORNIA 94720-1740
tel: 510-642-3371, fax: 510-642-6163
Email: mgollner@berkeley.edu
Web: firelab.berkeley.edu

May 15, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

My name is Michael Gollner, and I am an Associate Professor of Mechanical Engineering and Director of the Berkeley Fire Research Lab at the University of California, Berkeley. This letter is to express my support for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman.

In my laboratory we perform both experiments and modeling to better understand fires in the Wildland-Urban Interface. We work with many federal and state agencies to improve modeling capabilities to help predict and mitigate future destruction.

Parcel-level mitigation data is critical to improving predictions of fire risk and we welcome partnering to support and participate in the WUI Data Commons on the collection and analysis of such data. This data will be critical to improving our understanding of fire risk and implementing optimized measures to reduce this risk.

Sincerely,

Sincerely,

Michael J. Gollner
Associate Professor and Deb Faculty Fellow
Department of Mechanical Engineering
University of California, Berkeley

UNIVERSITY OF CALIFORNIA, SAN DIEGO UCSD

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO SANTA BARBARA • SANTA CRUZ

SAN DIEGO SUPERCOMPUTER CENTER
(858) 534-5000

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April 11, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

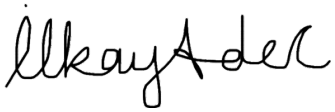
The Wildfire Science & Technology Commons is a bold new initiative designed to accelerate technological innovations for wildfire management and mitigation. We are building a community platform around open data, cutting-edge science, AI, and shared knowledge. Our mission is to bring people together to break down the barriers that currently exist between wildfire-related data, models, and tools. Today these resources are siloed, which slows down innovation. We have the opportunity to create a seamless, smart platform to enable solutions that revolutionize how we understand, respond to, and prevent wildfires. This letter is to express our support for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman.

To offer support for the WUI Data Commons, the Wildfire Science & Technology Commons will collaborate with the project to provide the following:

- Milliman will participate in the Wildfire Community of Practice as a pathfinder project
- Milliman will participate in the marketplace of the Wildfire Science & Technology Commons as a connection to the future WUI Data Commons to enable broader awareness of the WUI data available to the community
- The Wildfire Science & Technology Commons will list Milliman as a collaboration partner on the wildfirecommons.org website with a logo placement and highlight the goals of the collaboration
- Milliman will list the Wildfire Science & Technology Commons as a collaboration partner on the milliman.com website with a logo placement and highlight the goals of the collaboration

The Wildfire Science & Technology Commons is a UC San Diego initiative funded by the National Institute of Standards and Technology (NIST). Special thanks to Senator Alex Padilla (D-CA) and Representatives Juan Vargas (CA-52) and Sara Jacobs (CA-51) for their support of this project through the Congressional appropriations process.

Sincerely,



Ilkay Altintas, Ph.D.
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April 22, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

My name is JulieAnna Anastassatos, and I am the Vice President of Wildfire at Verisk. Verisk is proud to support local communities and the fire service with its ISO's Public Protection Classification (PPC) program. Verisk further serves the global (re)insurance industry with its extreme events and hazard modeling that aids in the assessment of risk for insurance catastrophe management, as well as underwriting and rating decision-making. This letter serves to express Verisk's support for the WUI Data Commons (WDC) and our desire to participate in the Phase 3 WDC pilot described by Milliman.

To best understand our perspective, please note that Verisk's ISO provides information, including statistics and modeling, underwriting and claims information, actuarial analyses, policy language, and consulting and technical services in connection with multiple lines of property/casualty insurance. Our clients include insurers and reinsurers, as well as agents, brokers, self-insureds, risk managers, financial services firms, regulators, and various governmental agencies.

An example of how Verisk could be involved in Phase 3, is as follows;

- Evaluate WDC output for use/incorporation in wildfire/fire risk assessment solutions that we provide to the (re)insurance market.

At a minimum, Verisk's support and desire to participate is subject to the following conditions, including but not limited to:

- Quality control and data governance
- Financial expectations and capacity constraints
- Data use agreements

Verisk supports the WDC because our clients and industry stakeholders have signaled their support and, as consumers of high-quality, verified and verifiable data, we continuously evaluate data sources that might enhance our products to serve our clients' needs and support resilience for individuals, communities and businesses.

