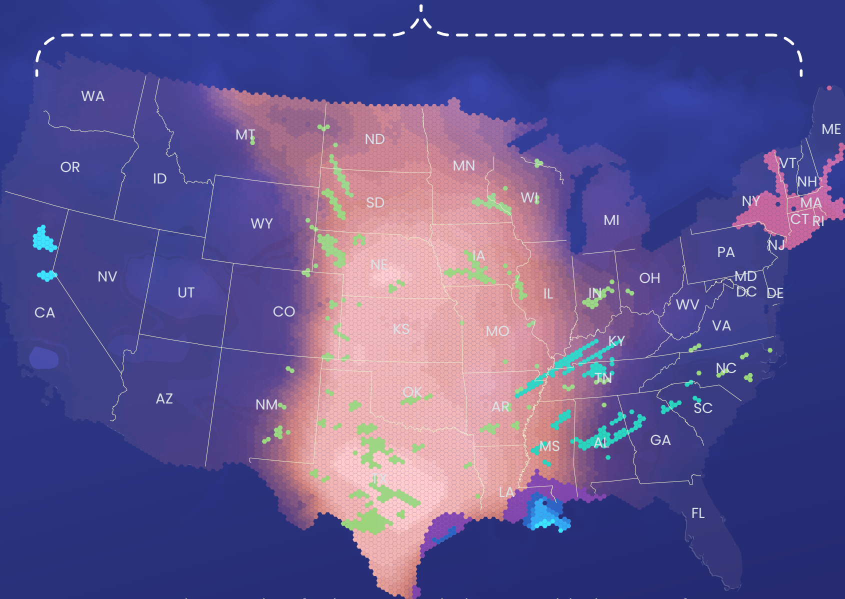
CoreLogic

2021
Climate Change
Catastrophe Report

$56.92B

In losses from all major events

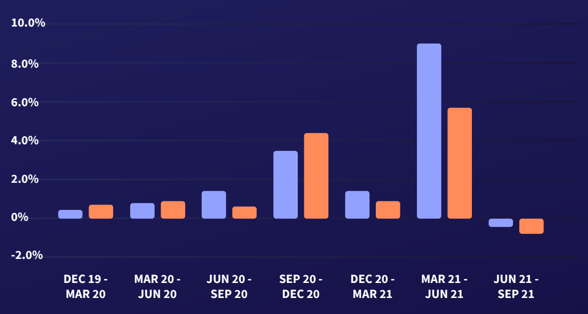


Natural catastrophes often leave communities with significant long-term impacts. A significant portion of the population may not wait for physical infrastructure to be rebuilt, instead choosing to relocate.

This can leave the area with less human capital available to sustain its local economy. In addition, job displacement and the destruction of real estate assets can leave many community members unable to pay their mortgages or afford reconstruction costs. This is especially true in low-income areas, where underinsurance rates are high, and savings rates are low. Recovery after a natural catastrophe can continue long after rebuilding is complete.

Reconstruction costs play a critical role in a community's recovery. Historically, costs for various construction materials and laborers have fluctuated, though this has especially been the case amid the COVID-19 pandemic. CoreLogic® Residential Component Technology (RCT) data indicates that costs significantly increased between March 2021 and June 2021. More recent data, however, indicates that costs leveled out between June 2021 and September 2021 as supply chains normalized after a year of disruption. This leaves costs meaningfully higher than they were two years ago, creating challenges for insurers in 2022.

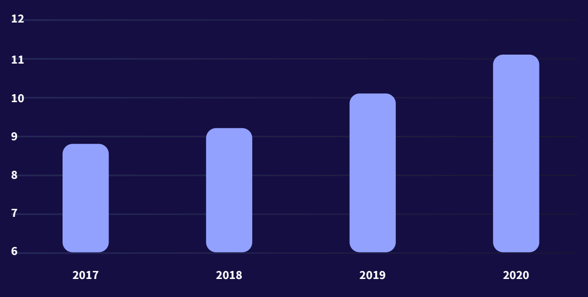
Change in Residential Reconstruction Cost



CoreLogic continues to monitor changing reconstruction costs and how they impact the recovery of communities after natural catastrophes.

