Prescott Area Wildland Urban Interface Commission

Homeowner Wildfire Mitigation in the Wildland Urban Interface

Prescott, Arizona

Final Report

2016

Eric Steffey, Ph.D., Project Director
Megha Budruk, Ph.D., Co-Project Director
Christine Vogt, Ph.D., Co-Project Director
Randy Virden, Ph.D., Co-Project Director
Kelli Larson, Ph.D., Co-Project Director
Virginia Miller, Research Assistant

Support from:
National Fire Protection Association
&
United Service Automobile Association

School of Community Resources & Development
ARIZONA STATE UNIVERSITY

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Prepared for the Prescott Area Wildland Urban Interface Commission as part of an agreement and collaboration with National Fire Protection Association, United Service Automobile Association, and Arizona State University

Prepared by:

Eric Steffey, Ph.D.
Project Director

Megha Budruk, Ph.D.
Christine Vogt, Ph.D.
Randy Virden, Ph.D.
Kelli Larson, Ph.D.
Co-Project Director

Virginia Miller,
Research Assistant

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School of Community Resources and Development
College of Public Programs
Arizona State University
411 N. Central Ave., Ste. 550
Phoenix, AZ 85004-0690
(602) 496-0550
Eric.Steffey@asu.edu

*Cover photo taken by Eric Steffey

Executive Summary

This report presents results from data collected on homeowner wildfire mitigation behaviors in the Prescott, Arizona area conducted during late summer and fall of 2016. The research was cooperatively developed and conducted between the Prescott Area Wildland Urban Interface Commission, National Fire Protection Association, United Service Automobile Association, and the School of Community Resources and Development at Arizona State University. The research study empirically tested a theoretical framework based on the theory of planned behavior to explore wildfire mitigation behaviors and examine the role formal homeowner associations (HOA) have on these behaviors.

Methods of this study included a questionnaire mailed to homeowners with property located in the wildland-urban interface in one of two cases; 1) property was located in a neighborhood with an HOA or 2) property was located in a neighborhood without a formal homeowner association (non-HOA). In each case the population was randomly sampled to provide an equal number of participants for each group. In addition to the paper questionnaire, respondents were offered an on-line option to provide their response. Questions were developed from previous literature and validated through interviews of local neighborhood leaders and a pilot study. Data were analyzed to provide basic descriptive results. An advanced structural modeling analysis was utilized to assess the theoretical framework exploring behaviors.

Results showed homeowners in HOAs as have higher level of wildfire knowledge, perceived wildfire risk, and sense of personal responsibility in protecting one's self from wildfire's impacts. Attitudes toward wildfire mitigation behaviors play an important role in predicting intentions to perform these behaviors among HOA residents. Additionally, perceived constraints directly influenced actual mitigation actions. For non-HOA residents, social norms of the neighborhood influenced homeowner's intentions to mitigate their wildfire risk.

The study showed that HOAs play in important role in promoting homeowner wildfire mitigation behaviors when compared to non-HOA residents. Additionally, through the theoretical framework, a set of beliefs were identified which provide areas of focus in promoting wildfire mitigation behaviors among homeowners in each neighborhood situation. For HOAs, belief that wildfire mitigation is beneficial was identified as a focal area leading to a homeowner's intention to mitigate wildfire risk. While beliefs of control over abilities of performing wildfire mitigation actions offered insight into actual mitigation actions. These include:

HOA behavioral beliefs

- Sense of security
- Safety for family
- Protection of property value
- Reducing impacts from wildfire
- Protecting personal belongings

Implications

- Promote how wildfire mitigation improves each of the listed beliefs.

Strategies

- Conduct outreach though:
  - Media sources: print, broadcast social media
  - HOA meetings

HOA control beliefs

- Knowledge of actions to take
- Having the appropriate tools
- Physical fitness

Implications

- Remove barriers that directly impact actual wildfire mitigation.

Strategies

- Conduct outreach
  - Promote city services available and how to access them.
  - Provide information of local contractors that provide wildfire mitigation services.

For the non-HOA homeowners, the theoretical model identified descriptive belies as an area of focus in promoting wildfire mitigation intentions. More specifically, the impacts that referent's actions have on one's intentions to behave in a certain way.

Non-HOA descriptive beliefs

- Neighbors actions
- Friends actions
- Family's actions
- Full-time resident actions

Implications

- Promote wildfire mitigation as a normative behavior shared by all in the community.

Strategies

- Municipality should set norms of mitigation on city owned lands.
- Publicize local mitigation efforts and successes.

Recommendations

- Provide a continual message to area residents through many different sources.
  - One-on-one interactions between agency officials (local fire department, state and national forest service, etc.) and residents.
    - Develop a direct connection with community organizations and residents.
    - Create opportunity for continued open dialog about the area's wildfire risks and suggested mitigation actions.
    - Develop and maintain personal relationships between officials and community residents to build trust and understanding of agency goals.
  - Use the knowledge of local residents when agency interactions are not possible or as a way to continue the message of appropriate wildfire mitigation actions and their benefits.
  - Promote local wildfire risk and mitigation through local media
    - Print local and national success stories of homeowner wildfire mitigation.
    - Have a weekly or monthly wildfire mitigation task that will not only maintain an ongoing message but also provide a suggested task that, if followed, would provide regular maintenance breaking down the potentially overwhelming task of mitigating one's property in to digestible steps.
    - Air regular ads on the radio and television that remind people of the wildfire risk and importance of mitigating this risk in the context of personal safety and protection of property and community.
    - Set up a regular spot on local radio and television morning shows, either weekly or monthly, that can discuss wildfire, the local risk, mitigation actions, and resources available to residents.
    - Have an annual television program just before wildfire season on local national affiliate stations to provide history, current/forecast risks, information and how-to's on mitigation, and resources (municipal and contractor) available to aid in mitigation actions.
    - Provide daily or weekly messages through social media on mitigation tips, news of current fires, and success stories related to wildfire mitigation.
- Create, maintain, and distribute information on municipal services, local contractors, landscape services, etc. focused on wildfire mitigation and resources available. Have a web presence as well as regular mailings.
- Develop more wildfire mitigation grant or funding opportunities for individual homeowners.
- Develop a standard that mitigation is the norm in the community.
- Promote mitigated property and Firewise Communities as an amenity in the housing market.
  - Work toward making mitigation on par to "home renovation" to improve value and equity in the home.
  - Work with realtors to espouse the value and importance of mitigated properties.

Study Limitations

As with any study, the results of this report have limitations that need to be noted. This research studies two independent cases of homeowners with property in an HOA and in non-HOA neighborhoods. These data presents a specific place and time and are not necessarily indicative of other communities. In particular, Prescott presents a unique case with a proactive community in addressing the wildfire risk as represented by the formation of Prescott Area Wildland Urban Interface Commission and having one of the first Firewise Communities. There were also concerns by some who received the questionnaire that the results would set regulation or policy impacting their property rights. In some instances, the research proved to be a rather emotional topic and a few households noted that due to their concerns they would not complete the questionnaire. Therefore, a segment of the population and their views may not be as strongly represented in the final results as with others in the population.

Conclusion

In conclusion, this study explored the influence HOAs have on wildfire mitigation actions using a theoretical framework called the Theory of Planned Behavior. This framework was shown to be a valid theory to explore homeowner wildfire mitigation behaviors. Intention to mitigate wildfire risk was influenced by homeowner attitudes in HOA neighborhoods and subjective norms in non-HOA neighborhoods. Perceived behavioral control, or the constraints and promoters one perceives in completing mitigation actions, had a direct impact on actual mitigation behaviors in HOA neighborhoods. Through the theoretical framework, areas of focus are identified in promoting the adoption of mitigation actions by homeowners.

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Chapter 1

Introduction

With an average of over 1,300 residential homes destroyed every year from wildfire and many more damaged or threatened, wildfire's impact on people and property has become an increasingly frequent national news story in the United States (National Interagency Fire Center, 2015). Major wildfires regularly threaten communities, force evacuations, damage property, and are the cause for loss of life. Prescott, Arizona is not an exception to this. The Prescott is experiencing an increase in people moving to the area creating a demand for housing development in the regions beautiful forests. When coupled with the fuel characteristics, topography, and weather susceptible to wildfire, Prescott will continue to be at risk of wildfire's that impact resident's personal property (Arizona Cooperative Extention, 2015).

Problem

With more people moving to the Wildland Urban Interface (WUI) every year, there is a confluence of people and property located adjacent to or within areas of extreme wildfire risk. To mitigate this risk, federal agencies and national coordination groups have developed a set of actions and programs such as Fire Adapted Communities, "Ready, set, Go," and Firewise Communities that outline actions that can be taken by municipalities, neighborhoods, and homeowners on vegetation and structures (Fire Adapted Communities Coalition, n.d.; International Association of Fire Chiefs, n.d; National Fire Protection Association, 2009). Through vegetation management of the property and modifications to structures, homeowners can reduce their risk to wildfire's impact as well as provide a safe and defendable space for firefighters (National Fire Protection Association, 2009). But homeowners may not perform these risk reduction activities due to many dynamic reasons. Understanding these reasons and offering ways to gain better compliance with property mitigation are keys to the protection of life and property as well as creating more resilient communities.

Purpose

The purpose of this study was 1) to explore what factors influence homeowner's mitigation actions locally, and 2) to examine the impact Homeowner Associations (HOA) have on these behaviors. A theoretical framework based on the Theory of Planned Behavior was used to identify the drivers behind homeowner mitigation behaviors. Program and policy implications of the study are twofold. First, by identifying community specific factors significantly related to mitigation actions, limited local resources can be focused in promoting these areas to gain better adherence by homeowners. This will work towards creating a more resilient community. Second, understanding the role of HOAs on homeowner mitigation behaviors offers insight into their importance concerning; a) linkages of information dissemination about wildfire mitigation actions from

agencies to homeowners, b) local regulation of mitigation actions, and c) access to funding for resident mitigation on private property. HOA's role in homeowner mitigation was explored by studying two populations, homeowners within an HOA and those not associated with an HOA. By exploring the role HOAs play in promoting mitigation, strategies can be identified to help develop more successful programs.

Chapter 2

Study Background

Much about wildfire behavior from an ecological perspective exists in the literature (Agee & Skinner, 2005; Anderson et al., 2015; Covington & Moore, 1994; Kreye & Kobziar, 2015; Stevens, Safford, & Latimer, 2014). Given the increased attention to wildfire risk and suppression, studies from a social science perspective have led to considerable research on wildfire mitigation behaviors of homeowners (Brenkert-Smith, Champ, & Flores, 2012; Martin, Martin, & Kent, 2009; McCaffrey, Stidham, Toman, & Shindler, 2011; McCaffrey & Winter, 2011). From this research salient factors that provide consistent prediction of wildfire mitigation behaviors have been identified (Brenkert-Smith et al., 2012; Champ, Donovan, & Barth, 2013; Gordon et al., 2010; Martin et al., 2009; McCaffrey et al., 2011; McCaffrey & Winter, 2011; McNeill et al., 2013). These salient factors provide a foundation that should be included in any future research focused on mitigation behaviors. Yet, much still remains to be explored. First, studies that have a theoretical basis (Bourque et al., 2013; Brenkert-Smith, Dickinson, Champ, & Flores, 2013; Jakes, Kruger, Monroe, Nelson, & Sturtevant, 2007; Martin, Bender, & Raish, 2007) have offered many perspectives but the field has not coalesced on a specific or set of theories to explain this phenomenon (Bourque et al., 2013; Brenkert-Smith et al., 2013; Jakes et al., 2007; I. M. Martin et al., 2007; Martin et al., 2009). With an increasing focus on measuring beliefs, attitudes, norms, and intentions, the theory of reasoned action (Fishbein & Ajzen, 1975) and planned behavior (Ajzen & Fishbein, 2005) appear promising in assessing individual factors to understand the dynamics of mitigation behaviors (Bates, Quick, & Kloss, 2009; Vogt, Winter, & Fried, 2005; Winter, McCaffrey, & Vogt, 2009; Winter, Vogt, & Fried, 2002). Finally, Kruger (2002) suggested that social networks are important in the dissemination of information about wildfire risk and preparedness. HOAs may be that important link (McCaffrey et al., 2011). Research exploring the impact of HOAs on wildfire mitigation behaviors of homeowners is limited and what exists has emerged through qualitative studies (Monroe et al., 2013).

Theoretical Framework

The theory of planned behavior (TPB) provides a framework for the understanding of underlying factors that influences human behaviors. Figure 1 presents a structured example of TPB. In the causal model, and working backwards, the behaviors being studied are predicted by intentions to perform the behavior which in turn are predicted by three direct measures of attitude toward the behavior, subjective norms concerning the behavior, and perceived behavioral controls impacting the behavior. Each direct measure is predicted by an indirect belief measure; these are behavioral beliefs, normative beliefs, and control beliefs respectively. Beliefs held by an individual are formed through life experiences and provide the basis of their understanding of the world. The authors, Fishbein and Ajzen, present this in a context which they view people as rational and who

utilize the information available in order to form their beliefs, which allow them to decide to behave in a certain way.

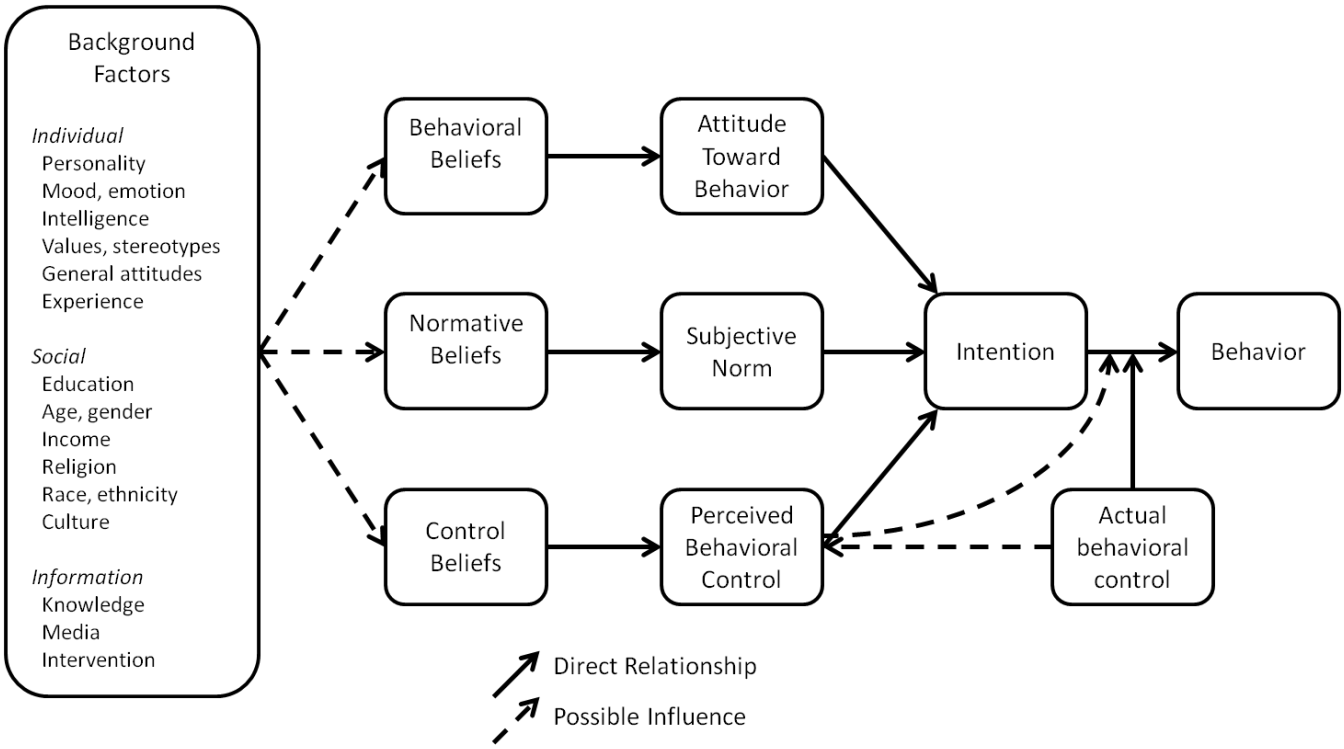

Figure C2.1 Theory of Planned Behavior, Ajzen (2005)

Pertinent to this study, the framework has been applied to the wildfire mitigation field in understanding homeowners' acceptance and intentions to approve fuel management approaches, government policies focused on mitigation behaviors (Vogt et al., 2005; Winter et al., 2009; Winter et al., 2002), and how knowledge predicts homeowners' attitudes, subjective norms, and perceived behavioral control in the context of protecting the environment and home against wildfires (Bates et al., 2009). This study expands on the literature by exploring HOAs in a wildfire mitigation context through this TPB theoretical framework.

Chapter 3

Methods

This study used a multi-method approach that included three stages to understand wildfire mitigation behaviors of homeowners living at the WUI in and around the City of Prescott, Arizona. The study first implemented a series of interviews which were conducted with neighborhood leaders to identify local dynamics. Second, a questionnaire was developed and tested through a pilot study administered to a small subset of the study population. The last part of the study implemented the validated questionnaire to a representative sample of each population (HOA and non-HOA). The study was implemented through a self administered mail questionnaire with an option to complete it on-line.

Study Location and Population

The study population is identified as homeowners in the WUI, within the Prescott city boundaries and select unincorporated neighborhoods outside the city limits in Yavapai County, Arizona. The approximate population of Prescott is 41,000 people (United States Census Bureau, 2015). The population of Prescott is comprised of mainly white (87.1%) with 9% identifying as Hispanic or Latino (United States Census Bureau, 2015). The United States Census Bureau (2015) identifies 22,159 housing units with 66% being owner occupied which equates to about 14,500 permanent dwelling units. In addition, median home values are $265,500 and rent values average $800 per month (United States Census Bureau, 2015).

Table C3.1 Prescott Census Demographics

	Prescott	Arizona
Population, 2014 estimates	40,958	6,731,484
Population change (2010 – 2014)	2.8%	5.3%
Gender (female)	50.8%	50.3%
Persons under 18 years of age (2010)	13.6%	25.5%
Persons 65 years of age and over (2010)	30.8%	13.8%
Race, White (not Hispanic)	87.1%	57.8%
Hispanic or Latino	8.6%	29.6%
High school graduate	91.7%	85.7%
Bachelor's degree or higher	35.4%	26.9%
Homeownership rate (2009-2013)	65.3%	64.4%
Housing units (2010)	22,159	2,844,526
Median value of housing units (2009-2013)	$263,100	$165,100
Median household income (2009-2013)	$44,224	$49,774

Note. (United States Census Bureau, 2015)

The study region presents high wildfire risk because of the fuel characteristics, topography, and weather present. The vegetation in the region is largely dense stands of ponderosa pine, pinion juniper, scrub oak, and desert grasses (Arizona Cooperative Extention, 2015). These plant species are very susceptible to combustion,

especially during the hot dry periods in late spring to early summer before the monsoon rains. Prescott has average summer high temperatures reaching close to 90° with lows around 60°. With the semi-arid climate and active spring and summer lightning storms, the area is at a high risk for vegetation ignition. The city is situated in the Bradshaw Mountains located in central Arizona at an elevation of 5,200 feet above sea level with surrounding peaks reaching over 8,000 feet (City of Prescott Office of Tourism, n.d.). With many canyons, valleys, cliffs, and steep mountain ridges, the area has terrain that can increase the intensity of wildfires, especially when factoring in the high unpredictable winds associated with the late spring and early summer storms.

The Prescott area was selected as an ideal location and population for this study because of these inherent risks and the associated opportunities for studying wildfire mitigation behaviors. The location provides the ability to examine such behaviors across differing community dynamics of neighborhoods, for instance, the presence or absence of HOAs. One of the critical elements of site selection was the number of neighborhoods within the WUI. The city has around 50 neighborhoods with an active association and over 150 without an association all with sections or completely encompassed in the WUI. Unincorporated regions of Yavapai County were also included in the population. These areas included neighborhoods west and north of the City of Prescott. These unincorporated areas were chosen due to their proximity to recent fires and to gain broader perspectives. The area is cradled by the Prescott National Forest along the southern and western boarders of the city with undeveloped state trust and county land along the northern border. There are 24 neighborhoods which are recognized as Firewise Communities through the NFPA program within the area. The region has experienced devastating wildfires in its past which has spurred many local neighborhood leaders to form the Prescott Area Wildland Urban Interface Commission (PAWUIC), a nationally recognized fire council focused on promoting and educating the Firewise ideal and connecting residence with national, state, county, and city officials.

Study Interviews

To address the need for questionnaire development and to gain an understanding of the community, interviews were conducted during the Fall of 2015 with neighborhood leaders. Face to face interviews provide a platform to gain a deeper understanding and to elicit a broad range of concepts from the population of interest. In the context of this study, there were three rationales in conducting interviews with Prescott neighborhood community leaders. The first rationale was to learn about the community, specific neighborhoods, and their current needs and concerns as they pertain to wildfire mitigation. As a researcher not living in the Prescott area there was a need for a more intimate understanding of the community. In other words, it was important to gain a sense of the community dynamics before attempting to research its residents. The second rational was to identify some of the influences of city and county policies on the neighborhoods as well as the HOAs' role in

homeowner wildfire mitigation. Rational three was to elicit responses to behavioral outcomes, normative referents, and control factors specific to the community. These responses were used to develop items for the questionnaire related to each TPB belief factor to be measured (Fishbein & Ajzen, 2010).

Interview Participants and Sampling Procedures

Participants were identified as neighborhood leaders or residents who are active in the neighborhood either in the HOA, Firewise Communities program, or as someone knowledgeable of the neighborhood dynamics and history. Participants were identified through a convenient sample of active members/neighborhoods in PAWUIC. A total of eight interviews were conducted. After the one-on-one interviews were completed, a short tour and assessment of the neighborhood was conducted, most of the time with the interview participant. The neighborhood tour provided an on the ground assessment of what was being described in the interview and a firsthand visual of the wildfire risk and mitigation work of the neighborhood residents. The interviews were stopped after a total of eight completed due to reaching data saturation. The interview data were analyzed through a series of steps as outlined by Creswell (2009).

Study Questionnaire

The study then implemented a quantitative questionnaire based on TPB, past literature, and themes gained from participant interviews. This section describes the questionnaire development, pilot study, processes for administering the questionnaire, questions used in the analysis of the TPB framework, and selection of participants.

Questionnaire Measures

The questionnaire used for this study was specifically developed to address the studies purpose. Many of the questions used in the questionnaire were adopted or adapted from existing literature. The questions included two types of scales: Likert type (measures of subjective knowledge, locus of responsibility, and perceived risk) and semantic differential unipolar and bipolar adjective pair (measures of attitude toward wildfire mitigation, subjective norms, perceived control, and belief items). The following sections outline each factor's set of item measures that were used in the questionnaire.

Indirect Measures

Behavioral belief is the product of *belief strength* and *outcome evaluation* variables. This provides an overall belief that wildfire mitigation is beneficial for each object. Behavioral belief provides a base of individual beliefs which work to form a homeowner's overall attitude toward wildfire mitigation. The final measure has been recoded with 1 = *low belief* and 7 = *high belief*.

Methods

Belief Strength is a measure of a homeowner's evaluation of the likelihood that a "belief object" occurring after mitigating for wildfire's impact will have a positive or negative effect. This was assessed by asking participants "performing wildfire risk reduction on my property's vegetation and home in the next 12 months will:" based on a series of belief objects of "give me a sense of security," "provide safety for my family," "protect my property value," "still provide privacy around my home," "come at a significant cost," "reduce my risk to wildfire's impacts," "protect my personal belongings," "improve property appearance," and "not stop a fire from burning down home." Each were assessed on a seven point semantic differential scale with 1=*unlikely* and 7=*likely*.

Outcome evaluation measures a homeowner's positive or negative evaluation of the "belief object." This was assessed by asking participants "please provide your evaluation of each" with a list of the belief objects "give me a sense of security," "provide safety for my family," "protect my property value," "still provide privacy around my home," "come at a significant cost," "reduce my risk to wildfire's impacts," "protect my personal belongings," "improve property appearance," and "not stop a fire from burning down home." Each were evaluated on a seven point bipolar scale with -3=*bad* and 3=*good*.

Injunctive belief is the product of *injunctive norm* and *motivation to comply* variables. This provides an overall belief held by a homeowner that important referents (people or groups in their life) think they should or should not complete wildfire mitigation behaviors. Injunctive belief along with descriptive belief, described below, provides a base set of beliefs which work to form a homeowner's perception of social norms related to wildfire mitigation. The final measure has been recoded with 1 = *low belief* and 7 = *high belief*.

Injunctive norm measures a homeowner's belief that important people or groups think that they should or should not complete wildfire mitigation actions. This was assessed by asking participants "The following provides a list of individuals or groups who may think you should or should not perform wildfire risk reduction actions on your property's vegetation and home in the next 12 months. For each, please provide what you believe their level of agreement would be to you completing risk reduction actions on your property." The people and groups included "my neighbors," "my friends," "my family," "my homeowner association," and "the City of Prescott." These were assessed on a seven point bipolar scale with -3=*think that I should not take actions* and 3=*think that I should take action*.

Motivation to comply measures a homeowners desire to comply with what they believe important people or groups desire them to do. This was assessed by asking participants "when it comes to reducing my risk from wildfire, I want to do what:" "my neighbors," "my friends," "my family," "my homeowner association," and "the City of Prescott" think I should do. These were each assessed on a seven point semantic differential scale with 1=*disagree* and 7=*agree*.

Descriptive belief is the product of *descriptive belief strength* and *identification with referent* variables. This provides an overall belief of the impact referent (people or groups) wildfire mitigation actions have on personal actions. Descriptive belief along with Injunctive belief, described below, provides a base set of beliefs which work to form a homeowner's perception of social norms related to wildfire mitigation. The final measure has been recoded with 1 = *low belief* and 7 = *high belief*.

Descriptive belief strength measures a homeowner's belief that important people or groups are likely to perform wildfire mitigation actions on their property. This was assessed by asking participants "The following is a list of individuals or groups that you might be associated with. For each, please provide their likelihood of performing wildfire risk reduction actions on their property's vegetation and home in the next 12 months." The people and groups included "my neighbors," "my friends," "my family," "owners of undeveloped property," "full-time residents," "renters," "out of state property owners," and "seasonal/part-time residents." These were assessed on a seven point bipolar scale with -3=*would not take action* and 3=*would take action*.

Identification with referent measures a homeowners desire to be like important people or groups. This was assessed by asking participants "when it comes to matters of reducing risk from wildfires, how much do you want to be like:" "my neighbors," "my friends," "my family," "owners of undeveloped property," "full-time residents," "renters," "out of state property owners," and "seasonal/part-time residents." These were each assessed on a seven point semantic differential scale with 1=*Not at all* and 7=*very much*.

Control belief is the product of *control belief strength* and *power of control* variables. This provides an overall measure of homeowner's belief of their control over completing wildfire mitigation actions. Control belief provides a base set of beliefs which work to form a homeowner's perception of behavioral controls related to wildfire mitigation. The final measure has been recoded with 1 = *low belief* and 7 = *high belief*.

Control belief strength measures a homeowner's belief that certain events will promote or hinder their ability to perform wildfire mitigation actions. To assess this, participants were asked "many factors can aid or hinder our ability to perform wildfire risk reduction actions on our property's vegetation and home. For each of the following statements, please provide your level of agreement that the event would impact your ability to perform risk reduction actions on your properties' vegetation and home." The events measured were "being physically fit would enable me to perform wildfire risk reduction actions," "a debilitating illness would make it difficult for me to perform wildfire risk reduction actions," "living on a fixed income would make it difficult for me to perform wildfire risk reduction actions," "having the knowledge on how to protect my property would enable me to perform wildfire risk reduction actions," "daily obligations such as family and work make it difficult to find time to perform wildfire risk reduction actions," and "having the appropriate tools would enable me to

perform wildfire risk reduction actions." Each item was measured on a seven point unipolar scale with 1 = *unlikely* to 7 = *likely*.

Power of control measures a homeowner's evaluation of each event's likelihood of impacting them. To assess this, participants were asked "in the next 12 months I will:" The events measured were "be physically fit," "have a debilitating illness," "be on a fixed income," "have the knowledge on how to perform wildfire risk reduction actions," "not have time to perform wildfire risk reduction actions," and "have the tools needed to perform wildfire risk reduction actions." Each item was measured on a seven point bipolar scale with -3 = *disagree* to +3 = *agree*.

Direct Measures

Attitude toward mitigation behavior measures the degree of favorableness or unfavorableness homeowners have toward wildfire mitigation actions. This was measured by asking participants "performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:" through a series of adjective pairs. These included "harmful/beneficial," "bad/good," "worthless/valuable," "foolish/wise," "useless/useful," "punishing/rewarding," "unenjoyable/enjoyable," "undesirable/desirable," and "unimportant/important." Each was measured on a seven point semantic differential scale with 1=the negative objective pair and 7=the positive objective pair.

Subjective Norm measures a homeowner's perception that others influence their actions. To measure this, participant were asked four questions. 1) "most people who are important to me think that __ perform wildfire risk reduction actions on my property's vegetation and home." This was measured on a seven point semantic differential scale with 1=*I should not* and 7=*I should*. 2) "Most people whose opinion I value would approve of my performing wildfire risk reduction activities on my property's vegetation and home." This was measured on a seven point semantic differential scale with 1=*strongly disagree* and 7=*strongly agree*. 3) "It is expected of me that I complete wildfire risk reduction actions on my property's vegetation and home every year" and 4) "Most of the residents in my neighborhood with whom I am acquainted with have performed risk reduction activities on their property's vegetation and home to minimize the threat of wildfire." These last two questions were measured on a seven point semantic differential scale with 1=*definitely false* and 7=*definitely true*.

Perceived Behavior Control measures homeowner's perceived ability to perform wildfire mitigation actions. This was assessed by a series of five questions. 1) "For myself to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:" This was measured on a seven point semantic differential scale with 1=*extremely difficult* and 7=*extremely easy*. 2) "I am confident that if I wanted to I could complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months.

“ This was measured on a seven point semantic differential scale with 1=*false* and 7=*true*. 3) “For me to complete wildfire risk reduction actions on my property’s vegetation and home in the next 12 months is:” This was measured on a seven point semantic differential scale with 1=*impossible* and 7=*possible*. 4) “I feel in complete control over whether I perform wildfire risk reduction actions on my property’s vegetation and home in the next 12 months.” This was measured on a seven point semantic differential scale with 1=*definitely false* and 7=*definitely true*. 5) “The number of events outside my control which could prevent me from performing wildfire risk reduction actions on my property’s vegetation and home in the next 12 months are:” This was measured on a seven point semantic differential scale with 1=*numerous* and 7=*very few*.

Wildfire mitigation behavior measures homeowner’s overt actions taken to reduce their risk from wildfires. To measure actual wildfire mitigation behaviors, participants were asked to identify if each mitigation action is either “not a feature of my home or property,” “action is not necessary, as it existed when home was purchased,” “My household took this action primarily for wildfire safety reasons,” “my household took this action primarily for other reasons,” and “Did not take action.” The mitigation items were categorized as maintenance and construction (structure/design) actions. The wildfire mitigation maintenance items included “roof and rain gutters are kept free of leaves, needles, and twigs,” “overhanging and dead branches are removed within 10 feet of roof,” “Firewood and lumber are stacked at least 30 feet away from all structures,” “a green vegetated area is maintained at least 30 feet around the house,” “trees and shrubs are thinned out within 30-50 feet from the house,” “Shrubs and lower tree branches that could carry flames from the ground into the crown of the tree are removed,” and “dead vegetation, leaves, and needles are cleared at least 30 feet from the house.” The construction items included “house has a fire-resistant roof (e.g. asphalt or metal),” “house has screening installed on all vents,” “house construction materials (e.g. siding, porches, and decks) are fire-resistant,” “underside of deck is enclosed to keep debris from collecting underneath,” and “yard is landscaped with fire-resistant vegetation.”

To calculate a measure of actual wildfire mitigation behaviors, the measure of “not a feature of my home or property” was coded as 1 = *a feature* and 0 = *not a feature*. These responses were summed for each maintenance and construction factors to provide a measure of total features on the participant’s property. Similarly, the measure of “my household took this action primarily for wildfire safety reasons” was coded as 1 = *took action* and 0 = *did not take action*. These responses were summed for a measure of total wildfire mitigation actions completed. Total wildfire mitigation actions completed were then divided by total features to provide a percent measure of actual wildfire mitigation behavior adjusted for actual features present.

Intention to Mitigate Wildfire Risk measures a homeowner’s readiness for taking wildfire mitigation actions on their property. To measure intentions to mitigate wildfire risk, participants were asked to identify which category best explains their future intentions for each mitigation action. The categories were “not a

feature of my home or property," "structural action is not necessary, as it was already completed," "my household plans to take this action within the next 12 months for wildfire safety reasons," "my household plans to take this action within the next 12 months primarily for other reasons," "my household does not plan to complete this action within the next 12 months." The same mitigation actions in the mitigation behaviors measure were used (see wildfire mitigation behaviors for items).

To calculate a measure of intentions to mitigate wildfire risk, the measure of "not a feature of my home or property" was coded as 1 = *a feature* and 0 = *not a feature*. These responses were summed for each maintenance and structure/design factors to provide a measure of total features on the participants property. Similarly, the measure of "my household plans to take this action within the next 12 months for wildfire safety reasons" was coded as 1 = *intend to take action for wildfire safety* and 0 = *do not intend to take action for wildfire safety*. These responses were also summed for a measure of total intentions to reduce wildfire risk. Total intentions were divided by total features to provide a percent measure of intention to mitigate wildfire risk adjusted for actual features present.

Homeowners Association is defined as the presence and influence of a formal association with a governing board. To assess HOA affiliation, participants were asked "is your home located in a neighborhood that has an active homeowner's association?" Participants were given "yes," "no," and "do not know" response options. The responses were coded as 1=*yes*, 2=*no*, and 3=*do not know*.

Pilot Study

A pilot study was conducted to test the proposed questionnaire and sampling procedures for the main study. This pilot study sampled a small subset of 230 individuals, 115 from each of the groups (HOA and non-HOA). In addition to the questions outlined above, the pilot study included open ended questions relating to the behavioral outcomes, normative referent, and control factors to identify any additional location relevant beliefs that should be considered for the main study. Data collected were used to test question and scale validity (Dillman et al., 2009). The pilot study provided more detail of the initial sample needed for the main study by providing an idea of expected response rate and identifying any issues with each group's (HOA and non-HOA) population list.

Sampling Strategy and Sample

The population studied was owners of single family homes in and around the city of Prescott, Arizona that are located within the WUI. To provide for later analysis of HOAs' impact on wildfire mitigation behaviors, the study employed cluster sampling to account for equal representation of participants who own property in neighborhoods with and without an HOA. Participants in each cluster were randomly selected based on these neighborhood level characteristics. Arc Map 10.3 GIS Software was used to develop each cluster population.