Sincerely,

JulieAnna Anastassatos
Vice President, Wildfire

WESTERN FIRE CHIEFS ASSOCIATION

25030 SW Parkway Ave., Suite 330
Wilsonville, OR 97070
(800) 785-3473 • wfca@wfca.com • www.wfca.com

March 24, 2025

Nancy Watkins, Milliman Inc.
Taylor Munch, Milliman Inc.

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

I am Mark Niemeyer, President of the Western Fire Chiefs Association. This letter is to express our commitment to support the development of the WUI Data Commons (WDC) effort. Our Association will support and participate in the development and management of the WDC through the Phase 3 WDC pilot described by Milliman.

Our involvement in several aspects of Phase 3 includes:

- Coordinate participation of other fire service groups
- SME in areas including identifying meaningful data, technology vendors and contributing to the selection of neighborhoods for the pilot
- Assist in coordinating the transfer of data from inspections into the WDC
- Assist in designing meaningful reports for community understanding

The WDC is integral to ongoing projects and efforts the WFCA is engaged including; the Multi-State WUI mitigation alignment project, WUI Fire Protection Score, Wildfire field decision making tool, plus other efforts. We strongly believe that our collective efforts are highly needed to produce a viable outcome in the wildfire insurance related world.

Sincerely,

Mark Niemeyer
President, Western Fire Chiefs Association

Wuuii

April 24, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

Wuuii makes software used by insurers, fire agencies, and community wildfire organizations to assess, mitigate, and verify wildfire mitigation at the parcel level. This letter is to express our desire to participate in the Phase 3 WUI Data Commons (WDC) pilot described by Milliman.

We would be able to participate in the following capacities:

- Open source our data model for consideration and adoption by the WDC, which supports with IBHS Wildfire Prepared Home, NFPA 1141 and 1144, and CA PRC 4291.
- Serve as a provider of inspection technology through our apps for trained inspectors as well as our self-inspection app for property owners.
- Leverage our network of wildfire mitigation specialists and vetted contractors that cover 85% of Californians with a three-business day SLA to support “mitigation makeovers.”
- Enable Wuuii software licensees to contribute their inspection data, including at the community level.

Our desire to participate is conditional based on:

- Support of our software licensees, including admitted and non-admitted insurers, fire agencies, and community wildfire organizations as well as property owners to contribute inspection data; and
- Financial resources to integrate with and support the WUI Data Commons, which could be offset through grant funding.

We would like to participate in the WUI Data Commons because our mission is to create success stories of properties and communities surviving wildfires and maintaining the availability of affordable insurance. To do that requires innovative technology designed for the property owners being asked to take action and leverages the private sector to increase the pace and scale of climate adaptation.

Sincerely,

Ivan O’Neill
Co-founder and CEO
Wuuii, Inc.
ivan@wuuii.com
707.926.3653

XyloPlan

June 6, 2025

c/o Jeff Meston
Executive Director
California Fire Chiefs Association
808 R Street, Suite 209
Sacramento, CA 95811

RE: Wildland Urban Interface (WUI) Data Commons Letter of Support

To Whom It May Concern:

I lead XyloPlan, a company that helps communities and utilities make data-driven decisions to reduce wildfire risk. We use advanced fire behavior modeling and optimization to prioritize vegetation management where it will most effectively slow fast-moving fires and protect lives and critical infrastructure. This letter is to express our support for the WUI Data Commons (WDC) and desire to participate in the Phase 3 WDC pilot described by Milliman.

We view the WDC as a vital enabler of the coordinated, layered approach required to promote and incentivize wildfire resilience. In our work optimizing vegetation management, defensible space, and home hardening efforts, shared access to timely and accurate mitigation data will improve transparency and alignment across stakeholders.

Participating in the WDC will directly enhance our modeling capabilities. Our ability to assess risk and recommend targeted interventions depends on an accurate reflection of both the built and natural environment. The WDC's consolidation of mitigation data will allow us to generate more informed, actionable insights—ultimately helping communities reduce the threat of wildfire loss.

Sincerely,

Scott Cheeseman
Chief Executive Officer
XyloPlan

855 Marina Bay Parkway; Suite 150
Richmond, CA 94804

scott@xyloplan.com

For more information about Milliman please visit us at:

milliman.com

Milliman

Milliman is among the world's largest providers of actuarial, risk management, and technology solutions. Our consulting and advanced analytics capabilities encompass healthcare, property & casualty insurance, life insurance and financial services, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

milliman.com

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