Wildfire Risk in the Wild, Wild, West

A three-part series focused on identifying the challenges and opportunities affecting consumers and property insurance markets in wildfire-exposed states.

INCREASING Wildfire Risk in the Wild, Wild West

The evolving conditions resulting in growing exposure in the wildland-urban interface

Part I | November 2022

American Property Casualty Insurance Association℠
INSURING AMERICA apci.org

1122 | 3511PRI

SUMMARY

Communities in wildfire-exposed regions are facing growing wildfire risk and higher losses, resulting in higher insurance costs and less choice for consumers. As more communities face devastation, tragically impacting property, lives, and livelihoods, increased attention is needed to examine the root underlying causes contributing to these issues. If left unaddressed, the affordability of property insurance in wildfire regions will continue to pose increasing challenges for consumers.

In the U.S., the mountainous west continues to grow in popularity each year as more are drawn to its breathtaking landscapes and recreational opportunities. However, these regions are experiencing rapidly evolving environmental conditions that are making them more prone to burn. The intensifying impacts from climate change and drought are enabling fires to ignite more easily and spread more rapidly, resulting in more catastrophic losses as ember storms consume entire communities in mere hours. State and federal policies that have allowed forests to decline in health further contribute to increased wildfire risk, while local land use policies have allowed substantial community development and population migration in the wildland urban interface (WUI) – an area where the built environment meets or intermingles with nature. The collective impacts of such policies have put a growing number of communities directly in harm's way.

As a result, the U.S. has experienced unprecedented losses due to wildfire, leaving a trail of destruction and devastation across western states, such as California, Oregon, Colorado, and New Mexico. Since 2017, eight of the ten costliest insured wildfire events in the world have occurred in California. The impact on insurers has been significant, as losses from 2017 and 2018 alone wiped out over 20 years of underwriting profits for homeowners insurers. More recently, losses have been further exacerbated by inflation and supply chain disruptions resulting in higher costs and timeframes needed to reconstruct homes and businesses across the U.S. Recent laws that expand coverage benefits available under insurance policies have similarly compounded the overall impact and costs of catastrophic wildfires, resulting in higher insurance costs for consumers in these regions.

To address growing concerns of the affordability of insurance for consumers, lawmakers and regulators must focus on ways to reduce exposure and future losses. In high-risk areas where state and local officials control development and encourage the adoption and enforcement of building codes that harden homes or businesses, insurance is often more affordable and available for consumers, and overall losses are often smaller. Communities must be adapted to better withstand natural catastrophes. Homes built to meet local risks, should result in a meaningful decrease in future expected losses, enabling insurers to continue to provide affordable and available coverage for consumers.

This paper will examine in more detail the underlying issues contributing to growing exposure and increasing costs in the wildland urban interface (WUI), which are affecting the affordability of insurance in wildfire-exposed regions.

TABLE OF CONTENTS

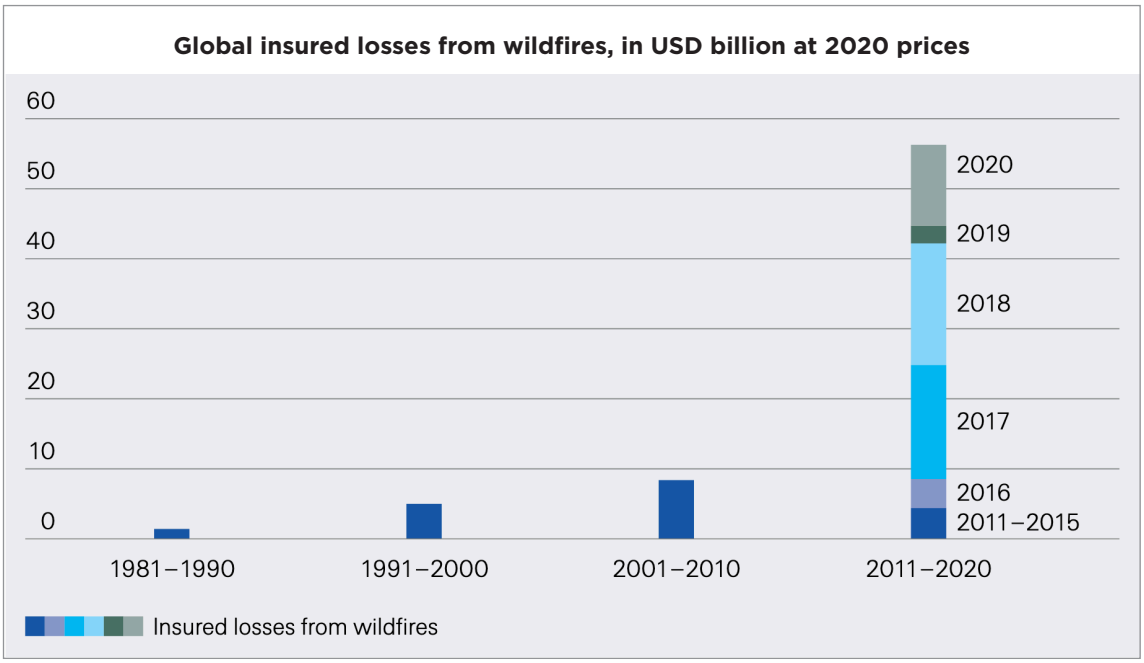
For more information, visit other papers in this series...

MANAGING Wildfire Risk in the Wild, Wild, West
The growing challenges property insurers face in the wildland-urban interface

TAMING Wildfire Risk in the Wild, Wild, West
The current state of mitigation in the wildland-urban interface

RECENT WILDFIRE LOSSES

Insurers in the U.S. are facing increasing pressure following a severe multi-year period of wildfire losses. According to Swiss Re, prior to 2015 the globe recorded only four years in which aggregated wildfire-related insured losses had topped $2 billion (2021 USD).



Source: Swiss Re Institute.

"Since 2017, there has been an average of 8,370 fires and 2.1 million acres burned in California per year, causing more than $40 billion in combined losses for the insurance industry."[1]

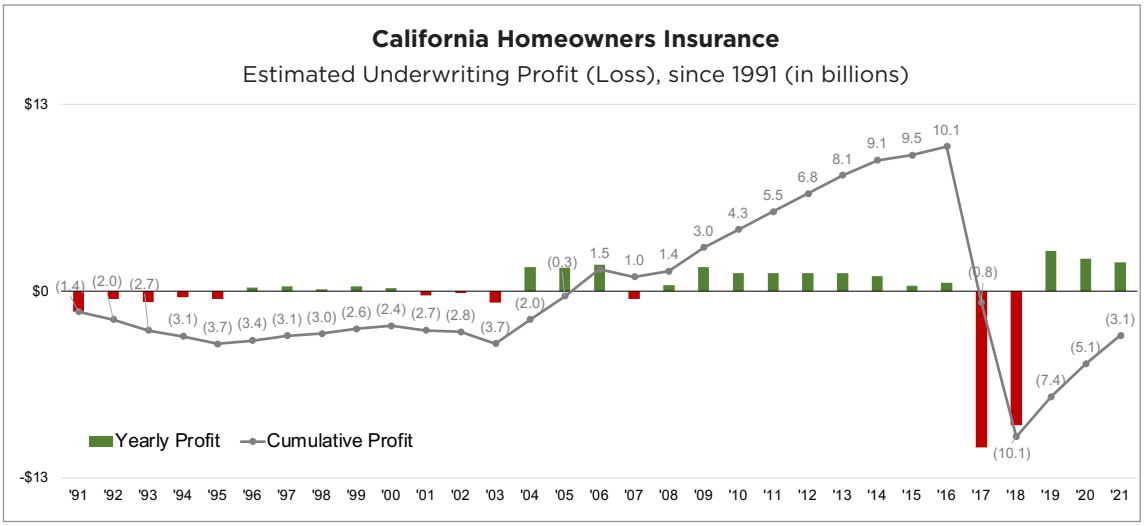
Top 10 Costliest Insured Global Wildland Fires ($ millions) shaded are CA-based wildfires since 2017