Natural hazards, in addition to other factors, are elevating risks and costs for insurers and for homeowners, as indicated by the increase in total written premiums. For example, from 2017 to 2020, the total written premium in the state of California for dwelling fire and homeowners insurance combined has increased by more than 27%, from $8.7B to $11.1B.

California - Total Written Premium (Fire + Homeowners, Billions of Dollars)



Source: California Department of Insurance

Understanding Impact

Not all risk is the same, and every natural hazard event has its own unique consequences — from total destruction, to personal property loss, to structural damage. For each of the four perils outlined in this report, the impact on homes will vary in degree, reinforcing the importance for insurers to regularly assess their portfolios using appropriate risk models to simulate the possible degrees of peril severity.

By understanding various scenarios, insurers may be able to better protect their policyholders, rebuild faster and help establish community resilience.

Wildfires

Accounts for damage caused by fire, smoke, ash, odor and burn.

Hurricane

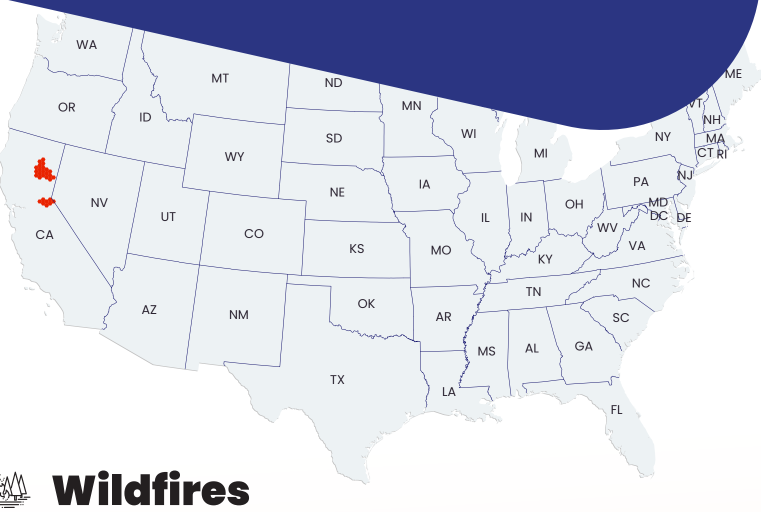
Accounts for damage caused by wind, storm surge and inland flooding.

Severe Weather

Accounts for damage caused by tornado, hail and straight-line winds (derechos), including debris.

Winter Storm

Accounts for storm damage caused by water, burst pipes, poor insulation and storm effects upon structures.



Wildfires

$1.46B in Property Damage

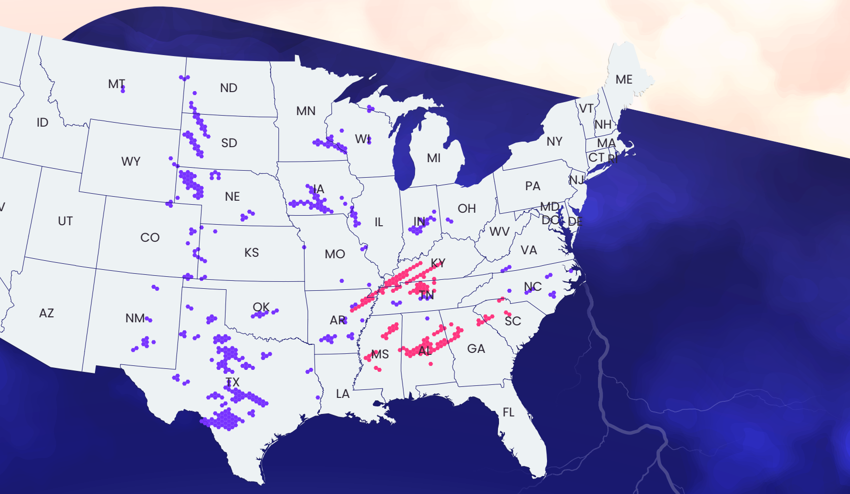
Between long-duration dry conditions and extreme heat, the number of wildfires each year is increasing — and 2021 was no exception. The Dixie Fire became the second largest wildfire in California history, scorching nearly one million acres and over 1,200 structures in its path. Surrounding homes were impacted and continue to recover from severe smoke and ash damage.