Through working with the Yavapai County Geographical Information Systems Department, a geodatabase was acquired for study population development. Data layers developed by Martinuzzi et al. (2015) were used to identify the wildland–urban interface and intermix within the region

The cluster population for single family parcels in an HOA totaled 5,677 and those not in an HOA totaled 6,481, of which 1,223 parcels are not identified as being part of a defined neighborhood. A sample size for each cluster was calculated as 360 and 363 respondents respectively based on a 95% confidence level (Dillman et al., 2009). Accordingly, this was calculated as outlined by Dillman et al. (2009). Past studies have shown response rates around 35% in similar settings and sampling design (Bourque et al., 2013; Brenkert-Smith et al., 2012). Taking these past response rates and factoring a more conservative 30% response rate, an approximate initial sample of homeowners in HOA neighborhoods was 1,200 and for non-HOA Neighborhoods 1,210. These initial samples were rounded to 1,200 participants each cluster in an attempt to provide equal numbers across clusters. Table 2 provides a segmentation of neighborhoods and dwellings per cluster.

Table C3.2 Population & Sample

	HOA Cluster	**Non-HOA Cluster**	**Total**
Number of Neighborhoods in WUI	63	170	233
Prescott	49	154	203
Yavapai	14	16	30
Number of Dwellings in WUI*	5,677	6,481	12,158
Prescott	4,619	5,416	10,035
Yavapai	1,058	1,092	2,150
Sample (95% confidence level)	360	363	723
Initial Sample (30% response rate)	1,200	1,210	2,410
Rounded Initial Sample	1,200	1,200	2,400

Note. * 1,223 dwellings not associated as part of a formalized neighborhood and are included in the non-HOA total.

Administering the Questionnaire

For this study, a standard Dillman's mailing method was used which provided a means to contact homeowners though methods of acquiring property addresses. A combined mail and on-line questionnaire instrument was selected to maximize responses from homeowners living in the WUI. It was felt these methods were most efficient with minimal costs and time commitments (Dillman et al., 2009).

An initial mailing was sent to the study sample on August 8th, 2016. The initial mailing included the paper questionnaire with information on how to access the web based questionnaire if desired, a cover letter describing the study, a NFPA Firewise sticker, and a postage paid business reply envelope. A week after the initial mailing a reminder postcard was sent to those who had not completed the questionnaire. The last mailing was sent out a week after the reminder postcard mailing and contained the same paper questionnaire, a

cover letter with directions to the online questionnaire, and postage paid business reply envelope to return the completed paper questionnaire.

Analysis

Data were entered and cleaned in SPSS version 22 statistical package before any analysis was performed. To assess normality and any issues with these data, descriptive statistics were estimated. Means, median, modes, skewness, and kurtosis were assessed to identify non-normality and outliers. To handle non-normality and missing data in the structural model, a robust, full information maximum likelihood estimator was used. Cronbach's alpha coefficients were used to assess the internal consistency of multi-item factors. Items that did not contribute to the measurement of each factor were removed.

To assess model fit, individual parameters were assessed for expected magnitude and direction. Global fit was assessed through Chi-square test of exact fit, standardized root mean squared residual (SRMR), comparative fit index (CFI), and the root mean square error of approximation (RMSEA). The global fit indices are assessed based on accepted values for quality of model fit with the data. For the Chi-square test of exact fit, the chi-square statistic is required to be non-significant in order to accept the null hypothesis that states the model fits the data perfectly. Good fit cutoff for the SRMR statistic is less than .08 (Hu & Bentler, 1999). The CFI should have values greater than .95 for good fit (Hu & Bentler, 1999), and the RMSEA should be less than .06 (Browne & Cudeck, 1992). To test the specific research purpose, this study employed a multi-group structural equation model using Mplus version 7 statistical software package. Addition analyses were explored to identify how significant differences impact mitigation behaviors.

Chapter 4

Results

This section presents results from the mail back questionnaire sent to study participants. These results are organized to display each group (HOA & non-HOA) separately as individual clusters. The section starts with an overview of study response rates followed by the demographics of the respondents. Descriptive statistics of each TPB factor are presented followed by the results of the TPB model analysis.

Response Rate and Sample

Overall, 2,409 questionnaires were mailed out (1,204, HOA and 1,205, non-HOA). Respondents were provided the option of responding via the enclosed paper questionnaire or via an online version. The overall study response rate was 28%, with the HOA sample having a 30% response rate while the non-HOA having a 26% response rate. Returned mail identified 118 addresses that were either not deliverable, addressee had moved, or addressee was deceased. Of the 644 questionnaires returned, online response provided less than a quarter of all responses (22.1%). Forty seven (7.3%) of the completed questionnaires had missing responses of one page or more; of which a total of five cases were removed due to missing data on all model variables. Other cases removed (4) were due to respondents identifying the dwelling as other than a single family home. The data show that eighty-one respondents between both samples (HOA and non-HOA) identified a contradicting HOA situation. The HOA sample had fifty-nine respondents that identified their dwelling was not located in an HOA while twenty-two respondents in the non-HOA sample self reported that their home was in an HOA. With this adjustment to each group, the final sample was 305 respondents in the HOA sample and 330 respondents in the non-HOA sample for a total sample of 635. Table C4.1 shows the population sample and participant responses.

Table C4.1 Response Rate

	HOA		**Non HOA**		**Totals**	
Initial Sample	1204		1205		2409	
Undeliverable	55	4.6%	63	5.2%	118	4.9%
Adjusted Sample	1149		1142		2291	
Response Rate	349	30.4%	294	25.7%	644*	28.1%
Online	*86*	*24.6%*	*56*	*19.1%*	*142*	*22.1%*
Paper	*263*	*75.4%*	*238*	*80.9%*	*501*	*77.9%*
Incomplete	22	6.3%	25	8.5%	47	7.3%
Cases Removed	7		2		9	
HOA Self Reported Adj.	-37		+37		-	
Final Group Totals	305		330*		635	

Note. *One case with no participant code could not be included with initial response totals due to lack of HOA identification. Response was added to non-HOA sample based on self reported assessment.

Respondent Demographics

Respondents were mostly full-time residents (84% HOA; Figure C4.2, & 92% Non-HOA; Figure C4.3) in their mid to late sixties (Figure C4.4) and retired (Figure C4.8 & Figure C4.9). Property ownership within an HOA averaged nine years while Non-HOA respondent's average ownership was sixteen years (Figure C4.1). The HOA respondents were mostly white (97%; Figure C4.6) and highly educated (71% with a bachelor degree or higher; Figure C4.7) making a median household income of $75,000 to $89,999 (Figure C4.10). Non-HOA respondents were also mostly white (93%; Figure C4.6) with about half (58%) completing a bachelor degree or higher (Figure C4.7) and making a median household income of $60,000 to $74,999 (Figure C4.10).

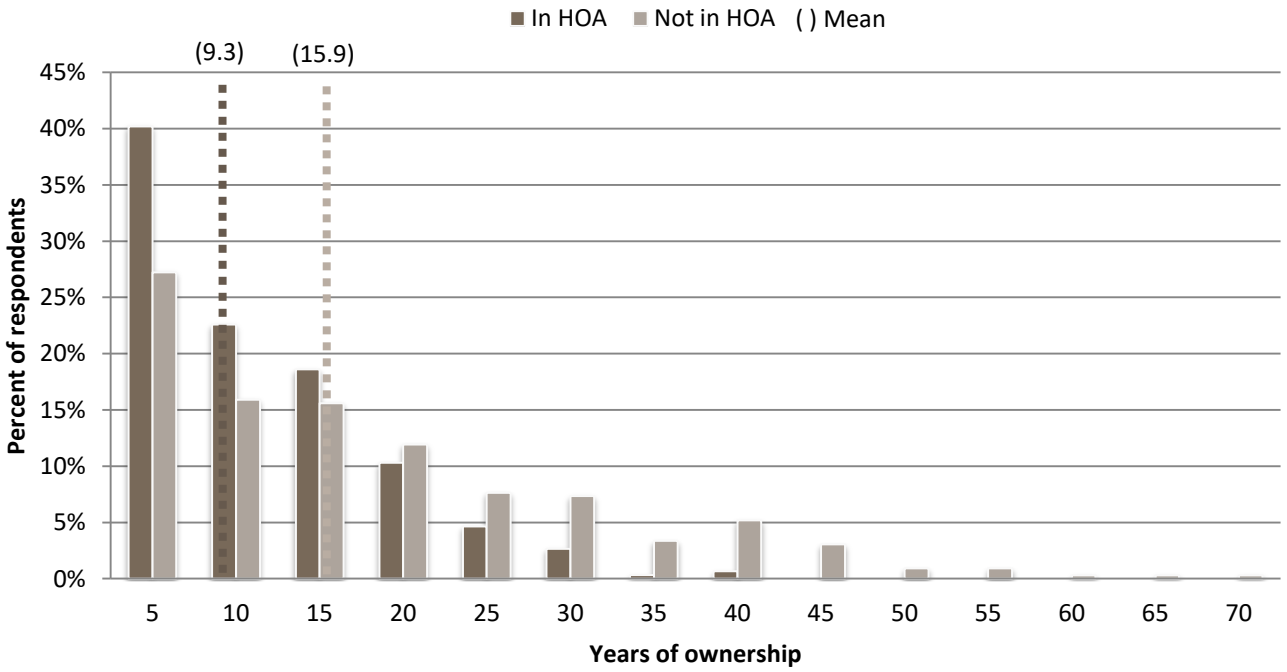

Figure C4.1 Resident length of residency
Note. Results from question 2

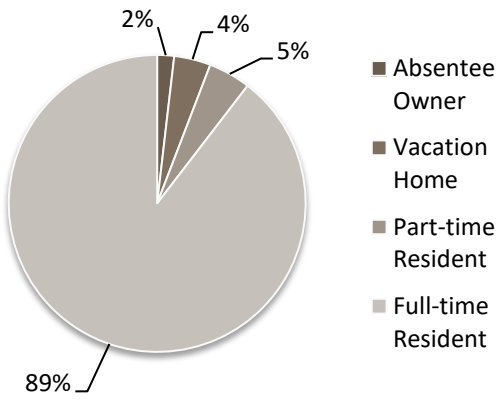

Figure C4.2 HOA residency status
Note. Calculated from question 1.

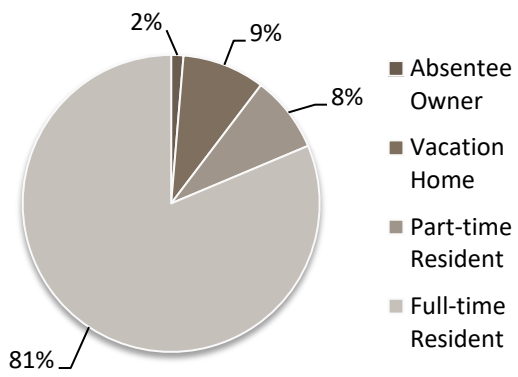

Figure C4.3 Non-HOA residency status
Note. Results from question 1.

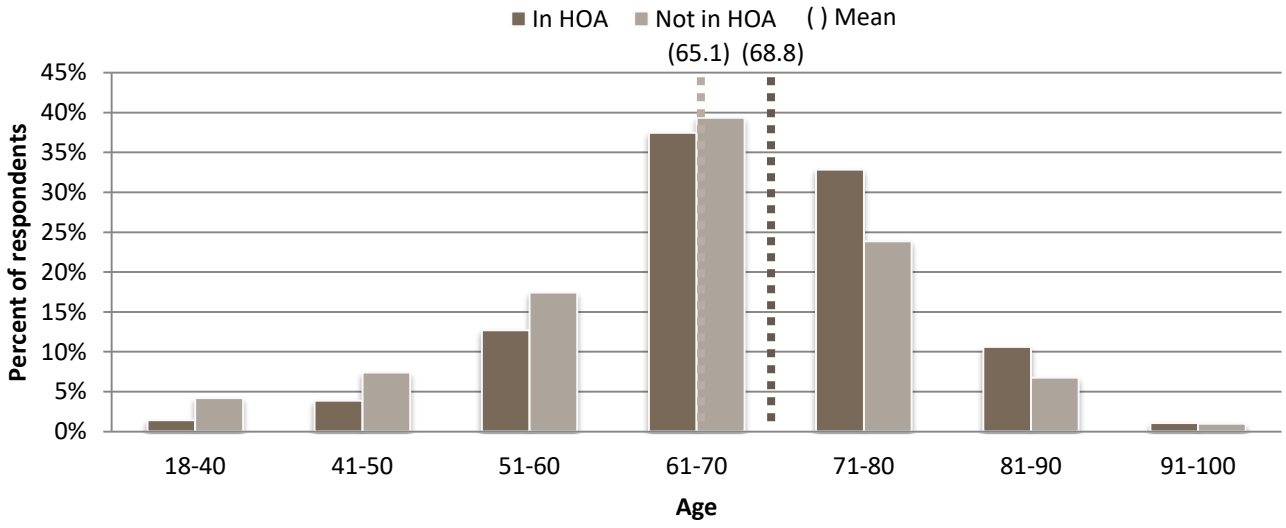

Figure C4.4 Age of respondents
Note. Calculated from question 42.

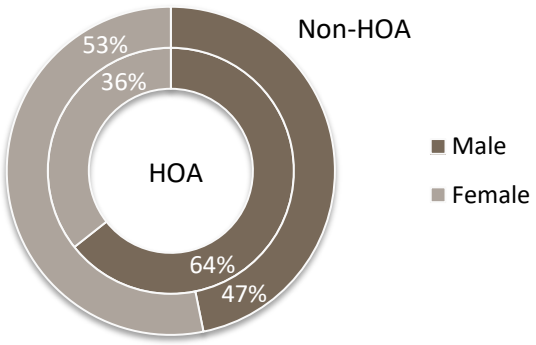

Figure C4.5 Respondent gender
Note. Results from question 41.

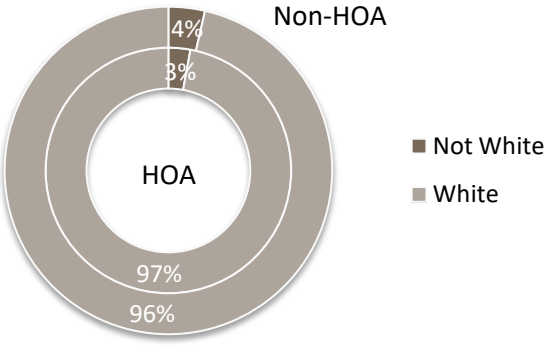

Figure C4.6 Race/ethnicity
Note. Results from question 43.

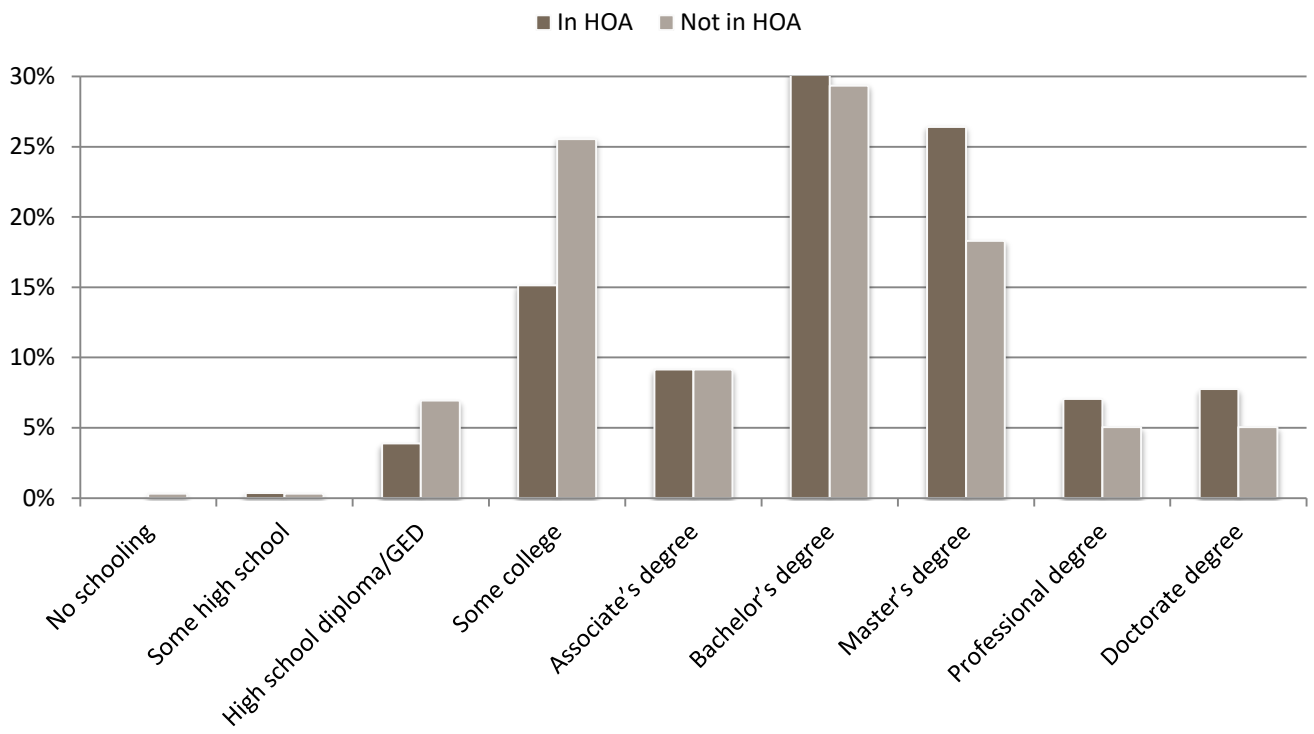

Figure C4.7 Respondent Education
Note. Results from question 45.

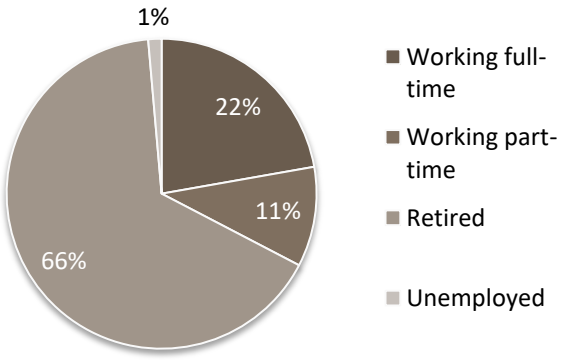

Figure C4.8 HOA employment
Note. Results from question 46.

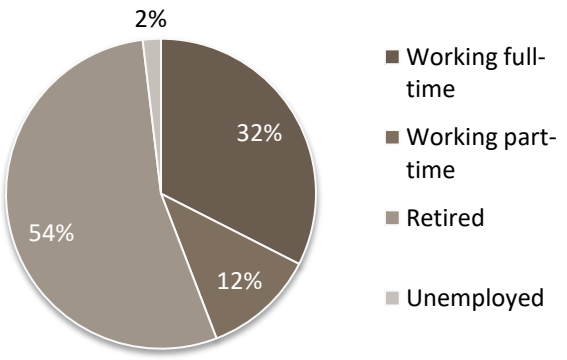

Figure C4.9 Non-HOA employment
Note. Results from question 46.

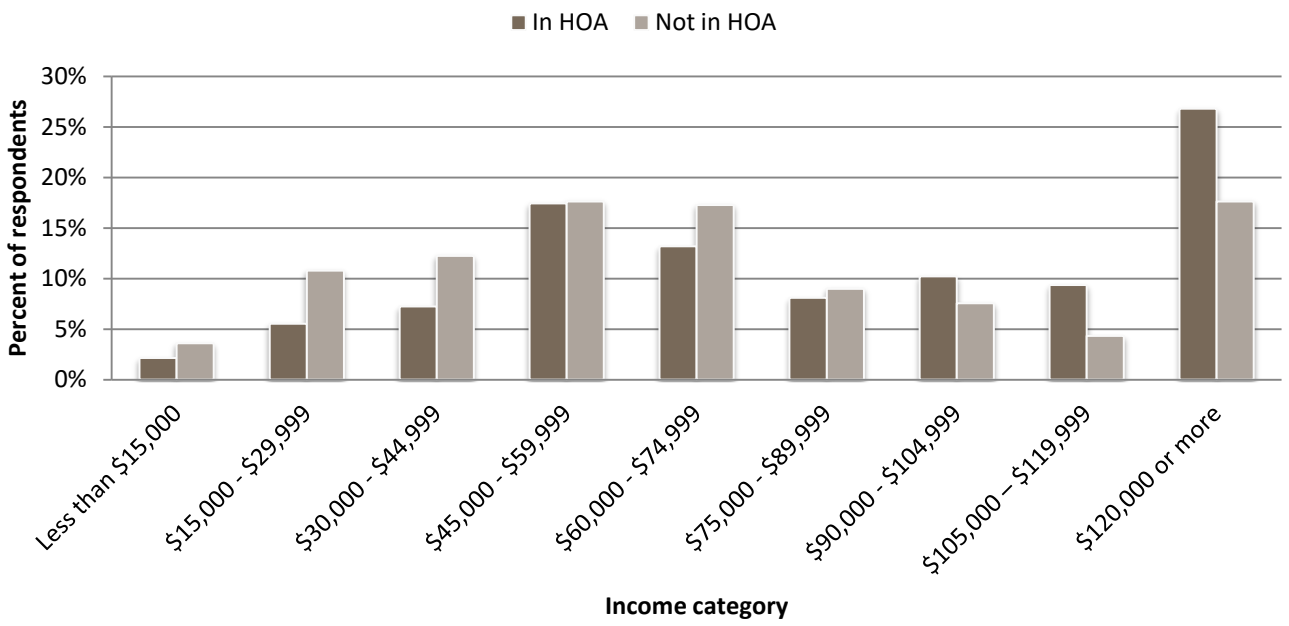

Figure C4.10 Respondent income
Note. Results from question 44.

Experience from wildfires and their impacts showed that non-HOA respondents generally had a higher percentage of homeowners being impacted by wildfire (Figure C4.11). Fortunately, only a small number of homeowners have had their property damaged or destroyed (0.7% and 1.1% respectively for HOA and 1.0% and 1.4% respectively for non-HOA).

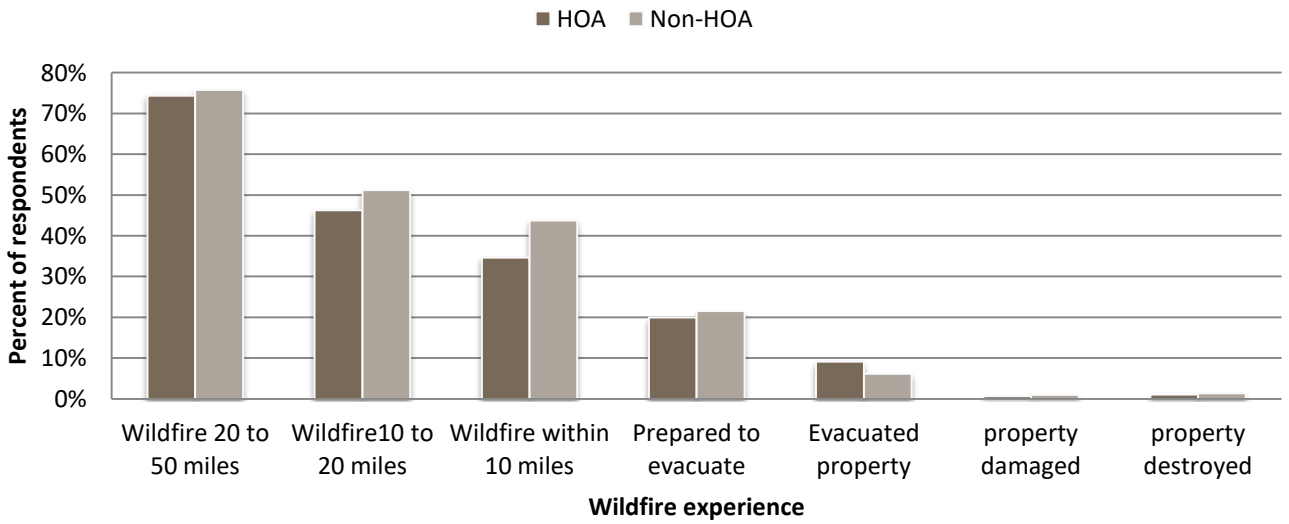

Figure C4.11 Respondent's experiences with wildfire
Note. Calculated from question 12.

Results

Respondents perceived a fairly high level of subjective knowledge with wildfires and actions to mitigate their impact (Figure C4.12). The HOA sample respondents identified a higher level of subjective knowledge with a mean of 6.0 than the non-HOA sample which had a mean of 5.7.

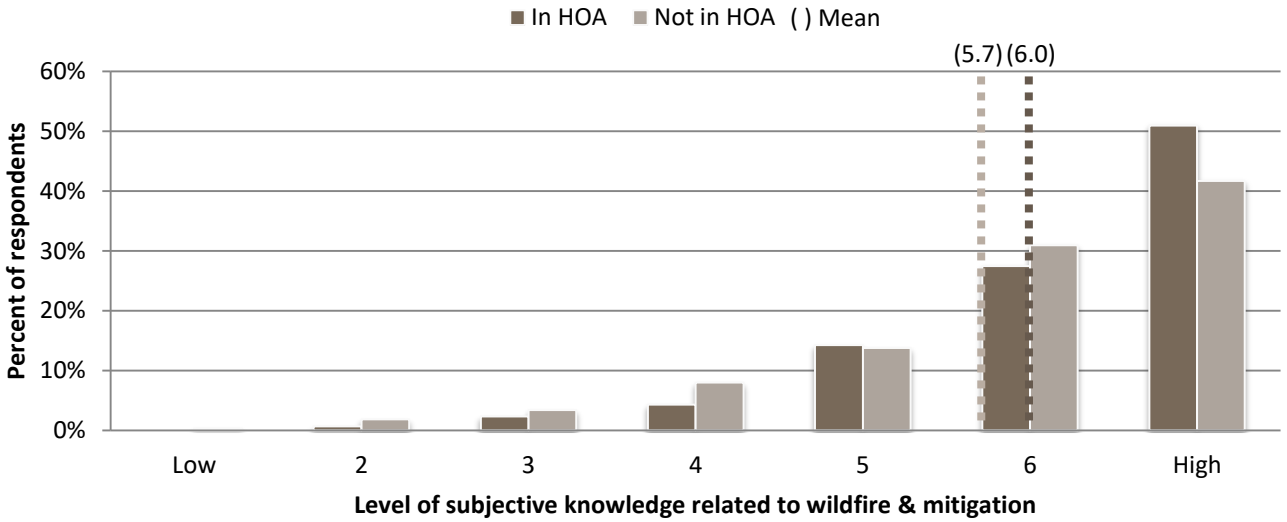

Figure C4.12 Respondent subjective knowledge
Note. Composite measure of questions 9, 10, & 11.

Respondents of both the HOA and non-HOA samples had a strong sense of self reliance (Figure C4.13). The overall means for locus of responsibility for each sample were moderate to high with a mean of 5.5 for the HOA sample and 5.4 for the non-HOA sample.

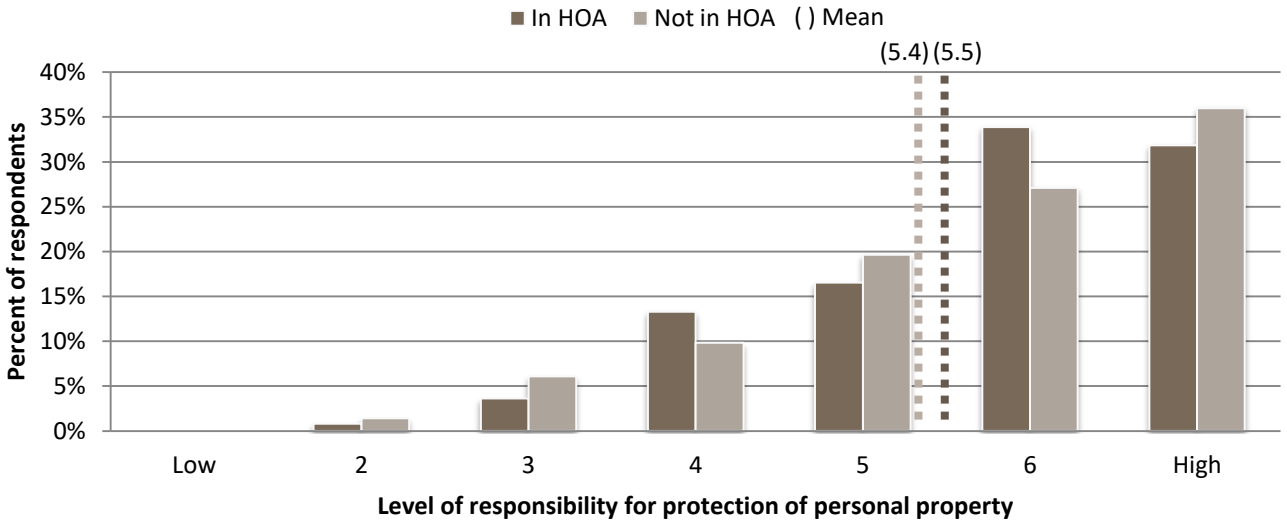

Figure C4.13 Respondent responsibility
Note. Composite measure of question 19. (homeowner association and Bureau of Land Management items were not included)

Respondents in HOAs consistently showed slightly higher levels of perceived wildfire risk than those of the non-HOA sample respondents (Figure C4.14). Perceived wildfire risk was moderate for both HOA and non-HOA samples with means of 5.4 and 5.1 respectively.

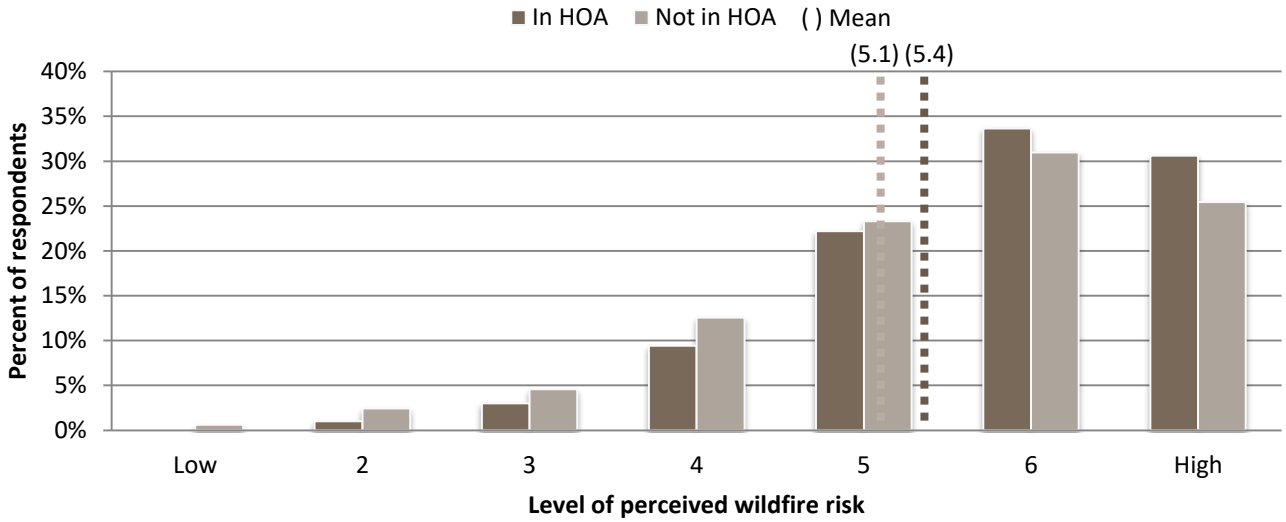

Figure C4.14 Respondent perceived wildfire risk
Note. Composite measure of questions 13, 14, 15, 16, & 17.

Model Descriptive Statistics

The following presents descriptive statistics for the study factors used in the TPB model. These include the indirect belief factors, direct factors, mitigation intentions measure, and actual behaviors measure. An overview of descriptive statistics and internal reliability for each factor in the model is presented in Table C4.2.

To validate and justify combining data from the two response modes (on-line and paper questionnaires), descriptive statistics were explored across both to identify any differences. There was one demographic variable in each sample (HOA and non-HOA) that was significantly different across response modes. Respondents who lived in an HOA had a significant age difference between response modes with those completing a paper questionnaire having an average age of 67 and respondents completing the on-line questionnaire having an average age of 72. For the non-HOA sample, length of residence was significantly different with respondents to the paper questionnaire having an average residency of seventeen years while on-line respondents only averaged ten years. With all other measures presenting no significant difference, the two response modes were combined into one database and used for subsequent analyses.

Indirect Belief Factors

This section presents the descriptive statistics of composite measures for the indirect factors of behavioral belief (Figure C4.15), normative beliefs (Figure C4.16 & Figure C4.17), and control belief (Figure

c4.18). To measure behavioral beliefs, a set of nine items were asked. Each item presented a normal distribution with no extreme skewness or kurtosis. Two items, “comes at a significant cost” and “will not stop a fire,” were worded negatively and removed from the analysis. Two more items “provides privacy” and “improves appearance” did not contribute to the internal reliability of the measure and were also removed from the analysis. The five remaining items used had a good internal reliability of α=0.946 for the HOA group and α=0.938 for the non-HOA group. The HOA sample had a mean of 6.4 and the non-HOA sample had a mean of 6.3 out of a 1=*low belief* and 7=*high belief* scale (Figure C4.15). These suggest an overall positive belief toward mitigation behaviors by both clusters.

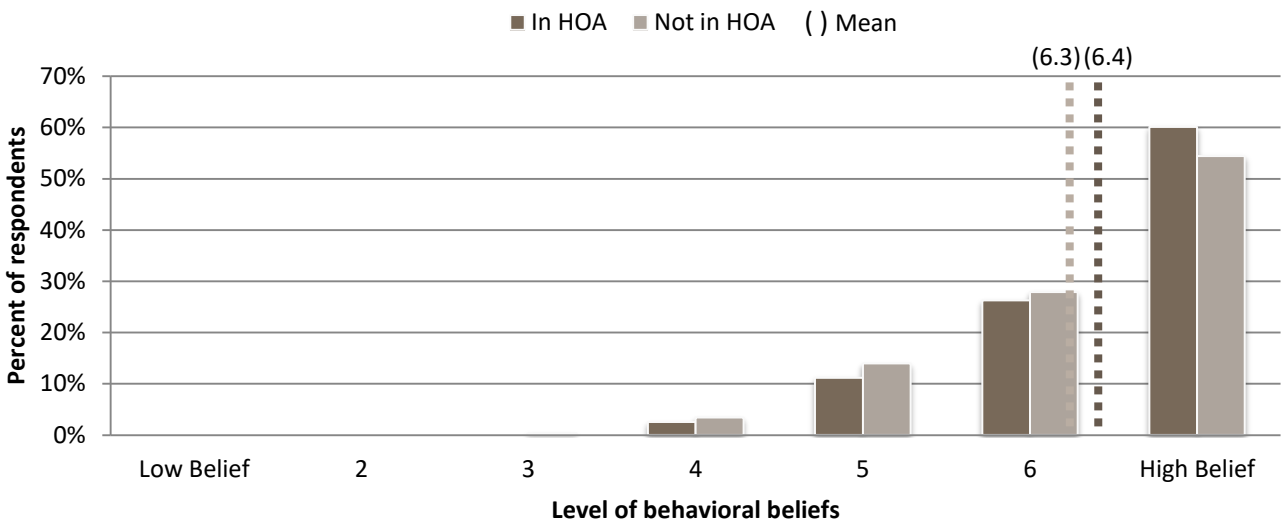

Figure C4.15 Respondent behavioral beliefs (Belief that wildfire mitigation is beneficial)
Note. Composite measure of the product of questions 24 & 25. (“Provides privacy,” “comes at a significant cost,” “improves appearance,” & “will not stop a fire” were not included).