Year	Name	Location	Insured Losses in 2021 USD	Acres	Structures
2018	**Camp**	Butte (CA, USA)	**$10,750**	153,336	18,804
2017	**Tubbs**	Napa & Sonoma (CA, USA)	**$9,560**	36,807	5,636
2018	**Woolsey**	Ventura, Los Angeles (CA, USA)	**$4,520**	96,949	1,643
1991	Oakland (Tunnel)	Alameda (CA, USA)	$3,350	1,600	2,900
2017	**Atlas**	Napa & Sonoma (CA, USA)	**$3,300**	51,624	783
2016	Horse Creek	Fort McMurray (CANADA)	$3,200	1,456,810	3,244
2020	**Glass**	Napa & Sonoma (CA, USA)	**$3,070**	67,484	1,520
2020	**CZU Lightning Complex**	San Mateo & Santa Cruz (CA, USA)	**$2,600**	86,509	1,490
2017	**Thomas**	Ventura & Santa Barbara (CA, USA)	**$2,470**	281,893	1,063
2020	**LNU Lightning Complex**	Lake, Napa, Sonoma, Solano & Yolo (CA, USA)	**$2,340**	363,220	1,491

Sources: Insurance Information Institute, Aon, CAL FIRE

1 S&P Global Market Intelligence: "Use of surplus lines for homeowners coverage surging in California", April 4, 2022.

To date, the peak global insured wildfire loss years have been 2017, 2018, and 2020, resulting in insured wildfire losses of $18 billion, $17 billion, and $14 billion, respectively, primarily due to losses in California. Since 2017, Aon has indicated eight of the ten costliest insured wildfire events in the world have occurred in California, resulting in nearly 40,000 homes lost in California alone due to wildfire. According to an analysis from Milliman, the losses in 2017 and 2018 were so significant that they wiped out over 20 years of underwriting profits for homeowners insurers. APCIA analysis of more recent data indicates that on a cumulative basis, the California homeowners insurance market remains unprofitable, dating back to the 1991 Oakland Tunnel fire, as shown in the chart below.

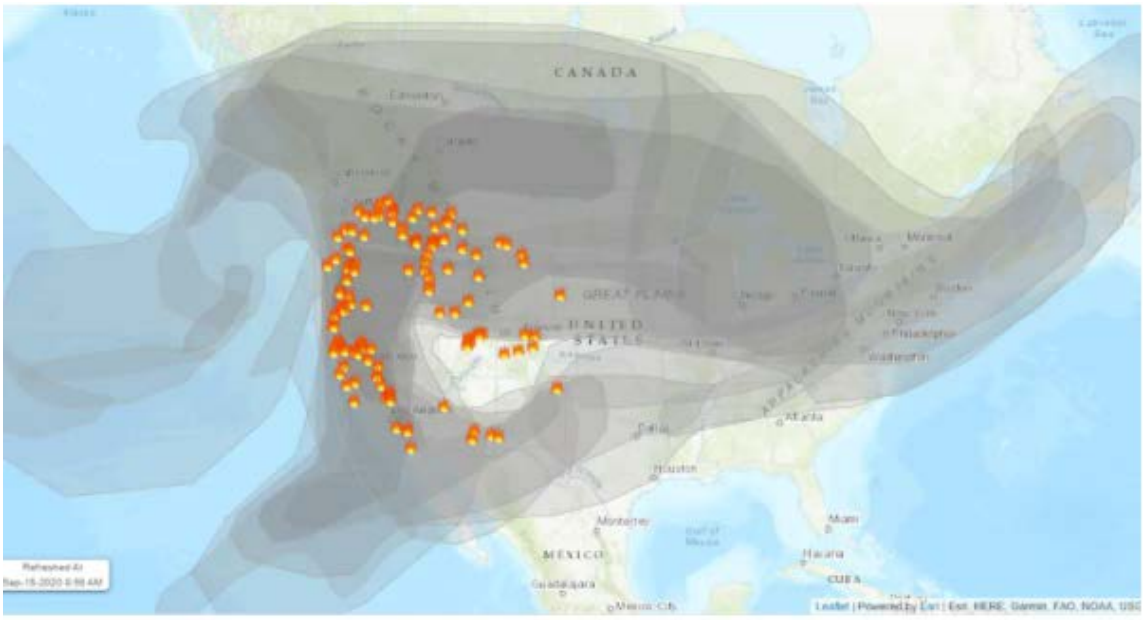


Notes:
1996 - 2021 data from P&C Combined Industry Annual Statement data from SNL.com.
1991 - 1995 Earned Premium and Loss Ratio data from the California Department of Insurance. Expense ratios for 1991-1995 are estimated as the average of 1996-1998.
Profit is based on direct industry earned premium, losses, and expenses.
Excludes impact of reinsurance and investment income.

Other western states have similarly faced recent record-breaking wildfire events. For example, in 2020, Oregon and Washington experienced double the 10-year average for acres burned, resulting in 6,000 structures lost, while Colorado experienced three of its four largest wildfires on record (at the time), resulting in almost 1,000 structures lost. Wildfire events in 2020 were so large and widespread, by mid-September drift smoke from wildfires had "covered almost the entirety of the Lower 48, even reaching [Washington,] D.C.", darkening skies to an ominous red and exposing millions to hazardous levels of air pollution.[1] Indirect losses due to smoke damage and evacuations were significant, contributing to approximately 20 percent of losses in California and Colorado, and 35 percent in Oregon and Washington.[3]

2 Matthew Cappucci & Jason Samenow, Washington Post, **'From ferocious fires to a historic hurricane season, 2020 took weather to new extremes'** Dec 29, 2020.

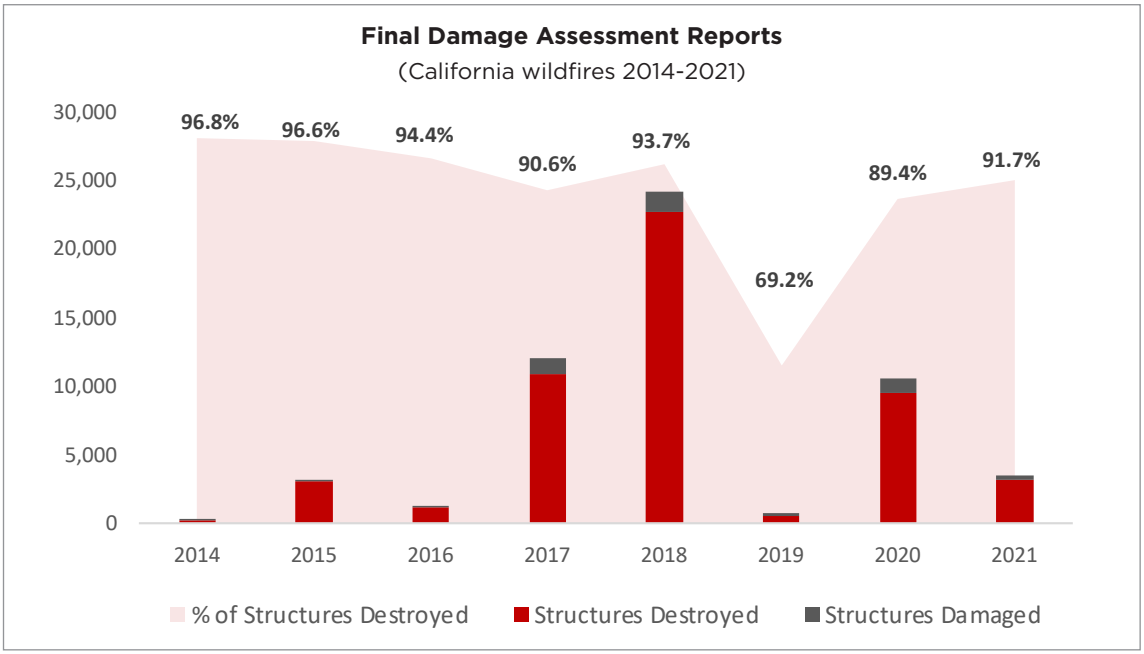
3 Newswire, **'RMS Estimates that Total Insured Losses from the 2020 Western U.S. Wildfires Will Be Between US$7bn – US$13bn'** Dec 17, 2020.



