

Survey Data Report: Town of Mountain Village, 2014
Prepared by WRWC and WiRē (Wildfire Research group), Jan 2016

Residents in the wildland-urban interface (WUI) can play an important role in reducing wildfires' catastrophic effects by performing wildfire risk mitigation on their property. "Wildfire risk mitigation" refers to activities that reduce the chances and/or potential consequences of a wildfire, including damage to or destruction of a home. These activities need to be performed before a wildfire occurs. Decisions about wildfire risk mitigation are complex and can be influenced by many factors, including residents' attitudes, experiences, knowledge, and concern about wildfire. They also can be influenced by people's access to information and other resources.

This report offers insight into the wildfire risk mitigation activities and related characteristics for people with homes in the Town of Mountain Village (TOMV), in the Telluride Fire Protection District (FPD) of San Miguel County, Colorado. This information can facilitate long-term monitoring, management, and educational practices concerning the mitigation of wildfire risk in WUI communities. The information comes from a social survey and property assessments administered by the West Region Wildfire Council (WRWC) as part of its mission to encourage wildfire risk mitigation on private property. This report provides information specific to the TOMV. We emphasize that results from similar surveys and assessments in other communities might differ, even if those communities are close to the TOMV.

How were the wildfire risk and social data collected?

The Bureau of Land Management (BLM) Southwest District Fire Management program and WRWC work to encourage residents of western Colorado to mitigate wildfire risk on their properties. As part of this effort, WRWC conducts wildfire risk assessments and household surveys for all properties with a residential structure of 800 square feet or larger in targeted communities. More information on the data collection will be described in a forthcoming report for the Telluride FPD, and procedures are very similar to those used in nearby counties (see Forest Service Research Notes RMRS-RN-66 and -67).

Wildfire Specialist Assessment

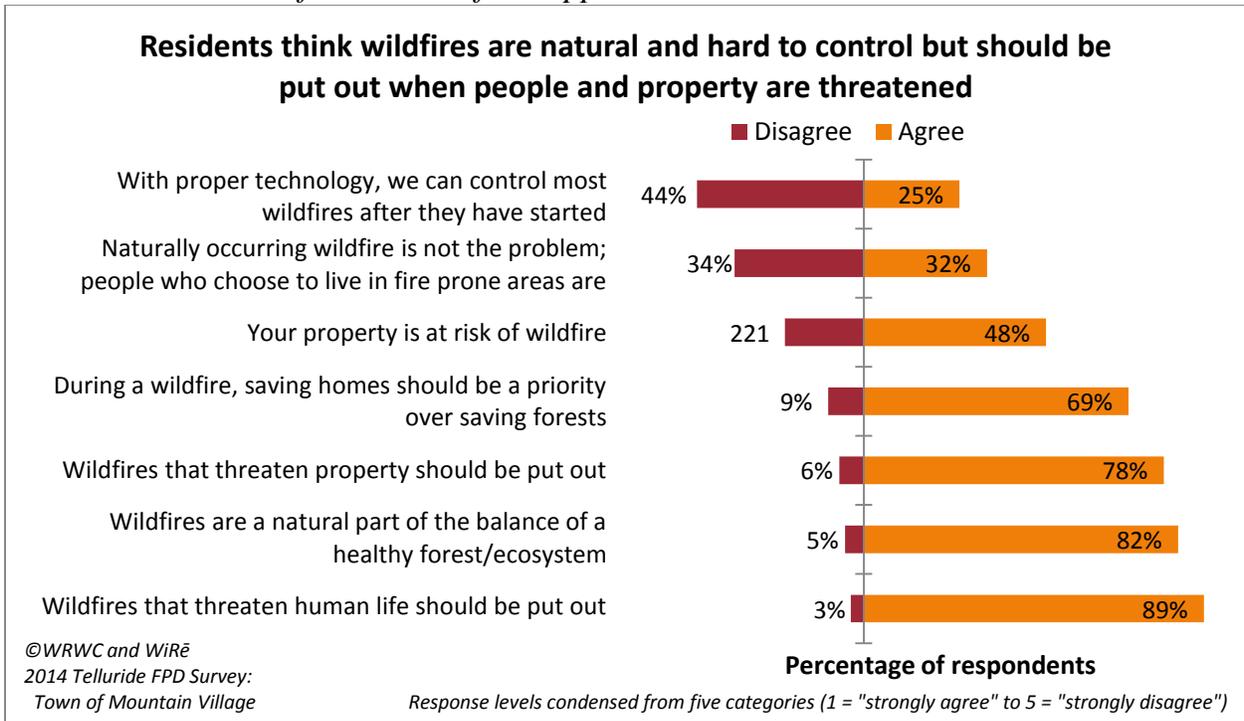
WRWC conducted the parcel-level, rapid wildfire risk assessment in summer 2014. This risk assessment is based on the Home Ignition Zone concept (Cohen 2000) and has been developed collaboratively by the BLM and WRWC over a series of implementations. A wildfire specialist assessed parcels for 11 characteristics that affect wildfire risk. These characteristics relate to the structure's wildfire-survivability as well as response considerations, such as firefighter access and evacuation potential. Each parcel was assigned an overall wildfire risk rating based on these 11 characteristics. This rating reflects a property's risk relative to the overall level of risk within its community rather than an absolute risk rating.