Normative belief was measured as injunctive (Figure C4.16) and descriptive (Figure C4.17) norms. Each item had a normal distribution with no extreme skewness or kurtosis present. One item, “HOA’s thoughts,” was removed from the injunctive composite measure due to the majority of non-HOA respondents identifying the question as not applicable. In addition, four other items, “undeveloped property owner’s actions,” “renter’s actions,” “out of state property owner’s actions,” and “seasonal resident’s actions” were not included in the final analysis. This was due to the items impacting the internal consistency. The final eight items provided a good internal reliability with the HOA and non-HOA samples for injunctive (α=0.908 & α=0.922 respectively) and descriptive beliefs (α=0.886 & α=0.873 respectively). Injunctive norm had a mean of 5.3 for the HOA sample and 4.8 for the non-HOA sample (Figure C4.16). Descriptive norm had means of 5.3 for the HOA sample and 4.7 for the non-HOA sample Figure C4.17). Both measures were out of a 1=*low belief* and 7=*high belief* scale. The means suggests a somewhat positive overall normative belief toward the influence of referent’s influence related to wildfire mitigation.

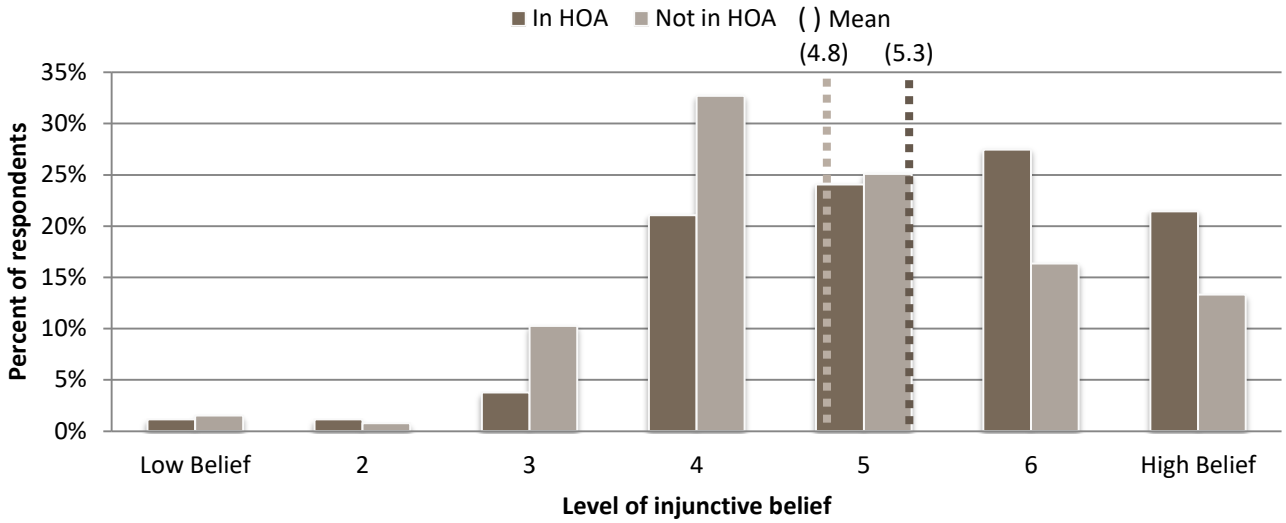

Figure C4.16 Respondent injunctive beliefs (Belief that what others think "you should do" is important)
Note. Composite measure of the product of questions 30 & 31. ("HOA's thoughts" was not included)

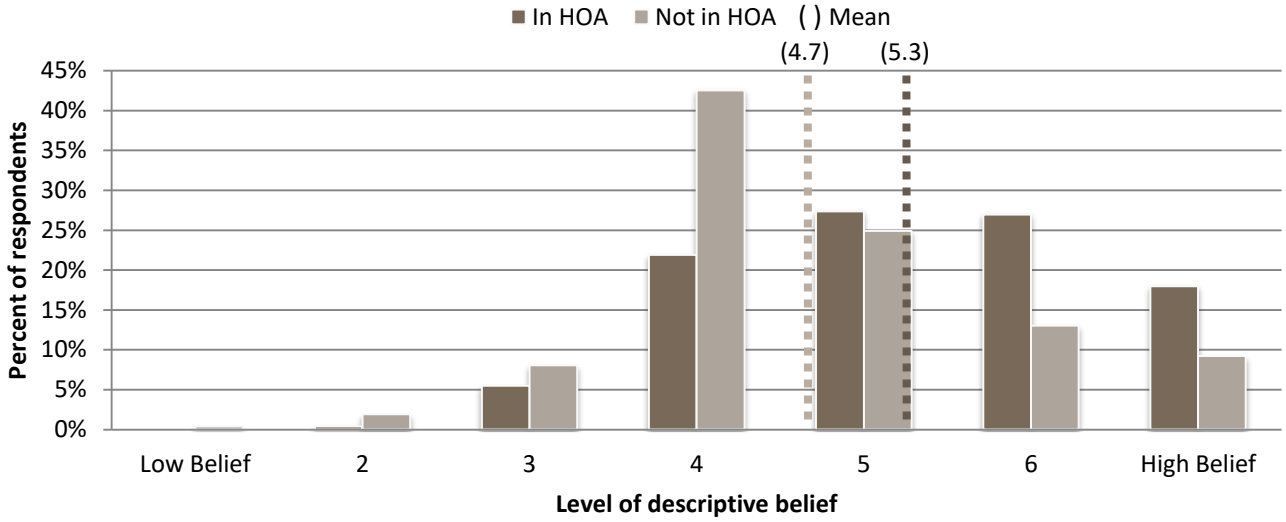

Figure C4.17 Respondent descriptive beliefs (Belief that what others do is influential in personal behavior)
Note. Composite measure of the product of questions 32 & 33. ("undeveloped property owner's actions," "renter's actions," "out of state property owner's actions," & "seasonal resident's actions" were not included)

Control belief items did not have any extreme skewness or kurtosis. Three negatively worded items, "debilitating illness," "fixed income," and "daily obligations" performed poorly in the reliability analysis and were not included in the final analysis. The internal reliability of the HOA and non-HOA samples were moderate (α=0.679 & α=0.700 respectively). The control belief measure had a mean of 5.7 for the HOA sample and 5.6 for the non-HOA sample (Figure C4.18). With a 1=*low belief* and 7=*high belief* scale, respondents believe they have a moderate level of control over completing wildfire mitigation actions.

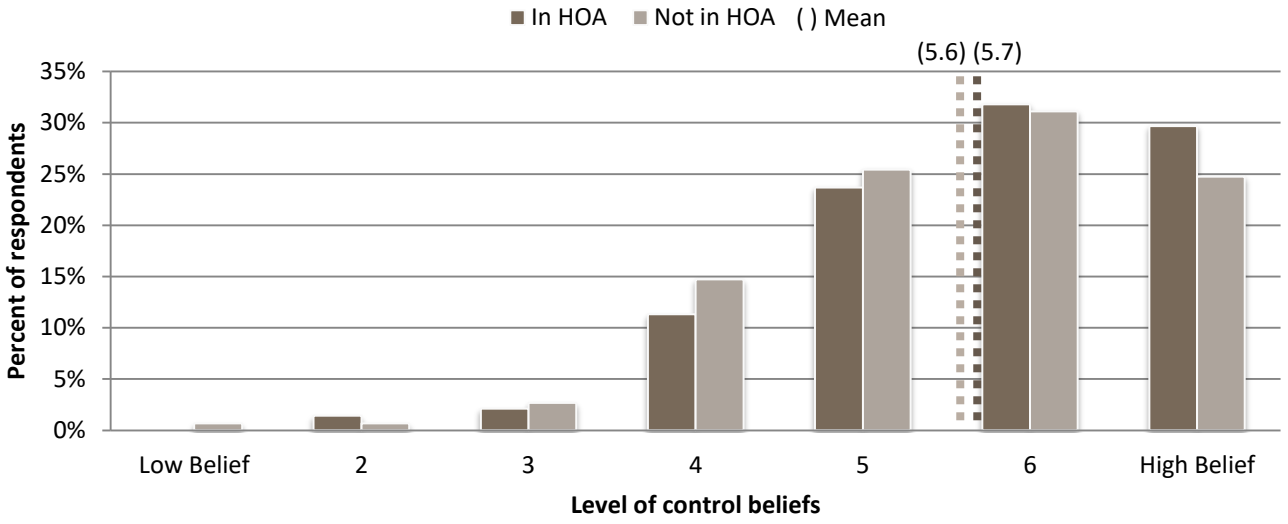

Figure C4.18 Respondent control belief (Belief that one is in control of their ability to act)
Note. Composite measure of the product of questions 39 & 40. ("debilitating illness," "fixed income," & "daily obligations" were not included)

Direct Factors

The following section presents the direct factors used in the study. Respondents showed a strong positive attitude toward wildfire mitigation behaviors. One item was removed (Unenjoyable/enjoyable) due to negatively impacting internal reliability. The eight items used had good internal reliability with α=0.934 for the HOA sample and α = 0.947 for the non-HOA sample. Means show a positive attitude toward mitigation behaviors with a mean of 6.5 for the HOA sample and 6.3 for the non-HOA sample based on a 1=*negative* and 7=*positive* scale (Figure C4.19).

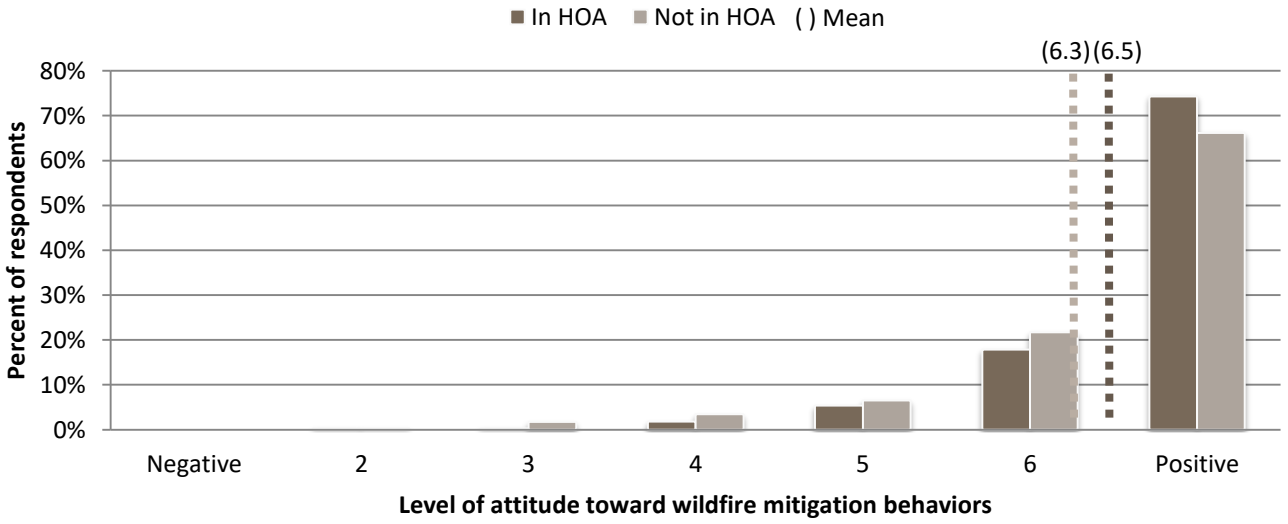

Figure C4.19 Respondent attitude toward mitigation behaviors
Note. Composite measure of question 23. ("unenjoyable/enjoyable" was not included)

Respondents identified a fairly high level of subjective norms in their neighborhoods with means of 6.0 for the HOA sample and 5.6 for the non-HOA sample based on a 1=*low* and 7=*high* scale (Figure C4.20). One item, "referent action," was not included in the composite measure due to its negative impact on the internal consistency with the other items. The internal reliability of the three items was acceptable with α=0.735 for the HOA sample and α=0.776 for the non-HOA sample.

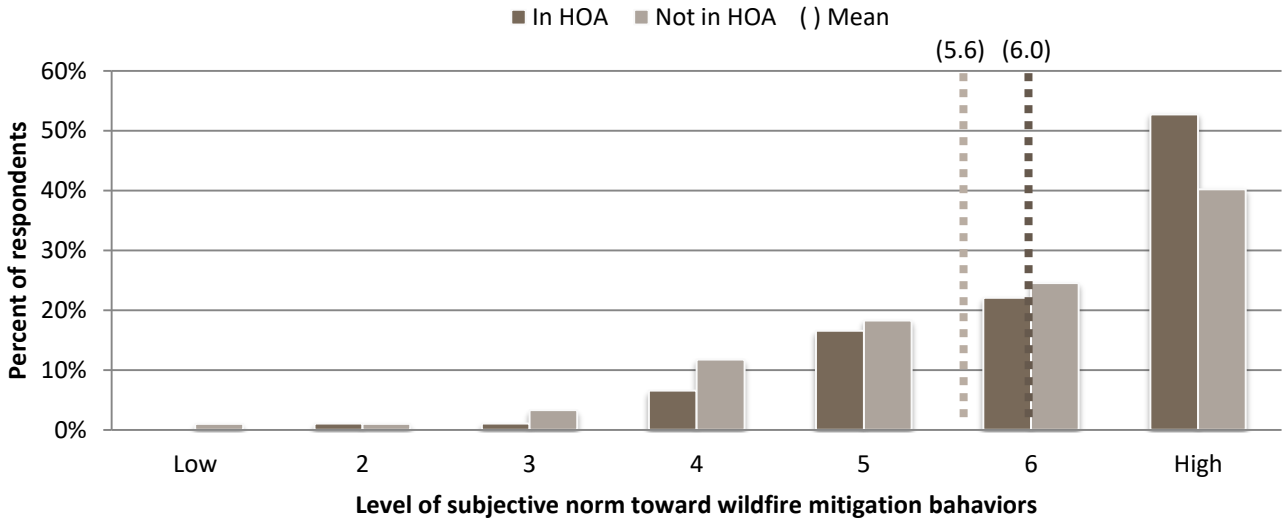

Figure C4.20 Respondent subjective norms
Note. Composite measure of questions 26, 27, & 28.

Results

Respondents had an average behavioral control of moderate to high for both the HOA and Non-HOA clusters (Figure C4.21). Internal reliability was good with α=0.887 for the HOA sample and α=0.896 for the non-HOA sample. There was a moderate perception that one has the ability to complete mitigation actions with a mean of 5.7 for the HOA sample and 5.4 for the non-HOA sample based on a 1=*low* and 7=*high* scale.

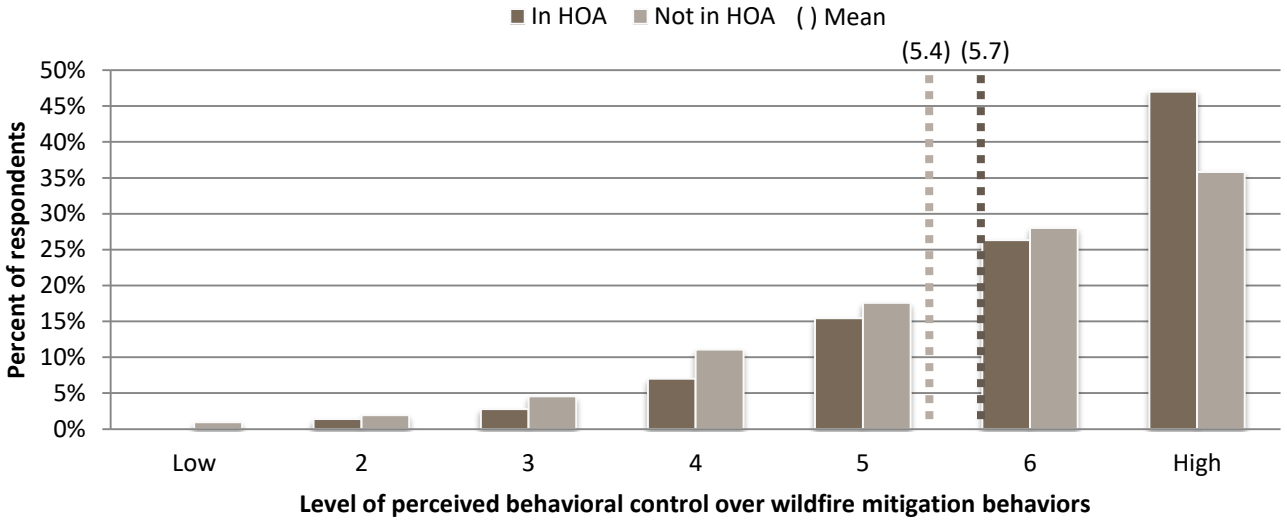

Figure C4.21 Respondent perceived behavioral controls
Note. Composite measure of questions 34, 35, 36, 37, & 38.

The last set of measures were intention to mitigate (Figure C4.22, Figure C4.24, Figure C4.25, & Figure C4.27) and wildfire mitigation behavior (Figure C4.23, Figure C4.24, Figure C4.26, & Figure C4.27). Overall, intentions to mitigate had lower percentages than wildfire mitigation behavior (Figure C4.24 & Figure C4.27). The HOA sample had higher intentions and behaviors when compared to the non-HOA sample. Maintenance intentions identified that HOA respondents intend to complete, on average, 49% of possible actions on their property. The non-HOA sample identified respondents intend to complete only 33% of possible action. Looking at intentions to complete construction mitigation, we see the HOA sample with only 17% of respondents intend to complete possible actions while the non-HOA sample had 11%. Wildfire maintenance and construction behaviors were higher with the HOA sample completing, on average, 55% and 22% of possible actions on their property and home, respectively. The non-HOA sample identified respondents completed on average 38% and 17% of possible actions on their property and home, respectively.

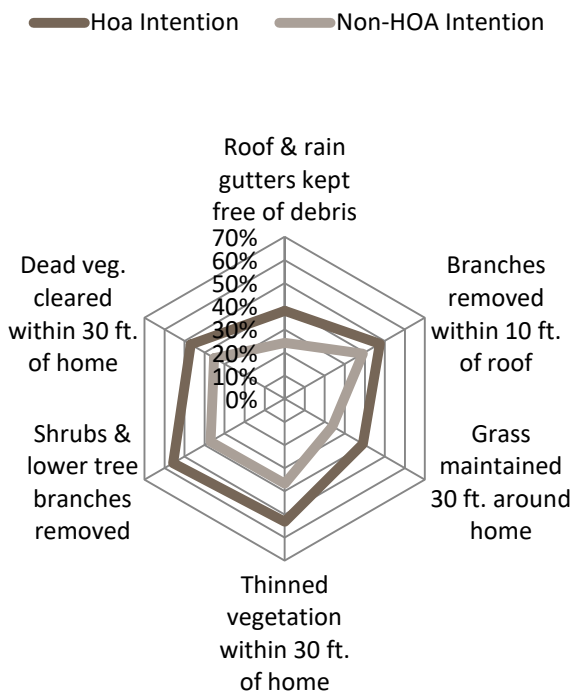

Figure C4.22 Intentions to mitigate wildfire risk (maintenance actions)
Note. Calculated from questio22.

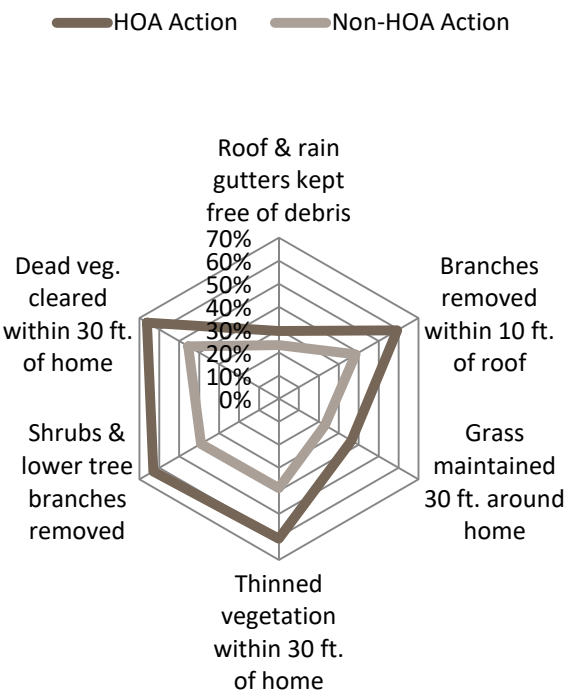

Figure C4.23 Wildfire mitigation behaviors (maintenance actions)
Note. Calculated from questions 21.

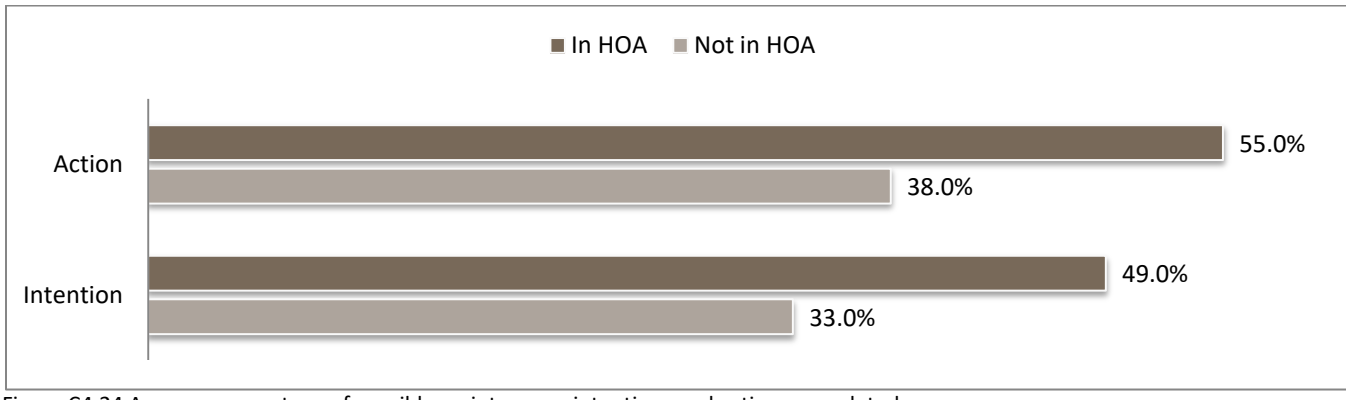

Figure C4.24 Average percentage of possible maintenance intentions and actions completed

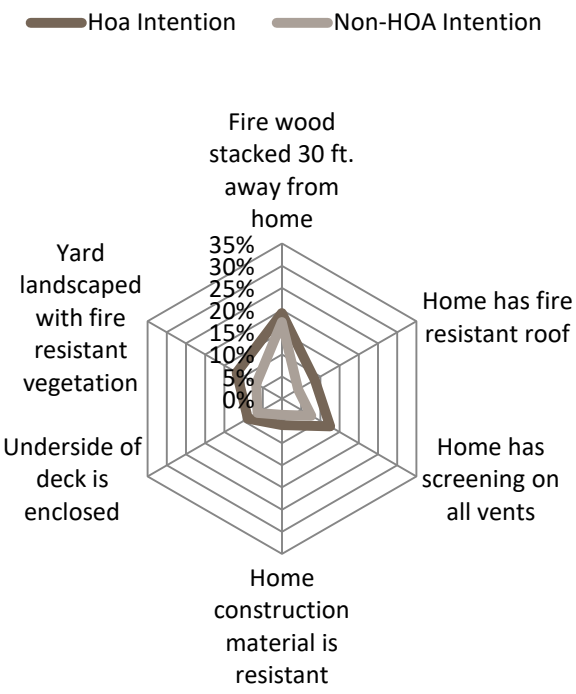

Figure C4.25 Intentions to mitigate wildfire risk (construction action)
Note. Calculated from questions 22.

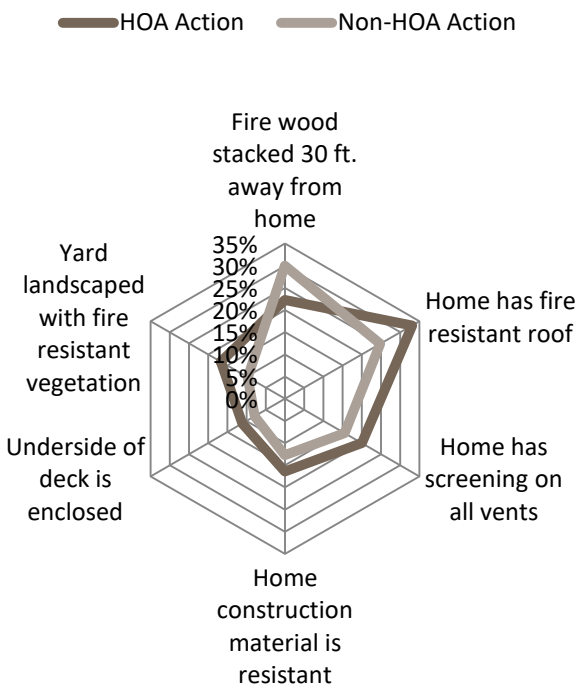

Figure C4.26 Wildfire mitigation behaviors (construction action)
Note. Calculated from questions 21.

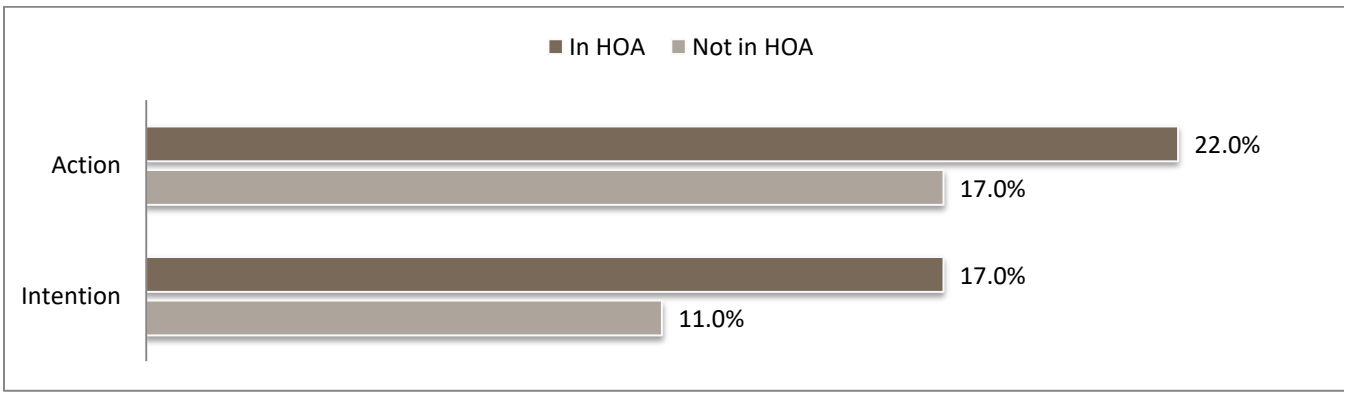

Figure C4.27 Average percentage of possible construction intentions and actions completed

Table C4.2 Overview of Model Variable's Descriptive Statistics

	HOA				Non-HOA			
Measure	***n***	***M***	***SD***	***α***	***n***	***M***	***SD***	***α***
TPB Indirect Factors								
Behavior Belief[a]	278	6.44	0.79	0.946	294	6.33	0.86	0.938
Injunctive Norm Belief[b]	266	5.34	1.29	0.908	263	4.81	1.31	0.922
Descriptive Norm Belief[b]	256	5.29	1.18	0.886	261	4.66	1.17	0.873
Control Belief[c]	283	5.71	1.15	0.679	299	5.56	1.19	0.700
TPB Direct Factors								
Attitude[d]	280	6.47	0.83	0.934	290	6.29	1.03	0.947
Subjective Norm[e]	290	5.98	1.11	0.735	306	5.60	1.34	0.776
Behavioral Control[f]	285	5.71	1.21	0.887	307	5.38	1.39	0.896
Intention to mitigate								
Maintenance Intentions[g]	305	0.49	0.38	-	330	0.33	0.36	-
Construction Intentions[h]	277	0.17	0.34	-	294	0.11	0.29	-
Actual Mitigate Behavior								
Maintenance Actions[g]	305	0.55	0.35	-	330	0.38	0.36	-
Construction Actions[h]	304	0.22	0.32	-	328	0.17	0.27	-
Wildfire Direct Factors								
Perceived wildfire Risk[i]	297	5.40	1.15	0.872	326	5.13	1.33	0.882
Personal Experience[j]	265	0.07	0.09	-	289	0.08	0.10	-
Subjective Knowledge[k]	302	6.00	0.99	0.732	324	5.73	1.03	0.537
Locus of Responsibility[l]	257	5.52	1.16	0.873	227	5.42	1.24	0.877

Note. *n* = number of cases. *M* = mean. *SD* = standard deviation. *α* = Cronbach's alpha.
[a] Composite measure with 5 items. 1 = *weak behavioral belief*, 7 = *strong behavioral belief*. Q24 & 25.
[b] Composite measure with 4 items. 1 = *low normative belief*, 7 = *high normative belief*. Injunctive Q30 & 31, Descriptive Q32 & 33.
[c] Composite measure with 3 items. 1 = *low control beliefs*, 7 = *high control beliefs*. Q 39 & 40.
[d] Composite measure with 8 items. 1 = *negative attitude*, 7 = *positive attitude*. Q23.
[e] Composite measure with 4 items. 1= *norms not promoting mitigation*, 7 = *norms promoting mitigation*. Q 26-29.
[f] Composite measure with 5 items. 1 = *perceived many constraints*, 7 = *perceived no constraints*. Q34-38.
[g] Index measure with 7 items. 0 = *no intentions/actions*, 1 = *intention/action to mitigate all*. Q 22.
[h] Index measure with 5 items. 0 = *no intentions/actions*, 1 = *intention/action to mitigate all*. Q21.
[i] Composite measure with 6 items, 1 = *no perceived risk*, 7 = *high perceived risk*. Q 13-18.
[j] Index measure with 7 items. 0 = *no experience*, 1 = *much experience*. Q12.
[k] Composite measure with 3 items. 1 = *low level of knowledge*, 7 = *high level of knowledge*. Q 9-11.
[l] Composite measure with 7 items. 1 = *low sense of responsibility*, 7 = *high sense of responsibility*. Q19.

Correlations of study measures are presented in Table C4.3 for the HOA sample and Table C4.4 for the non-HOA samples. To prepare data for analysis, a z-transformation was completed for each measure. This process centers and rescales the measures so the mean is zero and standard deviation is one. (Cohen, Cohen, West, & Aiken, 2003).

Table C4.3 HOA Variable Correlations

Measure	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Behavior Belief	1.00													
Injunctive Belief	0.49**	1.00												
Descriptive Belief	0.56**	0.74**	1.00											
Control Belief	0.37**	0.41**	0.47**	1.00										
Attitude	0.66**	0.43**	0.45**	0.33**	1.00									
Subjective Norms	0.62**	0.68**	0.63**	0.45**	0.56**	1.00								
Behavioral Control	0.37**	0.38**	0.51**	0.43**	0.32**	0.43**	1.00							
Maint. Intention	0.17**	0.20**	0.20**	0.15**	0.23**	0.16**	0.06	1.00						
Const. Intention	0.14*	0.16*	0.11	0.03	0.17**	0.16**	0.07	0.40**	1.00					
Maint. Action	0.24**	0.32**	0.34**	0.31**	0.28**	0.32**	0.28**	0.48**	0.28**	1.00				
Const. Action	0.14*	0.14*	0.21**	0.10	0.11	0.17**	0.14*	0.23**	0.40**	0.48**	1.00			
Risk	0.34**	0.27**	0.22**	0.20**	0.39**	0.35**	0.06	0.22**	0.12	0.31**	0.14*	1.00		
Experience	0.05	0.06	0.03	0.11	0.07	-0.05	-0.01	-0.08	0.13	0.16*	0.09	0.19**	1.00	
Knowledge	0.52**	0.44**	0.49**	0.29**	0.52**	0.50**	0.33**	0.24**	0.14*	0.35**	0.13*	0.47**	0.04	1.00
Responsibility	0.32**	0.40**	0.47**	0.10	0.32**	0.29**	0.15*	0.15*	0.16*	0.22**	0.10	-0.14*	-0.06	0.27**

Note. * $p < .05$. ** $p < .01$.

Table C4.4 Non-HOA Variable Correlations

Measure	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Behavior Belief	1.00													
Injunctive Belief	0.38**	1.00												
Descriptive Belief	0.50**	0.61**	1.00											
Control Belief	0.31**	0.25**	0.27**	1.00										
Attitude	0.65**	0.27**	0.35**	0.20**	1.00									
Subjective Norms	0.62**	0.56**	0.59**	0.27**	0.55**	1.00								
Behavioral Control	0.26**	0.18**	0.32**	0.33**	0.19**	0.31**	1.00							
Maint. Intention	0.23**	0.34**	0.25**	0.14*	0.22**	0.28**	0.12*	1.00						
Const. Intention	0.20**	0.23**	0.31**	0.09	0.17**	0.26**	0.13*	0.38**	1.00					
Maint. Action	0.29**	0.30**	0.29**	0.16**	0.27**	0.34**	0.19**	0.59**	0.25**	1.00				
Const. Action	0.21*	0.28**	0.29**	0.12*	0.20**	0.26**	0.18**	0.35**	0.33**	0.60**	1.00			
Risk	0.35**	0.27**	0.23**	0.12*	0.32**	0.29**	-0.07	0.27**	0.20**	0.29**	0.30*	1.00		
Experience	-0.03	0.03	0.05	-0.04	-0.01	-0.03	0.02	-0.07	0.02	0.10*	0.21	0.09	1.00	
Knowledge	0.40**	0.32**	0.39**	0.16**	0.36**	0.43**	0.10	0.29**	0.18**	0.32**	0.23*	0.58**	0.07	1.00
Responsibility	0.15**	0.01	0.19*	0.14	0.10	0.23**	-0.04	0.08	0.12	0.08	0.13	-0.19**	0.06	0.24**

Note. * $p < .05$. ** $p < .01$.