Extent of smoke from 2020 fires in the Lower 48. Large wildfires are also shown. (AirNow).

In Colorado, such events were tragically followed by the Marshall wildfire in December 2021, which resulted in 1,100 homes lost in a matter of hours, quickly becoming the costliest and most destructive wildfire in Colorado state history. Estimates from analysts at Jefferies indicates potentially $2.5 billion in insured losses have been incurred and Aon expects the Marshall wildfire will be the most costly U.S. wildfire event outside of California.[4]

The extent of devastation wildfires pose to communities is alarming. According to final Damage Assessment Reports compiled by the CAL FIRE Damage Inspection Specialists (DINS), between 2017 to 2021, 56 thousand structures[5] have been affected by wildfire in California with damage levels ranging from minor to destroyed. Of these 56 thousand structures, 51.5 thousand were destroyed (92 percent), of which 70 percent were residential structures.



Source: data compiled by the CAL FIRE Damage Inspection Specialists (DINS).

4 **https://www.artemis.bm/news/december-cat-losses-include-3-9bn-tornadoes-2-5bn-marshall-fire-jefferies/**.

5 All permanent structures greater than 120 square feet.

Aside from the property devastation, also deeply concerning has been the extensive loss of life. For example, three of the five deadliest wildfires in California history have occurred within the last 5 years, tragically resulting in 122 deaths from those three events alone.

GROWING EXPOSURE

Among the contributing factors leading to such devastation is evolving environmental conditions, including longer, hotter, and drier conditions due to climate change and the intensifying megadrought currently gripping the western U.S., as well as land use policies that have allowed continued expansion in high-risk regions, such as the Wildland Urban Interface (WUI). The WUI is an area where population centers are built directly adjacent to or among wildlands. As open space that previously separated wildlands and communities continues to shrink, the wildfires that naturally burn in the wildlands will more often spread into populated areas.

DROUGHT AND CLIMATE CHANGE

Halfway through the summer of 2021, nearly 100 percent of the Western U.S. was in drought – a concerning measure as the U.S. has never experienced that much land so dry west of the Continental Divide in 122 years of observation. Significant high temperatures further amplified the 20-year megadrought that has led to aridification, or drying up, of the region including, most notably, the Colorado River Basin, which has seen its natural flows diminished by nearly 20 percent since 2000.[6] A mega-drought is a severe drought that persists for at least 20 years, and a report released in mid-February 2022 suggests the current mega-drought is now the worst drought going back 1,200 years. The Fourth National Climate Assessment, released in 2018 by the U.S. Global Change Research Program, noted the impacts of climate change has intensified the severe drought in California and is worsening drought in the Colorado River Basin. Part of the reason for this is that climate change makes such droughts hotter than they might've been just a few decades ago, which draws more moisture out of soils and vegetation, thereby worsening the drought in a positive feedback loop.[7]

Higher average temperatures due to climate change coupled with less precipitation due to drought are resulting in fires igniting more easily and spreading more rapidly, resulting in much higher average acres burned per fire due to extremely dry vegetation. This was most recently evidenced in California in 2021 as the Dixie Fire became the largest single wildfire in California history.[8] Conditions also enabled for the first time ever a wildfire to burn from one side of the Sierra Nevada mountains to the other – first through the Dixie fire, which destroyed the Gold Rush-era community of Greenville, only to be repeated one month later after the Caldor fire largely destroyed the mountain hamlet of Grizzly Flats and threatened South Lake Tahoe.[9] In a study entitled 'Warming enabled upslope advance in western US forest fires', published in Proceedings of the National Academy of Sciences in June 2021, ominously just months prior to these events, researchers found climate warming has diminished the 'high-elevation flammability barrier' – the point where forests historically were too wet to burn regularly because of the lingering presence of snow. They further noted, over three decades (1984-2017) fires have advanced 252 meters uphill in Western mountains, or roughly 800 feet in elevation, amongst other findings.[10]

Fire season, a period that has historically been viewed in California as mainly from May through October,[11] is also now widely viewed to be year-round. CoreLogic, a leading property information, analytics and solutions provider, highlighted an observed change in wind patterns in a December 2020 wildfire presentation, noting extreme duration and intensity of winds that year, including wind events in California occurring outside of

6 **https://www.discovermagazine.com/environment/how-the-u-s-megadrought-will-affect-2022-and-beyond**.

7 Michael Cappucci, Washington Post, '**Drought in western U.S. is biggest in years and predicted to worsen during winter months**' Oct 19, 2020.

8 The August Complex Fire in 2020 is the largest wildfire in California after multiple fires merged into a single fire, becoming the state's first 'Gigafire' – a single fire resulting in over 1 million acres burned. Only three other Gigafire events have occurred in recent history, including two brush fires in Australia in 2020 that combined to burn 1.5 million acres, the 2004 Taylor Complex fire in Alaska which burned 1.3 million acres, and the 1998 Yellowstone fire in Montana and Idaho which burned 1.58 million acres.

9 **https://www.latimes.com/california/story/2021-12-13/winter-storms-poised-to-end-california-wildfire-season**.

10 **https://www.mcgill.ca/newsroom/channels/news/mountain-fires-burning-higher-unprecedented-rates-331540**.

11 **https://www.frontlinewildfire.com/wildfire-news-and-resources/california-fire-season/**.

the typical "windy season" for Santa Ana and Diablo winds. Such wind events often lead to the rapid spread of wildfires, resulting in catastrophic losses. Such conditions resulted in the explosive growth of the Marshall Wildfire, which devastated communities in Boulder County, Colorado in late December 2021. At the time, it was reported ninety percent of Boulder County was in severe or extreme drought, and hadn't seen substantial rainfall since midsummer. On December 30, 2021 during a 100mph+ wind event, bone-dry grasslands erupted into flames and quickly engulfed nearby dense, suburban communities situated on the outskirts of Denver near the Rocky Mountain foothills.[12] More recently, this was further evidenced by the Colorado Fire, which raged in California's Monterey County in January 2022, as a strong wind event pushed the fire toward the sea, with flames burning near the famous Bixby Creek Bridge. Following what was considered a reasonably wet October and December, the National Weather Service's Bay Area branch noted of the Colorado Fire, "[a] necdotally it seems as though the long-term drought is acting like a chronic illness where even recent rains and cold winter weather isn't helping to keep fires from developing."[13]

LAND USE POLICIES

State and federal forestry management policies have similarly contributed to the growing exposure. Across the western U.S., forest conditions in the last 30 years have deteriorated dramatically. Fire scientists have highlighted evidence of unnatural crowding in forests, noting fire suppression policies have led to as much as a sevenfold increase in tree density between 1911 and 2011. Such overcrowding, combined with hotter and drier conditions and bark beetle infestations led to 150 million trees killed in California alone, during the 2012-2016 drought.[14]