The wildfire specialist assessed properties primarily from public roadways and on-site, when permission was granted. When permission to enter was not granted, roadside assessment was supplemented with information from the San Miguel County Assessor's website and publicly accessible aerial and satellite imagery. When a characteristic was not observable by any method, the wildfire specialist assigned the highest risk category for the characteristic. This default could bias the professional assessments toward higher levels of risk in relevant categories. All assessments reflect the state of the property at the time of assessment. Wildfire risk assessments could be updated if a homeowner completes mitigation actions such as maintenance (e.g., grass mowing and needle clearing), moving combustible materials (e.g., porch furniture and propane grills), or retrofitting the home (e.g., installing fire-resistant roofing or decking).

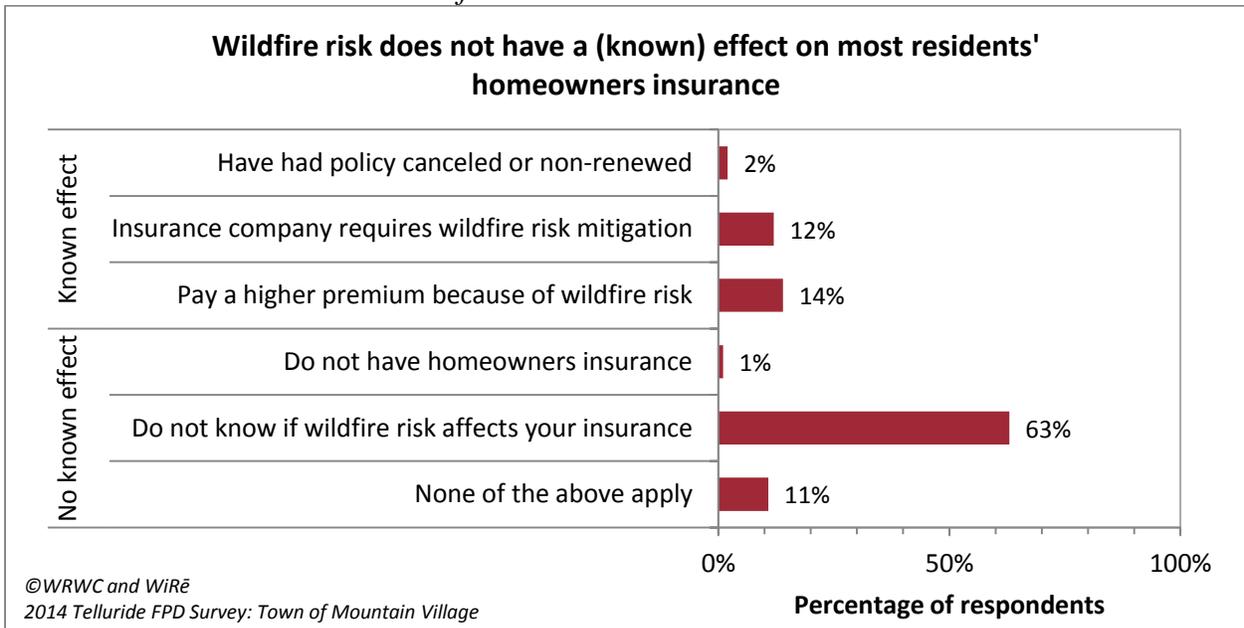
Resident Survey

WRWC also conducted a survey of residents of all properties in the Telluride FPD, as identified by County Assessor records. The survey contained seven sections designed to collect a variety of social information. It also asked residents to assess their property based on the same 11 wildfire risk characteristics as those assessed by the wildfire specialist.

