The Cost of Protecting Homes from Wildfires in Oregon

Full research paper at http://headwaterseconomics.org/wildfire

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This research focused on 33 wildfires fought by the USFS and BLM during 2006-2010.
Of the 33 wildfires studied, the average cost to protect a home within 6 miles of the fire was $56,614, but ranged significantly, in some fires costing more than $200,000 per home.
The estimated firefighting cost related to housing for the study fires ranged from none to 42%, and averaged 17%.
Based on data for 19 Oregon counties, home construction in the WUI was most rapid from 1977-1980. The next highest rate occurred in 2006, just prior to the recession.
An increase in temperature of $1^\circ$ F is associated with an increase of 420 wildfires.
Building new homes in otherwise undeveloped areas has the greatest potential to increase firefighting costs. An avg. increase in firefighting costs of $31,545 is expected if two homes instead of one were within 6 mi. of a wildfire. By comparison, an increase of only $319 is expected if 100 homes instead of 99 were within 6 mi. of the wildfire.
Policy Implications:

As firefighting costs rise, future policies will need to focus on covering the additional costs related to new housing.

If the costs were borne, in part, by those who build at-risk homes, or by local governments who permit them, rather than by the federal and state taxpayer, development rates in high risk areas may slow.
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