[1 big thing: Insurance deploying AI against wildfires](#)

Axios

To keep up with California's unrelenting wildfire threat, some insurers are now turning to AI to predict fire risk with unprecedented, structure-by-structure detail.

Why it matters: This will allow them to cover homes in areas that they would otherwise have passed over — but potentially at the cost of hiking rates for those who can least afford it.

The big picture: Spooked by a recent surge in destructive fires that shows no sign of cooling off, insurers have backed away from underwriting in the most flammable parts of the state. They say the risk is sky-high, and there's too much uncertainty about where fire will strike next and what it will consume.

Premiums are ballooning in fire-prone zones, and insurers are dropping thousands of homes in high-risk areas, according to California's Department of Insurance CDI).

Traditionally, insurers rely on fire maps and proprietary predictions from catastrophe modeling companies. These bring in detailed information about a property's location — but often overlook characteristics of the property itself.

Now, some insurers are getting creative. They are trying to pack in as much data as possible: information from building permits, records and codes — and, increasingly, satellite photos and aerial imagery from drones and aircraft.

Automatically analyzing super-detailed, top-down images helps insurers understand crucial, property-specific risk factors.

Some important ones: how close a house is to vegetation, how flammable that brush is and what the house's roof is made of.

Driving the news: MetLife announced this week that it's working with a Bay Area startup, Zesty.ai, to use this type of data for property-level scoring.

Zesty.ai predicts risk based on building information, aerial imagery, patterns gleaned from examining decades of wildfires and data from fire scientists.

MetLife has been extra conservative in fire areas, VP Carol Anderson tells Axios, in part because it has

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relied on traditional maps to assess risk.

When MetLife implements the new scoring system early next year, it hopes to bring in new customers and retain old ones, Anderson says.

Several startups have popped up to sell these new models to insurers, and some of the old guard are developing them, too.

About half a dozen companies have already met with CDI about their new models, according to Ken Allen, deputy commissioner for rate regulation.

And insurers, at an inflection point in how they approach fire risk, are increasingly interested, says Janet Ruiz of the Insurance Information Institute, an industry association.

But, but, but: Experts worry that property-level scoring can result in higher premiums for people living in high-risk areas, who are often on low or fixed incomes.

Low-income homeowners may be unable to afford property updates that would drive risk factors down, like replacing roofing or clearing trees. And if rates go up, their property values could go down in response.

New, more granular models could drive a bigger wedge between premiums, says Allen of the Department of Insurance, "so high risk pay more and lower risk pay less."

"We are seeing insurance companies over-rely on technology, and the consumers are paying the price," says Emily Rogan of United Policyholders, a nonprofit that advocates for insurance customers.

What they're saying: "MetLife follows standard actuarial principles for ratemaking to ensure our rates are not excessive, inadequate or unfairly discriminatory," a spokesperson told Axios.

Zesty.ai founder Attila Toth argues that it ultimately falls on regulators, not his company, to make sure that its risk models don't discriminate. But in a report last year, CDI said it "does not have the necessary authority to regulate how insurers underwrite residential property insurance."

After this story was published, Toth shared the summary of an outside auditor's report that analyzed the Zesty.ai fire risk model and concluded that, if applied properly, it would not "result in rates that are unfairly discriminatory."

The bottom line: "Moving to risk-based rates is overall a positive thing to do, but it could have a negative effect on people currently in these high-risk areas," says Lloyd Dixon, a RAND researcher who last year published a detailed study of wildfire's impact on insurance in California.