MANOVA Results

An exploration of the possible mean differences between the HOA and Non-HOA samples was assessed through a MANOVA. The one-way MANOVA explored the effect of HOA on the model factors. A significant effect was identified ($F_{(15,619)} = 0.882$, $p < 0.001$) suggesting that there is at least one factor that is significantly different between the two samples. The individual ANOVA indicated that many factors had significantly different means between the two samples (Table C4.5). HOAs were found to significantly increase residents' attitude toward wildfire mitigation ($F_{(1,633)} = 5.411$, $p < 0.05$), subjective norm ($F_{(1,633)} = 13.607$, $p < 0.05$), injunctive belief ($F_{(1,633)} = 22.300$, $p < 0.05$), descriptive belief ($F_{(1,633)} = 37.389$, $p < 0.05$), perceived behavioral control ($F_{(1,633)} = 9.160$, $p < 0.05$), subjective knowledge ($F_{(1,633)} = 8.417$, $p < 0.05$), perceived wildfire risk ($F_{(1,633)} = 7.024$, $p < 0.05$), intention to mitigate (maintenance, $F_{(1,633)} = 30.233$, $p < 0.05$ and construction, $F_{(1,633)} = 4.833$, $p < 0.05$), and mitigation behaviors (maintenance, $F_{(1,633)} = 38.587$, $p < 0.05$ and construction, $F_{(1,633)} = 5.721$, $p < 0.05$). These results suggest that HOAs have an influence on homeowner mitigation behaviors.

Table C4.5 ANOVA Results for HOA differences

	Adjusted R^2	***F***	***p***
Behavioral Belief	0.002	2.365	0.125
Injunctive Belief	**0.033**	**22.300**	**0.000**
Descriptive Belief	**0.054**	**37.389**	**0.000**
Control Belief	0.001	1.785	0.182
Attitudes	**0.007**	**5.411**	**0.020**
Subjective Norm	**0.019**	**13.341**	**0.000**
Behavioral Control	**0.013**	**9.160**	**0.003**
Subjective Knowledge	**0.012**	**8.417**	**0.004**
Locus of Responsibility	0.002	0.026	0.873
Personal Experience	0.003	2.687	0.102
Perceived Wildfire Risk	**0.009**	**7.024**	**0.008**
Mitigate Intention (maintenance)	**0.044**	**30.233**	**0.000**
Mitigate Intention (construction)	**0.006**	**4.833**	**0.028**
Mitigate Action (Maintenance)	**0.056**	**38.587**	**0.000**
Mitigate Action (construction)	**0.007**	**5.721**	**0.017**

Note. Degrees of Freedom = 1, 633. Bold items have significantly different means between the two samples.

TPB Model Results

Based on the items described earlier, measurement models were explored for each factor in model. Table C4.6 presents the fit of each measurement model. Each provided good fit to the data.

Table C4.6 Measurement Model Fit Indices

Measurement Model	x^2	*df*	CFI	SRMR	RMSEA	RMSEA CI (90%)
Behavioral Belief	34.257*	16	0.974	0.029	0.061	[0.033,0.090]
Injunctive Belief	8.839	8	0.999	0.024	0.019	[0.000,0.073]
Descriptive Belief	8.519	6	0.995	0.027	0.038	[0.000,0.091]
Control Belief	7.510	4	0.974	0.033	0.054	[0.000,0.114]
Attitude	74.216*	47	0.968	0.135	0.043	[0.023,0.062]
Subjective Norm	3.490	4	1.000	0.033	0.000	[0.000,0.081]
Perceived Control	29.669*	17	0.984	0.047	0.050	[0.016,0.079]

Note. x^2 = Chi Square (*p<.05)*. *Df* = Degrees of Freedom. CFI = Comparative Fit Index (>.95). SRMS = Standardized Root Mean Square Residual (<.08). RMSEA = Root Mean Square Error of Approximation (<.06). CI = Confidence Interval.
* $p < 0.05$.

These measurement models were analyzed in a full structural model to test the framework as identified in the study purpose. Figure C4.28 represents a structural representation of the model tested. Some modification were made to the model to aid in its fit to the data. Overall, the final model provided good fit to the data ($x^2_{(1186)} = 1909.291$, $p < 0.05$; CFI = 0.940; SRMR = 0.069; RMSEA = 0.044, CI [0.040,0.047]).

Results

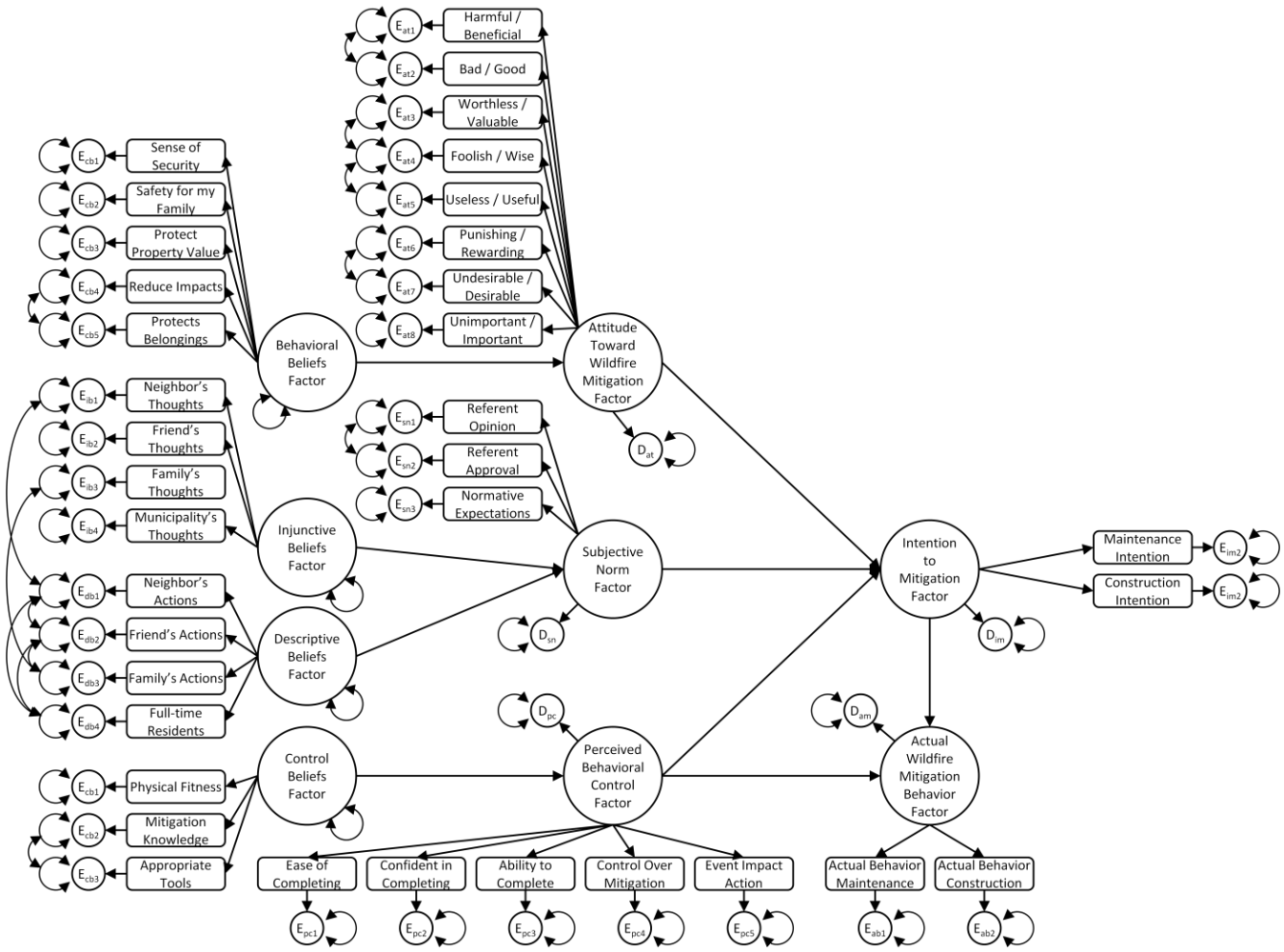

Figure C4.28 Theoretical framework model

All factor loadings were significant and aided to the measurement of each factor suggesting good local fit to the data. Table C4.7 and figures C4.29 (HOA) and C4.30(non-HOA) present the model estimates for each structural path. The indirect to direct factor paths were all positive and significant accept for the path between injunctive belief and subjective norms for both HOA and non-HOA samples which was not a significant predictor of subjective norms. The behavioral belief factor had a positive and significant path to the attitudes factor (HOA, $\beta = 0.705$, $p < 0.05$ & non-HOA, $\beta = 0.685$, $p < 0.05$). Injunctive beliefs did not have a significant path to subjective norms for either cluster's sample. Both the HOA and non-HOA samples had a significant and positive path from descriptive belief to subjective norm ($\beta = 0.666$, $p < 0.05$ & $\beta = 1.087$, $p < 0.05$, respectively). It is noted that the non-HOA standardized path coefficient of 1.087 is out of bounds with a value over one. The two factors have a high correlation ($r = 0.848$) which could present a case of multicollinearity between the factors. Finally, control beliefs provided a significant and positive path to perceived behavioral control for both samples (HOA, $\beta = 0.689$, $p < 0.05$ & non-HOA, $\beta = 0.480$, $p < 0.05$).

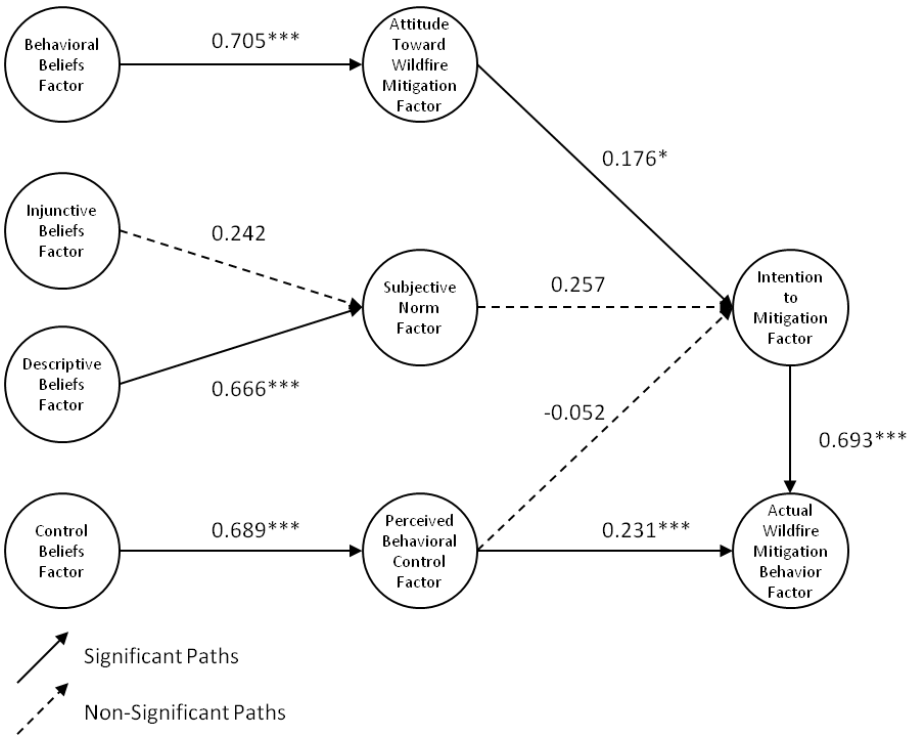

Figure C4.29. HOA Model Paths
*$p < .05$. **$p < .01$. ***$p < .001$

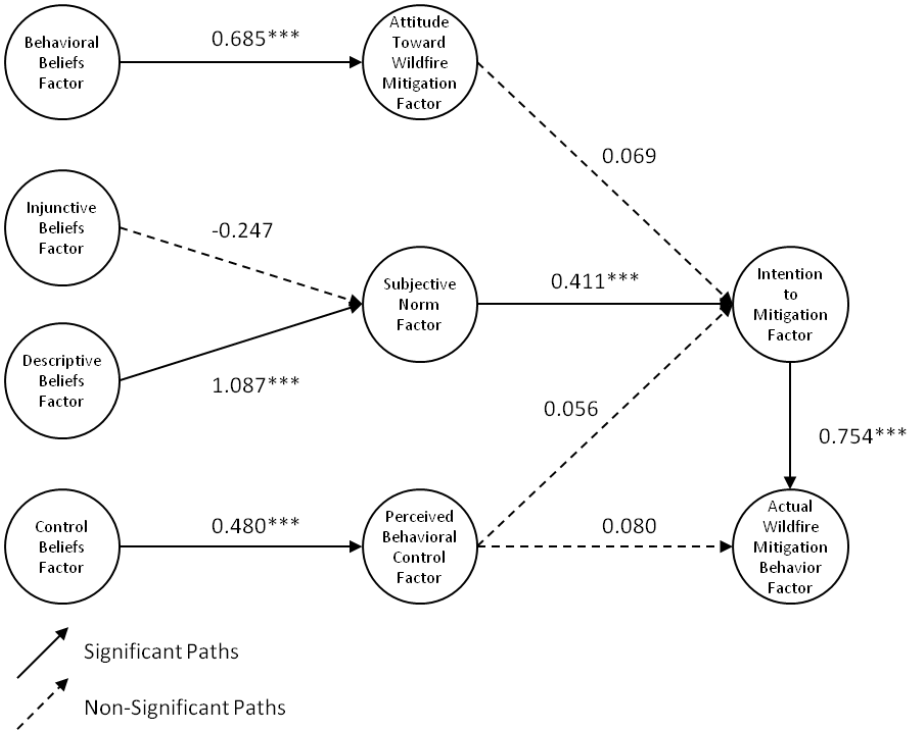

Figure C4.30. non-HOA Model Paths
*$p < .05$. **$p < .01$. ***$p < .001$

Results

Predictors of intention to mitigate were different for each sample. The model presented attitudes as a positive and significant predictor of intention to mitigate wildfire risk for the HOA sample (β = 0.176, $p < 0.05$). For the non-HOA sample, a positive and significant relationship was identified between subjective norms and intention to mitigate wildfire risk. The other predictors were not significantly related to intentions to mitigate wildfire risk. Intention to mitigate wildfire risk had a positive and significant relationship with actual wildfire mitigation behavior for both HOA and non-HOA samples (β = 0.639, $p < 0.05$ & β = 0.754, $p < 0.05$ respectively). A significant path was identified from perceived behavioral control directly to actual wildfire mitigation behavior for the HOA sample (β = 0.321, $p < 0.05$).

Table C4.7 Model Estimates

	HOA		**Non-HOA**	
Parameter	**β**	***SE***	**β**	***SE***
Behavioral Belief → Attitude	0.705***	0.037	0.685***	0.054
Injunctive Belief → Subjective Norm	0.242	0.172	-0.247	0.302
Descriptive Belief → Subjective Norm	0.666***	0.156	1.087***	0.257
Control Belief → Perceived Control	0.689***	0.051	0.480***	0.075
Attitude → Intention to Mitigate	0.176*	0.080	0.069	0.074
Subjective Norm → Int. to Mitigate	0.257	0.133	0.411***	0.084
Perceived Control → Int. to Mitigate	-0.052	0.095	0.056	0.075
Int. to Mitigate → Mitigate Action	0.639***	0.101	0.754***	0.075
Perceived Control → Mitigate Action	0.231***	0.065	0.080	0.055
Inj. Belief ↔ Behavioral Belief	0.500***	0.057	0.406***	0.053
Desc. Belief ↔ Behavioral Belief	0.698***	0.050	0.741***	0.047
Desc. Belief ↔ Inj. Belief	0.751***	0.061	0.835***	0.079
Control Belief ↔ Behavioral Belief	0.515***	0.067	0.457***	0.077
Control Belief ↔ Inj. Belief	0.503***	0.068	0.334***	0.083
Control Belief ↔ Desc. Belief	0.761***	0.058	0.467***	0.085
Protect belongings ↔ Reduce impact	0.447***	0.088	0.593***	0.074
Family thought ↔ Neighbor thought	-0.262	0.151	-0.386*	0.182
Neighbor action ↔ Friend action	0.505***	0.061	0.526***	0.094
Neighbor action ↔ Neighbor thought	0.435***	0.095	0.235**	0.090
Full-time res. act. ↔ Neighbor action	0.362***	0.071	0.533***	0.067
Full-time res. act. ↔ Friend action	0.376***	0.068	0.399***	0.091
Family action ↔ Family thought	0.560***	0.107	0.314***	0.090
Family action ↔ Friend action	0.198**	0.067	0.425***	0.095
Undesirable/Desirable ↔ Punishing/Rewarding	0.305**	0.100	0.340**	0.123
Useless/Useful ↔ Foolish/Wise	0.202	0.133	0.796***	0.093
Bad/Good ↔ Harmful/Beneficial	0.302*	0.153	0.176	0.234
Foolish/Wise ↔ Worthless/Valuable	0.531*	0.235	0.361***	0.114

Note. β = Standardized Bata coefficient estimate. *SE* = Standard Error.
*$p < .05$. **$p < .01$. ***$p < .001$.

Chapter 5

Discussion

This study investigated the application of a framework based on the theory of Planned Behavior in a homeowner wildfire mitigation context to provide unique insight into mitigation behaviors. A novel exploration of the present empirical study was the difference between HOAs and non-HOAs on resident wildfire mitigation actions. The following will discuss the finding of the study.

HOA

For the HOA sample, attitudes provided a significant prediction of intentions. This finding shows that residents with positive attitudes toward wildfire mitigation actions tend to have high behavioral intentions for completing these actions on their property. This also means that residents with a poor attitude will have low intentions for taking action to mitigate their property. This finding presents a unique understanding of mitigation intentions within HOAs.

Interestingly, subjective norms were not a significant factor in predicting intentions to mitigate. It is felt the norms, in a wildfire mitigation context, could vary within HOAs based on a number of factors such as association regulations and their level of enforcement. In other words, social norms may not be a significant predictor of intentions due to the dynamic within HOAs relating to mitigation focused CC&R's as well as enforcement of these regulations. There can be a range of week to strong and lenient to strict HOAs which could be moderating subjective norms relationship with intention to mitigate.

Perceive behavioral control had a positive and significant direct relationship with actual mitigation actions. This suggests that residents' with perceived control over their ability to complete mitigation actions are likely to mitigate within HOA neighborhoods. In other words, a residents' perceived lack of control over their ability to mitigate may supersede a strong intention toward mitigation which could lead to no mitigation behaviors attempted.

Non-HOA

For the non-HOA sample, the main driver of intentions to mitigate wildfire risk was subjective norms. Much literature has identified the relevance norms have on actions, and in this case intentions, to mitigate property (Brenkert-Smith et al., 2006, 2012; Brenkert-Smith et al., 2013; Monroe et al., 2013). These studies help to understand subjective norm's importance in non-HOA neighborhoods. Specifically, when there is limited wildfire mitigation regulation and/or enforcement, neighborhoods rely on the social networks and what others are doing as cues of accepted behaviors. In other word, neighborhoods without an association still have informal social rules that influence mitigation. This research shows that even residents who do not want a neighborhood

association and the dues that typically come with such a membership, are still influenced by and working with other residents.

Role of HOAs in Mitigation

HOA respondents showed higher average ratings of study factors than the non-HOA respondents overall. They tend to have more positive attitudes toward mitigation actions, stronger neighborhood norms and normative beliefs, a higher perceived control over ones actions, a higher level of subjective knowledge, higher level of perceived risk, higher intention to mitigate, and were more likely to take action. However, study analysis showed that maintenance mitigation intentions do not lead to as high of a ratio of actions taken as in a non-HOA situation. In other words, HOA respondents who intend to mitigate their property tend to complete fewer actions relative to their intentions than their non-HOA counterparts.

It has been suggested that HOAs, more notably their board members, provide an information connection from agencies, governments, and councils to neighborhood residents (Dickinson et al., 2015; Jakes et al., 2007; Monroe et al., 2013; Nelson et al., 2003). Interview data highlighted these connections and how HOAs create awareness and educate residents of their risk and actions that can be taken. The literature identifies the importance of HOA meetings in creating awareness of risk and providing information on mitigation options to residents, including new and part-time residents who may not have access to this information in other settings (Dickinson et al., 2015; Jakes et al., 2007; Monroe et al., 2013; Nelson et al., 2003). Corresponding to this, results show subjective knowledge was significantly higher among HOA than non-HOA respondents.

HOAs play an important role regarding access to resources. Interview data identified how government grants provide help to homeowners, specifically through providing financial support for mitigation work on private property. These grants are often contingent on the neighborhood taking actions as a whole. For example, the Firewise Communities program requires neighborhoods to have completed a wildfire risk assessment, an action plan, hold “Firewise Day” events annually, invest money into local Firewise actions, and submit documentation to become a registered community (National Fire Protection Association, 2009). However, as an interview participant noted, neighborhoods “…need a champion to take on this task and promote Firewise.” HOAs, with their organized boards, and in some cases staff, provide a means to coordinate the processes of becoming Firewise and complete paperwork required to apply for these grants. The concern is that residents in non-HOA neighborhoods or HOA neighborhoods not willing to take on the task of becoming a Firewise Community, miss out on this financial support. Bringing this back to the sample demographics, non-HOA residents on average identified a lower income with a higher percentage still in the workforce than their HOA counterparts. This suggests that non-HOA residents may actually be in higher need of financial support than those located in neighborhoods with active HOAs. Collins and Bolin (2009) framed a similar relationship in

their study of the White Mountains in exploring people's negotiation of the wildfire risk. They noted that the "amenity migrants," or new residents moving to the WUI for the natural aspects, put the working class residents at a higher wildfire risk and that the focus should be on addressing "social vulnerability". Collins and Bolin (2009) define "social vulnerability" as a "Lack of financial, physical, and/or legal capacity to reduce risk" (p.441). The access to financial resources brought up by interview participants adds to this idea of social vulnerability with comments such as "…the other neighborhood have some retired folk that are not stable financially" and "I am concerned with unincorporated lots adjacent to our neighborhood."

Limitation of Results

It is important to understand the limitations of this study and applicability of results. As identified, this research studied a particular case and time. In particular, the Prescott area is a unique case in that the community generally has been very proactive about wildfire protection for many years. This is not indicative to many communities in the WUI. These results could be quite different if implemented in another geographical context.

Wildfire mitigation can be an emotionally charged topic. The study identified about six individuals with concerns that the results will create regulation that could impose restrictions on them and dictate how they are to maintain their property. These individuals who contacted the researchers with this view refused to complete the questionnaire for these reasons. Though it is felt that these data provide a good representation of the population, there is the potential of some viewpoint not being expressed as strongly in the results due to these concerns.

Chapter 6

Recommendations

Creating a resilient community requires everyone from homeowners to federal land management agencies to do their part in mitigating wildfire risk (Davis, 1990; Jakes et al., 2007; Winter et al., 2009). Passing and uniformly enforcing ordinances do create awareness and compliance of the adopted wildfire code (Haines, 2008; Sisser et al., 2016). However, it is difficult to pass such measures restricting homeowner property rights and freedoms (Sisser et al., 2016; Vogt, Winter, & McCaffrey, 2007).

This study explored different aspects of mitigation behaviors to understand and identify unique ways in promoting homeowner wildfire mitigation actions. Through applying a TPB framework to a wildfire mitigation context, underlying beliefs that are at the heart of an individual's decision to behave in a certain way can be identified (Fishbein & Ajzen, 2010). Addressing or changing these underlying beliefs can work toward promoting homeowner mitigation actions.

In HOAs, the driving factor of wildfire mitigation intention was attitudes toward mitigation behaviors. With this information, the focus on promoting homeowners to mitigate their property should center on changing underlying behavioral beliefs which predict attitudes. The behavioral beliefs assessed in this study included a sense of security, safety for family, protection of property value, reducing impacts from wildfire, and protection of personal belongings. These salient beliefs are framed by the individuals' belief that the event is likely to occur and their evaluations of the event's benefit. For instance, a homeowner may feel a sense of security is likely if they mitigated their property and a wildfire occurred (event is likely to occur). But they may also believe that a sense of security is good (evaluation of the event's benefit). This would make their overall belief about mitigation providing a sense of security very high which impacts their overall attitude toward performing the action. In this case, outreach programs that provide information on how mitigation can increase security of the home would be one strategy to change behavioral beliefs. Each of the belief items identified (sense of security, safety for family, protection of property value, privacy around home, reduction of wildfire impacts, protection of personal belongings, property appearance) should be addressed with outreach efforts espousing the benefits mitigation provides.

Perceived behavioral control was also a significant factor for the HOA respondents. This directly influenced actual mitigation behavior. As noted above, perceived constraints can limit actual behavior even if the individual has a positive attitude and there are strong normative pressure promoting the behavior. Exploring the beliefs associated with perceived behavioral control, knowledge of actions to take, having the appropriate tools, and physical fitness, provide insight into the constraints individuals may be facing when it comes to completing wildfire mitigation actions. Strategies for outreach are discussed later in this section but

there is a clear need to create awareness of such services. There should be continued outreach to inform homeowners about actions they can take. As this study has identified, many older and retired individuals are living in the Prescott area. Some homeowners may have reduced physical capabilities that limit their ability to take certain actions themselves. Connecting these individuals with information on contractors and municipal services is critical. By removing the obstacles homeowners face, they will be more likely to complete mitigation actions on their property.

In non-HOA neighborhoods, subjective norms provided a significant impact on intention to mitigate. Descriptive belief, which was significantly and positively related with subjective norms, identifies the impact an individual can have on another by behaving in a certain way. In other words, the mitigation actions (or non actions) of neighbors, friends, family, and full-time residents create a social norm that people tend to adhere to (Fishbein & Ajzen, 2010). From a municipality or agency stand point, it is very important to lead by example and continue to mitigate fire prone property. This not only represents the municipality's or agency's commitment to community safety but can also set a social norm of the community itself. Another avenue would be to showcase mitigated property to promote this norm through media sources.

Connecting important information to the intended audience is not always an easy proposition. This takes numerous strategies and sources and requires a continued message (Winter & Cvetkovich, 2010). The following discusses potential strategies to address the messages identified above. One of the most impactful modes of delivering messages about wildfire mitigation is having an agency official visit the home or connect with the homeowner in some way. Though one of the more expensive and time consuming propositions, having agency personnel create direct connections, an open dialog, and personal relationships with homeowners is a key element in gaining compliance (Jakes et al., 2007; Vogt et al., 2007; Winter & Cvetkovich, 2010). Though the "expert" is always desired, other sources could utilized such as community members of neighboring Firewise Communities who could talk with homeowners. Specifically in Prescott, PAWUIC is a major resource in the community and has connections to individuals who are passionate and knowledgeable about this issue. PAWUIC thus has an important role to play in education and outreach.

Media sources, such as newspapers, magazines, radio, and television are ideal for a continued year round message that can reach a broad audience. Working with the local newspapers to print stories about mitigation efforts and successes in areas where fires have impacted the WUI could help with improving those behavioral beliefs toward mitigation. A weekly "mitigation task" segment in the paper, local weekly magazine, on the radio, or on television with information about the specific task, municipal services, and contractors who can aid, could help with a continued message and provide a more attainable process for property mitigation by providing just one task to complete each week. An annual prime time program on a national television affiliate before wildfire season could also provide directed information to many in the Prescott area. This is a strategy

often done in regions that are at risk of natural disaster such as Florida with its hurricanes and California with its potential for earthquakes. Pamphlets mailed to residents a few times a year can provide more detailed information on actions and resources available to the community. All of these suggestions should work toward the dissemination of messages that ultimately aim to change residents' beliefs toward mitigation actions.

Conclusion

This study explored the impacts HOAs have on homeowner wildfire mitigation behaviors in a TPB framework. Findings showed the influence of attitudes to be a driving force for the development of intentions to mitigate in neighborhoods with HOAs and that perceived behavioral controls directly impacted actual mitigation actions. While the main influence of intentions within non-HOA neighborhoods were subjective norms. Through the exploration of a MANOVA, HOAs were found to play a significant role in many aspects of wildfire mitigation.

Specific beliefs were identified that could be targeted in promoting wildfire mitigation action. In a time of limited budgets, these focal areas would provide the most impact with the limited resources currently at most municipal's and organization's disposal. This is more relevant in the current era where we are contending with a situation of potential for wildifre coupled with an increase in people moving to the WUI. With more money being funneled into suppression costs, limited resources are left to address proactive actions. This study provided specific areas to focus these limited resources to help reduce wildfire's impact on individuals and communities.

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Appendix A

Detailed Questionnaire Results Based on Municipality

This appendix presents results from the Wildfire Risk Reduction Actions in Prescott, Arizona questionnaire. The main topic areas of the questionnaire identified home ownership and property characteristics, personal experience and knowledge with wildfire, perceived responsibility, risk reduction actions and intentions, perceived risk, attitudes toward wildfire mitigation, social norms, perceived constraints, and demographic information. The study sampled two population, homeowners with property in an HOA and homeowners with property not within an HOA. To compare the two cases of HOA and non-HOA, the samples were designed to provide a comparable number of responses in each. There for, each case is looked at separately in each table. The results in this section also breakdown these data per municipality, within city of Prescott boundaries (Prescott) and outside the city boundaries (Yavapai). It is important to note that this was not an intended comparison of the study and these results should not be use for such as the two groups have widely different sample sizes. The breakdown of these data was to provide the city of Prescott specific results within city boundaries.

Sample demographics

This section presents demographic characteristic of sample respondents. Table AA.1 presents respondent gender and average age, table AA.2 presents respondents ethnicity, table AA.3 presents respondent household income, table AA.4 presents education, and table AA.5 presents respondent employment and military service.

Results show that primarily males responded in the HOA sample (64.4%) while about half, 47 percent, males responded in the non-HOA sample. Average age between the two samples were in the mid to late sixties with HOA respondents having a slightly higher average age (69 years) then the non-HOA sample (65 years). Respondent ethnicity was largely white for both samples with HOA having 97 percent white and non-HOA having 94 percent white. The other highest group was Hispanic or Latino in the non-HOA sample that accounted for three percent of all respondents.

Respondents had a median annual household income of $75,000 to $89,999 of the HOA sample which was slightly higher than the non-HOA sample which was $60,000 to $74,999. The results show the over half (54.5%) of the HOA sample earn $75,000 or more compared to 39 percent for the non-HOA sample. HOA respondents had an overall higher level of education attained with 71 percent having a bachelor or higher degree. When compared to the non-HOA sample, though still high, 58 percent had a bachelor or higher degree. Both are still higher than the national average of 45 percent attaining a bachelor degree or higher (Ryan & Bauman, 2016). Both the HOA and non-HOA had large portions of retired respondents (66% and 54% respectively). The HOA sample also had a higher percentage (30.9%) of respondents with current or former military service when compared to the non-HOA sample (18.4%). As expected giving the higher percentage or retired respondents, the majority of those who reported military service were retired (93.8% for HOA and 92.9% for non-HOA)

Table AA.1 Gender & age of respondents

	HOA		**Non-HOA**	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Respondents gender (male)[a]	63.3	64.4	45.8	46.8
	(mean)	(mean)	(mean)	(mean)
Respondent age[b]	69	69	64	65

Note. Survey question 41: "What is your gender?" & 42: "What was the year of your birth?"
[a] HOA n=289: Prescott n=251. Non-HOA n=314: Prescott n=240.
[b] HOA n=283: Prescott n=246. Non-HOA n=310: Prescott n=238.

Table AA.2 Respondent ethnicity

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
White	98.3	97.1	93.2	93.5
& Asian	0.0	0.4	0.4	0.3
& Hispanic or Latino	0.0	0.0	0.9	0.3
& Italian	0.0	0.0	0.4	0.3
& Irish	0.0	0.0	0.0	0.3
Black or African American	0.4	0.4	0.0	0.0
Hispanic or Latino	0.4	0.4	3.4	2.9
American Indian or Alaska Native	0.0	0.0	0.0	0.0
& Hispanic or Latino	0.0	0.4	0.4	0.3
& White	0.0	0.0	0.9	0.7
Polish	0.0	0.0	0.4	0.3
Asian	0.0	0.0	0.0	0.3
Other	0.8	1.4	0.0	0.3

Note. Survey question 43: "Please indicate which race or ethnic background you identify with."
HOA n=177: Prescott n=241. Non-HOA n=306: Prescott n=234.

Table AA.3 Respondents' annual household income

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Less than $15,000	1.5	2.1	3.2	3.6
$15,000 - $29,999	5.9	5.5	11.5	10.8
$30,000 - $44,999	7.4	7.2	12.0	12.2
$45,000 - $59,999	18.2	17.4	17.5	17.6
$60,000 - $74,999	12.8	13.2	18.4	17.3
$75,000 - $89,999	8.9	8.1	10.1	9.0
$90,000 - $104,999	11.3	10.2	6.9	7.6
$105,000 - $119,999	10.3	9.4	4.1	4.3
$120,000 or more	23.6	26.8	16.1	17.6

Note. Survey question 44: "What is your current annual household income?"
HOA n=235: Prescott n=203. Non-HOA n=278: Prescott n=217.

Table AA.4 Respondents' highest education level

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
No schooling	0.0	0.0	0.4	0.3
Some high school	0.4	0.4	0.4	0.3
High school diploma/GED	4.0	3.9	6.6	6.9
Some college	15.7	15.1	23.6	25.6
Associate's degree	7.6	9.2	12.0	9.1
Bachelor's degree	31.7	30.3	26.9	29.3
Master's degree	26.9	26.4	19.0	18.3
Professional degree	6.0	7.0	5.8	5.0
Doctorate degree	7.6	7.7	5.4	5.0

Note. Survey question 45: "What is the highest degree or level of school completed?"
HOA n=284: Prescott n=203. Non-HOA n=317: Prescott n=217.

Table AA.5 Respondents' Employment, military service and status

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Working full-time[a]	21.2	22.2	35.8	32.5
Working part-time[a]	8.8	10.4	11.1	11.7
Retired[a]	68.4	66.0	51.0	53.9
Unemployed[a]	1.6	1.4	2.1	1.9
Military service[b]	30.8	30.9	17.0	18.4
Active duty[c]	*1.4*	*1.2*	*0.0*	*0.0*
Reserves[c]	*4.3*	*3.7*	*2.6*	*3.6*
Retired[c]	*94.3*	*93.8*	*94.9*	*92.9*
Honorable Discharge[c]	*0.0*	*1.2*	*2.6*	*3.6*

Note. Survey question 46: "What is your current employment status?" & 47: "Are you serving or have you served in the military?" "If yes, what is your current military status?"
[a]HOA n=288: Prescott n=250. Non-HOA n=317: Prescott n=243.
[b]HOA n=288: Prescott n=250. Non-HOA n=315: Prescott n=241.
[c]HOA n=80: Prescott n=70. Non-HOA n=56: Prescott n=39.

Home ownership, property characteristics, and residency

This section presents the results of respondent home ownership, residency, and characteristics. Table AA.6 presents respondents residency. House characteristics are presented in tables AA.7 home story, AA.8 home construction material, AA.9 house roof material, and AA.10 property characteristics. Table AA.11 presents respondent's experience with insurance cancelation or discounts and table AA.12 present influence of HOAs for the respondents in the HOA sample.

Both the HOA and non-HOA samples had a high level of full-time respondents (81.3% and 89.6% respectively). The lower percent of full-time residents with the HOA sample were due to slightly higher percentage of respondents identifying the property was a vacation (9.0%) or that they are part-time residents (8.3%). The results also show the non-HOA respondent residing in their home longer (15.9 years) on average than those in the HOA sample (9.2 years).