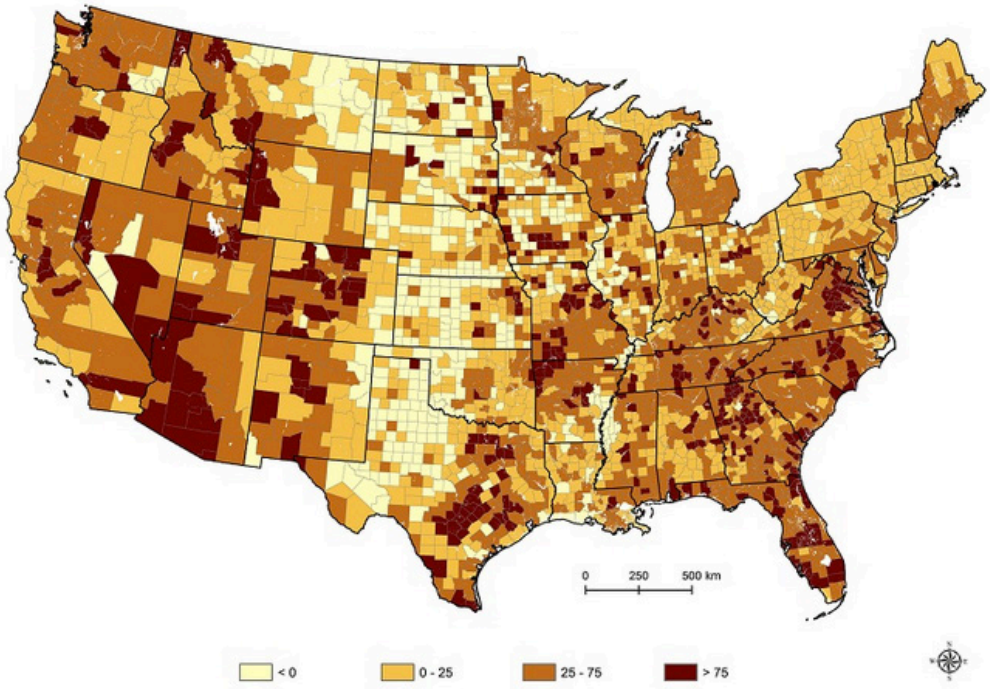
The lack of active forest management, combined with evolving environmental conditions are further exacerbated by land use policies. According to a study from the U.S. Forest Service, "Rapid growth of the U.S. Wildland Urban Interface raises wildfire risk", from 1990-2010, the WUI grew rapidly, increasing from 30.8 to 43.4 million homes (41% growth) and expanding in area from 143,568,227 acres to 190,271,144 acres in area, or 33%. The vast majority of new WUI areas were caused by new housing (97%), not an increase in wildland vegetation.[15] The highest gains in houses and people in the WUI occurred in the South and Southwest. The number of WUI homes increased by 70 percent or more in Nevada, Arizona, Florida, Utah, and Colorado over these two decades.

California similarly experienced significant growth during that time, particularly in more inland regions, though as California has a higher base population than several other western states, the state did not register growth rates as high.

12 **https://www.insurancejournal.com/magazines/mag-features/2022/01/24/650191.htm**.
13 **https://www.bbc.com/news/world-us-canada-60092300**.
14 **https://caes.ucdavis.edu/news/just-what-resilient-forest-anyway**.
15 **https://www.nrs.fs.usda.gov/news/release/wui-increase**.

Areas where homes, forests mix increased rapidly over two decades

Growth Rate of Homes in the WUI 1990-2010 by County (in percent)

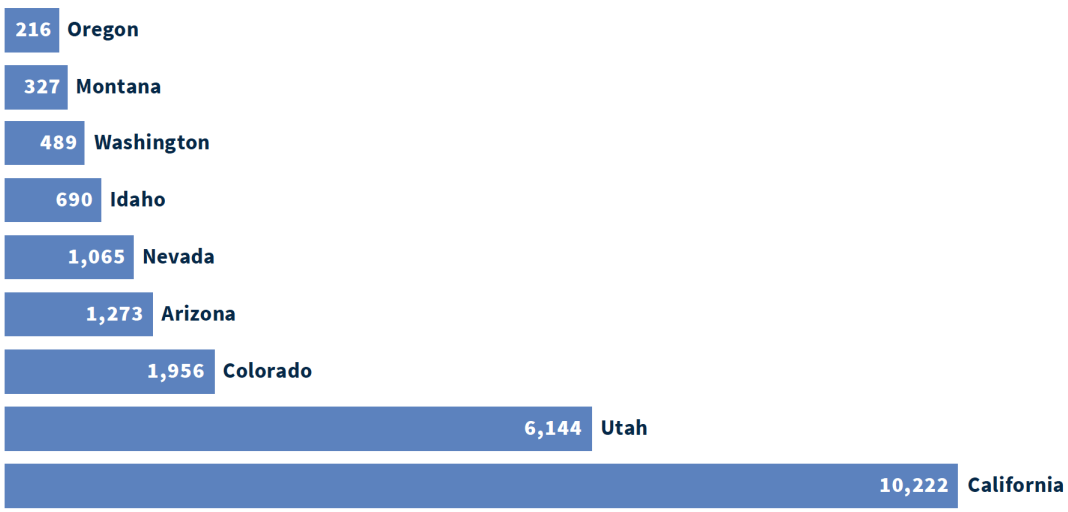


Source: U.S. Forest Service.

Data from Cape Analytics and HazardHub further highlighted housing growth in the WUI since 2011 continued to accelerate. Between 2011-2020, 22,382 new homes were built in zones at 'high' risk of wildfire. California led the states in the west for the highest number of new homes built in high-risk wildfire areas, with just over 10,000 in California alone followed closely by Utah.

New Home Builds in High Fire Risk Zones by State

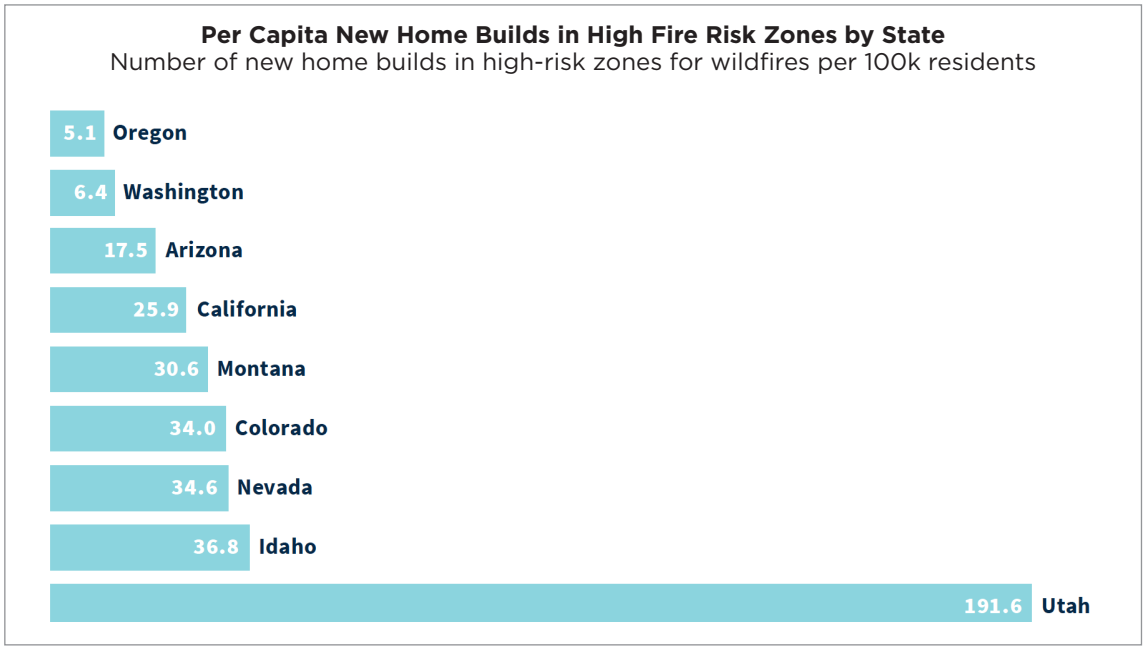
Number of new home builds in high-risk zones for wildfires



Data source: Cape Analytics & HazardHub.