Attitudes toward wildfire and wildfire suppression



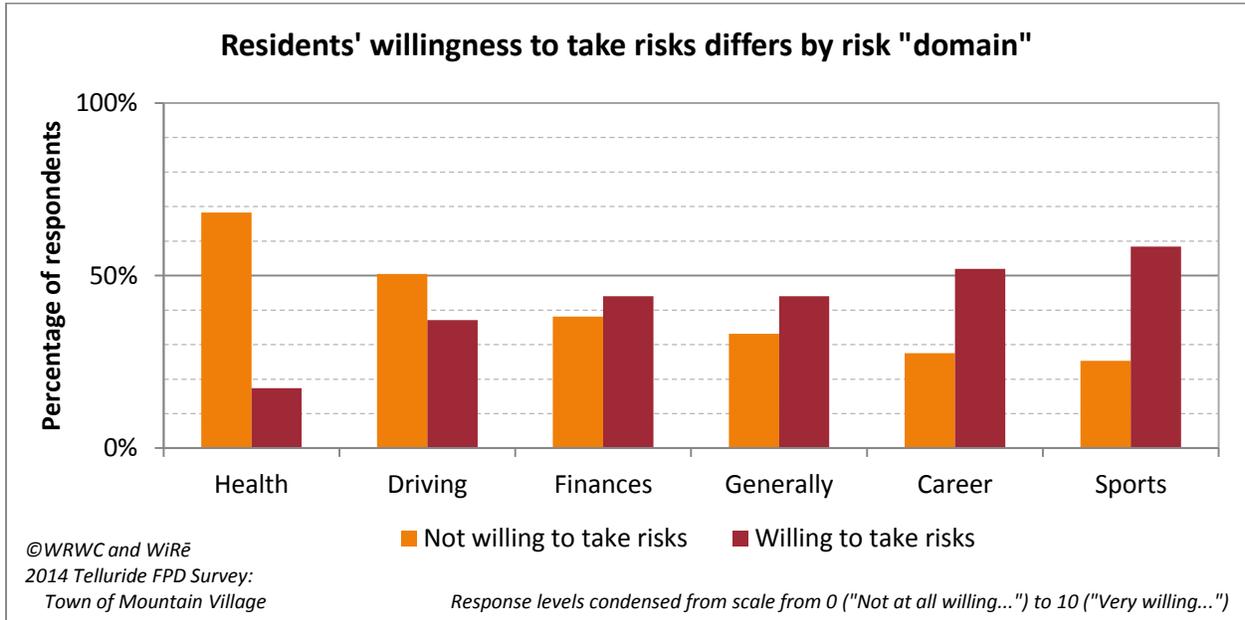
Homeowners insurance and wildfire



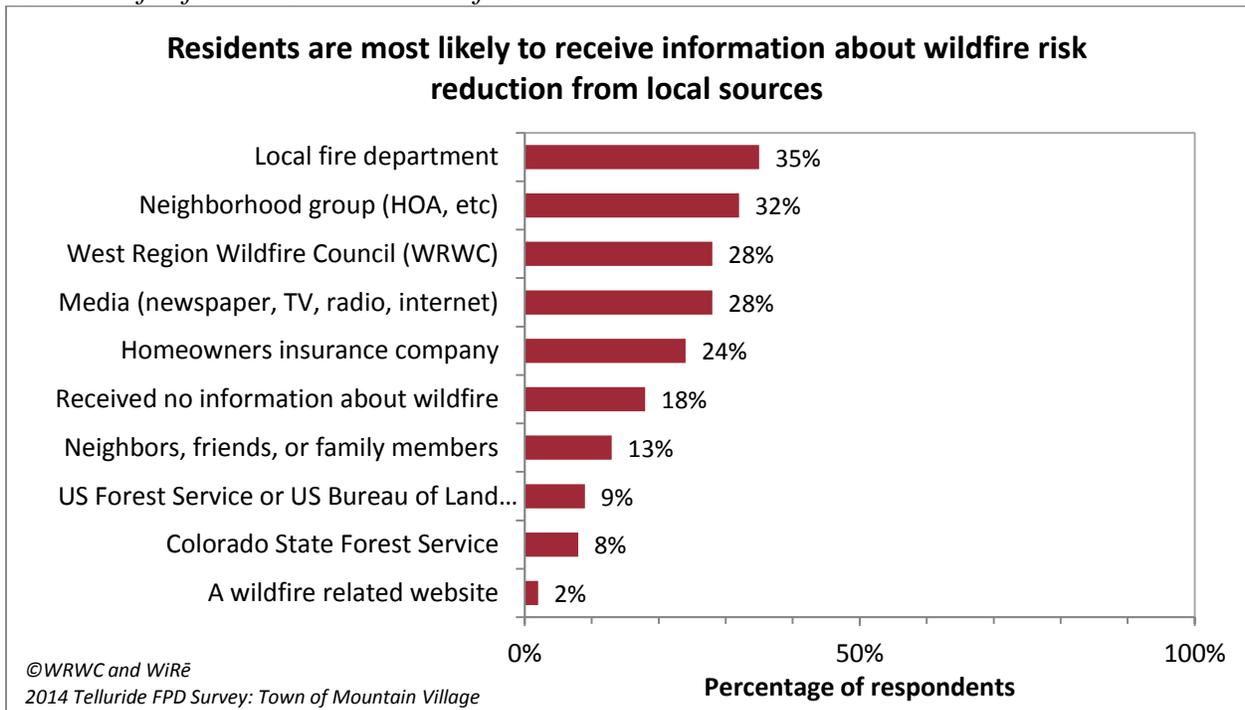
How do residents characterize risk?