Homes Impacted

4,101

Reconstruction Cost Value

$0.73 Billion



Severe Weather

$7.46B in Property Damage

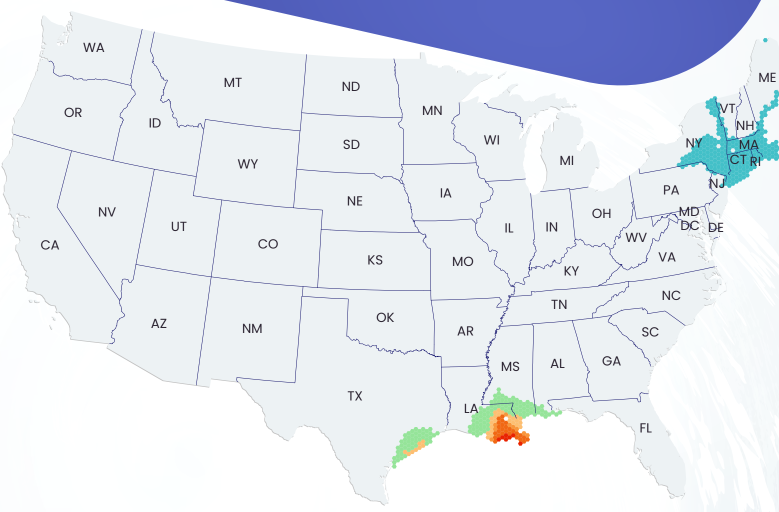
Every year, hundreds of tornadoes, hailstorms and straight-line wind events occur across the U.S. While late in the year for severe storm losses, the Midwest tornado outbreak on December 10 and 11, 2021 was the deadliest December outbreak on record.

Reconstruction Cost Value

$123.7 Billion

Homes Impacted

563,627



Hurricanes

$33B in Property Damage

With climate change affecting the ocean's temperatures, tropical cyclone activity is expected to become more frequent and destructive. When Hurricane Ida made landfall on the 16th anniversary of Hurricane Katrina, many Louisiana residents anticipated the worst. In reality, Ida proved that at least two things had changed since Katrina — the levees held and the flood insurance gap had narrowed. Once the storm moved into the Northeastern U.S., the floods were notable in severity for a Gulf Coast hurricane.