16 **https://content.capeanalytics.com/the-wildfire-west-lp**.

However, on a per capita basis, Utah experienced the most explosive growth in the last decade.



Data source: Cape Analytics & HazardHub.

Cape Analytics separately highlighted in a 2021 report that growth in the WUI increased further in response to the pandemic.[17] The report highlighted cities at high risk of wildfire experienced significant home appreciation during the pandemic as newly remote-based workers migrated to larger and more picturesque settings. A March 2022 report from CoreLogic echoed these findings, noting for vacation homes, the Mountain-West region[18] was the hottest housing market in the U.S. in 2021. The report indicated WUI areas such as Denver, Colorado have experienced home equity gains of 109% compared to the market's previous high in 2006, while Boise, Idaho equity values jumped 22% from December 2020 to December 2021.[19] CoreLogic separately reported, sales of "ultra-luxury" homes – those over $40 million – have also spread into less traditional geographic areas. CoreLogic noted "North American locations such as Summit Park, Utah and Hailey, Idaho — both locations just outside popular ski zones — are topping the charts for strong demand and equity increases", while Riverside, California, a region just east of Los Angeles, recorded a sale over $40 million in 2021 — the biggest sale ever for this region.[21]

According to Verisk Wildfire Risk Analysis, which uses data from FireLine® , Verisk's wildfire risk management tool, there are now over 4.5 million properties estimated at high to extreme risk from wildfire in the U.S.[22]

17 **https://capeanalytics.com/blog/zoom-towns-wildfire-risk/**.

18 The U.S. Census Bureau defines the Mountain-West as the region encompassing Arizona, Colorado, Idaho, New Mexico, Montana, Utah, Nevada and Wyoming. **https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf**.

19 **https://www.corelogic.com/intelligence/vacation-locations-saw-large-home-equity-gains-in-2021/**.

20 **https://www.corelogic.com/intelligence/holidaze-luxury-priced-home-sales-heated-up-in-2021/**.

21 FireLine evaluates wildfire risk at the address level using advanced remote sensing and digital mapping technology to assess the primary factors contributing to wildfire risk—fuel, slope, and road access. FireLine also identifies properties located in Special Hazard Interface Areas, indicating risks exposed to wind-borne embers.

22 Verisk disclaims U.S. figures are based on data from the 2010 U.S. Census and Canadian figures based on data from the LOCATION® database; figures are rounded to the nearest 100.

States At High to Extreme Wildfire Risk, 2021					
Rank	State	Estimated number of properties at risk	Rank	State	Percent of properties at risk
	TOTAL	**4,515,200**			
1	California	2,040,600	1	Montana	29%
2	Texas	717,800	2	Idaho	26%
3	Colorado	373,900	3	Colorado	17%
4	Arizona	242,200	4	California	15%
5	Idaho	175,000	5	New Mexico	15%
6	Washington	155,500	6	Utah	14%
7	Oklahoma	153,400	7	Wyoming	14%
8	Oregon	147,500	8	Arizona	9%
9	Montana	137,800	9	Oklahoma	9%
10	Utah	136,000	10	Oregon	9%
11	New Mexico	131,600	11	Texas	7%
12	Nevada	67,100	12	Nevada	6%
13	Wyoming	36,800	13	Washington	5%

Source: Verisk, via Insurance Information Institute (data as of As of October 2021).

California ranks the highest for the estimated number of properties, boasting over 2 million exposed properties – nearly three time more than the next highest state, Texas – while Montana has the highest percent of properties at risk, followed closely by Idaho.[23]

While wildfires may be a naturally occurring event, such as those originating from lightning, studies have shown 85 percent of wildland fires in the U.S. are caused by humans,[24] with some data indicating in California 95 percent of fires are human caused. This is often due to accidental or negligent actions, such as leaving a campfire unattended or escaped debris burns, or more common day-to-day activities such as welding, grinding, weeding at the wrong time of day, driving with a loose chain, or pulling an overheated vehicle to the side of the road. This may also include recent wildfire events involving utility equipment or intentional acts, such as arson.

The potential for human-caused catastrophic wildfire events makes wildfire unique from all other naturally occurring disasters, such as hurricanes, earthquakes, flooding, or convective storms, where the conditions that lead to loss are almost entirely driven by mother nature. Thus, continued expansion in wildfire-exposed regions are a significant concern for property insurers, as the potential for catastrophic wildfires (and in turn insured losses) increases as human activity increases in these areas. This concern is further amplified in regions with high concentration of property requiring insurance coverage, though WUI-specific building or vegetation codes have not been adopted or enforced.

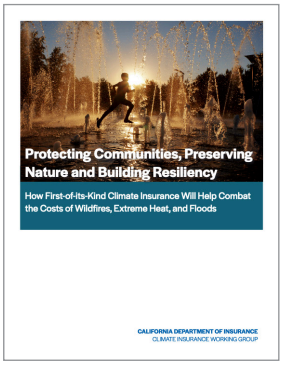
This concern has not only drawn the attention of insurers, but researchers in the scientific community. The current insurance market affordability and availability challenges are often a symptom of broader issues, and recent studies have highlighted land use policies in high-risk areas as a significant contributor to such insurance market challenges, particularly in the wildfire space.

For example, in a 2021 article from USA Today[25] it was noted, "[z]oning is a local matter, and politicians are mostly interested in keeping property values high and increasing the tax base with more building." The article went on to note that mortgage companies continue to sell in risky areas as there's no incentive for them to stop providing mortgages in high-risk areas when banks can easily unload them to the secondary market. The construction industry similarly benefits from the continued expansion in high-risk regions as communities are built and then must be rebuilt following a disaster.

23 **https://www.verisk.com/insurance/campaigns/location-fireline-state-risk-report/**.
24 **https://www.nps.gov/articles/wildfire-causes-and-evaluation.htm**.
25 **https://news.yahoo.com/climate-change-freight-train-making-093004857.html**.

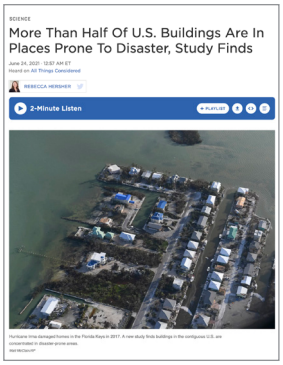
Thus, collective public policy decisions have created a situation that incentivizes increasing risk exposure without the need to bear the full costs of that risk, which is otherwise known as a "moral hazard." In stark contrast, the insurance industry has been forced to bear the growing risk and associated costs, while simultaneously facing increasing pressure from consumers, lawmakers, and insurance regulators because of the growing unaffordability of insurance coverage in these high-risk regions.

Other studies have echoed these concerns, noting the following:



State and local governments play a critical role in promoting more responsible land use policies in high-risk areas, such as the Wildland Urban Interface (WUI) and low-lying areas at risk from sea level rise or other flooding events.