It is often suggested that risk perceptions play an important role in residents' decisions about whether and how to mitigate wildfire risk, but there are many ways to think about risk. Results covered in this section pertain to different aspects of how residents understand and think about risk.

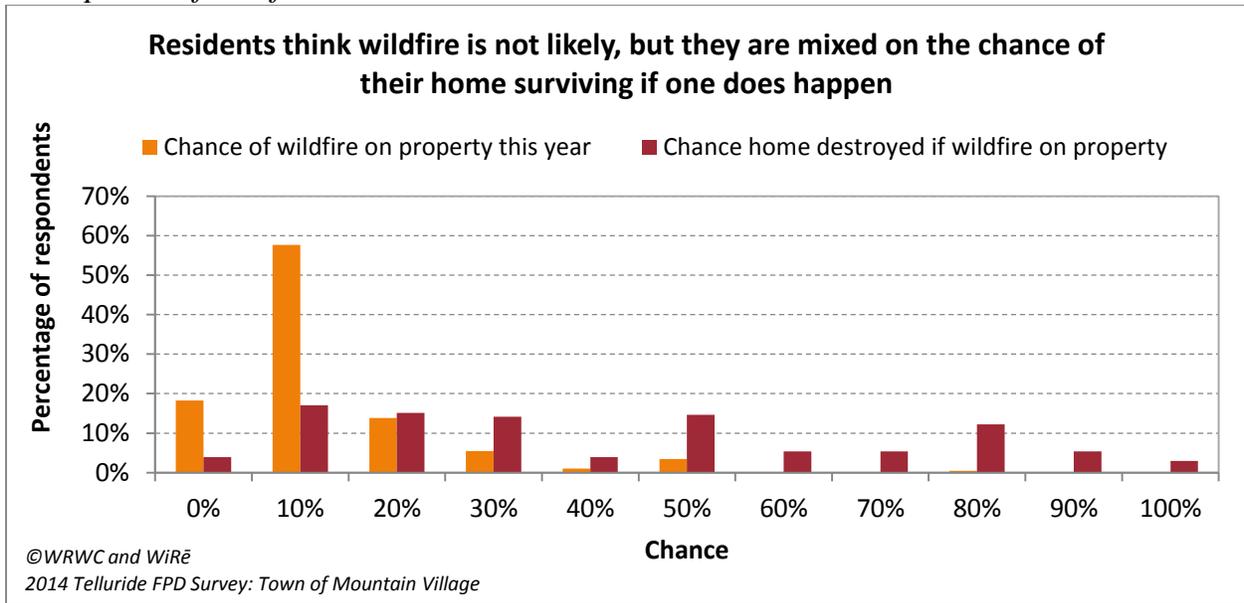
Attitudes toward risks



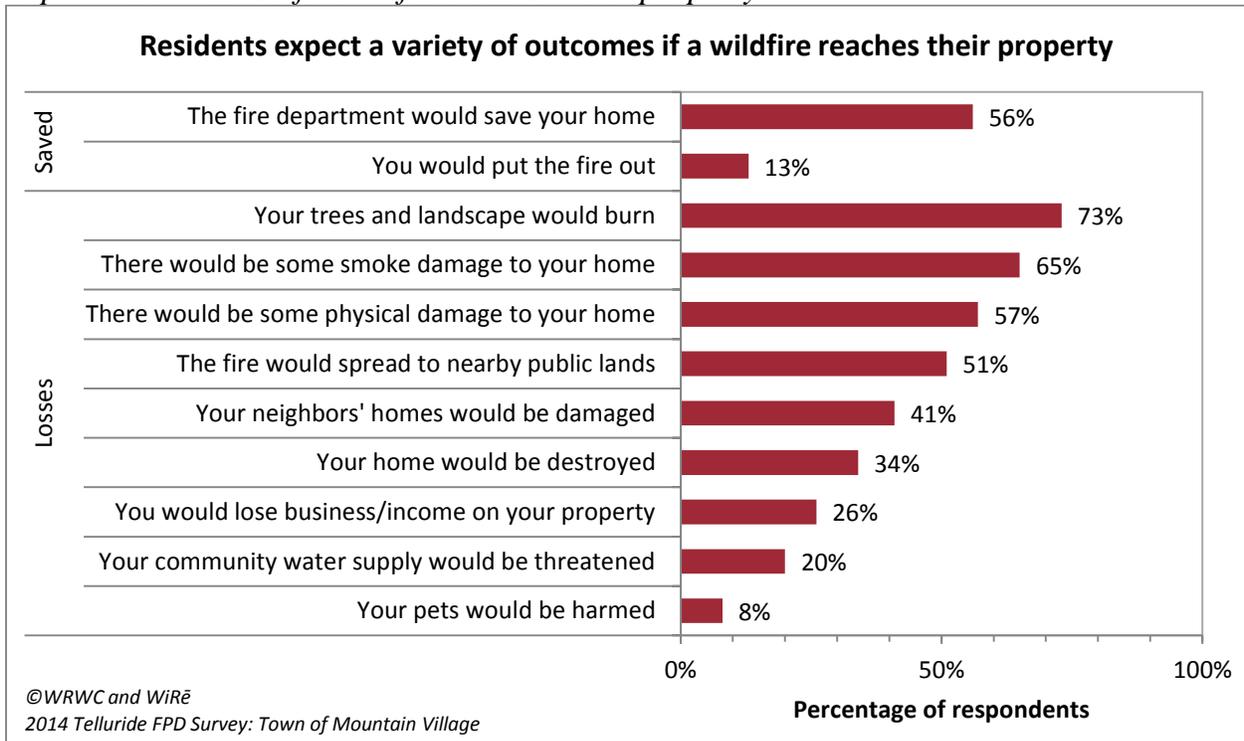
Sources of information about wildfire risks