Home stories were even between one and two stories for the HOA sample (47.7% and 49.0%). The non-HOA sample had more single story homes (63.3%) than two (32.4%) and three or more (4.2) homes. Primary home construction was wood frame with stucco siding (47.2%) and wood siding (37.5%) for the HOA sample. The non-HOA sample identified the same two but wood siding was identified more by respondents (41.8%) than stucco siding (30.5%). Respondents in both the HOA and non-HOA samples identified that asphalt shingles were the primary roof material (71.2% and 83.2% respectively). A quarter of the respondents in the HOA sample identified having a terra cotta roof. Cedar shake shingles were only identified in the non-HOA sample but were extremely low (0.6%). Property characteristics were gathered from parcel data provided from Yavapai County. These data show that property characteristics for the HOA sample were newer than that of non-HOA (21 years verse 37). Homes within HOAs were larger (2,268 to 1,860 square feet) on smaller lots (0.36 to 0.42 acres) and median home values were over 100k higher than the non-HOA sample.

A very small percentage of respondents reported a threat of policy cancelation from their insurance company due to property not being mitigated for wildfire (1% for HOA and 1.2% for non-HOA). Ten percent for the HOA sample and only three percent for the non-HOA sample saw a discount by their insurance company for either mitigating the property or residing in a designated firewise community.

Homeowner associations were shown to have a moderate influence over respondent's wildfire mitigation actions with a mean of five. Fifty percent of respondents rated their HOA as having much influence or just below.

Table AA.6 Residency

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Absentee land owner[a]	1.1	1.3	2.4	1.8
Vacation home owner[a]	6.8	9.0	3.6	4.0
Part-time resident[a]	8.4	8.3	4.4	4.6
Full-time resident[a]	83.7	81.3	89.7	89.6
	(mean)	(mean)	(mean)	(mean)
Years of residency [b]	9.1	9.2	15.5	15.9

Note. Survey question 1: "How many days a year, on average, do you reside in the residence located in Prescott, Arizona?" & 2: "How many years have you lived at/owned this property?" *Absentee land owner* = 0 days, *vacation home owner* = 1 to 30 days, *part-time resident* = 31 to 182 days, *full-time resident* > 182 days

[a] HOA n=300: Prescott n=263. Non-HOA n=326: Prescott n=252.

[b] HOA n=301: Prescott n=263. Non-HOA n=327: Prescott n=252.

Table AA.7 Home story

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
One story	46.2	47.7	63.5	63.3
Two stories	51.5	49.0	31.8	32.4
Three or more stories	2.3	3.3	4.7	4.2

Note. Survey question 4: "How many stories is the home located on the parcel owned in Prescott, Arizona?"
HOA n=304: Prescott n=262. Non-HOA n=330: Prescott n=253.

Table AA.8 Home construction material

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Wood frame with vinyl siding	5.7	5.7	7.2	6.8
Wood frame with wood siding	36.3	37.5	43.0	41.8
Wood frame with stucco siding	50.0	47.2	29.1	30.5
Wood frame with brick siding	1.1	1.3	3.6	3.7
Wood frame with concrete siding	5.7	6.7	3.6	4.0
Wood frame with metal siding	0.0	0.3	1.6	1.5
Cinder block	0.4	0.7	10.0	8.9
Concrete	0.8	0.7	2.0	2.8

Note. Survey question 5: "What is the construction material of your home?"
HOA n=299: Prescott n=262. Non-HOA n=325: Prescott n=251.

Table AA.9 Home roof material

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Cedar shake shingles	0.0	0.0	0.8	0.6
Asphalt shingles	71.4	71.2	85.4	83.2
Metal roof	0.8	2.3	4.7	7.0
Terra cotta tiles	27.5	25.8	9.1	9.2
Flat roof	0.4	0.7	0.0	0.0

Note. Survey question 6: "What type of roof is on the home?"
HOA n=299: Prescott n=262. Non-HOA n=327: Prescott n=253.

Table AA.10 Property characteristics

	HOA		Non-HOA	
	Prescott (median)	Total (median)	Prescott (median)	Total (median)
Home age (years)	20	21	38	37
Home size (sf)	2,299	2,268	1,824	1,860
Property acreage (acres)	0.34	0.36	0.32	0.42
Property value ($)	268,528	261,444	146,581	151,186

Note. Yavapai County parcel data.
HOA n=304: Prescott n=267. Non-HOA n=329: Prescott n=255.

Table AA.11 Homeowners Insurance related to wildfire mitigation action

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Threat of cancelation[a]				
Yes	1.1	1.0	0.8	1.2
No	97.0	97.4	97.0	96.7
Not sure	1.9	1.6	2.0	2.1
Incentive or discount[b]				
Yes	11.0	10.0	2.0	3.0
No	70.0	70.7	79.2	79.0
Not sure	19.0	19.3	18.8	17.9

Note. Survey question 7: "Has your homeowner's insurance company ever:" "Threatened to cancel your policy if wildfire risk reduction actions were not taken on your property?", "Provided incentives or discounts for taking wildfire risk reduction actions on your property or for living in a registered firewise community?"
[a] HOA n=304: Prescott n=266. Non-HOA n=330: Prescott n=255.
[b] HOA n=300: Prescott n=263. Non-HOA n=329: Prescott n=255.

Table AA.12 HOA influence on homeowner mitigation actions in associations

	No Influence					**Much Influence**		
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Prescott	5.7	4.9	10.3	10.3	16.7	23.2	28.9	5.13
Total	6.0	5.0	9.6	11.3	16.9	23.3	27.9	5.10

Note. Survey question 8: "How would you rate the influence the association has on your actions concerning protecting your property from the risk of wildfire?" Mean based on a 7 point scale with 1=*not at all informed, relevant, or motivated* and 7=*very informed, relevant, or motivated*.
HOA n=301: Prescott n=263.

Wildfire knowledge and experience

This section presents the results of respondent's perceived knowledge and risk as well as their experience with wildfire. Table AA.13 through AA.16 presents the percentage breakdown of each question on perceived knowledge. Table AA.17 provides an overview of perceived knowledge means for comparison. Table AA.18 presents length of wildfire experience, AA.19 presents years since most recent wildfire experience, AA.20 presents average number of experience per event, AA. 21 presents the percent of population that had a wildfire experience.

The HOA sample showed consistently higher means of each perceived knowledge measure that the non-HOA sample. The HOA sample perceived themselves as more informed (5.90 HOA verse 5.63 non-HOA), information as more relevant (6.17 for HOA verse 5.98 for non-HOA), and more motivated to learn about wildfire mitigation (5.93 HOA verse 5.56 non-HOA).

The HOA sample generally had lower average length of experience with each wildfire event than that of the non-HOA sample. Years since most recent experience was mixed but generally showed HOAs as having more recent experiences with wildfire. Both samples were similar in regards to average number of times each wildfire event was experienced.

Table AA.13 Wildfire knowledge (HOA, City of Prescott)

	Not at all						**Very**	
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
How informed are you[a]	0.8	2.3	1.9	6.8	20.3	29.3	38.7	5.86
Find wildfire information relevant[a]	0.0	1.5	3.4	5.3	12.4	24.1	53.4	6.14
Motivation to learn[b]	0.8	0.4	4.5	7.2	16.7	29.2	41.3	5.91

Note. Survey questions 9: "How well informed do you consider yourself to be about wildfire risk on your property?"; 10: "To what extent do you find information about wildfire to be personally relevant?"; & 11: "How motivated are you to learn more about the connection between wildfire risk and undertaking behaviors to create defensible space around your home?" Mean based on a 7 point scale with 1=*not at all informed, relevant, or motivated* and 7=*very informed, relevant, or motivated*.
[a] n=266. [b] n=264.

Table AA.14 Wildfire knowledge (HOA, Total)

	Not at all						**Very**	
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
How informed are you[a]	1.0	2.0	1.6	5.9	19.7	30.6	39.1	5.90
Find wildfire information relevant[a]	0.3	1.3	3.0	4.6	13.2	22.0	55.6	6.17
Motivation to learn[b]	0.7	0.7	4.3	7.6	16.2	27.5	43.0	5.93

Note. Survey questions 9: "How well informed do you consider yourself to be about wildfire risk on your property?"; 10: "To what extent do you find information about wildfire to be personally relevant?"; & 11: "How motivated are you to learn more about the connection between wildfire risk and undertaking behaviors to create defensible space around your home?" Mean based on a 7 point scale with 1=*not at all informed, relevant, or motivated* and 7=*very informed, relevant, or motivated*.
[a] n=304. [b] n=302.

Table AA.15 Wildfire knowledge (Non-HOA, City of Prescott)

	Not at all						**Very**	
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
How informed are you[a]	1.6	2.0	4.8	11.6	20.7	29.9	29.5	5.55
Find wildfire information relevant[a]	2.4	1.2	5.2	8.0	13.5	22.3	47.4	5.86
Motivation to learn[b]	2.0	2.4	7.5	11.9	18.7	23.0	34.5	5.50

Note. Survey questions 9: "How well informed do you consider yourself to be about wildfire risk on your property?"; 10: "To what extent do you find information about wildfire to be personally relevant?"; & 11: "How motivated are you to learn more about the connection between wildfire risk and undertaking behaviors to create defensible space around your home?" Mean based on a 7 point scale with 1=*not at all informed, relevant, or motivated* and 7=*very informed, relevant, or motivated*.
[a] n=251. [b] n=252.

Table AA.16 Wildfire knowledge (Non-HOA, Total)

	Not at all						**Very**	
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
How informed are you[a]	1.2	2.2	4.0	10.8	20.6	29.2	32.0	5.63
Find wildfire information relevant[b]	1.8	1.2	4.0	7.1	13.5	20.2	52.1	5.98
Motivation to learn[c]	2.1	2.4	6.1	12.5	17.7	21.1	37.9	5.56

Note. Survey questions 9: "How well informed do you consider yourself to be about wildfire risk on your property?"; 10: "To what extent do you find information about wildfire to be personally relevant?"; & 11: "How motivated are you to learn more about the connection between wildfire risk and undertaking behaviors to create defensible space around your home?" Mean based on a 7 point scale with 1=*not at all informed, relevant, or motivated* and 7=*very informed, relevant, or motivated*.
[a] n=325. [b] n=326. [c] n=327.

Table AA.17 Wildfire knowledge (mean comparison)

	HOA		Non-HOA	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
How informed are you[a]	5.86	5.90	5.55	5.63
Find wildfire information relevant[b]	6.14	6.17	5.86	5.98
Motivation to learn[c]	5.91	5.93	5.50	5.56

Note. Survey questions 9: "How well informed do you consider yourself to be about wildfire risk on your property?"; 10: "To what extent do you find information about wildfire to be personally relevant?"; & 11: "How motivated are you to learn more about the connection between wildfire risk and undertaking behaviors to create defensible space around your home?" Mean based on a 7 point scale with 1=*not at all informed, relevant, or motivated* and 7=*very informed, relevant, or motivated*.

[a] HOA n=304: Prescott n=266. Non-HOA n=325: Prescott n=251.

[b] HOA n=304: Prescott n=266. Non-HOA n=326: Prescott n=251.

[d] HOA n=302: Prescott n=264. Non-HOA n=327: Prescott n=252.

Table AA.18 Years of wildfire experience

	HOA		Non-HOA	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Wildfire 20-50 miles from property[a]	6.05	6.18	7.39	7.02
Wildfire 10-20 miles from property[b]	4.22	4.16	4.45	4.49
Wildfire within 10 miles of property[c]	2.95	3.01	3.66	3.71
Prepared to evacuate property[c]	1.60	1.78	1.63	1.91
Evacuated property[d]	0.90	0.92	0.63	0.61
Property damaged[c]	0.02	0.01	0.13	0.17
Property destroyed[d]	0.12	0.11	0.03	0.08

Note. Survey question 12: "Please identify the year of your first and most recent experience for each of the following."

[a] HOA: Prescott n=241. Non-HOA: Prescott n=229.

[b] HOA: Prescott n=237. Non-HOA: Prescott n=227.

[c] HOA: Prescott n=240. Non-HOA: Prescott n=227.

[d] HOA: Prescott n=239. Non-HOA: Prescott n=227.

Table AA.19 Years since most recent of wildfire event experience

	HOA		Non-HOA	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Wildfire 20-50 miles from property[a]	2.99	3.03	3.08	3.2
Wildfire 10-20 miles from property[b]	5.06	4.75	4.58	4.7
Wildfire within 10 miles of property[c]	5.25	4.82	7.04	5.9
Prepared to evacuate property[d]	7.82	6.20	13.16	8.1
Evacuated property[e]	13.47	10.05	13.20	9.6
Property damaged[f]	3.00[†]	3.00[†]	29.00[†]	15.7[‡]
Property destroyed[g]	13.50[‡]	13.50[‡]	2.00[‡]	6.7[‡]

Note. Survey question 12: "Please identify the year of your first and most recent experience for each of the following."
[†] Actual value, only one respondent had recent experience. [‡] Three or fewer respondents.
[a] HOA n=200: Prescott n=173. Non-HOA n=201: Prescott n=156.
[b] HOA n=126: Prescott n=107. Non-HOA n=135: Prescott n=98.
[c] HOA n=90: Prescott n=71. Non-HOA n=117: Prescott n=75.
[d] HOA n=51: Prescott n=35. Non-HOA n=55: Prescott n=25.
[e] HOA n=22: Prescott n=15. Non-HOA n=17: Prescott n=10.
[f] HOA n=1: Prescott n=1. Non-HOA n=3: Prescott n=1.
[g] HOA n=2: Prescott n=2. Non-HOA n=3: Prescott n=2.

Table AA.20 Number of wildfire event experience

	HOA		Non-HOA	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Wildfire 20-50 miles from property[a]	2.18	2.10	2.36	2.17
Wildfire 10-20 miles from property[b]	0.84	0.84	1.00	1.03
Wildfire within 10 miles of property[c]	0.42	0.49	0.63	0.68
Prepared to evacuate property[d]	0.20	0.30	0.16	0.26
Evacuated property[e]	0.08	0.10	0.05	0.06
Property damaged[e]	0.01	0.01	0.00	0.01
Property destroyed[e]	0.01	0.01	0.01	0.01

Note. Survey question 12: "Provide the number of times you have experienced [each] particular event."
[a] HOA n=266: Prescott n=230. Non-HOA n=290: Prescott n=220.
[b] HOA n=268: Prescott n=231. Non-HOA n=289: Prescott n=220.
[c] HOA n=268: Prescott n=231. Non-HOA n=292: Prescott n=222.
[d] HOA n=270: Prescott n=233. Non-HOA n=292: Prescott n=222.
[e] HOA n=271: Prescott n=234. Non-HOA n=292: Prescott n=222.

TableAA.21 Percent of respondents who had a wildfire event experience

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Wildfire 20-50 miles from property[a]	74.4	74.4	74.5	72.4
Wildfire 10-20 miles from property[b]	45.5	46.3	50.0	51.2
Wildfire within 10 miles of property[c]	31.2	34.7	38.3	43.8
Prepared to evacuate property[d]	15.9	20.0	14.0	30.6
Evacuated property[e]	7.7	9.2	5.0	6.2
Property damaged[e]	0.9	0.7	0.5	1.0
Property destroyed[e]	1.3	1.1	0.9	1.4

Note. Survey question 12: "Provide the number of times you have experienced [each] particular event."
[a] HOA n=266: Prescott n=230. Non-HOA n=290: Prescott n=220.
[b] HOA n=268: Prescott n=231. Non-HOA n=289: Prescott n=220.
[c] HOA n=268: Prescott n=231. Non-HOA n=292: Prescott n=222.
[d] HOA n=270: Prescott n=233. Non-HOA n=292: Prescott n=222.
[e] HOA n=271: Prescott n=234. Non-HOA n=292: Prescott n=222.

Respondent responsibility and perceived risk

This section presents the results from respondents' perceived wildfire risk and sense of responsibility for mitigating this risk. Tables AA.22 through AA.25 presents the breakdown of responses to each perceived risk assessment question. Table AA.26 presents a mean comparison of each perceived risk assessment question. Table AA.27 through AA.30 presents the breakdown of responses related to responsibility for protection of home and property with a mean comparison presented in table AA.31. Table AA.32 through AA.35 presents the breakdown of responses related to responsibility for protection of the community with table AA.36 presenting the mean comparison.

The HOA sample generally had a higher mean risk rating than the non-HOA sample. Vulnerability of family (4.69 HOA and 4.50 non-HOA) and property (4.76 HOA and 4.41 non-HOA) showed a neutral. Overall, perceived risk ratings were moderate across both groups. Both the HOA and non-HOA samples showed a strong sense of personal responsibility concerning the protection of their home and property with means of 6.46 and 6.19 respectively. The HOA sample had a high mean rating (5.82) that neighbors were also responsible. Though still moderate, the state of Arizona (4.75 HOA and 4.94 and non-HOA) and Bureau of Land Management (4.66 HOA and 4.96 non-HOA) had the lowest ratings when it came to protection of one's personal property. For the protection of the community from wildfire, both the HOA and non-HOA samples continued to have a strong sense of personal responsibility with means of 5.82 and 5.68 respectively. Both samples identified strongly that the City of Prescott (5.76 HOA and 5.78 non-HOA), Yavapai County (5.64 HOA and 5.77 non-HOA), and USDA Forest Service (5.80 HOA and 5.93 non-HOA) has the responsibility for community wildfire protection.

Table AA.22 Perceived wildfire risk (HOA, City of Prescott)

	Not at all						**Extremely**	
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Concern about wildfire effects[a]	0.4	2.3	3.4	5.7	18.5	21.9	47.9	5.97
Seriousness of consequences[b]	0.4	1.9	3.4	8.7	18.2	25.4	42.0	5.87
Vulnerability of family[c]	3.8	8.7	8.7	22.1	23.2	20.2	13.3	4.66
Vulnerability of property[a]	2.6	6.8	10.9	23.0	22.3	21.5	12.8	4.71
Severity of impact[a]	0.8	2.3	4.9	11.7	10.6	21.9	47.9	5.86
Concern of adjacent properties[a]	2.3	7.3	7.6	16.8	19.1	19.1	27.9	5.12

Note. Survey questions 13: "To what extent do you feel concerned about the effects of wildfire?"; 14: "How serious do you feel the negative consequences of wildfire are to you personally?"; 15: "How vulnerable do you feel about the possibility of wildfire physically affecting you or your family?"; 16: "How vulnerable do you feel about the possibility of wildfire affecting your property and/or possessions?"; 17: "How severe would the impacts of a wildfire be where you live?"; 18: To what extent do you feel concerned about adjacent properties that have not taken wildfire risk reduction actions?" Mean based on a 7 point scale with 1=*not at all concerned, serious, vulnerable, severe* and 7=*extremely concerned, serious, vulnerable, severe*.
[a] n=265. [b] n=264. [c] n=263.

Table AA.23 Perceived risk (HOA, Total)

	Not at all						**Extremely**	
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Concern about wildfire effects[a]	0.3	2.0	3.0	6.6	17.5	21.5	49.0	6.00
Seriousness of consequences[b]	0.3	1.7	3.0	8.3	19.0	24.3	43.3	5.90
Vulnerability of family[c]	4.0	8.0	8.3	22.6	23.9	18.6	14.6	4.69
Vulnerability of property[d]	2.3	6.3	11.6	22.4	22.8	20.1	14.5	4.76
Severity of impact[d]	1.0	2.3	4.3	10.9	10.2	21.5	49.8	5.91
Concern of adjacent properties[d]	2.3	7.3	7.3	15.7	20.3	18.3	28.7	5.14

Note. Survey questions 13: "To what extent do you feel concerned about the effects of wildfire?"; 14: "How serious do you feel the negative consequences of wildfire are to you personally?"; 15: "How vulnerable do you feel about the possibility of wildfire physically affecting you or your family?"; 16: "How vulnerable do you feel about the possibility of wildfire affecting your property and/or possessions?"; 17: "How severe would the impacts of a wildfire be where you live?"; 18: To what extent do you feel concerned about adjacent properties that have not taken wildfire risk reduction actions?" Mean based on a 7 point scale with 1=*not at all concerned, serious, vulnerable, severe* and 7=*extremely concerned, serious, vulnerable, severe*.
[a] n=302. [b] n=300. [c] n=301. [d] n=303.

Table AA.24 Perceived risk (Non-HOA, City of Prescott)

	Not at all						**Extremely**	
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Concern about wildfire effects	2.4	2.8	5.1	8.7	19.3	21.7	40.2	5.65
Seriousness of consequences	3.5	3.9	5.5	10.6	17.3	20.5	38.6	5.50
Vulnerability of family	7.1	9.8	14.6	20.5	22.4	10.2	15.4	4.33
Vulnerability of property	6.7	12.2	16.5	19.3	22.4	10.2	12.6	4.20
Severity of impact	3.5	4.7	5.5	9.8	13.4	16.9	46.1	5.60
Concern of adjacent properties	7.9	8.3	12.3	15.9	18.7	18.3	18.7	4.58

Note. Survey questions 13: "To what extent do you feel concerned about the effects of wildfire?"; 14: "How serious do you feel the negative consequences of wildfire are to you personally?"; 15: "How vulnerable do you feel about the possibility of wildfire physically affecting you or your family?"; 16: "How vulnerable do you feel about the possibility of wildfire affecting your property and/or possessions?"; 17: "How severe would the impacts of a wildfire be where you live?"; 18: To what extent do you feel concerned about adjacent properties that have not taken wildfire risk reduction actions?" Mean based on a 7 point scale with 1=*not at all concerned, serious, vulnerable, severe* and 7=*extremely concerned, serious, vulnerable, severe*.
n=254.

Appendix A: Detailed Questionnaire Results

TableAA. 25 Perceived risk (Non-HOA, Total)

	Not at all						**Extremely**	
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Concern about wildfire effects[a]	1.8	2.4	4.0	8.8	19.5	19.5	44.1	5.76
Seriousness of consequences[a]	2.7	3.6	4.3	9.7	16.7	18.8	44.1	5.67
Vulnerability of family[a]	5.8	8.5	12.8	21.9	22.5	10.9	17.6	4.50
Vulnerability of property[a]	5.5	9.7	14.6	21.3	21.9	11.9	15.2	4.41
Severity of impact[b]	2.7	4.3	4.9	9.1	11.6	17.1	50.3	5.75
Concern of adjacent properties[c]	7.0	8.3	10.7	16.2	17.4	18.3	22.0	4.72

Note. Survey questions 13: "To what extent do you feel concerned about the effects of wildfire?"; 14: "How serious do you feel the negative consequences of wildfire are to you personally?"; 15: "How vulnerable do you feel about the possibility of wildfire physically affecting you or your family?"; 16: "How vulnerable do you feel about the possibility of wildfire affecting your property and/or possessions?"; 17: "How severe would the impacts of a wildfire be where you live?"; 18: To what extent do you feel concerned about adjacent properties that have not taken wildfire risk reduction actions?" Mean based on a 7 point scale with 1=*not at all concerned, serious, vulnerable, severe* and 7=*extremely concerned, serious, vulnerable, severe*.
[a] n=329. [b] n=328. [c] n=327.

Table AA.26 Perceived risk (mean comparison)

	HOA		**Non-HOA**	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Concern about wildfire effects[a]	5.97	6.00	5.65	5.76
Seriousness of consequences[b]	5.87	5.90	5.50	5.67
Vulnerability of family[c]	4.66	4.69	4.33	4.50
Vulnerability of property[d]	4.71	4.76	4.20	4.41
Severity of impact[e]	5.86	5.91	5.60	5.75
Concern of adjacent properties[f]	5.12	5.14	4.58	4.72

Note. Survey questions 13: "To what extent do you feel concerned about the effects of wildfire?"; 14: "How serious do you feel the negative consequences of wildfire are to you personally?"; 15: "How vulnerable do you feel about the possibility of wildfire physically affecting you or your family?"; 16: "How vulnerable do you feel about the possibility of wildfire affecting your property and/or possessions?"; 17: "How severe would the impacts of a wildfire be where you live?"; 18: To what extent do you feel concerned about adjacent properties that have not taken wildfire risk reduction actions?" Mean based on a 7 point scale with 1=*not at all concerned, serious, vulnerable, severe* and 7=*extremely concerned, serious, vulnerable, severe*.
[a] HOA n=302: Prescott n=265. Non-HOA n=329: Prescott n=254.
[b] HOA n=300: Prescott n=264. Non-HOA n=329: Prescott n=254.
[c] HOA n=301: Prescott n=263. Non-HOA n=329: Prescott n=254.
[d] HOA n=303: Prescott n=265. Non-HOA n=329: Prescott n=254.
[e] HOA n=303: Prescott n=265. Non-HOA n=328: Prescott n=254.
[f] HOA n=300: Prescott n=265. Non-HOA n=327: Prescott n=254.

Table AA.27 Responsible for home protection from wildfire (HOA, City of Prescott)

	Not at all						**Very**		
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	NA (%)	Overall Mean
Myself[a]	0.8	0.0	0.4	3.1	8.4	22.1	64.9	0.4	6.46
My neighbors[b]	1.9	1.5	4.2	6.9	17.2	26.0	41.2	1.1	5.82
Homeowners association[c]	1.5	1.9	4.2	9.2	13.1	26.9	42.3	0.8	5.83
City of Prescott[d]	1.9	1.9	6.2	12.7	17.4	25.1	32.0	2.7	5.52
Yavapai County[e]	3.9	1.6	10.2	11.0	16.5	24.4	27.6	4.7	5.29
State of Arizona[f]	5.9	6.3	9.8	14.6	16.1	20.1	20.5	6.7	4.83
Bureau of Land Mgt.[g]	11.4	6.7	6.3	9.4	18.4	20.0	20.4	7.5	4.71
USDA Forest Service[h]	6.2	3.5	2.3	8.5	15.4	23.6	35.9	4.6	5.49

Note. Survey question 19: "For the protection of your property and home in the Prescott area, how responsible are each of the following in reducing wildfire risk?" Mean based on a 7 point scale with 1=*not at all responsible* and 7=*very responsible*. NA=not applicable.
[a] n=261. [b] n=259. [c] n=258. [d] n=252. [e] n=242. [f] n=237. [g] n=236. [h] n=247.

Table AA.28 Responsible for home protection from wildfire (HOA, Total)

	Not at all						**Very**		
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	NA (%)	Overall Mean
Myself[a]	0.7	0.0	0.3	3.3	8.7	21.3	65.0	0.7	6.46
My neighbors[b]	1.7	1.3	3.7	7.0	19.1	25.4	40.5	1.3	5.82
Homeowners association[c]	1.7	2.0	4.4	9.8	13.2	26.7	41.2	1.0	5.78
City of Prescott[d]	3.7	2.0	6.4	12.5	17.9	23.0	30.1	4.4	5.39
Yavapai County[e]	4.8	1.4	9.2	13.0	16.4	23.6	27.1	4.5	5.24
State of Arizona[f]	6.9	5.9	10.0	16.6	15.9	18.3	20.0	6.6	4.75
Bureau of Land Mgt.[g]	11.8	5.9	7.6	10.4	17.3	19.4	19.7	8.0	4.66
USDA Forest Service[h]	6.1	3.7	3.7	8.1	15.5	22.6	35.4	5.1	5.45

Note. Survey question 19: "For the protection of your property and home in the Prescott area, how responsible are each of the following in reducing wildfire risk?" Mean based on a 7 point scale with 1=*not at all responsible* and 7=*very responsible*. NA=not applicable.
[a] n=298. [b] n=295. [c] n=293. [d] n=283. [e] n=279. [f] n=271. [g] n=266. [h] n=282.

Table AA.29 Responsible for home protection from wildfire (Non-HOA, City of Prescott)

	Not at all						**Very**		
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	NA (%)	Overall Mean
Myself[a]	0.4	0.8	2.4	7.2	11.6	23.7	51.0	2.8	6.13
My neighbors[b]	3.7	3.3	4.1	16.3	21.5	21.5	26.4	3.3	5.26
City of Prescott[c]	3.7	2.9	5.8	11.2	15.7	19.8	32.6	8.3	5.42
Yavapai County[d]	4.5	3.7	8.6	11.4	16.7	18.0	29.8	7.3	5.22
State of Arizona[e]	7.4	3.7	8.2	12.7	16.4	15.6	27.5	8.6	5.01
Bureau of Land Mgt.[f]	7.5	3.8	5.0	10.4	14.2	17.1	23.8	18.3	5.04
USDA Forest Service[g]	7.4	2.0	3.7	9.8	14.8	14.8	33.6	13.9	5.34

Note. Survey question 19: "For the protection of your property and home in the Prescott area, how responsible are each of the following in reducing wildfire risk?" Mean based on a 7 point scale with 1=*not at all responsible* and 7=*very responsible*. NA=not applicable.
[a] n=242. [b] n=238. [c] n=222. [d] n=227. [e] n=223. [f] n=196. [g] n=210.

Table AA.30 Responsible for home protection from wildfire (Non-HOA, Total)

	Not at all						**Very**		
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	NA (%)	Overall Mean
Myself[a]	0.6	0.6	2.5	6.5	9.3	24.7	53.7	2.2	6.19
My neighbors[b]	3.4	3.1	5.6	16.6	20.1	21.3	27.3	2.5	5.25
City of Prescott[c]	4.5	2.9	5.4	9.3	14.4	17.6	29.5	16.3	5.36
Yavapai County[d]	4.7	3.1	8.5	10.7	17.6	19.5	29.9	6.0	5.25
State of Arizona[e]	7.1	4.5	9.3	12.5	15.4	15.7	26.0	9.6	4.94
Bureau of Land Mgt.[f]	8.4	4.5	4.9	10.4	13.0	15.6	24.4	18.8	4.96
USDA Forest Service[g]	7.9	1.9	3.5	8.9	14.6	16.5	34.0	12.7	5.36

Note. Survey question 19: "For the protection of your property and home in the Prescott area, how responsible are each of the following in reducing wildfire risk?" Mean based on a 7 point scale with 1=*not at all responsible* and 7=*very responsible*. NA=not applicable.
[a] n=317. [b] n=311. [c] n=261. [d] n=299. [e] n=282. [f] n=250. [g] n=275.

Table AA.31 Responsible for home protection from wildfire (mean comparison)

	HOA		Non-HOA	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Myself[a]	6.46	6.46	6.13	6.19
My neighbors[b]	5.82	5.82	5.26	5.25
Homeowners association[c]	5.83	5.78	-	-
City of Prescott[d]	5.52	5.39	5.42	5.36
Yavapai County[e]	5.29	5.24	5.22	5.25
State of Arizona[f]	4.83	4.75	5.01	4.94
Bureau of Land Mgt.[g]	4.71	4.66	5.04	4.96
USDA Forest Service[h]	5.49	5.45	5.34	5.36

Note. Survey question 19: "For the protection of your property and home in the Prescott area, how responsible are each of the following in reducing wildfire risk?" Mean based on a 7 point scale with 1=*not at all responsible* and 7=*very responsible*.
[a] HOA n=298: Prescott n=261. Non-HOA n=317: Prescott n=242.
[b] HOA n=295: Prescott n=259. Non-HOA n=311: Prescott n=238.
[c] HOA n=293: Prescott n=258.
[d] HOA n=283: Prescott n=252. Non-HOA n=261: Prescott n=222.
[e] HOA n=279: Prescott n=242. Non-HOA n=299: Prescott n=227.
[f] HOA n=271: Prescott n=237. Non-HOA n=282: Prescott n=223.
[g] HOA n=266: Prescott n=236. Non-HOA n=250: Prescott n=196.
[h] HOA n=282: Prescott n=247. Non-HOA n=275: Prescott n=210.

Table AA.32 Responsible for community protection from wildfire (HOA, City of Prescott)

	Not at all						Very		
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	NA (%)	Overall Mean
Myself[a]	1.2	3.5	6.5	9.6	11.5	18.1	48.8	0.8	5.79
My neighbors[b]	1.9	4.6	8.9	12.4	17.0	23.6	30.5	1.2	5.33
Homeowners association[c]	3.9	5.0	5.0	12.7	16.2	21.6	33.6	1.9	5.36
City of Prescott[d]	2.0	0.4	4.3	8.6	14.1	30.2	37.6	2.7	5.81
Yavapai County[e]	2.4	1.6	4.7	7.8	15.3	31.0	33.7	3.5	5.70
State of Arizona[f]	3.5	4.3	7.1	8.6	16.9	25.5	19.0	5.1	5.36
Bureau of Land Mgt.[g]	7.9	4.8	4.8	6.7	17.1	21.4	31.0	6.3	5.22
USDA Forest Service[h]	3.5	1.9	2.3	5.4	12.0	27.0	43.2	4.6	5.88

Note. Survey question 20: "For overall protection of the Prescott area, how responsible are each of the following in reducing wildfire risk?" Mean based on a 7 point scale with 1=*not at all responsible* and 7=*very responsible*. NA=not applicable.
[a] n=258. [b] n=256. [c] n=254. [d] n=248. [e] n=246. [f] n=242. [g] n=236. [h] n=247.

Table AA.33 Responsible for Community protection from wildfire (HOA, Total)

	Not at all						**Very**		
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	NA (%)	Overall Mean
Myself[a]	1.0	3.4	5.7	10.4	11.4	17.8	49.7	0.7	5.82
My neighbors[b]	1.7	4.4	8.1	12.5	17.8	23.6	31.0	1.0	5.37
Homeowners association[c]	4.0	5.1	5.1	13.5	15.5	21.9	33.3	1.7	5.34
City of Prescott[d]	2.7	0.3	4.8	8.2	14.4	29.8	36.6	3.1	5.76
Yavapai County[e]	3.1	1.4	5.1	8.9	14.3	30.4	33.8	3.1	5.64
State of Arizona[f]	4.5	4.1	6.9	10.3	17.2	23.1	29.3	4.5	5.29
Bureau of Land Mgt.[g]	8.0	4.9	5.2	7.0	17.8	20.9	30.3	5.9	5.19
USDA Forest Service[h]	3.7	2.7	2.7	6.1	12.1	25.6	42.8	4.4	5.80

Note. Survey question 20: "For overall protection of the Prescott area, how responsible are each of the following in reducing wildfire risk?" Mean based on a 7 point scale with 1=*not at all responsible* and 7=*very responsible*. NA=not applicable.
[a] n=296. [b] n=294. [c] n=292. [d] n=283. [e] n=284. [f] n=277. [g] n=270. [h] n=284.

Table AA.34 Responsible for community protection from wildfire (Non-HOA, City of Prescott)

	Not at all						**Very**		
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	NA (%)	Overall Mean
Myself[a]	1.2	2.8	5.7	13.4	18.2	18.6	38.5	1.6	5.58
My neighbors[b]	3.3	6.2	4.9	17.3	21.4	17.7	25.9	3.3	5.11
City of Prescott[c]	1.6	2.0	4.1	8.2	13.1	23.4	43.4	4.1	5.85
Yavapai County[d]	1.6	2.5	6.6	6.6	11.9	22.2	44.4	4.1	5.81
State of Arizona[e]	3.7	3.7	6.6	10.8	11.2	19.9	36.5	7.5	5.46
Bureau of Land Mgt.[f]	4.5	2.1	4.1	7.0	11.6	20.7	37.2	12.8	5.64
USDA Forest Service[g]	3.3	1.2	1.6	7.8	9.4	20.8	49.4	6.5	5.98

Note. Survey question 20: "For overall protection of the Prescott area, how responsible are each of the following in reducing wildfire risk?" Mean based on a 7 point scale with 1=*not at all responsible* and 7=*very responsible*. NA=not applicable.
[a] n=243. [b] n=235. [c] n=234. [d] n=233. [e] n=223. [f] n=211. [g] n=229.