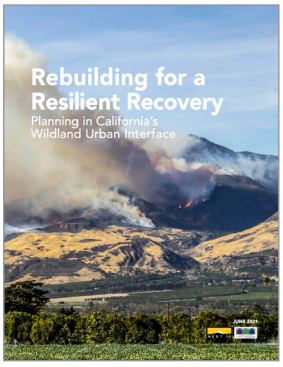
CLICK TO VIEW



Local governments have an incentive to retain population and tax base by allowing new development, even in areas that are at high risk for disasters. That has led coastal cities to approve waterfront homes even as sea levels rise and floods get more damaging, a 2020 study found. A similar trend is playing out in the western U.S., where homes continue to be built in places that are likely to burn.

The findings underscore how **development patterns exacerbate damage from climate change.**

CLICK TO VIEW



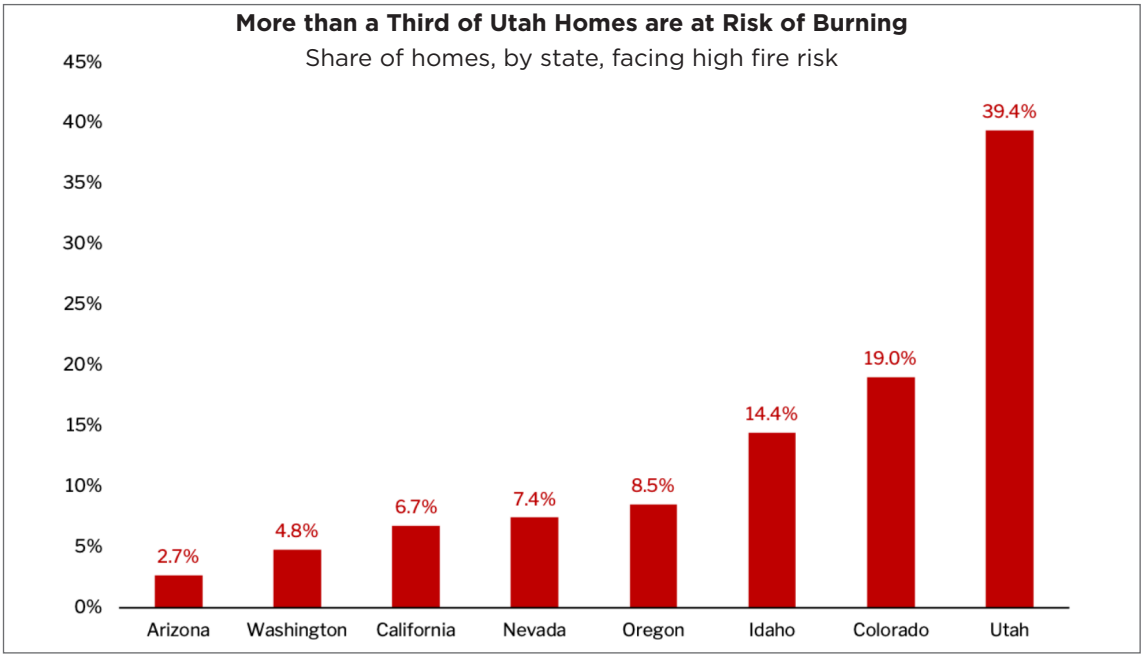
If we continue with rebuilding as usual, it's almost inevitable that a major insurance crisis lies ahead, as **more properties may become uninsurable due to the increasing risk.**

CLICK TO VIEW

A tremendous number of new homes are being built in the highest wildfire risk areas. While these areas may be naturally beautiful, they are also naturally combustible. Our analysis suggests places like California and Utah contribute to rural sprawl and do so at considerable risk for more destruction of homes and loss of life wrought by wildfires. Moreover, **as the climate gets hotter and drier, the risk in these areas will only grow, as stronger, wind-driven wildfires impact even low-risk regions.**

CLICK TO VIEW

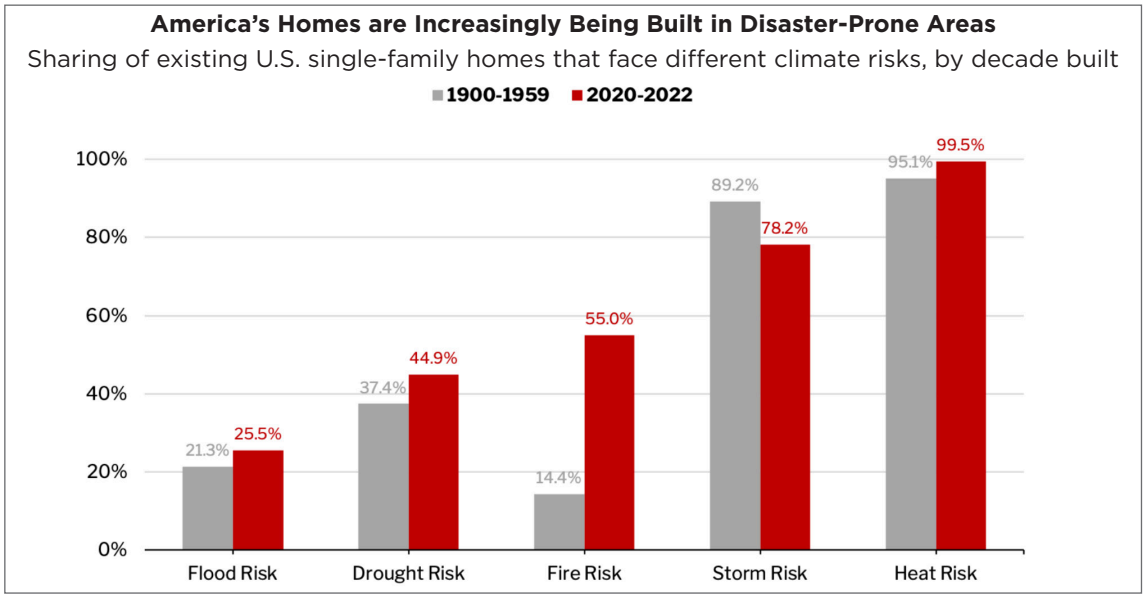
An analysis from Redfin in 2021[26] determined California now has $628 billion dollars in property market value at high fire risk, followed by Colorado and Utah, with $222 billion and $219 billion, respectively.[27]



Source: ClimateCheck data, county property record.
Note: Home-value data is not available for Arizona because Redfin Estimates don't overlap with Arizona's high-fire-risk areas.

REDFIN

Redfin further noted in an analysis released on September 9, 2022, that 55% of homes being built today face "Fire Risk", compared with only 14% of homes built between 1900 to 1959, as suburbanization and a shift to the Sun Belt have driven builders into more vulnerable areas.[28] This represents an increase of over 40 points, greater than any other climate risk, which have increased only marginally, with "Storm Risk" even decreasing over the same period.