Perceptions of wildfire risks



Expected outcomes of a wildfire on resident's property

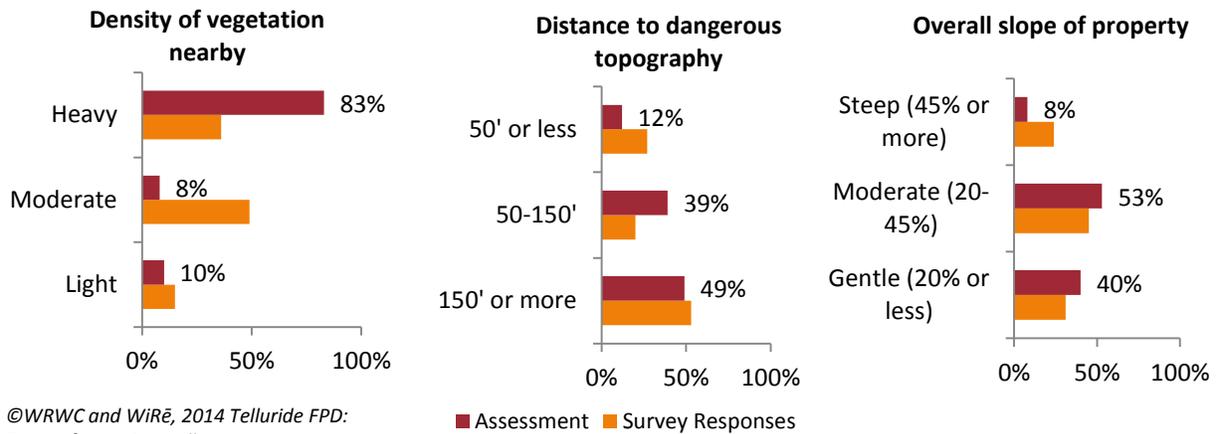


Professional assessment versus survey responses for property hazards

The charts in this section compare the results of the professional assessments against survey responses for the set of 11 property characteristics, as well as for the overall risk rating based on these characteristics. Properties without survey responses are not included here.

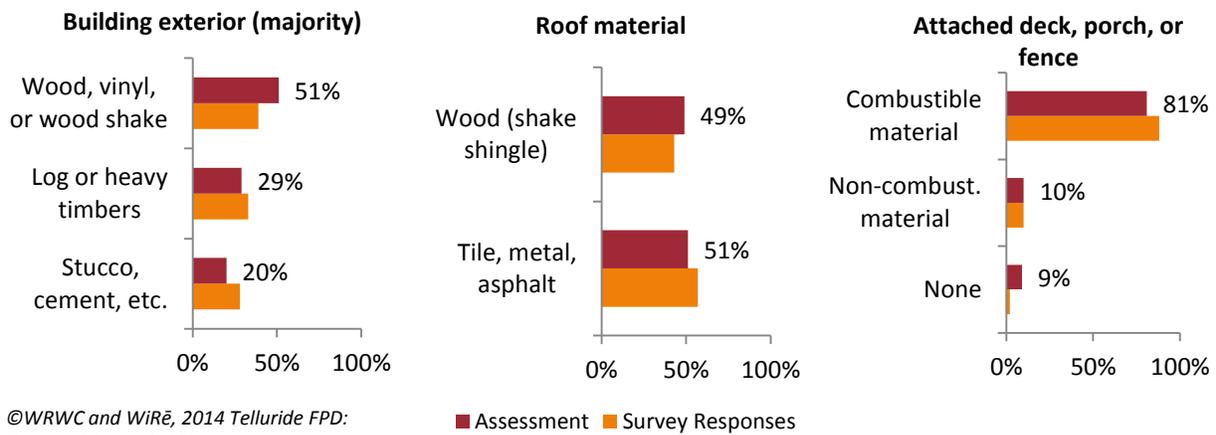
Background Risk Factors

The highest assessed background risk factor is the density of the vegetative fuels in the neighborhood, but many residents see the fuel as quite a bit less dense than the professional does. Residents are more likely to describe their property as having a steep slope than the professional, but both the professional and residents see a variety of slopes and distances to dangerous topography (e.g., ridges, canyons).