Table AA.35 Responsible for Community protection from wildfire (Non-HOA, Total)

	Not at all						**Very**		
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	NA (%)	Overall Mean
Myself[a]	2.2	2.5	5.0	11.5	15.2	19.6	42.2	1.9	5.68
My neighbors[b]	4.1	5.4	5.7	15.9	18.7	18.1	28.6	3.5	5.16
City of Prescott[c]	2.2	1.6	4.5	9.0	12.5	22.4	41.0	6.7	5.68
Yavapai County[d]	2.9	1.9	6.4	6.1	12.4	22.6	43.3	4.5	5.16
State of Arizona[e]	4.2	3.5	6.8	10.0	12.3	20.0	34.8	8.4	5.68
Bureau of Land Mgt.[f]	5.1	2.6	4.5	7.1	11.9	20.3	34.7	13.8	5.16
USDA Forest Service[g]	3.5	1.3	2.2	7.3	10.8	21.3	47.6	6.0	5.68

Note. Survey question 20: "For overall protection of the Prescott area, how responsible are each of the following in reducing wildfire risk?" Mean based on a 7 point scale with 1=*not at all responsible* and 7=*very responsible*. NA=not applicable.
[a] n=316. [b] n=304. [c] n=291. [d] n=300. [e] n=284. [f] n=268. [g] n=296

Table AA.36 Responsible for community protection from wildfire (mean comparison)

	HOA		**Non-HOA**	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Myself[a]	5.79	5.82	5.58	5.68
My neighbors[b]	5.33	5.37	5.11	5.16
Homeowners association[c]	5.36	5.34	-	-
City of Prescott[d]	5.81	5.76	5.85	5.68
Yavapai County[e]	5.70	5.64	5.81	5.16
State of Arizona[f]	5.36	5.29	5.46	5.68
Bureau of Land Mgt.[g]	5.22	5.19	5.64	5.16
USDA Forest Service[h]	5.88	5.80	5.98	5.68

Note. Survey question 20: "For overall protection of the Prescott area, how responsible are each of the following in reducing wildfire risk?" Mean based on a 7 point scale with 1=*not at all responsible* and 7=*very responsible*.
[a] HOA n=296: Prescott n=258. Non-HOA n=316: Prescott n=243.
[b] HOA n=294: Prescott n=256. Non-HOA n=304: Prescott n=235.
[c] HOA n=292: Prescott n=254.
[d] HOA n=283: Prescott n=248. Non-HOA n=291: Prescott n=234.
[e] HOA n=284: Prescott n=246. Non-HOA n=300: Prescott n=233.
[f] HOA n=277: Prescott n=242. Non-HOA n=284: Prescott n=223.
[g] HOA n=270: Prescott n=236. Non-HOA n=268: Prescott n=211.
[h] HOA n=284: Prescott n=247. Non-HOA n=296: Prescott n=229.

Wildfire mitigation actions

This section presents respondent's actions that have been taken on their property. Tables AA.37 through AA.42 present the breakdown of results for maintenance actions completed on the home and property. Tables AA.43 through AA.48 present the breakdown of results for construction actions completed on the home and property.

Looking at maintenance actions, Results show that respondents largely took action on their property for wildfire safety reasons. Overall, the HOA sample had a higher completion of maintenance mitigation actions for wildfire safety than the non-HOA sample. This trend continued for construction actions as well. Many of the available construction actions possible were identified as already completed features of the home. The HOA sample had consistently higher percent of respondents identifying the construction action was already a feature of the home.

Table AA.37 Mitigation action: Roof and rain gutters kept free of debris

	HOA		**Non-HOA**	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	5.0	5.7	5.2	4.6
Action not necessary, already existed	10.3	9.4	5.6	5.3
Took action primarily for wildfire safety	30.2	30.1	20.5	23.8
Took action primarily for other reason	47.3	47.8	63.9	61.6
Did not take action	7.3	7.0	4.8	4.6

Note. Survey question 21: "For each feature or action below, please check the one box that best explains if or why your household took that action."
HOA n=299: Prescott n=262. Non-HOA n=323: Prescott n=249.

Table AA.38 Mitigation action: Over hanging and dead branches removed

	HOA		**Non-HOA**	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	10.3	10.4	6.5	6.3
Action not necessary, already existed	3.8	3.7	3.3	2.5
Took action primarily for wildfire safety	59.5	60.7	37.6	39.9
Took action primarily for other reason	15.6	15.8	32.2	32.4
Did not take action	10.7	9.4	20.4	18.9

Note. Survey question 21: "For each feature or action below, please check the one box that best explains if or why your household took that action."
HOA n=298: Prescott n=262. Non-HOA n=318: Prescott n=245.

Table AA.39 Mitigation action: Green vegetated area maintained 30 feet around home

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	23.8	22.7	23.7	21.1
Action not necessary, already existed	12.3	10.8	9.0	8.2
Took action primarily for wildfire safety	35.8	37.6	21.2	24.0
Took action primarily for other reason	15.8	16.9	28.6	29.0
Did not take action	12.3	11.9	17.6	17.7

Note. Survey question 21: "For each feature or action below, please check the one box that best explains if or why your household took that action."
HOA n=295: Prescott n=260. Non-HOA n=317: Prescott n=245.

Table AA.40 Mitigation action: Trees and shrubs thinned within 30-50 feet from house

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	3.1	3.1	7.7	6.3
Action not necessary, already existed	8.1	8.1	2.8	2.8
Took action primarily for wildfire safety	61.8	62.7	24.1	40.0
Took action primarily for other reason	18.9	16.9	32.5	29.4
Did not take action	8.1	9.2	22.8	21.6

Note. Survey question 21: "For each feature or action below, please check the one box that best explains if or why your household took that action."
HOA n=295: Prescott n=259. Non-HOA n=320: Prescott n=246.

Table AA.41 Mitigation action: Shrubs and lower tree branches removed

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	2.3	2.0	4.1	3.2
Action not necessary, already existed	4.2	3.7	3.3	2.8
Took action primarily for wildfire safety	63.0	64.2	35.4	40.8
Took action primarily for other reason	20.2	18.1	35.4	33.2
Did not take action	10.3	12.0	21.8	19.9

Note. Survey question 21: "For each feature or action below, please check the one box that best explains if or why your household took that action."
HOA n=299: Prescott n=262. Non-HOA n=316: Prescott n=243.

Table AA.42 Mitigation action: Dead vegetation cleared 30 feet from home

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	4.6	4.0	4.9	4.1
Action not necessary, already existed	2.3	2.3	0.8	1.3
Took action primarily for wildfire safety	65.6	67.3	41.9	46.9
Took action primarily for other reason	22.1	20.3	40.7	37.5
Did not take action	5.3	6.0	11.8	10.3

Note. Survey question 21: "For each feature or action below, please check the one box that best explains if or why your household took that action."
HOA n=300: Prescott n=262. Non-HOA n=320: Prescott n=246.

Table AA.43 Mitigation action: Firewood and lumber stacked 30 feet from home

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	62.3	58.7	41.6	38.4
Action not necessary, already existed	2.3	2.3	0.8	0.6
Took action primarily for wildfire safety	18.5	22.8	26.3	31.4
Took action primarily for other reason	4.6	5.0	12.3	12.7
Did not take action	12.3	11.1	18.9	16.8

Note. Survey question 21: "For each feature or action below, please check the one box that best explains if or why your household took that action."
HOA n=298: Prescott n=260. Non-HOA n=315: Prescott n=243.

Table AA.44 Mitigation action: Home has fire-resistant roof

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	9.3	8.1	9.9	8.9
Action not necessary, already existed	37.6	37.2	36.0	32.7
Took action primarily for wildfire safety	34.1	34.1	22.3	26.0
Took action primarily for other reason	12.8	15.2	23.1	24.4
Did not take action	6.2	5.4	8.7	7.9

Note. Survey question 21: "For each feature or action below, please check the one box that best explains if or why your household took that action."
HOA n=296: Prescott n=258. Non-HOA n=315: Prescott n=242.

Table AA.45 Mitigation action: Home has screening on all vents

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	5.2	5.2	9.1	9.0
Action not necessary, already existed	45.6	42.8	33.6	30.1
Took action primarily for wildfire safety	20.2	21.0	13.3	16.3
Took action primarily for other reason	17.9	18.6	23.2	25.6
Did not take action	11.1	12.4	20.7	18.9

Note. Survey question 21: "For each feature or action below, please check the one box that best explains if or why your household took that action."
HOA n=290: Prescott n=252. Non-HOA n=312: Prescott n=241.

Table AA.46 Mitigation action: Home construction material is fire resistant

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	12.2	12.3	13.0	12.9
Action not necessary, already existed	34.9	32.4	28.9	25.1
Took action primarily for wildfire safety	14.5	17.1	10.5	13.5
Took action primarily for other reason	14.1	13.3	11.7	13.8
Did not take action	24.3	24.9	36.0	34.7

Note. Survey question 21: "For each feature or action below, please check the one box that best explains if or why your household took that action."
HOA n=293: Prescott n=255. Non-HOA n=311: Prescott n=239.

Table AA.47 Mitigation action: Underside of deck enclosed

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	39.4	38.7	40.2	39.2
Action not necessary, already existed	10.8	10.4	8.4	8.7
Took action primarily for wildfire safety	11.6	11.4	6.7	8.4
Took action primarily for other reason	8.9	8.8	10.0	10.9
Did not take action	29.3	30.6	34.7	32.8

Note. Survey question 21: "For each feature or action below, please check the one box that best explains if or why your household took that action."
HOA n=297: Prescott n=259. Non-HOA n=311: Prescott n=239.

Table AA.48 Mitigation action: Yard landscaped with fire resistant vegetation

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	12.7	13.5	13.8	14.7
Action not necessary, already existed	20.6	18.7	12.9	11.8
Took action primarily for wildfire safety	17.5	17.6	10.4	10.2
Took action primarily for other reason	15.1	15.6	18.3	18.5
Did not take action	34.1	34.6	44.6	44.7

Note. Survey question 21: "For each feature or action below, please check the one box that best explains if or why your household took that action."
HOA n=289: Prescott n=252. Non-HOA n=313: Prescott n=240.

Wildfire mitigation intentions

This section presents the results from questions on respondent intentions to mitigate wildfire risk. Tables AA.49 through AA.54 present the breakdown of responses for maintenance mitigation intentions. Tables AA.55 through AA.60 present the breakdown of responses for construction mitigation intentions.

Results show that a most respondents intend to perform maintenance mitigation actions on their home in the next 12 months. Of these, taking action for wildfire safety reasons was the primary reason identified among both HOA and non-HOA samples. A high percentage of construction actions were identified as already completed.

Table AA.49 Mitigation intentions: Roof and rain gutters kept free of debris

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	5.2	5.9	5.4	4.9
Plan action primarily for wildfire safety	41.3	40.3	21.8	25.9
Plan action primarily for other reason	37.3	37.5	55.6	53.4
Do not plan to take action	16.3	16.3	17.2	15.9

Note. Survey question 22: "For each feature and action below, please check the one box that best explains your household's future intentions to complete each action."
HOA n=288: Prescott n=252. Non-HOA n=309: Prescott n=239.

Table AA.50 Mitigation intentions: Over hanging and dead branches removed

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	10.7	10.9	6.7	6.5
Plan action primarily for wildfire safety	46.4	50.9	37.7	41.9
Plan action primarily for other reason	18.7	17.5	31.0	27.9
Do not plan to take action	21.4	20.7	24.3	23.4

Note. Survey question 22: "For each feature and action below, please check the one box that best explains your household's future intentions to complete each action."
HOA n=285: Prescott n=252. Non-HOA n=307: Prescott n=239.

Table AA.51 Mitigation intentions: Green vegetated area maintained 30 feet around home

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	25.0	23.5	24.7	22.0
Plan action primarily for wildfire safety	39.1	41.8	22.1	26.0
Plan action primarily for other reason	14.1	13.7	24.3	23.0
Do not plan to take action	21.8	21.1	28.9	28.9

Note. Survey question 22: "For each feature and action below, please check the one box that best explains your household's future intentions to complete each action."
HOA n=285: Prescott n=248. Non-HOA n=304: Prescott n=235.

Table AA.52 Mitigation intentions: Trees and shrubs thinned within 30-50 feet from house

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	3.2	3.1	8.1	6.5
Plan action primarily for wildfire safety	55.0	56.6	35.3	39.5
Plan action primarily for other reason	16.1	15.0	27.2	25.2
Do not plan to take action	25.7	25.2	29.4	28.8

Note. Survey question 22: "For each feature and action below, please check the one box that best explains your household's future intentions to complete each action."
HOA n=286: Prescott n=249. Non-HOA n=306: Prescott n=235.

Table AA.53 Mitigation intentions: Shrubs and lower tree branches removed

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	2.4	2.1	4.2	3.3
Plan action primarily for wildfire safety	56.7	58.4	34.7	39.7
Plan action primarily for other reason	18.1	16.8	34.7	31.3
Do not plan to take action	22.8	22.7	26.3	25.7

Note. Survey question 22: "For each feature and action below, please check the one box that best explains your household's future intentions to complete each action."
HOA n=291: Prescott n=254. Non-HOA n=307: Prescott n=236.

Table AA.54 Mitigation intentions: Dead vegetation cleared 30 feet from home

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	4.8	4.1	5.1	4.2
Plan action primarily for wildfire safety	48.0	49.3	32.9	37.7
Plan action primarily for other reason	14.7	13.8	29.5	26.6
Do not plan to take action	32.5	32.8	32.5	31.5

Note. Survey question 22: "For each feature and action below, please check the one box that best explains your household's future intentions to complete each action."
HOA n=290: Prescott n=252. Non-HOA n=308: Prescott n=237.

Table AA.55 Mitigation intentions: Firewood and lumber stacked 30 feet from home

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	62.5	59.1	42.4	39.0
Action not necessary, already completed	8.1	9.1	16.0	18.4
Plan action primarily for wildfire safety	18.1	19.9	14.7	18.4
Plan action primarily for other reason	3.5	3.4	13.0	11.6
Do not plan to take action	7.7	8.4	13.9	12.6

Note. Survey question 22: "For each feature and action below, please check the one box that best explains your household's future intentions to complete each action."
HOA n=296: Prescott n=259. Non-HOA n=310: Prescott n=238.

Table AA.56 Mitigation intentions: Home will have fire-resistant roof

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	9.3	8.2	10.1	9.1
Action not necessary, already completed	68.5	69.3	64.6	65.9
Plan action primarily for wildfire safety	8.2	8.9	3.4	4.5
Plan action primarily for other reason	2.3	2.4	6.3	5.5
Do not plan to take action	11.7	11.3	15.6	14.9

Note. Survey question 22: "For each feature and action below, please check the one box that best explains your household's future intentions to complete each action."
HOA n=293: Prescott n=257. Non-HOA n=308: Prescott n=237.

Table AA.57 Mitigation intentions: Home will have screening on all vents

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	5.1	5.2	9.4	9.2
Action not necessary, already completed	67.2	65.5	56.4	56.9
Plan action primarily for wildfire safety	12.3	13.1	6.0	8.2
Plan action primarily for other reason	3.6	3.8	6.4	6.6
Do not plan to take action	11.9	12.4	21.8	19.1

Note. Survey question 22: "For each feature and action below, please check the one box that best explains your household's future intentions to complete each action."
HOA n=290: Prescott n=253. Non-HOA n=304: Prescott n=234.

Table AA.58 Mitigation intentions: Home construction material will be fire resistant

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	12.0	12.2	13.2	13.2
Action not necessary, already completed	47.7	47.0	38.5	39.1
Plan action primarily for wildfire safety	6.2	6.1	2.6	3.9
Plan action primarily for other reason	1.2	1.7	5.6	4.9
Do not plan to take action	32.9	33.1	40.2	38.8

Note. Survey question 22: "For each feature and action below, please check the one box that best explains your household's future intentions to complete each action."
HOA n=296: Prescott n=258. Non-HOA n=304: Prescott n=234.

Table AA.59 Mitigation intentions: Underside of deck will be enclosed

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	39.7	39.1	40.5	39.6
Action not necessary, already completed	23.7	22.1	18.1	18.8
Plan action primarily for wildfire safety	8.6	9.2	5.1	6.8
Plan action primarily for other reason	3.5	4.1	6.3	5.8
Do not plan to take action	24.5	25.5	30.0	28.9

Note. Survey question 22: "For each feature and action below, please check the one box that best explains your household's future intentions to complete each action."
HOA n=294: Prescott n=257. Non-HOA n=308: Prescott n=237.

Table AA.60 Mitigation intentions: Yard landscaped with fire resistant vegetation

	HOA		Non-HOA	
	Prescott (%)	Total (%)	Prescott (%)	Total (%)
Not a feature of home or property	12.6	13.4	14.1	15.0
Action not necessary, already completed	33.5	32.2	29.9	29.4
Plan action primarily for wildfire safety	12.2	12.3	7.7	7.2
Plan action primarily for other reason	7.1	7.2	10.7	9.5
Do not plan to take action	34.6	34.9	37.6	38.9

Note. Survey question 22: "For each feature and action below, please check the one box that best explains your household's future intentions to complete each action."
HOA n=292: Prescott n=254. Non-HOA n=306: Prescott n=234.

Attitudes toward wildfire mitigation behavior

This section presents the results of respondent's attitudes toward wildfire mitigation behaviors. Tables AA.61 through AA.64 provide the breakdown of responses with table AA.65 presenting mean comparisons.

Results show that across all objective pair, respondents of both the HOA and non-HOA sample had a strong positive evaluation of wildfire mitigation behaviors. The unenjoyable/enjoyable item had a lower average mean (5.34 HOA and 5.06 non-HOA) identifying that respondents had a moderate rating suggesting wildfire mitigation behaviors were just slightly enjoyable.

Table AA.61 Attitudes toward performing wildfire mitigation (HOA, City of Prescott)

	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)		Overall Mean
Harmful[a]	0.0	0.4	0.4	0.8	5.8	20.8	71.9	Beneficial	6.62
Bad[b]	0.0	1.2	0.0	2.0	3.5	20.1	73.2	Good	6.61
Worthless[c]	0.4	0.8	0.8	3.9	5.9	18.8	69.4	Valuable	6.48
Foolish[d]	0.8	0.4	1.2	2.0	3.1	18.4	74.2	Wise	6.58
Useless[d]	0.4	0.4	1.6	2.3	5.9	17.6	71.9	Useful	6.53
Punishing[b]	0.8	1.2	2.8	10.6	13.8	15.4	55.5	Rewarding	6.04
Unenjoyable[c]	2.4	3.1	6.7	20.8	16.9	11.4	38.8	Enjoyable	5.36
Undesirable[d]	1.2	0.8	1.2	5.1	6.3	20.3	65.2	Desirable	6.36
Unimportant[d]	0.0	0.8	1.2	2.3	5.1	16.8	73.8	Important	6.57

Note. Survey question 23: "Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:" Mean based on a 7 point scale.
[a] n=260. [b] n=254. [c] n=255. [d] n=256.

Table AA.62 Attitudes toward performing wildfire mitigation (HOA, Total)

	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)		Overall Mean
Harmful[a]	0.0	0.3	0.7	1.7	6.0	19.1	72.1	Beneficial	6.59
Bad[b]	0.0	1.0	0.3	2.4	4.5	18.3	73.4	Good	6.59
Worthless[c]	0.3	1.0	1.0	4.1	4.8	17.8	69.9	Valuable	6.47
Foolish[c]	1.0	0.3	1.0	2.1	3.8	16.4	75.3	Wise	6.58
Useless[d]	0.7	0.3	1.4	2.7	6.1	16.7	72.0	Useful	6.52
Punishing[e]	1.0	1.0	2.4	10.4	14.5	14.2	56.4	Rewarding	6.04
Unenjoyable[c]	2.7	3.1	7.5	19.5	17.1	11.0	39.0	Enjoyable	5.34
Undesirable[c]	1.7	0.7	1.4	5.1	6.8	20.2	64.0	Desirable	6.32
Unimportant[d]	0.3	0.7	1.4	2.4	5.5	16.4	73.4	Important	6.55

Note. Survey question 23: "Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:" Mean based on a 7 point scale.
[a] n=298. [b] n=290. [c] n=292. [d] n=293. [e] n=289.

Table AA.63 Attitudes toward performing wildfire mitigation (Non-HOA, City of Prescott)

	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)		Overall Mean
Harmful[a]	0.0	0.4	0.0	5.4	7.5	22.8	63.9	Beneficial	6.44
Bad[b]	1.3	0.4	0.4	5.9	5.1	24.1	62.9	Good	6.37
Worthless[c]	1.3	0.4	1.3	5.6	6.4	25.2	59.8	Valuable	6.30
Foolish[b]	3.0	1.3	0.0	4.6	6.3	19.4	65.4	Wise	6.30
Useless[d]	3.0	0.8	0.0	5.9	6.4	23.7	60.2	Useful	6.24
Punishing[c]	2.6	0.9	2.1	11.5	11.1	23.5	48.3	Rewarding	5.91
Unenjoyable[b]	7.2	5.1	5.9	17.7	17.7	17.3	29.1	Enjoyable	5.02
Undesirable[d]	2.1	1.7	1.3	8.5	9.3	23.7	53.4	Desirable	6.06
Unimportant[a]	2.5	0.0	0.8	4.1	7.9	23.7	61.0	Important	6.30

Note. Survey question 23: "Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:" Mean based on a 7 point scale.
[a] n=241. [b] n=237. [c] n=234. [d] n=236.

Table AA.64 Attitudes toward performing wildfire mitigation (Non-HOA, Total)

	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)		Overall Mean
Harmful[a]	0.0	0.3	0.0	4.8	7.0	21.4	66.5	Beneficial	6.49
Bad[b]	1.3	0.6	0.3	5.5	4.9	21.4	65.9	Good	6.40
Worthless[c]	1.3	0.7	1.0	5.6	6.2	22.5	62.7	Valuable	6.33
Foolish[b]	2.6	1.3	0.0	4.9	5.2	17.5	68.5	Wise	6.35
Useless[d]	2.6	0.7	0.0	5.6	5.9	22.0	63.3	Useful	6.30
Punishing[e]	2.3	1.0	2.0	11.2	11.5	22.0	50.0	Rewarding	5.95
Unenjoyable[b]	6.8	5.2	5.5	17.5	17.5	16.9	30.5	Enjoyable	5.06
Undesirable[c]	2.0	1.6	1.0	8.5	10.1	21.9	54.9	Desirable	6.08
Unimportant[f]	2.6	0.0	1.0	4.8	7.4	21.8	62.5	Important	6.30

Note. Survey question 23: "Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:" Mean based on a 7 point scale.
[a] n=313. [b] n=308. [c] n=306. [d] n=305. [e] n=304. [f] n=312.

Table AA.65 Attitudes toward performing wildfire mitigation (mean comparison)

	HOA		Non-HOA	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Harmful – beneficial[a]	6.62	6.59	6.44	6.49
Bad – good[b]	6.61	6.59	6.37	6.40
Worthless – valuable[c]	6.48	6.47	6.30	6.33
Foolish – wise[d]	6.58	6.58	6.30	6.35
Useless – Useful[e]	6.53	6.52	6.24	6.30
Punishing – rewarding[f]	6.04	6.04	5.91	5.95
Unenjoyable – enjoyable[g]	5.36	5.34	5.02	5.06
Undesirable – desirable[h]	6.36	6.32	6.06	6.08
Unimportant – important[i]	6.57	6.55	6.30	6.30

Note. Survey question 23: "Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:" Mean based on a 7 point scale.

[a] HOA n=298: Prescott n=260. Non-HOA n=313: Prescott n=241.
[b] HOA n=290: Prescott n=254. Non-HOA n=308: Prescott n=237.
[c] HOA n=292: Prescott n=255. Non-HOA n=306: Prescott n=234.
[d] HOA n=292: Prescott n=256. Non-HOA n=308: Prescott n=237.
[e] HOA n=203: Prescott n=256. Non-HOA n=305: Prescott n=236.
[f] HOA n=289: Prescott n=254. Non-HOA n=304: Prescott n=234.
[g] HOA n=292: Prescott n=255. Non-HOA n=308: Prescott n=237.
[h] HOA n=292: Prescott n=256. Non-HOA n=306: Prescott n=236.
[i] HOA n=293: Prescott n=256. Non-HOA n=312: Prescott n=241.

Behavioral belief

This section presents the results from behavioral belief strength and evaluations from questionnaire items. Tables AA.66 through AA.69 presents detailed results for each item's behavioral strength. Table AA.70 compares the means across each sample. Table AA.71 through AA.74 presents behavioral outcome evaluation detailed results. Table AA.75 presents the mean comparison of the two samples.

Results show that both the HOA and non-HOA samples were similar across most items. Most item responses show a strong belief that wildfire mitigation is beneficial. The negatively worded item, "comes at a significant cost" and "will not stop home from burning" were reverse coded. The items provided low means for both the HOA (4.02 and 3.80 respectively) and non-HOA (3.43 and 3.58 respectively) samples.

The HOA and non-HOA samples had very strong evaluations of the outcome of wildfire mitigation. As with the behavioral belief strength results, the negatively item, "significant cost for mitigation," had a medium level of means for the two samples (0.12 HOA and 0.03 non-HOA). Comparing the two samples' means show similar results.

Table AA.66 Wildfire mitigation behavioral belief strength (HOA, City of Prescott)

	Unlikely						**Likely**	
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Gives a sense of security[a]	3.5	1.2	2.3	7.4	21.8	21.0	42.8	5.77
Provides safety for family[b]	3.5	1.2	1.6	8.6	20.4	19.2	45.5	5.81
Protects property value[a]	3.5	1.6	2.3	6.6	18.7	18.7	48.6	5.86
Maintains Privacy around home[b]	6.7	5.1	4.7	12.2	18.4	16.1	36.9	5.26
Comes at a significant cost[†c]	12.3	13.4	14.2	20.9	10.7	14.6	13.8	4.04
Reduces risk to wildfires impacts[d]	1.9	1.2	4.3	7.4	17.8	20.5	46.9	5.87
Protects personal belongings[a]	2.3	0.8	4.3	8.6	19.5	22.2	42.4	5.78
Improves property appearance[a]	5.4	3.9	5.4	13.2	14.4	19.8	37.7	5.38
Will not stop home from burning[†e]	15.5	9.6	15.9	28.3	8.8	10.4	11.6	3.82

Note. Survey questions 24: "Performong wildfire risk reduction actions on my property's vegetation and home in the next 12 months will:" Mean based on a 7 point scale with 1=*unlikely* and 7=*likely*. [†]Variable reverse coded.
[a] n=257. [b] n=255. [c] n=253. [d] n=258. [e] n=251.

Table AA.67 Wildfire mitigation behavioral belief strength (HOA, Total)

	Unlikely						**Likely**	
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Gives a sense of security[a]	3.7	1.0	2.0	8.8	20.3	20.0	44.1	5.77
Provides safety for family[b]	3.1	1.4	2.0	9.6	19.1	18.4	46.4	5.81
Protects property value[a]	3.1	1.7	3.1	6.8	18.3	18.0	49.2	5.86
Maintains Privacy around home[b]	7.2	5.1	5.1	12.3	18.8	15.4	36.2	5.21
Comes at a significant cost[†c]	12.8	13.1	13.8	21.7	10.7	14.5	13.4	4.02
Reduces risk to wildfires impacts[c]	1.7	1.4	4.1	8.1	16.9	20.0	47.8	5.88
Protects personal belongings[a]	2.4	1.0	4.4	8.5	19.3	20.7	43.7	5.78
Improves property appearance[a]	5.8	3.4	5.1	13.2	14.9	19.3	38.3	5.36
Will not stop home from burning[†d]	15.6	8.7	17.0	29.2	9.0	9.7	10.8	3.80

Note. Survey questions 24: "Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:" Mean based on a 7 point scale with 1=*unlikely* and 7=*likely*. [†]Variable reverse coded.
[a] n=295. [b] n=3293 [c] n=290. [d] n=288

Table AA.68 Wildfire mitigation behavioral belief strength (Non-HOA, City of Prescott)

	Unlikely						**Likely**	
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Gives a sense of security[a]	3.7	2.1	3.7	9.5	19.0	20.2	41.7	5.66
Provides safety for family[b]	3.3	2.5	2.9	8.4	18.0	24.7	40.2	5.70
Protects property value[c]	3.3	2.5	5.4	8.3	17.9	22.1	40.4	5.63
Maintains Privacy around home[b]	9.2	5.0	7.5	12.1	19.2	17.2	29.7	4.97
Comes at a significant cost[†d]	23.5	14.3	14.3	16.0	9.7	9.7	12.6	3.53
Reduces risk to wildfires impacts[e]	3.3	3.7	3.3	10.4	17.4	18.3	43.6	5.64
Protects personal belongings[d]	3.8	2.5	3.4	9.2	18.1	22.7	40.3	5.65
Improves property appearance[c]	7.1	2.5	3.8	13.3	20.8	19.6	32.9	5.29
Will not stop home from burning[†f]	19.0	13.5	13.1	21.9	13.9	5.1	13.5	3.68

Note. Survey questions 24: "Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:" Mean based on a 7 point scale with 1=*unlikely* and 7=*likely*. [†]Variable reverse coded.
[a] n=242. [b] n=239. [c] n=240. [d] n=238. [e] n=241. [f] n=237.

Table AA.69 Wildfire mitigation behavioral belief strength (Non-HOA, Total)

	Unlikely						**Likely**	
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Gives a sense of security[a]	2.9	1.6	3.5	9.8	18.1	19.4	44.8	5.76
Provides safety for family[b]	2.6	1.9	2.6	9.0	17.0	23.8	43.1	5.80
Protects property value[c]	2.9	1.9	4.8	9.3	16.0	21.1	44.1	5.73
Maintains Privacy around home[d]	8.0	4.5	7.4	13.8	17.6	16.7	32.1	5.07
Comes at a significant cost[†e]	25.2	14.2	14.2	16.5	10.3	8.7	11.0	3.43
Reduces risk to wildfires impacts[c]	2.9	3.2	2.9	9.6	16.3	19.5	45.7	5.74
Protects personal belongings[e]	2.9	2.6	2.9	8.7	17.1	22.3	43.5	5.75
Improves property appearance[c]	6.1	2.6	4.5	15.0	18.8	18.2	34.8	5.32
Will not stop home from burning[†e]	21.3	11.6	14.2	22.6	12.9	5.8	11.6	3.58

Note. Survey questions 24: "Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:" Mean based on a 7 point scale with 1=*unlikely* and 7=*likely*. [†]Variable reverse coded.
[a] n=315. [b] n=311. [c] n=313. [d] n=312. [e] n=310.

Table AA.70 Wildfire mitigation behavioral belief strength (mean comparison)

	HOA		**Non-HOA**	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Gives a sense of security[a]	5.77	5.77	5.66	5.76
Provides safety for family[b]	5.81	5.81	5.70	5.80
Protects property value[c]	5.86	5.86	5.63	5.73
Maintains Privacy around home[d]	5.26	5.21	4.97	5.07
Comes at a significant cost[†e]	4.04	4.02	3.53	3.43
Reduces risk to wildfires impacts[f]	5.87	5.88	5.64	5.74
Protects personal belongings[g]	5.78	5.78	5.65	5.75
Improves property appearance[c]	5.38	5.39	5.29	5.32
Will not stop home from burning[†h]	3.82	3.80	3.68	3.58

Note. Survey question 24: "Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:" Mean based on a 7 point scale with 1=*unlikely* and 7=*likely*. [†]Variable reverse coded.
[a] HOA n=295: Prescott n=257. Non-HOA n=315: Prescott n=242.
[b] HOA n=293: Prescott n=255. Non-HOA n=311: Prescott n=239.
[c] HOA n=295: Prescott n=257. Non-HOA n=313: Prescott n=240.
[d] HOA n=293: Prescott n=255. Non-HOA n=312: Prescott n=239.
[e] HOA n=290: Prescott n=253. Non-HOA n=310: Prescott n=238.
[f] HOA n=295: Prescott n=258. Non-HOA n=313: Prescott n=241.
[g] HOA n=295: Prescott n=257. Non-HOA n=310: Prescott n=238.
[h] HOA n=288: Prescott n=251. Non-HOA n=310: Prescott n=237.

Table AA.71 Wildfire mitigation behavioral outcome evaluations (HOA, City of Prescott)

	Bad						**Good**	
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
A sense of security is:[a]	0.0	0.0	0.4	1.9	8.5	19.4	69.8	2.56
Safety for family is:[b]	0.0	0.0	0.0	1.6	3.9	13.6	80.9	2.74
Protection of property value is:[c]	0.0	0.0	0.0	1.6	6.7	14.2	77.6	2.68
Privacy around home is:[d]	0.0	0.4	0.4	9.0	10.5	20.3	59.4	2.28
Significant cost for mitigation is:[†e]	13.4	8.1	12.6	28.3	11.7	13.8	12.1	0.07
Reduction of risk is:[b]	0.0	0.8	0.8	2.3	7.8	21.8	66.5	2.49
Protection of belongings is:[a]	0.0	0.4	0.8	1.9	8.9	18.2	69.8	2.53
Improving property appearance is:[b]	0.4	1.2	1.2	5.1	8.2	22.6	61.5	2.33
Home burning down is:[†f]	8.7	2.4	0.4	2.4	1.2	3.2	81.7	2.21

Note. Survey questions 25: "For the following, please provide your evaluation of each." Mean based on a 7 point scale with -3=*bad* and 3=*good*. [†]Variable reverse coded.
[a] n=258. [b] n=257. [c] n=254. [d] n=256. [e] n=247. [f] n=252.

Table AA.72 Wildfire mitigation behavioral outcome evaluations (HOA, Total)

	Bad						**Good**	
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
A sense of security is:[a]	0.0	0.0	0.3	2.0	8.8	18.6	70.2	2.56
Safety for family is:[b]	0.0	0.0	0.0	1.4	4.4	12.6	81.6	2.74
Protection of property value is:[c]	0.0	0.0	0.3	1.4	6.8	14.7	76.7	2.66
Privacy around home is:[d]	0.0	0.7	0.7	7.8	12.3	19.1	59.4	2.27
Significant cost for mitigation is:[†e]	13.5	7.8	12.1	27.0	12.1	14.5	13.1	0.12
Reduction of risk is:[a]	0.0	0.7	1.7	2.4	7.5	20.3	67.5	2.47
Protection of belongings is:[b]	0.3	0.3	0.7	1.7	9.5	17.7	69.7	2.52
Improving property appearance is:[a]	0.3	1.0	1.0	4.7	9.2	22.0	61.7	2.34
Home burning down is:[†f]	9.1	2.1	0.7	2.4	1.0	2.8	81.9	2.20

Note. Survey questions 25: "For the following, please provide your evaluation of each." Mean based on a 7 point scale with -3=*bad* and 3=*good*. [†]Variable reverse coded.
[a] n=295. [b] n=294. [c] n=292. [d] n=293. [e] n=282. [f] n=287.