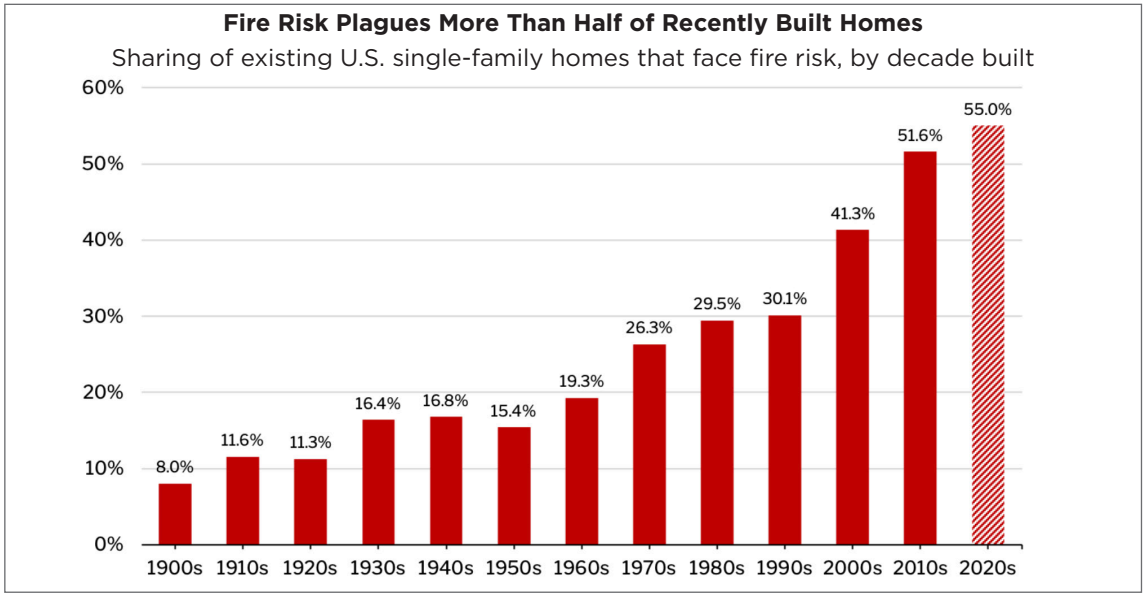


Source: Redfin analysis of data from ClimateCheck, county records.

REDFIN

26 **https://www.redfin.com/news/wildfire-real-estate-risk-2021/**.
27 Data was based on a Redfin analysis of county property records and risk scores from climate-data startup ClimateCheck **https://climatecheck.com/**.
28 **https://www.redfin.com/news/homes-built-disaster-prone-areas/**.

The steepest increases have occurred since the 2000s, with at least 10-point jumps in the 2000s and 2010s.



Source: Redfin analysis of data from ClimateCheck, county records.

REDFIN

The states facing the highest increase in risk from fire for recently built homes include Colorado, Arizona, Utah, California, and Florida. These states show percentage point differences of +66.2, +59.0, +57.2, +52.1, and +51.3, respectively, with Colorado, Arizona, Utah, and California each indicating of new homes built between 2020-2022, 85% to 97% of homes are at risk of fire.

Top states where new homes are more likely to face fire risk than old homes

	Homes built from 2020-2022: share with fire risk	Homes built from 1900-1959: share with fire risk	Percentage-point difference
Colorado	89.6%	23.4%	66.2 ppts
Arizona	96.9%	37.9%	59.0 ppts
Utah	84.9%	27.6%	57.3 ppts
California	91.1%	39.0%	52.1 ppts
Florida	57.5%	6.2%	51.3 ppts

Building Risk: Colorado has Increasingly Built Homes in Areas at Risk for Fires.
Distribution of property-level fire risk scores.
Source: REDFIN.

Redfin noted in their analysis that builders have been forced to develop in more rural areas which are more prone to wildfire and drought, and "[m]any of these areas are attracting homebuyers because they're relatively affordable, have lower property taxes, more housing options or access to nature. Some buyers also just aren't aware of the risks. That's partly due to a lack of informational resources, but also because people don't often see the full cost of disaster when it does occur." However, Redfin suggested "[o]n a federal level, Fannie Mae and Freddie Mac could charge higher rates or refuse to securitize mortgages on risky homes, which might disincentivize lenders from writing loans in endangered areas."

Until such property development trends are corrected and existing homes are mitigated, communities will continue to face increased risk of devastation as environmental conditions further deteriorate, significantly increasing exposure for insurers providing coverage in these high-risk regions. As a result, insurers have begun to raise these concerns and discuss solutions among stakeholders within the broader property development industry, to help address the growing pressure and call attention to the underlying problem to be solved for the benefit of all stakeholders.

Similarly, to help communities better understand increasing wildfire risk, insurers are advocating for increased education and disclosure of wildfire risk for consumers, such as climate hazard disclosures in real estate transactions. Such disclosures have commonly been done for properties at risk of flooding in some states, such as when a property is located in a FEMA-designated special flood hazard area (SFHA). Separately, non-profit First Street Foundation (FSF), has long partnered with the National Association of Realtors (NAR) to help communicate flood risk to prospective buyers. FSF developed a Risk Factor™ model for flood, known as Flood Factor®, which has been incorporated into various real estate listing sites. FSF recently launched two new Risk Factor™ models, one for wildfire, known as Fire Factor®, and another for extreme heat, known as Heat Factor®.[29]

INCREASING COSTS

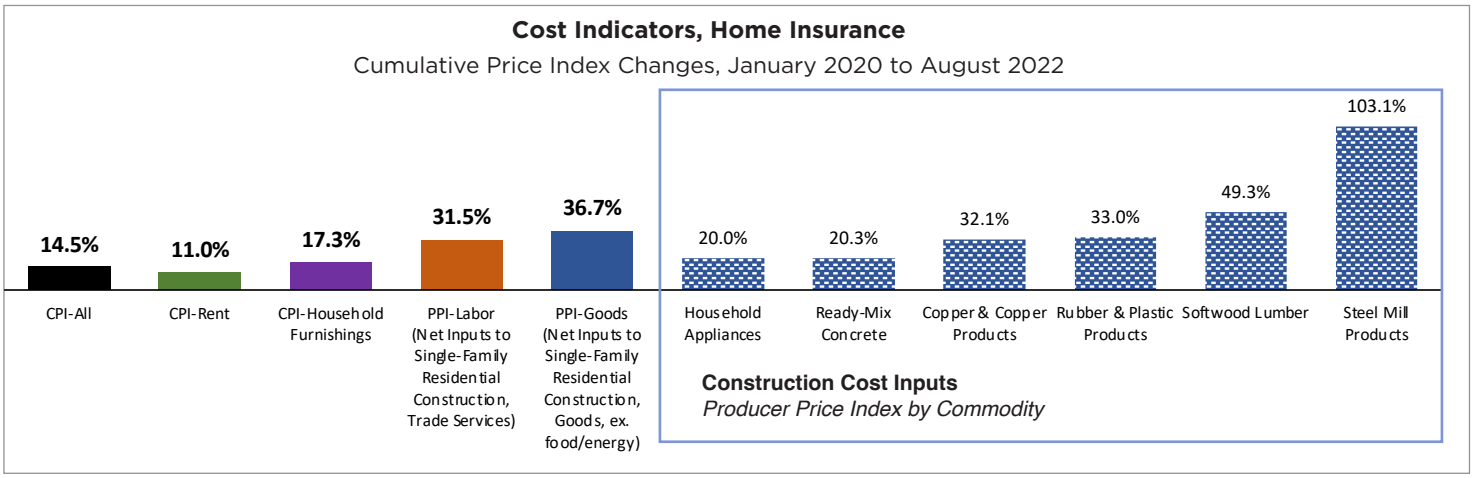
In addition to the recent severe multi-year period of wildfire losses and growing exposure from environmental conditions and land use policies, insurers are also facing increasing pressure from higher prospective (or future) loss costs due to a combination of issues, such as inflation, supply chain disruptions and recent laws expanding policy coverage following a catastrophic wildfire.

INFLATION AND SUPPLY CHAIN DISRUPTIONS

Reconstruction costs have been extremely elevated due to recent inflation and supply chain disruptions, and the increased volume of natural disaster losses. Demand for skilled contractors and construction materials to build new homes and complete home remodeling projects during the height of the pandemic in 2020 collided with the end of a record-breaking year for catastrophe losses when thousands of homes across the U.S. would also need to be reconstructed following devastating hurricanes, wildfires, and other natural catastrophe events. Materials and labor supply were further strained as natural disasters remained elevated in 2021.