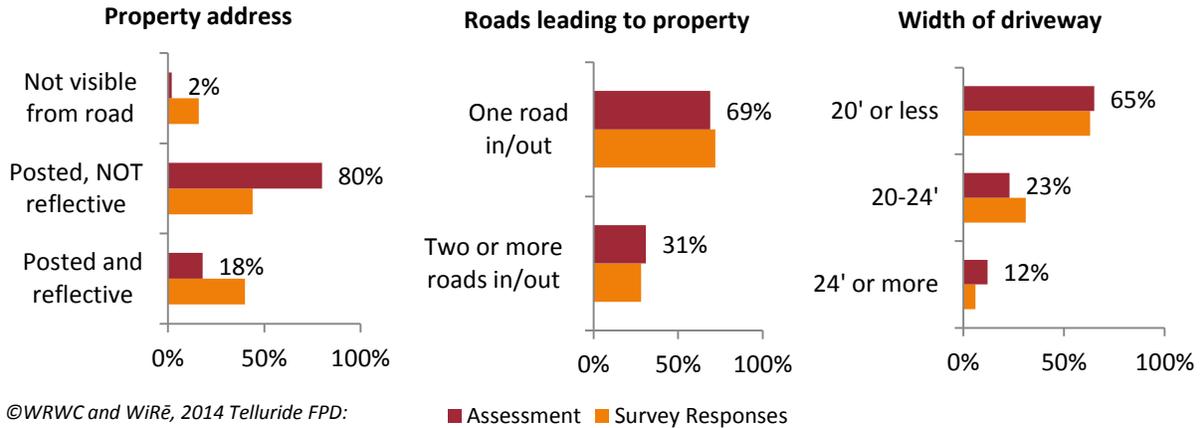
Structural Risk Factors

Many properties face high risk through structural risk factors. Combustible building materials are very common in this area, whether for exterior siding, porches and decks, attached fences, or even roofs. Residents and the professional rate these factors similarly in most cases, except that the professional sees combustible siding as more common than residents do.



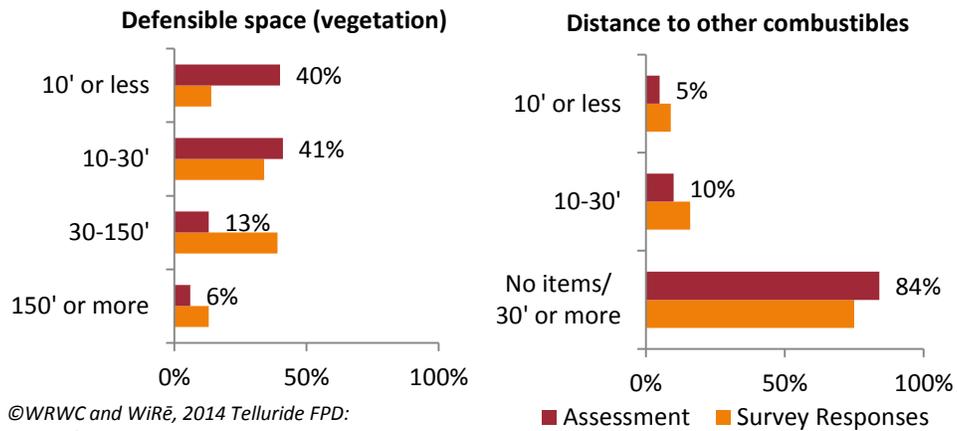
Access Risk Factors

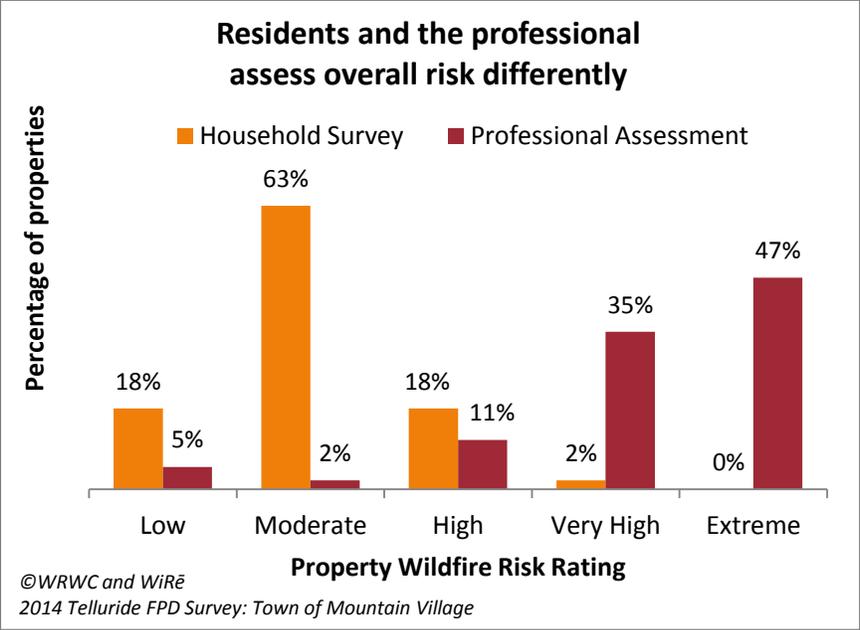
Many properties face high risk from access risk factors, including most having only one access road and many driveways being narrower than 20 feet wide. Respondents generally rate these factors similarly to how the professional did, with the exception of the address, which respondents were more likely than the professional to report as either not visible from the road or posted and reflective.