Table AA.73 Wildfire mitigation behavioral outcome evaluations (Non-HOA, City of Prescott)

	Bad						**Good**	
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
A sense of security is:[a]	0.0	0.0	0.8	3.7	6.2	16.5	72.7	2.57
Safety for family is:[b]	0.0	0.4	0.4	1.7	5.4	13.0	79.1	2.67
Protection of property value is:[c]	0.0	0.0	0.8	2.5	8.8	19.2	68.8	2.53
Privacy around home is:[d]	0.0	1.3	0.8	4.6	14.7	18.1	60.5	2.29
Significant cost for mitigation is:[†d]	16.4	8.0	10.9	22.3	13.4	10.9	18.1	0.13
Reduction of risk is:[e]	0.0	0.4	0.0	5.8	9.5	22.4	61.8	2.39
Protection of belongings is:[e]	0.0	0.4	0.0	4.1	7.5	23.7	64.3	2.47
Improving property appearance is:[e]	0.0	0.0	0.8	5.4	12.0	21.6	60.2	2.35
Home burning down is:[†c]	9.2	3.3	2.5	2.5	0.8	1.7	80.0	2.08

Note. Survey questions 25: "For the following, please provide your evaluation of each." Mean based on a 7 point scale with -3=*bad* and 3=*good*. [†]Variable reverse coded.
[a] n=242. [b] n=239. [c] n=240. [d] n=238. [e] n=241.

Table AA.74 Wildfire mitigation behavioral outcome evaluations (Non-HOA, Total)

	Bad						**Good**	
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
A sense of security is[a]	0.0	0.0	0.6	3.8	6.0	17.8	71.7	2.56
Safety for family is:[b]	0.0	0.3	0.3	1.6	5.4	13.5	78.8	2.68
Protection of property value is:[c]	0.0	0.0	0.6	2.6	8.0	18.5	70.3	2.55
Privacy around home is:[d]	0.0	1.0	1.9	4.2	14.1	18.0	60.8	2.29
Significant cost for mitigation is:[†e]	17.3	9.1	11.4	22.8	12.1	9.4	17.9	0.03
Reduction of risk is:[f]	0.0	0.3	0.6	5.1	8.9	20.7	64.3	2.42
Protection of belongings is:[f]	0.0	0.3	0.3	3.5	7.3	22.9	65.6	2.49
Improving property appearance is:[c]	0.0	0.3	0.6	6.1	11.8	21.4	59.7	2.33
Home burning down is:[†d]	10.3	2.9	2.3	2.6	0.6	2.9	78.5	2.03

Note. Survey questions 25: "For the following, please provide your evaluation of each." Mean based on a 7 point scale with -3=*bad* and 3=*good*. [†]Variable reverse coded.
[a] n=315. [b] n=312. [c] n=313. [d] n=311. [e] n=307. [f] n=314.

Table AA.75 Wildfire mitigation behavioral outcome evaluations (mean comparison)

	HOA		Non-HOA	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
A sense of security is:[a]	2.56	2.56	2.57	2.56
Safety for family is:[b]	2.74	2.74	2.67	2.68
Protection of property value is:[c]	2.68	2.66	2.53	2.55
Privacy around home is:[d]	2.28	2.27	2.29	2.29
Significant cost for mitigation is:[†e]	0.07	0.12	0.13	0.03
Reduction of risk is:[f]	2.49	2.47	2.39	2.42
Protection of belongings is:[g]	2.53	2.52	2.47	2.49
Improving property appearance is:[h]	2.33	2.34	2.35	2.33
Home burning down is:[†i]	2.21	2.20	2.08	2.09

Note. Survey question 25: "For the following, please provide your evaluation of each." Mean based on a 7 point scale with -3=*bad* and 3=*good*. [†]Variable reverse coded.

[a] HOA n=295: Prescott n=258. Non-HOA n=315: Prescott n=242.

[b] HOA n=294: Prescott n=257. Non-HOA n=312: Prescott n=239.

[c] HOA n=292: Prescott n=254. Non-HOA n=313: Prescott n=240.

[d] HOA n=293: Prescott n=256. Non-HOA n=311: Prescott n=238.

[e] HOA n=282: Prescott n=247. Non-HOA n=307: Prescott n=238.

[f] HOA n=295: Prescott n=257. Non-HOA n=314: Prescott n=241.

[g] HOA n=294: Prescott n=258. Non-HOA n=314: Prescott n=241.

[h] HOA n=295: Prescott n=257. Non-HOA n=313: Prescott n=241.

[i] HOA n=287: Prescott n=257. Non-HOA n=311: Prescott n=241.

Social norms

This section presents the result responses on social norms. Table AA.76 though AA.79 present the detailed results broken down by sample. Table AA.80 presents mean comparisons across the samples.

The results show the HOA sample identifying a higher influence of social norms than the non-HOA sample. The HOA sample identified high means for "referents think I should mitigate" (5.95), "referents approve mitigation" (6.23), and it is expected I mitigate" (5.77). The non-HOA sample respondents identified a strong level of "referents approve mitigation" with a mean of 5.95. Other non-HOA items were rated as moderately influential.

Table AA.76 Social norms (HOA, City of Prescott)

	Strongly disagree Definitely false					**Strongly agree definitely true**		
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Referents think I should mitigate[a]	1.6	2.4	0.8	11.8	11.0	22.0	50.4	5.96
Referents approve mitigation[b]	0.8	0.8	1.2	5.4	11.7	23.3	56.8	6.24
It is expected I mitigate[c]	2.0	3.5	2.7	10.5	11.7	21.9	47.7	5.83
Most neighbors mitigate[c]	3.1	5.9	7.4	12.9	26.2	22.3	22.3	5.09

Note. Survey questions 26: "Most people who are important to me think that I should perform wildfire risk reduction action on my property's vegetation and home."; 27: "Most people whose opinion I value would approve of my performing wildfire risk reduction activities on my property's vegetation and home."; 28: "It is expected of me that I complete wildfire risk reduction actions on my property's vegetation and home every year."; & 29: "Most of the residents in my neighborhood with whom I am acquainted with have performed risk reduction activities on their property's vegetation and home to minimize the threat of wildfire." Mean based on a 7 point scale with 1= *strongly disagree/definitely false* and 7=*strongly agree/definitely true*.
[a] n=254. [b] n=257. [c] n=256.

Table AA.77 Social norms (HOA, Total)

	Strongly disagree Definitely false					**Strongly agree definitely true**		
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Referents think I should mitigate[a]	1.4	2.1	1.0	12.4	12.4	20.6	50.2	5.95
Referents approve mitigation[b]	1.0	0.7	1.0	5.8	11.2	23.7	56.6	6.23
It is expected I mitigate[c]	2.7	3.4	2.7	10.5	12.9	21.4	46.3	5.77
Most neighbors mitigate[c]	2.7	5.4	7.5	12.9	26.9	22.8	21.8	5.11

Note. Survey questions 26: "Most people who are important to me think that I should perform wildfire risk reduction action on my property's vegetation and home."; 27: "Most people whose opinion I value would approve of my performing wildfire risk reduction activities on my property's vegetation and home."; 28: "It is expected of me that I complete wildfire risk reduction actions on my property's vegetation and home every year."; & 29: "Most of the residents in my neighborhood with whom I am acquainted with have performed risk reduction activities on their property's vegetation and home to minimize the threat of wildfire." Mean based on a 7 point scale with 1= *strongly disagree/definitely false* and 7=*strongly*
[a] n=291 [b] n=295. [c] n=294.

Table AA.78 Social norms (Non-HOA, City of Prescott)

	Strongly disagree Definitely false					**Strongly agree definitely true**		
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Referents think I should mitigate[a]	3.3	2.9	5.4	21.3	13.4	17.2	36.4	5.36
Referents approve mitigation[b]	1.7	1.2	2.1	12.9	10.4	25.7	46.1	5.90
It is expected I mitigate[c]	7.9	4.1	5.8	15.7	11.6	15.3	39.7	5.24
Most neighbors mitigate[b]	10.8	10.4	10.8	24.1	19.9	10.8	13.3	4.17

Note. Survey questions 26: "Most people who are important to me think that I should perform wildfire risk reduction action on my property's vegetation and home."; 27: "Most people whose opinion I value would approve of my performing wildfire risk reduction activities on my property's vegetation and home."; 28: "It is expected of me that I complete wildfire risk reduction actions on my property's vegetation and home every year."; & 29: "Most of the residents in my neighborhood with whom I am acquainted with have performed risk reduction activities on their property's vegetation and home to minimize the threat of wildfire." Mean based on a 7 point scale with 1= *strongly disagree/definitely false* and 7=*strongly*
[a] n=239. [b] n=241. [c] n=242.

Table AA.79 Social norms (Non-HOA, Total)

	Strongly disagree Definitely false					**Strongly agree definitely true**		
	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Referents think I should mitigate[a]	3.2	2.6	4.2	20.4	14.1	16.3	39.3	5.46
Referents approve mitigation[b]	1.3	1.3	1.9	13.1	10.8	22.9	48.7	5.95
It is expected I mitigate[c]	7.3	3.8	5.1	14.9	13.6	13.9	41.5	5.31
Most neighbors mitigate[b]	10.5	9.9	10.2	24.8	19.4	10.5	14.6	4.23

Note. Survey questions 26: "Most people who are important to me think that I should perform wildfire risk reduction action on my property's vegetation and home."; 27: "Most people whose opinion I value would approve of my performing wildfire risk reduction activities on my property's vegetation and home."; 28: "It is expected of me that I complete wildfire risk reduction actions on my property's vegetation and home every year."; & 29: "Most of the residents in my neighborhood with whom I am acquainted with have performed risk reduction activities on their property's vegetation and home to minimize the threat of wildfire." Mean based on a 7 point scale with 1= *strongly disagree/definitely false* and 7=*strongly*
[a] n=313. [b] n=314. [c] n=316.

Table AA.80 Wildfire risk reduction behavioral outcome evaluations (mean comparison)

	HOA		**Non-HOA**	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Referents think I should mitigate[a]	5.96	5.95	5.36	5.46
Referents approve mitigation[b]	6.24	6.23	5.90	5.95
It is expected I mitigate[c]	5.83	5.77	5.24	5.31
Most neighbors mitigate[d]	5.09	5.11	4.17	4.23

Note. Survey questions 26: "Most people who are important to me think that I should perform wildfire risk reduction action on my property's vegetation and home."; 27: "Most people whose opinion I value would approve of my performing wildfire risk reduction activities on my property's vegetation and home."; 28: "It is expected of me that I complete wildfire risk reduction actions on my property's vegetation and home every year."; & 29: "Most of the residents in my neighborhood with whom I am acquainted with have performed risk reduction activities on their property's vegetation and home to minimize the threat of wildfire." Mean based on a 7 point scale with 1= *strongly disagree/definitely false* and 7=*strongly*

[a] HOA n=291: Prescott n=254. Non-HOA n=313: Prescott n=239.

[b] HOA n=295: Prescott n=257. Non-HOA n=314: Prescott n=241.

[c] HOA n=294: Prescott n=256. Non-HOA n=316: Prescott n=242.

[d] HOA n=294: Prescott n=256. Non-HOA n=314: Prescott n=231.

Injunctive belief

This section presents the injunctive belief results. Tables AA.81 through AA.84 present detailed results of the normative belief items for each sample. Mean comparison of these results are presented in Table AA.85. Detailed motivation to comply item results are presented in tables AA.86 through AA.89 with table AA.90 providing the comparison of means for each item and sample.

Results show the HOA sample as having much higher perception that referents think you should perform wildfire mitigation actions than the non-HOA sample. The HOA sample perceived the association highest with a mean of 1.93. The HOA sample also identified family (1.61) and the City of Prescott/Yavapai County (1.61) as having a strong level of thinking you should mitigate. The highest mean level for the non-HOA sample was with the city of Prescott/Yavapai County with a moderate mean of 1.27.

The results show an overall higher level of complaisance with referents for the HOA sample compared to the non-HOA sample. All means were moderate for both the HOA and non-HOA samples. The highest level of compliance for the HOA sample was with family (5.46) and wit the City of Prescott/Yavapai County (4.92) for the non-HOA sample.

Table AA.81 Normative belief of individuals or groups (HOA, City of Prescott)

	Think I should not take action					**Think I should take action**		
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
Neighbors[a]	3.3	2.4	6.5	15.9	19.1	20.7	32.1	1.36
Friends[b]	2.9	3.3	7.3	20.0	16.3	17.6	32.7	1.27
Family[c]	3.3	2.0	4.5	13.9	13.1	21.3	41.8	1.63
Homeowners association[d]	1.7	2.9	4.2	9.6	8.8	18.4	54.4	1.94
City of Prescott and/or Yavapai Co.[e]	3.3	2.9	4.6	13.8	12.9	19.2	43.3	1.61

Note. Survey questions 30: "Please provide what you believe [each referent's] level of agreement would be to you completing risk reduction actions on your property." Mean based on a 7 point scale with -3= *think I should not take action* and 3=*think I should take action*.
[a] n=246. [b] n=245. [c] n=244. [d] n=239. [e] n=240.

Table AA.82 Normative belief of individuals or groups (HOA, Total)

	Think I should not take action					**Think I should take action**		
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
Neighbors[a]	3.2	2.1	6.0	16.5	19.7	20.1	32.4	1.37
Friends[b]	2.5	3.2	6.7	21.2	18.0	16.6	31.8	1.26
Family[c]	2.8	2.1	5.7	13.5	13.8	20.2	41.8	1.61
Homeowners association[d]	1.8	2.5	4.3	10.1	8.3	19.1	53.8	1.93
City of Prescott and/or Yavapai Co.[d]	3.2	2.9	4.3	14.1	12.6	19.9	43.0	1.61

Note. Survey questions 30: "Please provide what you believe [each referent's] level of agreement would be to you completing risk reduction actions on your property." Mean based on a 7 point scale with -3= *think I should not take action* and 3=*think I should take action*.
[a] n=284. [b] n=283. [c] n=282. [d] 277.

Table AA.83 Normative belief of individuals or groups (Non-HOA, City of Prescott)

	Think I should not take action					**Think I should take action**		
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
Neighbors[a]	11.3	2.7	8.6	29.3	16.2	15.8	16.2	0.49
Friends[a]	10.4	4.5	8.1	29.3	16.7	14.0	17.1	0.48
Family[b]	9.6	2.8	9.6	23.4	15.1	17.9	21.6	0.72
City of Prescott and/or Yavapai Co.[c]	7.4	1.4	7.9	16.3	12.6	17.2	37.2	1.26

Note. Survey questions 30: "Please provide what you believe [each referent's] level of agreement would be to you completing risk reduction actions on your property." Mean based on a 7 point scale with -3= *think I should not take action* and 3=*think I should take action*.
[a] n=222. [b] n=218. [c] n=215.

Table AA.84 Normative belief of individuals or groups (Non-HOA, Total)

	Think I should not take action					**Think I should take action**		
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
Neighbors[a]	9.6	3.1	9.6	29.2	15.8	14.1	18.6	0.55
Friends[b]	8.6	5.1	8.9	28.4	15.8	13.7	19.5	0.57
Family[c]	8.3	3.5	10.1	22.9	13.5	17.4	24.3	0.79
City of Prescott and/or Yavapai Co.[d]	6.7	2.5	7.7	15.8	12.0	18.0	37.3	1.27

Note. Survey questions 30: "Please provide what you believe [each referent's] level of agreement would be to you completing risk reduction actions on your property." Mean based on a 7 point scale with -3= *think I should not take action* and 3=*think I should take action*.
[a] n=291. [b] n=292. [c] n=288. [d] n=284.

Table AA.85 Normative belief of individuals or groups (mean comparison)

	HOA		Non-HOA	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Neighbors[a]	1.36	1.37	0.49	0.55
Friends[b]	1.27	1.26	0.48	0.57
Family[c]	1.63	1.61	0.72	0.79
Homeowners association[d]	1.94	1.93	-	-
City of Prescott and/or Yavapai Co.[e]	1.61	1.61	1.26	1.27

Note. Survey questions 30: "Please provide what you believe [each referent's] level of agreement would be to you completing risk reduction actions on your property." Mean based on a 7 point scale with -3= *think I should not take action* and 3=*think I should take action*.
[a] HOA n=284: Prescott n=246. Non-HOA n=291: Prescott n=222.
[b] HOA n=283: Prescott n=245. Non-HOA n=292: Prescott n=222.
[c] HOA n=282: Prescott n=244. Non-HOA n=288: Prescott n=218.
[d] HOA n=277: Prescott n=239.
[e] HOA n=277: Prescott n=240. Non-HOA n=284: Prescott n=215.

Table AA.86 Motivation to comply with individuals or groups (HOA, City of Prescott)

	Disagree						Agree	
I want to do what:	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
My neighbors think I should do[a]	9.3	6.5	12.6	25.6	11.8	14.2	19.9	4.46
My friends think I should do[b]	9.0	6.1	11.8	24.1	14.3	15.1	19.6	4.52
My family think I should do[a]	5.7	2.4	3.7	15.4	13.4	17.9	41.5	5.48
My homeowners association think I should do[c]	3.7	2.1	4.5	18.9	14.8	20.2	35.8	5.43
City of Prescott and/or Yavapai Co. think I should do[d]	2.8	1.2	6.1	17.4	15.0	21.1	36.4	5.49

Note. Survey questions 31: "When it comes to reducing my risk from wildfires, I want to do what:" Mean based on a 7 point scale with 1=*disagree* and 7=*agree*.
[a] n=246. [b] n=245. [c] n=243. [d] n=247.

Table AA.87 Motivation to comply with individuals or groups (HOA, Total)

	Disagree						Agree	
I want to do what:	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
My neighbors think I should do[a]	9.2	7.1	11.3	26.2	12.8	13.1	20.2	4.46
My friends think I should do[b]	8.9	6.4	12.5	24.9	14.6	13.5	19.2	4.47
My family think I should do[a]	5.3	2.8	3.9	14.9	14.2	17.0	41.8	5.48
My homeowners association think I should do[c]	3.9	2.2	5.0	19.0	14.7	20.1	35.1	5.39
City of Prescott and/or Yavapai Co. think I should do[a]	3.2	1.8	6.0	17.0	15.6	19.9	36.5	5.46

Note. Survey questions 31: "When it comes to reducing my risk from wildfires, I want to do what:" Mean based on a 7 point scale with 1=*disagree* and 7=*agree*.
[a] n=282 [b] n=281. [c] n=297.

Table AA.88 Motivation to comply with individuals or groups (Non-HOA, City of Prescott)

	Disagree						Agree	
I want to do what:	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
My neighbors think I should do[a]	23.5	8.1	8.1	25.8	10.9	8.1	15.4	3.78
My friends think I should do[b]	20.5	8.6	7.7	26.4	13.2	7.7	15.9	3.90
My family think I should do[a]	14.0	3.6	5.4	18.1	13.6	17.2	28.1	4.77
City of Prescott and/or Yavapai Co. think I should do[a]	9.5	3.2	5.0	17.6	18.6	19.0	27.1	4.98

Note. Survey questions 31: "When it comes to reducing my risk from wildfires, I want to do what:" Mean based on a 7 point scale with 1=*disagree* and 7=*agree*.
[a] n=221. [b] n=220.

Table AA.89 Motivation to comply with individuals or groups (Non-HOA, Total)

	Disagree						Agree	
I want to do what:	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
My neighbors think I should do[a]	22.1	8.7	8.0	24.2	12.5	8.7	15.9	3.86
My friends think I should do[a]	19.0	8.7	8.0	26.3	13.5	8.0	16.6	3.97
My family think I should do[a]	13.5	3.8	5.5	17.0	15.2	16.6	28.4	4.80
City of Prescott and/or Yavapai Co. think I should do[b]	9.4	1.8	6.0	17.0	15.6	19.9	36.5	4.92

Note. Survey questions 31: "When it comes to reducing my risk from wildfires, I want to do what:" Mean based on a 7 point scale with 1=*disagree* and 7=*agree*.
[a] n=289. [b] n=288.

Table AA.90 Motivation to comply with individuals or groups (mean comparison)

	HOA		Non-HOA	
I want to do what:	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
My neighbors think I should do[a]	4.46	4.46	3.78	3.86
My friends think I should do[b]	4.52	4.47	3.90	3.97
My family think I should do[a]	5.48	5.48	4.77	4.80
My homeowners association think I should do[c]	5.43	5.39	-	-
City of Prescott and/or Yavapai Co. think I should do[d]	5.49	5.46	4.98	4.92

Note. Survey questions 31: "When it comes to reducing my risk from wildfires, I want to do what:" Mean based on a 7 point scale with 1=*disagree* and 7=*agree*.
[a] HOA n=282: Prescott n=246. Non-HOA n=289: Prescott n=221.
[b] HOA n=281: Prescott n=245. Non-HOA n=289: Prescott n=220.
[c] HOA n=279: Prescott n=243.
[d] HOA n=282: Prescott n=247. Non-HOA n=288: Prescott n=221.

Descriptive belief

This section presents the results from descriptive belief strength and identification with referent questions. Table AA.91 through AA.94 presents detailed sample results for each referent with table AA.95 presenting mean comparisons of the samples. Table AA.96 through AA.99 present the detailed results for identification with referent with mean comparison presented in table AA.100.

Overall, HOA respondents identified higher likelihood of referents performing wildfire mitigation than non-HOA respondents. The HOA sample identified that family had a moderate likelihood (1.59) of mitigating while renters have a low likelihood (-1.50). The non-HOA sample also identified family as most likely to mitigate but only at a medium level with a mean of 0.97. Rated as least likely to mitigate by the non-HOA sample was also renters with a mean of -1.80.

Both samples, HOA and non-HOA, results showed the highest identification with family (5.43 and 4.82 respectively) and full-time residents (5.26 and 4.53 respectively). The HOA sample had a general higher level of identification with referents than the non-HOA sample. Renter had the lowest level of identification with for both the HOA and non-HOA samples (2.27 and 2.13 respectively).

Table AA.91 Descriptive belief strength of referents (HOA, City of Prescott)

	Would not take action						**Would take action**	
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
Neighbors[a]	2.0	6.1	10.1	15.4	26.3	21.5	18.6	0.97
Friends[b]	2.0	3.3	7.3	19.6	20.4	26.9	20.4	1.16
Family[c]	3.0	2.1	5.1	13.6	12.7	24.6	39.0	1.61
Owners of undeveloped property[d]	22.4	20.7	18.1	20.7	9.7	4.2	4.2	-0.96
Full-time residents[e]	0.8	2.9	2.9	14.5	25.2	28.1	25.6	1.47
Renters[f]	36.9	20.7	17.4	16.6	3.7	2.5	2.1	-1.55
Out of state property owners[f]	29.0	19.1	20.3	14.1	8.3	5.4	3.7	-1.15
Seasonal/part-time residents[g]	17.7	15.2	16.9	23.9	11.9	8.6	5.8	-0.54

Note. Survey questions 32: "For each, please provide [individuals or groups] likelihood of performing wildfire risk reduction actions on their property's vegetation and home in the next 12 months." Mean based on a 7 point scale with -3=*would not take action* and 3=*would take action*.
[a] n=247. [b] n=245. [c] n=236. [d] n=237. [e] n=242. [f] n=241. [g] n=243.

Table AA.92 Descriptive belief strength of referents (HOA, Total)

	Would not take action						**Would take action**	
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
Neighbors[a]	2.5	6.0	8.8	15.4	28.1	21.8	17.5	0.96
Friends[b]	1.8	3.5	6.4	22.0	20.6	25.2	20.6	1.14
Family[c]	2.9	2.9	5.1	12.9	13.2	23.2	39.7	1.59
Owners of undeveloped property[d]	22.6	20.4	18.6	20.1	9.9	4.0	4.4	-0.96
Full-time residents[e]	0.7	2.9	2.9	14.6	25.0	28.6	25.4	1.48
Renters[f]	36.5	20.6	17.7	15.5	4.3	2.2	3.2	-1.50
Out of state property owners[g]	29.4	19.0	19.0	14.0	9.0	4.7	5.0	-1.12
Seasonal/part-time residents[h]	16.7	14.2	16.7	23.8	13.5	8.2	6.8	-0.45

Note. Survey questions 32: "For each, please provide [individuals or groups] likelihood of performing wildfire risk reduction actions on their property's vegetation and home in the next 12 months." Mean based on a 7 point scale with -3=*would not take action* and 3=*would take action*.
[a] n=285. [b] n=282. [c] n=272. [d] n=274. [e] n=280. [f] n=277. [g] n=279. [h] n=281.

Table AA.93 Descriptive belief strength of referents (Non-HOA, City of Prescott)

	Would not take action						**Would take action**	
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
Neighbors[a]	10.5	11.4	11.4	24.5	24.0	8.7	9.6	0.05
Friends[b]	6.2	5.8	12.8	26.5	23.0	14.6	11.1	0.42
Family[c]	4.7	5.2	6.1	23.6	17.0	19.8	23.6	0.97
Owners of undeveloped property[d]	33.2	23.5	13.4	16.1	5.1	4.1	4.6	-1.33
Full-time residents[e]	6.7	4.0	3.6	22.7	22.2	23.6	17.3	0.90
Renters[f]	43.2	25.5	9.5	14.5	3.6	1.8	1.8	-1.77
Out of state property owners[g]	37.5	24.5	9.7	17.6	2.8	4.2	3.7	-1.49
Seasonal/part-time residents[g]	26.8	20.5	20.0	17.7	5.5	5.9	3.6	-1.13

Note. Survey questions 32: "For each, please provide [individuals or groups] likelihood of performing wildfire risk reduction actions on their property's vegetation and home in the next 12 months." Mean based on a 7 point scale with -3=*would not take action* and 3=*would take action*.
[a] n=229. [b] n=226. [c] n=212. [d] n=217. [e] n=225. [f] n=220. [g] n=216.

Table AA.94 Descriptive belief strength of referents (Non-HOA, Total)

	Would not take action						**Would take action**	
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
Neighbors[a]	9.7	11.3	11.3	25.0	13.7	8.0	11.0	0.10
Friends[b]	5.7	6.1	11.5	28.4	21.3	13.9	13.2	0.48
Family[c]	5.0	5.8	5.8	23.0	16.2	19.1	25.2	0.97
Owners of undeveloped property[d]	34.4	23.3	12.8	17.0	5.2	3.1	4.2	-1.39
Full-time residents[e]	5.8	4.8	3.4	25.5	21.1	22.1	17.3	0.87
Renters[f]	44.4	24.1	10.5	14.7	2.8	1.4	2.1	-1.80
Out of state property owners[g]	38.3	24.1	10.3	17.7	2.8	3.2	3.5	-1.54
Seasonal/part-time residents[f]	25.2	21.0	20.3	17.5	5.6	5.6	4.9	-1.06

Note. Survey questions 32: "For each, please provide [individuals or groups] likelihood of performing wildfire risk reduction actions on their property's vegetation and home in the next 12 months." Mean based on a 7 point scale with -3=*would not take action* and 3=*would take action*.
[a] n=300. [b] n=296. [c] n=278. [d] n=288. [e] n=294. [f] n=286. [g] n=282.

Table AA.95 Descriptive belief strength of referents (mean comparison)

	HOA		**Non-HOA**	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Neighbors[b]	0.97	0.96	0.05	0.10
Friends[c]	1.16	1.14	0.42	0.48
Family[d]	1.61	1.59	0.97	0.97
Owners of undeveloped property[e]	-0.96	-0.96	-1.33	-1.39
Full-time residents[f]	1.47	1.48	0.90	0.87
Renters[g]	-1.55	-1.50	-1.77	-1.80
Out of state property owners[h]	-1.15	-1.12	-1.49	-1.54
Seasonal/part-time residents[i]	-0.54	-0.45	-1.13	-1.06

Note. Survey questions 32: "For each, please provide [individuals or groups] likelihood of performing wildfire risk reduction actions on their property's vegetation and home in the next 12 months." Mean based on a 7 point scale with -3=*would not take action* and 3=*would take action*.
[b] HOA n=285: Prescott n=247. Non-HOA n=300: Prescott n=229.
[c] HOA n=282: Prescott n=245. Non-HOA n=296: Prescott n=226.
[d] HOA n=272: Prescott n=236. Non-HOA n=278: Prescott n=212.
[e] HOA n=274: Prescott n=237. Non-HOA n=288: Prescott n=217.
[f] HOA n=280: Prescott n=242. Non-HOA n=294: Prescott n=225.
[g] HOA n=277: Prescott n=241. Non-HOA n=286: Prescott n=220.
[h] HOA n=279: Prescott n=241. Non-HOA n=282: Prescott n=216.
[i] HOA n=281: Prescott n=243. Non-HOA n=286: Prescott n=220.

Table AA.96 Identification with referents (HOA, City of Prescott)

	Not at all						Very much	
	1	2	3	4	5	6	7	Overall
How much do you want to be like:	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Mean
Your neighbors[a]	9.6	4.6	7.9	19.2	19.2	16.7	22.9	4.75
Your friends[b]	8.0	4.2	7.6	21.0	18.5	16.0	24.8	4.85
Your family[c]	5.6	2.6	4.3	14.3	15.2	19.5	38.5	5.43
Owners of undeveloped property[d]	46.2	17.9	12.8	11.1	6.0	1.7	4.3	2.35
Full-time residents[e]	6.3	1.7	3.4	14.7	21.4	26.5	26.1	5.27
Renters[f]	48.5	20.6	10.7	11.2	4.3	1.3	3.4	2.20
Out of state property owners[f]	44.9	18.4	12.8	12.8	4.3	2.6	4.3	2.38
Seasonal/part-time residents[g]	35.4	16.9	13.5	16.9	6.3	4.6	6.3	2.81

Note. Survey questions 33: "When it comes to matters of reducing risk from wildfires, how much do you want to be like:" Mean based on a 7 point scale with 1=*not at all* and 7=*very much*.
[a] n=240. [b] n=238. [c] n=231. [d] n=234. [e] n=233. [f] n=234. [g] n=237.

Table AA.97 Identification with referents (HOA, Total)

	Not at all						Very much	
	1	2	3	4	5	6	7	Overall
How much do you want to be like:	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Mean
Your neighbors[a]	10.1	5.1	7.9	19.1	20.2	16.2	21.3	4.68
Your friends[b]	8.1	3.7	8.1	22.3	19.0	15.4	23.4	4.81
Your family[c]	4.9	2.3	5.7	14.3	15.8	18.9	38.1	5.43
Owners of undeveloped property[d]	45.7	17.1	13.0	11.5	6.3	2.2	4.1	2.39
Full-time residents[e]	5.5	1.5	4.7	15.3	21.9	25.5	25.5	5.26
Renters[f]	46.6	20.1	11.6	11.6	5.2	1.1	3.7	2.27
Out of state property owners[g]	44.1	17.8	13.0	12.6	5.6	2.2	4.8	2.44
Seasonal/part-time residents[h]	32.1	17.0	13.7	18.5	7.4	4.8	6.6	2.93

Note. Survey questions 33: "When it comes to matters of reducing risk from wildfires, how much do you want to be like:" Mean based on a 7 point scale with 1=*not at all* and 7=*very much*.
[a] n=277. [b] n=273. [c] n=265. [d] n=269. [e] n=274. [f] n=268. [g] n=270. [h] n=271.

Table AA.98 Identification with referent (Non-HOA, City of Prescott)

	Not at all						Very much	
	1	2	3	4	5	6	7	Overall
How much do you want to be like:	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Mean
Your neighbors[a]	21.1	7.9	7.9	26.9	15.0	8.8	12.3	3.82
Your friends[b]	13.6	5.9	9.0	30.3	16.3	10.9	14.0	4.19
Your family[c]	10.7	3.3	7.0	23.7	14.9	14.4	26.0	4.76
Owners of undeveloped property[d]	46.6	15.5	9.6	18.3	4.1	2.3	3.7	2.39
Full-time residents[e]	13.2	3.6	5.9	25.9	15.9	18.6	16.8	4.51
Renters[f]	52.8	16.1	6.0	17.9	4.1	0.5	2.8	2.17
Out of state property owners[d]	50.2	16.0	5.9	17.4	4.1	1.4	5.0	2.33
Seasonal/part-time residents[e]	42.7	16.8	8.6	19.5	5.0	1.4	5.9	2.55

Note. Survey questions 33: "When it comes to matters of reducing risk from wildfires, how much do you want to be like:" Mean based on a 7 point scale with 1=*not at all* and 7=*very much*.
[a] n=227. [b] n=221. [c] n=215. [d] n=219. [e] n=220. [f] n=218.

Table AA.99 Identification with referent (Non-HOA, Total)

	Not at all						Very much	
	1	2	3	4	5	6	7	Overall
How much do you want to be like:	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Mean
Your neighbors[a]	20.4	9.4	8.7	24.7	14.0	8.0	14.7	3.86
Your friends[b]	13.7	7.2	9.2	29.1	15.1	9.2	16.4	4.18
Your family[c]	11.0	3.2	6.4	22.3	14.2	15.2	27.7	4.82
Owners of undeveloped property[d]	47.1	16.6	9.0	16.6	4.5	2.1	4.2	2.38
Full-time residents[e]	12.7	3.8	6.9	24.7	16.8	16.8	18.2	4.53
Renters[f]	54.4	15.4	6.7	16.1	3.9	0.4	3.2	2.13
Out of state property owners[g]	51.9	14.6	7.3	16.0	4.5	1.0	4.5	2.28
Seasonal/part-time residents[h]	43.4	16.0	8.7	18.4	5.2	1.7	6.6	2.58

Note. Survey questions 33: "When it comes to matters of reducing risk from wildfires, how much do you want to be like:" Mean based on a 7 point scale with 1=*not at all* and 7=*very much*.
[a] n=299 [b] n=292. [c] n=282. [d] n=289. [e] n=291. [f] n=285. [g] n=287. [h] n=288.

Table AA.100 Identification with referent (mean comparison)

	HOA		Non-HOA	
How much do you want to be like:	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Your neighbors[a]	4.75	4.68	3.82	3.86
Your friends[b]	4.85	4.81	4.19	4.18
Your family[c]	5.43	5.43	4.76	4.82
Owners of undeveloped property[d]	2.35	2.39	2.39	2.38
Full-time residents[e]	5.27	5.26	4.51	4.53
Renters[f]	2.20	2.27	2.17	2.13
Out of state property owners[g]	2.38	2.44	2.33	2.28
Seasonal/part-time residents[h]	2.81	2.93	2.55	2.58

Note. Survey questions 33: "When it comes to matters of reducing risk from wildfires, how much do you want to be like:" Mean based on a 7 point scale with 1=*not at all* and 7=*very much*.

