

GEOG640 Moderation Session 2, Wednesday 27 March 2019

Takeaways:

- 1) Individuals share the burden of responsibility in fire-hardening their neighborhoods (clearing combustible materials, increasing defensible space, fire-retardant roofing); the risk of a single house consumed in flame drastically increases risk to all surrounding homes in a neighborhood.
- 2) Current wildfire policy is not enacted at a fine-enough resolution to allow specific neighborhood to contextualize fire preparedness. Perhaps because of this conceptual distance, homeowners in a neighborhood do not always act to mitigate risk, increasing the vulnerability of the community as a whole.
- 3) **Windshield surveys** (in the form of **spatial video/mobile mapping**) are quick-and-cheap ways to identify if individual parcels are in compliance with fire code, so long as the properties are visible from the roadside. They need not be reserved for post-disaster recovery evaluations.
- 4) The purpose of this paper is to adapt windshield surveys and spatial video to quickly classify parcels in neighborhoods according to Los Angeles County Fire Department standards, as to tailor ways to identify fire risk, barriers to evacuation, and pressures to apply to homeowners to fire-harden their properties on a more localized basis. Such standards cannot be vegetation- or structural material-dependent, and excludes risks that are not visible from the road, to make the procedure for assessment more generalizable. The authors intend to steer policy changes with this study.
- 5) The investigated sites in Altadena can be subdivided into two neighborhoods – one with older, riskier properties, and another newer development to the east. There are three clusters of very high-risk parcels, due in part to their proximity to a canyon filled with dried vegetation that has not burned in decades. A cluster of homes on the older, western side of the canyon are clustered around an evacuation chokepoint.
- 6) The investigated neighborhoods northeast of Bradbury are mostly fire-safe, except for an area of sloped development sitting directly on the WUI, and the most at-risk properties are dispersed – suggesting individual homeowners are failing to comply rather than there being a systematic risk at hand.
- 7) Only one of the three Santa Clarita sites was displayed due to brevity considerations. The third site's extremely high risk was dominated by wide expanses of open space (either undeveloped land or for grazing). Many homes have not handled proper mitigation in handling vegetation overgrowth; fuel ladders abound.
- 8) These efforts require further validation by other subject matter experts in other locations. Other axes, such as aerial photography and information such as property age, could supplement spatial video analyses as well. (However, no follow-up studies have been cited, nor has this paper been mentioned in other peer-reviewed documents in the eight years that have passed since it was published.)