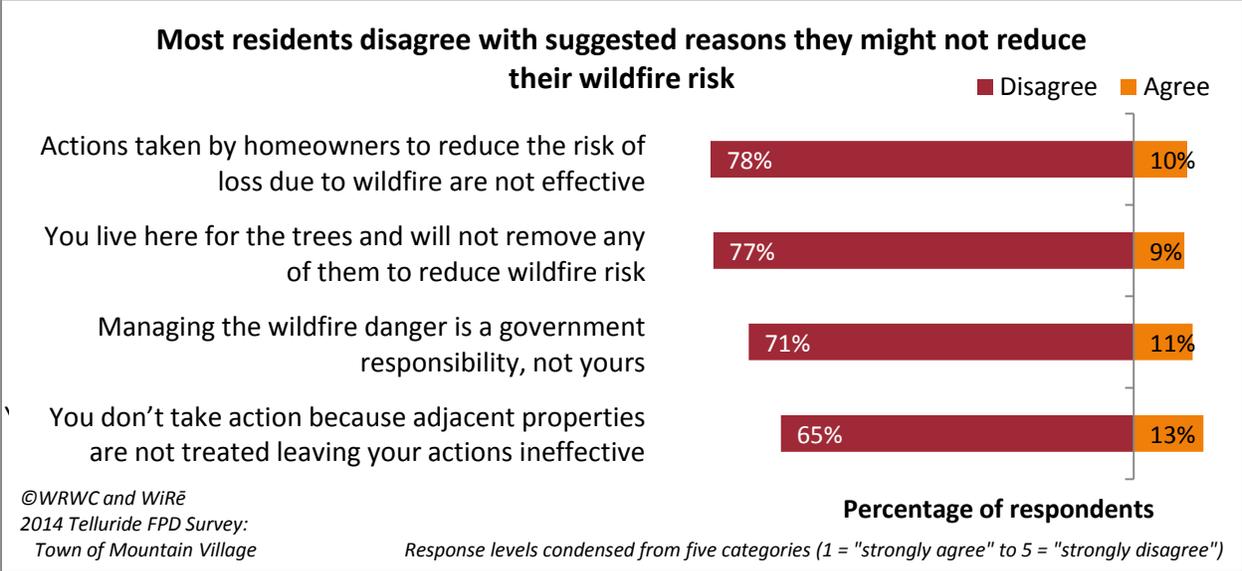
Defensible Space Risk Factors

Vegetation and other combustibles near the home affect defensible space. The professional notes that a large majority of properties have less than 30 feet of cleared vegetation, with 40% of properties having only 10 feet or less. About 15% properties have other combustible items, including propane tanks, firewood, trash, or flashy vegetation, within 30 feet of the house. Many residents see these factors differently from the professional, though. Residents tend to rate themselves as having more defensible space. A significant portion of residents also note other combustibles items closer to the home, compared to the professional.



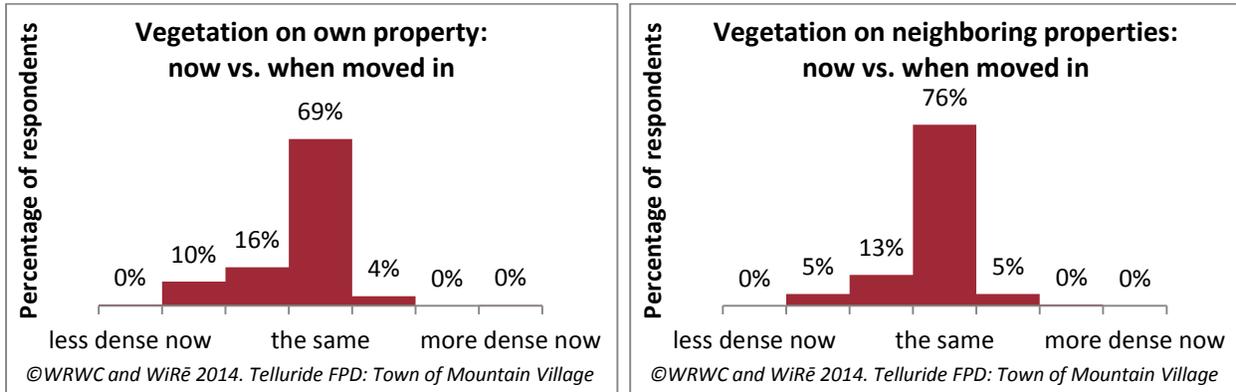


What do residents think about wildfire risk mitigation?