The resulting impacts have led to significantly higher material and labor costs across the U.S. to reconstruct homes, in addition to longer timeframes needed to rebuild. This has led to insurance claims inflation rising faster than the U.S. inflation rate, and outpacing homeowners insurance premiums collected. These loss amplification effects have been particularly pronounced in regions experiencing a demand surge following a natural disaster, such as wildfire, and can remain elevated for some time further amplifying other property losses unrelated to recent natural disasters.

29 **https://firststreet.org/risk-factor/**.



Source: Bureau of Labor Statistics. Data as of September 26, 2022.

Consumer Price Index for All Urban Consumers: All Items in U.S. City Average. Seasonally adjusted for All Items, Household Furnishings and Operations, and Rent of Shelter.

Producer Price Index by Commodity: Inputs to Industries: Net Inputs to Single Family Residential Construction. Not seasonally adjusted for Goods (ex. food/energy) and Trade Services (i.e., labor).

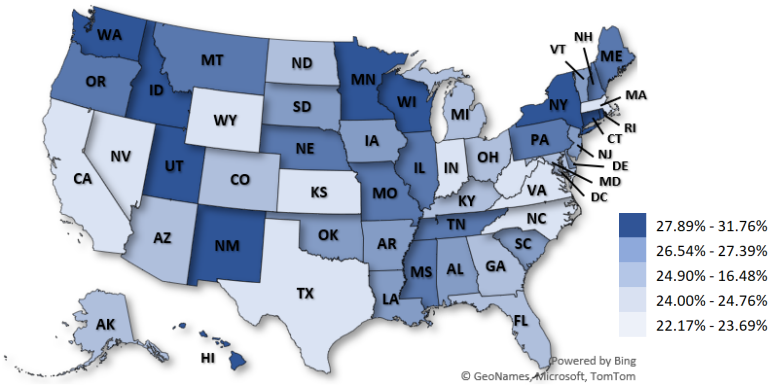
Data provided by Verisk highlights a three-year change in reconstruction costs by state, from September 2019 to September 2022. The data identifies several wildfire-exposed states among those experiencing the highest increases in cost to rebuild for each residential and commercial property, led by Idaho which saw the second highest increase for residential property and the highest increase for commercial property.

3-Year Change in Cost to Rebuild – RESIDENTIAL PROPERTY, by State

(September 2019-September 2022, Percentage)

Top 10 States
3-Year Change in Cost

HI	31.76%
ID	30.83%
CT	30.58%
RI	29.58%
WI	29.09%
UT	28.99%
NY	28.81%
MN	28.69%
NM	28.36%
WA	27.89%



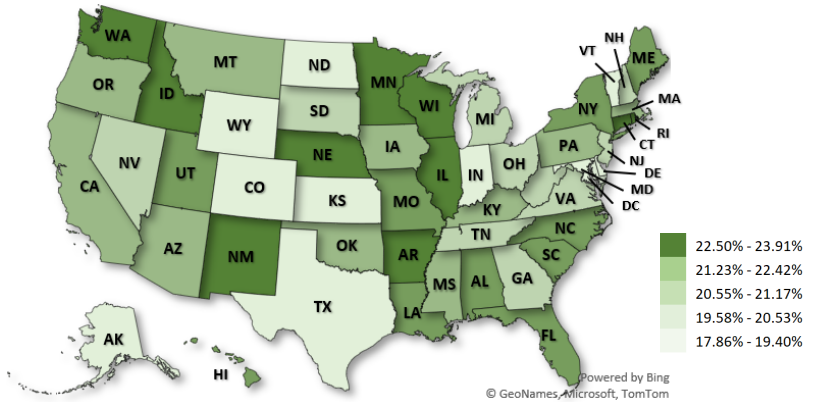
Source: Verisk.

3-Year Change in Cost to Rebuild – COMMERCIAL PROPERTY, by State

(September 2019-September 2022, Percentage)

Top 10 States
3-Year Change in Cost

ID	23.91%
MN	23.78%
NM	23.70%
CT	23.55%
WI	23.53%
NE	22.81%
WA	22.70%
IL	22.65%
RI	22.64%
AR	22.50%



Source: Verisk.

LAWS EXPANDING COVERAGE

Insurers are also adjusting to recent laws that have expanded coverage benefits and modified claims handling expectations, which have added further pressure.

For example, California, Oregon, and Colorado, have enacted in the last few years various legislative changes that extended timeframes for policyholders to collect full replacement cost and additional living expenses, which may amplify ultimate loss value due to inflation over time, and the ability to combine coverages when policy limits for coverage to rebuild or replace the primary dwelling are insufficient, which is not contemplated under the homeowners insurance policy. In allowing policyholders to combine coverage following catastrophic wildfires, insurers and reinsurers must remodel potential loss exposure. In addition, such mandates may also inadvertently introduce uncertainty in policy contract terms or reinsurance treaties for certain provisions related to insurance-to-value (ITV), which could result in potential disputes.

In California, insurers are also now required to provide coverage for additional living expenses during mandatory evacuations. As wildfires have become more frequent and larger in size, tens of thousands of residents may be under mandatory evacuation orders for extended periods throughout the state, at any point in the year given the year-round fire season, posing a substantial expansion of coverage for indirect losses.

Thus, if the same losses that occurred in record loss years, such as 2017 and 2018, happened today, the losses would result in substantially higher loss costs, not yet taking into consideration the recent spike in inflation. In addition, California enacted new regulatory authority to implement non-renewal moratoria in the immediate aftermath of a wildfire. Collectively, these and other recently enacted policies have introduced insurers to significant volatility and amplified potential loss costs and expenses due to wildfires.

As the effects from climate change and drought show no signs of easing, and severe inflation continuing to impact the cost and timeframes needed to reconstruct homes and businesses, policymakers must strike a better balance by also focusing on ways to reduce exposure and make communities more resilient. This includes focusing on issues such as stronger and better enforced building codes, improved land use planning, resilient infrastructure, retrofitting existing infrastructure, and fuel load reduction in areas at risk for wildfires. APCIA further explores such mitigation opportunities in our white paper, entitled Taming Wildfire in the Wild, Wild, West—The current state of mitigation in the wildland-urban interface.

Policymakers should also explore ways to incentivize individuals, businesses, and communities to take steps to reduce the property damage caused by natural disasters, with particular attention placed on the needs of communities and individuals most at risk. Insurers strongly support increased funding for resilience hardening, such as grants or low interest loans, in addition to other financial incentives, such as building permit fee rebates or various income, property or sales tax credits. Many insurers are similarly working towards the ability to provide financial incentives through premium credits that reflect wildfire mitigation efforts. Insurers recognize the opportunity and role insurance can have in helping to incentivize action to reduce risk, though insurers are working to address several hurdles before this can be achieved. APCIA further explores these challenges in our white paper, entitled Managing Wildfire Risk in the Wild, Wild, West—The growing challenges property insurers face in the wildland-urban interface.

WILDFIRE RISK IN THE WILD, WILD, WEST
A three-part series focused on identifying the challenges and opportunities affecting consumers and property insurance markets in wildfire-exposed states.

PART I:
INCREASING Wildfire Risk in the Wild, Wild, West
The evolving conditions resulting in growing exposure in the wildland-urban interface
Link: https://www.apci.org/attachment/static/7103

PART II:
MANAGING Wildfire Risk in the Wild, Wild, West
The growing challenges property insurers face in the wildland-urban interface
Link: https://www.apci.org/attachment/static/7104

PART III:
TAMING Wildfire Risk in the Wild, Wild, West
The current state of mitigation in the wildland-urban interface
Link: https://www.apci.org/attachment/static/6885

APCIA CONTACT:

KAREN COLLINS
Assistant Vice President, Personal Lines
847-553-3695
karen.collins@apci.org

American Property Casualty Insurance Association℠
INSURING AMERICA apci.org