Homes Impacted

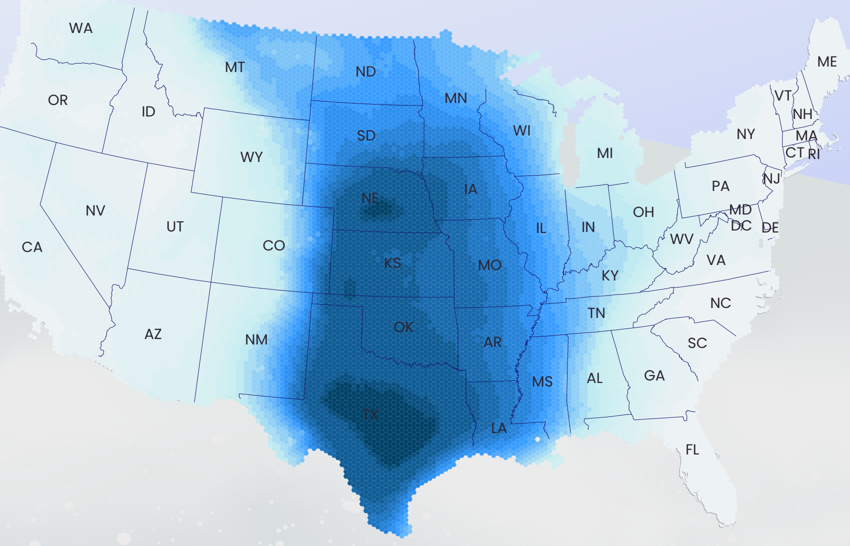
1,233,860

Reconstruction Cost Value

$395.39 Billion

A closer look at mortgage delinquencies

A natural hazard can not only devastate a community but also increase its mortgage delinquency rate to historic levels. In August, the mortgage delinquency rate in the Houma metro area of Louisiana stood at 7.4%. After Hurricane Ida made landfall on August 29, delinquencies nearly doubled to a rate of 13.3% in September, and up to 13.5% in October.



Winter Storm

$15B in Property Damage

Wall and ceiling insulation, higher window standards and the minimization of pipe exposure through insulation and reduction of piping in exterior walls, are all factors for producing more resilient homes. To their detriment, not all homes in the affected region of the 2021 Central U.S. freeze met these guidelines.

Reconstruction Cost Value	Homes Impacted
$2.27 Trillion	12,764,941

Modern insurance and mortgage solutions can have significant value when it comes to addressing the increase in climate change-induced hazard events and their impact on the real estate economy. Nearly every property in the U.S. has exposure to hazard risk, and the effects of a catastrophic event can result in an unstable economy with high levels of unemployment and mortgage delinquency.

Resilience can be enhanced with effort on the part of multiple stakeholders, including:

Local, state and federal governments that enact policies that are informed by the latest research on natural catastrophes and their nuanced impacts on a local environment.

Insurers that take advantage of the breadth of available data and analytics to improve underwriting accuracy, claims management efficiency and homeowner education.

Mortgage servicers that implement more sophisticated risk assessment tools and implement borrower education programs to encourage proactive hazard mitigation.

And homeowners who understand how all of the above work together to protect their financial wellbeing.

Methodology

To quantify the value of property exposure of single-family and multifamily structures, CoreLogic uses its reconstruction cost value (RCV) methodology, which estimates the cost to rebuild the home in the event of a total loss and is not to be confused with property market values or new construction cost estimation.

Reconstruction cost estimates more accurately reflect the actual cost of damage to, or destruction of, properties that would occur from each hazard peril, since they include the cost of materials, equipment and labor needed to rebuild. The reconstruction cost values in this report are based on 100% percent (or “total”) destruction of the residential property and do not include the property’s internal contents. The RCV is structure only; damage from an event may cause damage to furniture and interior contents producing a loss potential more than 100% of the RCV. The results illustrate three figures: the total number of residential properties at risk (“homes impacted”); the estimated damage in dollars that occurred to each property and its internal contents, which is not necessarily a total destruction of the structure (“property damage”); and the total current reconstruction cost value of those properties assuming total destruction, excluding internal contents (“reconstruction cost value”).

Events Included Per Peril

All events occurred in 2021.

Wildfire: Wildfire event estimates include the Caldor Fire from August 14 to October 21 and the Dixie Fire from July 13 to October 25.

Severe Weather (inclusive of tornadoes, hail and straight-line wind): Severe weather event estimates include the southeast tornadoes on March 24 and 25, eastern severe weather on March 27 and 28, Texas hail storms from April 12 to 15, Texas and Oklahoma severe weather on April 27 and 28, southern tornadoes from May 2 to 4, Ohio Valley hail storms on June 17 and 18, central severe weather from June 24 to 26, central severe weather from July 8 to 11, north central severe weather from August 10 to 13, and Kentucky tornado on December 10.

Hurricane: Hurricane event estimate based on Hurricane Ida’s landfall wind, surge and flood from August 29 to September 1 and flooding in the Northeast on September 1 and 2.

Winter Storm: Winter storm event estimate based on the Central U.S. freeze from February 10 to February 19.

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