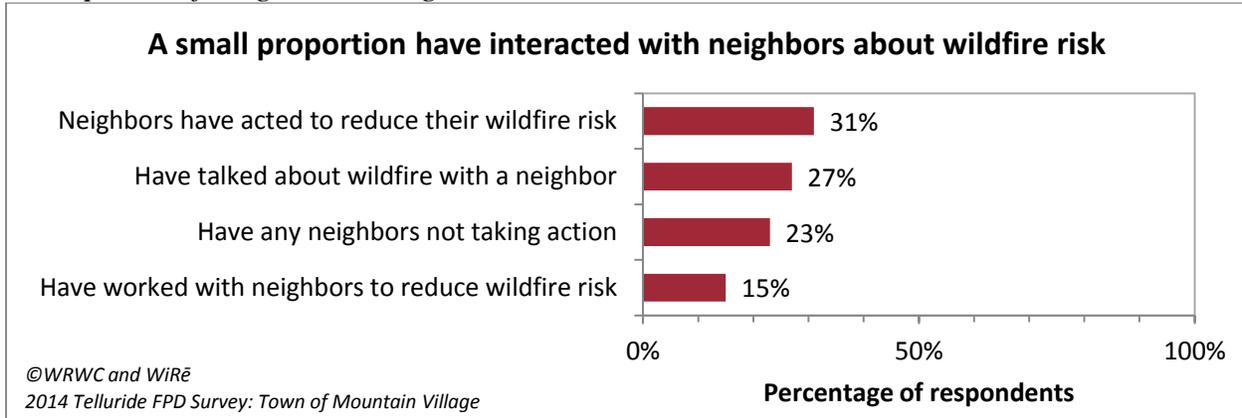


Perceived vegetation density

Vegetation density can be thought of as an outcome of wildfire risk mitigation, which includes clearing vegetation around structures and thinning trees and brush on the property more generally.

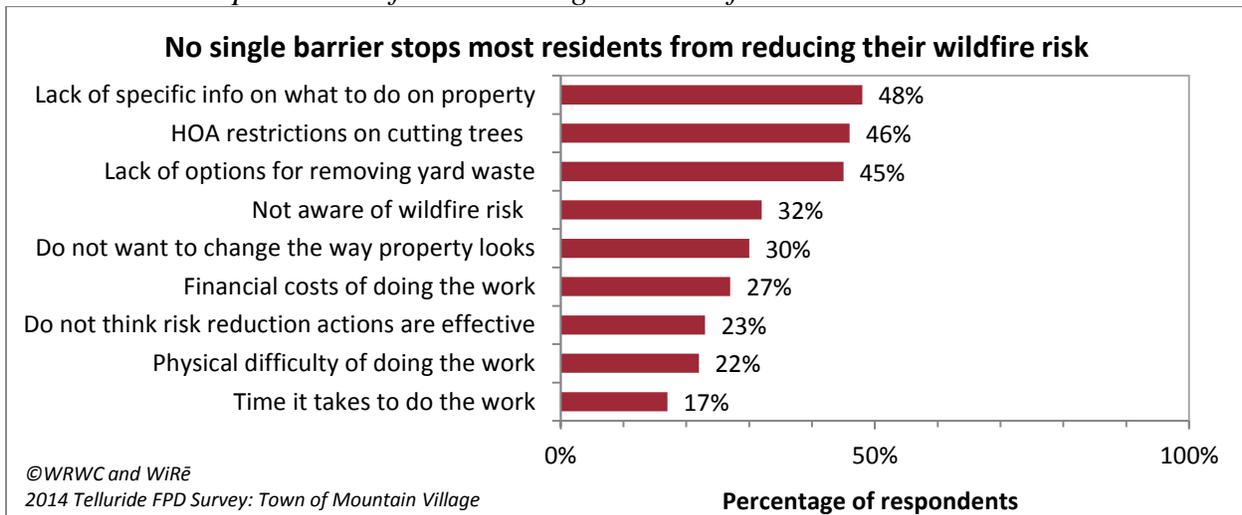


Perceptions of neighbors' mitigation actions



What affects whether residents reduce wildfire risk on their property?

Barriers that stop residents from reducing their wildfire risk



Incentives that would encourage residents to reduce their wildfire risk