[a] HOA n=277: Prescott n=240. Non-HOA n=299: Prescott n=227.
[b] HOA n=273: Prescott n=238. Non-HOA n=292: Prescott n=221.
[c] HOA n=265: Prescott n=231. Non-HOA n=282: Prescott n=215.
[d] HOA n=269: Prescott n=234. Non-HOA n=289: Prescott n=219.
[e] HOA n=274: Prescott n=238. Non-HOA n=291: Prescott n=220.
[f] HOA n=268: Prescott n=233. Non-HOA n=285: Prescott n=218.
[g] HOA n=270: Prescott n=234. Non-HOA n=287: Prescott n=219.
[h] HOA n=271: Prescott n=237. Non-HOA n=288: Prescott n=220.

Perceived behavioral control

Presented in this section are the results from perceived behavioral control questions. Detailed results are presented by sample for each control item in tables AA.101 through AA.104 with table AA.105 presenting a comparison of means.

The HOA sample results show a higher level of perceived control in performing mitigation actions than the non-HOA sample. The HOA sample respondents identified wildfire mitigation as moderately easy (5.08), highly possible (6.06), with very few obstacles. Non-HOA respondents identified wildfire mitigation as moderately easy (4.70), moderately possible (5.57), with very few obstacles (5.57).

Table AA.101 Perceived constraints to wildfire mitigation (HOA, City of Prescott)

	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
	Difficult						**Easy**	
Completing wildfire mitigation actions is:[a]	2.4	4.7	7.1	15.4	25.3	25.3	19.8	5.11
	Impossible						**Possible**	
Completing wildfire mitigation actions is:[b]	0.8	1.6	2.8	6.4	11.2	27.7	49.4	6.06
	Numerous						**Very few**	
Number of events preventing performance of mitigation actions[b]	2.8	1.6	6.0	6.8	10.8	23.3	48.6	5.86
	False						**True**	
Confident in ability to complete wildfire mitigation actions[b]	1.2	2.4	2.8	5.6	10.0	27.3	50.6	6.05
In complete control over whether I perform wildfire mitigation actions[c]	3.6	4.8	4.8	10.4	13.6	25.2	37.6	5.52

Note. Survey questions 34: "For myself to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:," 35: "I am confident that if I wanted to I could complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months," 36: "For me to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:," 37: "I feel in complete control over whether I perform wildfire risk reduction actions on my property's vegetation and home in the next 12 months," & 38: "The number of events outside my control which could prevent me from performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months are:" Mean based on a 7 point scale with 1=*difficult/impossible/numerous/false* and 7=*easy/possible/very few/true*.
[a] n=253. [b] n=249. [c] n=250.

Table AA.102 Perceived constraints to wildfire mitigation (HOA, Total)

	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
	Difficult						**Easy**	
Completing wildfire mitigation actions is:[a]	2.4	4.8	7.2	16.6	25.5	23.8	19.7	5.08
	Impossible						**Possible**	
Completing wildfire mitigation actions is:[b]	0.7	1.4	3.1	5.9	12.6	26.9	49.3	6.06
	Numerous						**Very few**	
Number of events preventing performance of mitigation actions[b]	2.8	1.4	5.6	8.0	11.2	23.1	47.9	5.84
	False						**True**	
Confident in ability to complete wildfire mitigation actions[b]	1.4	2.4	2.4	5.9	11.5	25.5	50.7	6.03
In complete control over whether I perform wildfire mitigation actions[c]	3.5	4.2	4.5	11.5	14.6	25.8	35.9	5.51

Note. Survey questions 34: "For myself to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:," 35: "I am confident that if I wanted to I could complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months," 36: "For me to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:," 37: "I feel in complete control over whether I perform wildfire risk reduction actions on my property's vegetation and home in the next 12 months," & 38: "The number of events outside my control which could prevent me from performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months are:" Mean based on a 7 point scale with 1=*difficult/impossible/numerous/false* and 7=*easy/possible/very few/true*.
[a] n=290. [b] n=286. [c] n=287.

Table AA.103 Perceived constraints to wildfire mitigation (Non-HOA, City of Prescott)

	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
	Difficult						**Easy**	
Completing wildfire mitigation actions is:[a]	5.9	7.5	11.7	19.2	20.5	15.1	20.1	4.67
	Impossible						**Possible**	
Completing wildfire mitigation actions is:[b]	3.3	4.1	2.9	13.3	15.3	22.8	37.8	5.54
	Numerous						**Very few**	
Number of events preventing performance of mitigation actions[b]	3.7	2.9	2.9	11.2	12.9	21.6	44.8	5.71
	False						**True**	
Confident in ability to complete wildfire mitigation actions[c]	4.5	3.7	4.5	9.9	12.0	23.6	41.7	5.59
In complete control over whether I perform wildfire mitigation actions[b]	5.4	4.1	7.5	15.8	16.6	18.3	32.4	5.18

Note. Survey questions 34: "For myself to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:," 35: "I am confident that if I wanted to I could complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months," 36: "For me to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:," 37: "I feel in complete control over whether I perform wildfire risk reduction actions on my property's vegetation and home in the next 12 months," & 38: "The number of events outside my control which could prevent me from performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months are:" Mean based on a 7 point scale with 1=*difficult/impossible/numerous/false* and 7=*easy/possible/very few/true*.
[a] n=239. [b] n=241. [c] n=242.

Table AA.104 Perceived constraints to wildfire mitigation (Non-HOA, Total)

	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
	Difficult						**Easy**	
Completing wildfire mitigation actions is:[a]	5.1	6.7	12.2	20.8	19.2	15.7	20.2	4.70
	Impossible						**Possible**	
Completing wildfire mitigation actions is:[b]	2.9	3.5	3.2	14.0	15.0	23.6	37.9	5.57
	Numerous						**Very few**	
Number of events preventing performance of mitigation actions[b]	3.2	2.5	3.2	10.5	13.4	22.0	45.2	5.75
	False						**True**	
Confident in ability to complete wildfire mitigation actions[b]	3.5	3.2	4.8	10.8	12.1	22.6	43.0	5.65
In complete control over whether I perform wildfire mitigation actions[c]	5.1	3.5	7.7	15.3	16.9	19.5	31.9	5.22

Note. Survey questions 34: "For myself to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:," 35: "I am confident that if I wanted to I could complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months," 36: "For me to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:," 37: "I feel in complete control over whether I perform wildfire risk reduction actions on my property's vegetation and home in the next 12 months," & 38: "The number of events outside my control which could prevent me from performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months are:" Mean based on a 7 point scale with 1=*difficult/impossible/numerous/false* and 7=*easy/possible/very few/true*.
[a] n=312. [b] n=314. [c] n=313.

Table AA.105 Perceived constraints to wildfire mitigation (mean comparison)

	HOA		Non-HOA	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Completing wildfire mitigation actions is:[a]	5.11	5.08	4.67	4.70
Completing wildfire mitigation actions is:[b]	6.06	6.06	5.54	5.57
Number of events preventing performance of mitigation actions[c]	5.86	5.84	5.71	5.75
Confident in ability to complete wildfire mitigation actions[c]	6.05	6.03	5.59	5.65
In complete control over whether I perform wildfire mitigation actions[d]	5.52	5.51	5.18	5.22

Note. Survey questions 34: "For myself to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:," 35: "I am confident that if I wanted to I could complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months," 36: "For me to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is:," 37: "I feel in complete control over whether I perform wildfire risk reduction actions on my property's vegetation and home in the next 12 months," & 38: "The number of events outside my control which could prevent me from performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months are:" Mean based on a 7 point scale with 1=*difficult/impossible/numerous/false* and 7=*easy/possible/very few/true*.

[a] HOA n=290: Prescott n=253. Non-HOA n=312: Prescott n=239.

[b] HOA n=286: Prescott n=249. Non-HOA n=314: Prescott n=239.

[c] HOA n=286: Prescott n=249. Non-HOA n=314: Prescott n=242.

[d] HOA n=287: Prescott n=250. Non-HOA n=313: Prescott n=241.

Control belief

This section presents results from the control belief power and strength questions. Detailed control belief power results are presented in tables AA.106 through AA. 109. Table AA.110 presents the means from each of the detailed results for caparison. Tables AA.111 through AA.114 present control belief strength detailed results. Table AA.115 presents the mean comparisons for each of the samples.

The HOA sample generally had a lower belief of the impact of each event when compared to the non-HOA sample. Only having knowledge on how to protect property had a higher mean for the HOA sample (2.04) than the non-HOA sample (1.82). For both the HOA and non-HOA samples, daily obligations impacts were rated lowest with means of -0.63 and 0.17 respectively.

Both samples had high level of having the knowledge needed to mitigate (5.90 and 5.61 respectively) and are likely to be physically fit (5.56 and 5.45 respectively). A moderate likelihood of being on a fix income was identified by both samples (4.25 HOA and 4.24 non-HOA). In addition, it was unlikely that a debilitating illness would be experience (2.11 HOA and 2.26 non-HOA).

Table AA.106 Control belief power (HOA, City of Prescott)

	Disagree						**Agree**	
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
Being physically fit would enable me to perform wildfire mitigation actions[a]	3.2	2.4	2.0	5.2	13.5	22.7	51.0	1.96
A debilitating illness would make it difficult to perform wildfire mitigation actions[a]	4.0	5.2	3.2	7.2	7.2	21.9	51.4	1.80
Living on a fixed income would make it difficult for me to perform wildfire mitigation actions[b]	10.8	7.2	11.6	13.7	13.7	19.7	23.3	0.64
Having knowledge on how to protect my property would enable me to perform wildfire mitigation actions[b]	1.6	0.8	3.2	4.8	12.0	27.3	50.2	2.08
Daily obligations make it difficult to find time to perform wildfire mitigation actions[c]	28.0	17.2	12.4	12.8	12.0	11.6	6.0	-0.78
Having the appropriate tools would enable me to perform wildfire mitigation actions[b]	5.2	4.8	5.6	11.2	13.7	24.9	34.5	1.36

Note. Survey questions 39: "For each of the following statements, please provide your level of agreement that the event would impact your ability to perform risk reduction action on your property's vegetation and home." Mean based on a 7 point scale with -3=*disagree* and 3=*agree*.
[a] n=251. [b] n=249. [c] n=250.

Table AA.107 Control belief power (HOA, Total)

	Disagree -3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	Agree 3 (%)	Overall Mean
Being physically fit would enable me to perform wildfire mitigation actions[a]	2.8	2.4	1.7	6.3	13.9	22.9	50.0	1.95
A debilitating illness would make it difficult to perform wildfire mitigation actions[a]	3.8	5.2	2.8	7.6	7.6	21.5	51.4	1.80
Living on a fixed income would make it difficult for me to perform wildfire mitigation actions[b]	10.1	6.6	10.8	14.7	13.6	19.6	24.5	0.72
Having knowledge on how to protect my property would enable me to perform wildfire mitigation actions[b]	2.4	0.7	2.8	5.6	11.5	26.6	50.3	2.04
Daily obligations make it difficult to find time to perform wildfire mitigation actions[c]	25.8	16.4	11.5	13.6	13.9	12.2	6.6	-0.63
Having the appropriate tools would enable me to perform wildfire mitigation actions[b]	5.2	4.2	4.9	11.9	13.6	24.8	35.3	1.40

Note. Survey questions 39: "For each of the following statements, please provide your level of agreement that the event would impact your ability to perform risk reduction action on your property's vegetation and home." Mean based on a 7 point scale with -3=*disagree* and 3=*agree*.
[a] n=288. [b] n=286. [c] n=287.

Table AA.108 Control belief power (Non-HOA, City of Prescott)

	Disagree						**Agree**	
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
Being physically fit would enable me to perform wildfire mitigation actions[a]	2.5	1.7	0.8	6.7	12.1	25.4	50.8	2.04
A debilitating illness would make it difficult to perform wildfire mitigation actions[b]	7.5	2.1	3.3	6.2	5.4	19.9	55.6	1.82
Living on a fixed income would make it difficult for me to perform wildfire mitigation actions[c]	10.9	9.2	6.3	11.3	11.7	17.6	33.1	0.89
Having knowledge on how to protect my property would enable me to perform wildfire mitigation actions[d]	2.1	3.4	2.1	10.5	13.4	21.0	47.5	1.83
Daily obligations make it difficult to find time to perform wildfire mitigation actions[c]	19.2	9.6	7.1	14.2	17.2	13.0	19.7	0.18
Having the appropriate tools would enable me to perform wildfire mitigation action[a]	5.4	4.2	2.9	12.1	13.3	22.9	39.2	1.49

Note. Survey questions 39: "For each of the following statements, please provide your level of agreement that the event would impact your ability to perform risk reduction action on your property's vegetation and home." Mean based on a 7 point scale with -3=*disagree* and 3=*agree*.
[a] n=240. [b] n=241. [c] n=239. [d] n=238.

Table AA.109 Control belief power (Non-HOA, Total)

	Disagree						Agree	
	-3 (%)	-2 (%)	-1 (%)	0 (%)	1 (%)	2 (%)	3 (%)	Overall Mean
Being physically fit would enable me to perform wildfire mitigation actions[a]	1.9	1.9	1.6	6.4	12.2	24.7	51.3	2.04
A debilitating illness would make it difficult to perform wildfire mitigation actions[b]	6.1	2.6	2.9	5.1	6.7	19.5	57.2	1.91
Living on a fixed income would make it difficult for me to perform wildfire mitigation actions[c]	9.6	8.7	5.8	10.9	12.5	17.7	34.7	1.00
Having knowledge on how to protect my property would enable me to perform wildfire mitigation actions[d]	1.9	3.9	2.9	10.7	11.4	19.8	49.4	1.82
Daily obligations make it difficult to find time to perform wildfire mitigation actions[c]	18.6	10.3	9.0	12.2	16.7	13.5	19.6	0.17
Having the appropriate tools would enable me to perform wildfire mitigation actions[c]	6.1	4.5	3.5	10.0	12.9	20.6	42.4	1.50

Note. Survey questions 39: "For each of the following statements, please provide your level of agreement that the event would impact your ability to perform risk reduction action on your property's vegetation and home." Mean based on a 7 point scale with -3=*disagree* and 3=*agree*.
[a] n=312. [b] n=313. [c] n=311. [d] n=308.

Table AA.110 Control belief power (mean comparison)

	HOA		Non-HOA	
	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Being physically fit would enable me to perform wildfire mitigation actions[a]	1.96	1.95	2.04	2.04
A debilitating illness would make it difficult to perform wildfire mitigation actions[b]	1.80	1.80	1.82	1.91
Living on a fixed income would make it difficult for me to perform wildfire mitigation actions[c]	0.64	0.72	0.89	1.00
Having knowledge on how to protect my property would enable me to perform wildfire mitigation actions[d]	2.08	2.04	1.83	1.82
Daily obligations make it difficult to find time to perform wildfire mitigation actions[e]	-0.78	-0.63	0.18	0.17
Having the appropriate tools would enable me to perform wildfire mitigation actions[f]	1.36	1.40	1.49	1.50

Note. Survey questions 39: "For each of the following statements, please provide your level of agreement that the event would impact your ability to perform risk reduction action on your property's vegetation and home." Mean based on a 7 point scale with -3=*disagree* and 3=*agree*.
[a] HOA n=288: Prescott n=251. Non-HOA n=312: Prescott n=240.
[b] HOA n=288: Prescott n=251. Non-HOA n=313: Prescott n=241.
[c] HOA n=286: Prescott n=249. Non-HOA n=311: Prescott n=239.
[d] HOA n=286: Prescott n=249. Non-HOA n=308: Prescott n=238.
[e] HOA n=287: Prescott n=250. Non-HOA n=311: Prescott n=239.
[f] HOA n=286: Prescott n=249. Non-HOA n=311: Prescott n=240.

Table AA.111 Control belief strength (HOA, City of Prescott)

	Unlikely						Likely	
In the next 12 months I will:	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Overall Mean
Be physically fit[a]	4.0	3.2	2.4	12.9	17.7	22.2	37.5	5.54
Experience a debilitating illness[b]	46.5	23.9	10.3	12.3	1.6	2.9	2.5	2.17
Be on a fixed income[c]	27.9	8.9	4.5	6.5	5.7	9.3	37.2	4.30
Have knowledge on how to mitigate[c]	1.6	0.4	5.3	9.7	10.5	25.1	47.4	5.92
Not have time to mitigate[c]	30.8	19.8	11.3	13.0	9.3	7.3	8.5	3.06
Have the appropriate tools needed[a]	6.5	5.6	6.0	12.9	15.7	20.2	33.1	5.19

Note. Survey questions 40: "In the next 12 months I will:" Mean based on a 7 point scale with 1=*unlikely* and 7=*likely*.
[a] n=248. [b] n=243. [c] n=247.

Table AA.112 Control belief strength (HOA, Total)

	Unlikely						Likely	
	1	2	3	4	5	6	7	Overall
In the next 12 months I will:	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Mean
Be physically fit[a]	4.2	2.8	2.5	12.6	17.2	22.8	37.9	5.56
Experience a debilitating illness[b]	47.9	25.0	9.3	11.4	1.4	2.9	2.1	2.11
Be on a fixed income[c]	29.6	8.1	4.6	6.3	5.3	9.5	36.6	4.25
Have knowledge on how to mitigate[c]	1.8	0.4	4.9	9.5	11.3	26.4	45.8	5.90
Not have time to mitigate[c]	29.2	19.0	12.3	13.0	12.0	7.0	7.4	3.10
Have the appropriate tools needed[a]	6.7	5.3	5.6	12.3	17.5	20.0	32.6	5.19

Note. Survey questions 40: "In the next 12 months I will:" Mean based on a 7 point scale with 1=*unlikely* and 7=*likely*.
[a] n=285. [b] n=280. [c] n=284.

Table AA.113 Control belief strength (Non-HOA, City of Prescott)

	Unlikely						Likely	
	1	2	3	4	5	6	7	Overall
In the next 12 months I will:	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Mean
Be physically fit[a]	6.8	3.4	5.5	9.3	17.3	16.9	40.9	5.41
Experience a debilitating illness[b]	48.1	21.5	8.2	12.0	3.4	3.4	3.4	2.25
Be on a fixed income[a]	24.5	9.7	6.8	11.4	3.4	9.7	34.6	4.27
Have knowledge on how to mitigate[a]	3.0	2.5	5.1	13.9	13.9	24.9	36.7	5.55
Not have time to mitigate[a]	24.5	15.6	11.4	15.6	11.4	11.4	10.1	3.49
Have the appropriate tools needed[c]	10.6	8.1	6.4	13.1	10.6	21.2	30.1	4.89

Note. Survey questions 40: "In the next 12 months I will:" Mean based on a 7 point scale with 1=*unlikely* and 7=*likely*.
[a] n=237. [b] n=233. [c] n=236.

Table AA.114 Control belief strength (Non-HOA, Total)

	Unlikely						Likely	
	1	2	3	4	5	6	7	Overall
In the next 12 months I will:	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Mean
Be physically fit[a]	5.9	3.6	5.6	9.8	15.7	18.0	41.3	5.45
Experience a debilitating illness[b]	46.2	22.9	9.0	12.3	3.3	2.7	3.7	2.26
Be on a fixed income[c]	25.5	8.5	7.5	11.4	3.3	9.8	34.0	4.24
Have knowledge on how to mitigate[c]	2.3	2.6	4.9	15.0	11.4	24.8	38.9	5.61
Not have time to mitigate[c]	23.9	14.4	12.1	16.7	12.4	10.8	9.8	3.51
Have the appropriate tools needed[b]	10.9	7.6	5.9	14.5	10.2	20.7	30.3	4.89

Note. Survey questions 40: "In the next 12 months I will:" Mean based on a 7 point scale with 1=*unlikely* and 7=*likely*.
[a] n=305. [b] n=301. [c] n=306. [d] n=304.

Table AA.115 Control belief power (mean comparison)

	HOA		Non-HOA	
In the next 12 months I will:	Prescott (mean)	Total (mean)	Prescott (mean)	Total (mean)
Be physically fit[a]	5.54	5.56	5.41	5.45
Experience a debilitating illness[b]	2.17	2.11	2.25	2.26
Be on a fixed income[c]	4.30	4.25	4.27	4.24
Have knowledge on how to mitigate[c]	5.92	5.90	5.55	5.61
Not have time to mitigate[c]	3.06	3.10	3.49	3.51
Have the appropriate tools needed[d]	5.19	5.19	4.89	4.89

Note. Survey questions 40: "In the next 12 months I will:" Mean based on a 7 point scale with 1=*unlikely* and 7=*likely*.
[a] HOA n=285: Prescott n=248. Non-HOA n=305: Prescott n=237.
[b] HOA n=280: Prescott n=243. Non-HOA n=301: Prescott n=233.
[c] HOA n=284: Prescott n=247. Non-HOA n=306: Prescott n=237.
[d] HOA n=285: Prescott n=248. Non-HOA n=304: Prescott n=236.

Appendix B

Questionnaire Comments

This Appendix presents the raw comments from questionnaire question 48. The comments are coded into associated themes. This is provided for clarity and transparency in the open-ended data coding.

HOA sample comments

Attitude toward wildfire mitigation

Positive attitude

- Agree with the urban-wildfire mitigation concept.
- I know that juniper trees are a large fire hazard but we are not cutting them down. Other than that, we are doing everything possible to be a good example in our neighborhood.
- It's a very good idea since we live on the edge of a National Forest in a desert.
- Our HOA was great with info. Someone came from the city(?) and looked at my property and explained what to do. I enjoy doing it and it makes property look nicer. Sometimes, it’s hard to make time get all the brush to the dump.
- Very important to take procedures to protect your property

Mixed attitude

- I believe that in our established neighborhood it would have been wise to remove trees in increments thus giving the remaining trees time to rebuild root connections with their "neighbors." It was too drastic a change causing soil shifting. I miss some of the 100+ year old ponderosas. Now I have brighter sunlight in my home and overlook rooftops on the next street over, I would rather see trees. New developments could be cleared prior to building. But go slowly in existing areas.
- I like the trees and bushes around my home and don't plan to remove any of them, but I do keep the dead stuff trimmed/pruned away and the yard kept clear of dead stuff and pine needles and weeds.
- Juniper trees near my home (within 10 feet) are protected by the HOA and cannot be removed without HOA consent. They add to the beauty of the home. The branches can be trimmed that are close to the house.
- Need to have firewise evaluation done by Prescott FD. Not sure my wife will approve of all firewise recommendations.
- Some mitigation conflicts with landscape & privacy. We do as much as practical and live in a Firewise Community.
- The HOA in years past has sometimes been overzealous in its desire to become/maintain firewise status.
- We keep out trees (pine trees) trimmed at least 12-15 high of branches but we are very reluctant to cut the trees close to our house down. We remove weeds, pine cones and needles 30' around annually. Since we live on a steep grade we feel very vulnerable to fire.

Poor attitude

- We live in the center of a forest and most people live here because of the beauty. Efforts of individual homeowners (short of clear cutting entire neighborhoods) to mitigate the risks of wildfire would have

little effort. Efforts of the BLM, forest service and large private property owners to reduce risks would have the most effect.

Wildfire mitigation will not stop a fire from burring property

- We have taken some measures, but think even the most 'state of the art' standards won't project this area in a wind driven wild fire. The entire subdivision will burn regardless of vegetation management.
- No matter the degree of firewising my property, if a fire comes, my home will burn. At the same time I believe firewising my property gives firefighters a material level of support in fighting the fire.
- With the Wildfires in California we see how dangerous these fires are for loss of home. We feel if there was a fire like California, No matter how much mitigation we have done there would be no stopping it from taking our home. Our HOA requirements are the strictest it will be costing us $5000+ to comply--hopefully it will be good for our neighborhood. The problems are the undeveloped lots where owners do nothing. We shall see if the HOA can force them to cooperate. Thank you for doing this study.

Social norms

Influence of social norms

- Firewise community very active in our area.
- We also mitigated 16 yards in the wildwood estates area for our neighbors free of charge on 1/3 to 1/2 acre lots to show by example it can be done! Example lead to others doing the same. I also meet with all new homeowners to talk about this issue and a health forest and water table issues.
- Important for neighbors to participate, in many cases their property is quite close to that of the homeowner
- The Firewise activities make a difference in how the community responds to wildfire mitigation.
- It is hard to answer questions when we don't know many neighbors, but it seems more could be done.

Lack of neighborhood consistency or working together

- Have issue with residences performing work without working with their neighbors to identify least impactful measures taken.
- One neighbor's yard is covered with pine needles and thousands of old pine cones--no one has picked anything up in the 6+ months we have been here. Yet another neighbor paid landscapers to come and they hauled away 40 trash bags of pine needles--so some do it, and some do not, but the HOA doesn't seem to be making anyone do anything that I can see or have heard of in my limited time here.

Behavioral controls

Constraints to wildfire mitigation

Age

- Many homeowners are older and therefore are not as able as others to perform the necessary yard work or evacuation of home as others-especially on short notice.
- Ready to do it but too old and too many health problems.
- Yard is gravel covered. Trees and bushes tended to annually or as needed. Most work is hired due to our age.

Finding qualified contractors

- Finding contractors who actually show up to work on homes here is next to impossible.

Tree diseases

- Arborist said wait until winter to cut ponderosa pine to avoid pine bark beetle problems.

HOA Regulations

- Lightening struck pine across street a month ago and we are told that the empty lot behind our house was struck several years ago and burned the house down entirely. The threat is real. But the sound of chainsaws in our neighborhood don't go over very well. I think you have to have permission to cut anything of a certain diameter. In order to follow your directions to get growth 10 ft away from our home, the HOA would have to come ad approve many removals, and I have been told they don't like to do that.

Cost of mitigation

- I do think cost is also a factor for some, the arborist quoted us $500 to remove several lower hanging pine tree branches from over the roof and that is just one tree! It is maybe 4-5 branches.
- House on the side of a hill, steep in some locations. I have fallen trying to keep up with weeds, branches, etc. I have to often hire help which is not cheap. Sometimes family does it.
- Living in an area surrounding by a National Forest, in my case within 200 yards leads me to think the current leadership provided by the US Dept. of Forest needs to continue. Grants to property owners like those recently made available are important ad hopefully will continue.
- My homeowners association is very proactive in wildfire control and helps with some funding to do wildfire control. However, we have not been able to get the City of Prescott or the fire dept. to help with our neighboring trailer park to the south to clean up and correct code violations. It is a MAJOR concern.
- On a fixed income, cost is always a problem. I can take care of part of the problem (brush, shrubs) but trees are more of a problem and in my environment of scrub oak re-growth of them posses more of a control problem. If you are interested in visiting my property and providing suggestions you are certainly welcome.

Health

- I am in a nursing home for memory care. I have Alzheimer's and live in Phoenix. My house is maintained by my 2 daughters in Phoenix.
- Major health issues limit my work.
- Ready to do it but too old and too many health problems.

Physical Ability

- I am 72 with bad knees and hip. My husband has a severe shoulder injury and should not do yard work. Up until 3 years ago I tried to cut down as many invasive weeds as I could (mainly purple thistle) in our subdivision. My knees don't allow for this anymore. I personally still weed whack the road side of 4 nearby un-built on lots to keep down fire possibility. Our HOA doesn't do anything many members would eliminate it if they could. The city enforcement has helped me in the past to somewhat control the weeds but I don't think the city does enough. I can't know or judge the other groups, county, etc. I really appreciate firefighters. I mourn for the 19 that died. I think the firewise program is great. I do

what I physically can. We don't plan more construction. Our home build and roof don't fit into your categories. We will keep our roof free of debris.

Available time

- It's a matter of time and every year and keeping chain saw / weed whacker operational.
- Our HOA was great with info. Someone came from the city(?) and looked at my property and explained what to do. I enjoy doing it and it makes property look nicer. Sometimes, it's hard to make time get all the brush to the dump.

Having the tools needed

- It's a matter of time and every year and keeping chain saw / weed whacker operational.

Physical terrain

- Sometimes the terrain can make things difficult. Steep, rocky, and otherwise inaccessible

Mitigation actions taken

- Installing a sprinkler system on the roof of our house, etc to be used in the event of a fire.
- Wildfire risk mitigation shouldn't be all or nothing approach. Do those things that are most doable, in conjunction with neighbor's efforts.
- Cleared brush/vegetation around home 50'-75'.
- My neighborhood wants to look "natural" and so no green areas around homes here. Also, HOA said leave 3 yrs of pine needles according to my neighbor, to hold moisture and nutrients in soil for trees and avoid runoff, but we cleared ours out for fear of fire and we lost a lot of soil that ran off the land and into the creek.
- One neighbor's yard is covered with pine needles and thousands of old pine cones--no one has picked anything up in the 6+ months we have been here. Yet another neighbor paid landscapers to come and they hauled away 40 trash bags of pine needles--so some do it, and some do not, but the HOA doesn't seem to be making anyone do anything that I can see or have heard of in my limited time here.
- I am a gardener and 20 years ago I planted small native plants around the perimeter of our home. I do not think that this perimeter is 30 ft. I think it is less. I do not want to drop down my plants even though they have grown large. I do trim up the lower branches of trees and more overhanging the road or my house. I do the yard work.
- I like the trees and bushes around my home and don't plan to remove any of them, but I do keep the dead stuff trimmed/pruned away and the yard kept clear of dead stuff and pine needles and weeds.
- My entire .65 acre lot is covered in 2/3 inches of landscape rock. I put it down when I built this home. I believe I bought at least 120 tons or more of landscape rock. My neighbor's lot next door has a lot of dry grass etc. In the canyon near us, I worry a fire would come up the canyon and get close to me. My neighbor is pretty much an idiot!! Hahahahaha
- My property is a rental property. I rely on my landscaper to keep it clean and safe.
- Our lot has been inspected by the fire department and is Firewise.
- This is a serious action that we have undertaken and will continue as best we are able.
- This past week I completed the necessary actions to receive approval from my HOA as a firewise property.

- Took down 4 large cotton wood trees one large fir, put in imitation lawn and rock, took out over 5K ft. Lawn.
- We are doing our mitigation needs continually.
- We keep out trees (pine trees) trimmed at least 12-15 high of branches but we are very reluctant to cut the trees close to our house down. We remove weeds, pine cones and needles 30' around annually. Since we live on a steep grade we feel very vulnerable to fire.
- We live in a moderate risk area. Hilly and quite a bit of foliage, pine trees etc. However we are very close to an active fire station and have city water and fire hydrants close by. We are also aware of fire dangers, and although we are not full time residents we try to maintain our property with wildfires in mind. I understand aircraft for fire suppression are costly, however a water dropping helicopter at the local municipal airport during fire season would make sense.
- We regularly move dead branches and plant, remove lower limbs, and cut our wild land grasses. The landscape near our house is mostly concrete, rocks, or boulders.
- We'll do what we can
- When we bought this home in 2007 we cleared one side of the house, put rocks on it and planted cactus. On the back side of the house this is a gully that was covered in brush. I cleared the brush and rocked that area also. We have several fruit trees on the other side of the house and it is also rocked. I believe our home is pretty safe. We have water hose on the front and back of the house also.
- Yard is gravel covered. Trees and bushes tended to annually or as needed. Most work is hired due to our age.
- I spent 6 yrs laying a wide area of indigenous rock around my house for weed and fire control.

Perceived Risk

High to moderate perceived risk

- We have taken some measures, but think even the most ‘state of the art’ standards won’t protect this area in a wind driven wild fire. The entire subdivision will burn regardless of vegetation management.
- Lightening struck pine across street a month ago and we are told that the empty lot behind our house was struck several years ago and burned the house down entirely. The threat is real. But the sounds of chainsaws in our neighborhood don’t go over very well. I think you have to have permission to cut anything of a certain diameter.
- I do live in a firewise community. I also have a city fire hydrant in my front yard and a two million gallon water tank up at the top of the hill.
- My entire .65 acre lot is covered in 2/3 inches of landscape rock. I put it down when I built this home. I believe I bought at least 120 tons or more of landscape rock. My neighbor's lot next door has a lot of dry grass etc. In the canyon near us, I worry a fire would come up the canyon and get close to me. My neighbor is pretty much an idiot!! Hahahahaha
- My experience with wildfires has been watching the yearly burns in Southern California. I moved to Prescott, Arizona three years ago & this is my first experience with wildfire risk reduction. I live in Yavapai Hills where each lot is 1/4 to 1/2 of an acre in size & in our section each lot has trees & bushes. It is my experience that fire prevention would limit damage in case of a house fire. But looking around the neighborhoods, a wildfire would be devastating. However, I will do my part to reduce risk in my yard.

- The danger of a wildfire is not likely to be the fault of our Firewise Community, but we do live in interface with the forest and lighting is always a possibility.
- We keep out trees (pine trees) trimmed at least 12-15 high of branches but we are very reluctant to cut the trees close to our house down. We remove weeds, pine cones and needles 30' around annually. Since we live on a steep grade we feel very vulnerable to fire.
- We live in a moderate risk area. Hilly and quite a bit of foliage, pine trees etc. However we are very close to an active fire station and have city water and fire hydrants close by. We are also aware of fire dangers, and although we are not full time residents we try to maintain our property with wildfires in mind. I understand aircraft for fire suppression are costly, however a water dropping helicopter at the local municipal airport during fire season would make sense.
- We live on the edge of a forest, we are very aware of fire danger. Thanks for the including us in your study!! Very helpful
- I knew fire was a risk here so I went to the firewise meetings at PAWUIC and I took the 2 day class.

Low perceived risk

- I have stucco Santa Fe house with minimum yard, mainly rock and gravel yard not much vegetation. There is minimal undeveloped land around me... None adjacent to me.
- My answers as to risk/fear are based on living in an area surrounded by irrigated golf course. My HOA requires that all properties meet criteria of a firewise community which influenced my responses regarding neighbors and my own property.
- When we bought this home in 2007 we cleared one side of the house, put rocks on it and planted cactus. On the back side of the house this is a gully that was covered in brush. I cleared the brush and rocked that area also. We have several fruit trees on the other side of the house and it is also rocked. I believe our home is pretty safe. We have water hose on the front and back of the house also.

Concerns of evacuation

- There is only one road into and out of this subdivision as well as fire crews making evacuations difficult.
- Many homeowners are older and therefore are not as able as others to perform the necessary yard work or evacuation of home as others-especially on short notice.
- Some streets within Prescott are closed off with chains...this is scary in case of fire.

Concerns with adjacent properties

- biggest problem is with neighbor’s property within 15 ft. of my house. Neighbor does not use their house, so grounds are not taken care of.
- I am on a hill; common ground is about 15' from my house on windward side. Winds are ferocious here and would blow burning debris from a long way. The common ground has not been trimmed or maintained down the side of my hill so I've been doing it for about 100', and now pay for it myself to get it done each year. The new part time owners above me have refused to remove a fallen desert tree because it is still "green". The thick foliage is on the ground presenting a real hazard in a wildfire. They are also not taking care of the yard and it is overgrown. The main problem in residential areas is denial and refusal to believe there is a risk, putting us all at risk. It was the same before rodeo-Chedesky, no one would listen until it was too late.

- Owners of nearby undeveloped land ignore their property and have no interest in my safety. That is also the attitude of the city of Prescott. No one clears vegetation or fire proofs anything. If a major wildfire invades north Prescott, I would grab what I can, family and pats in car, and run like hell. That's all I could do.
- I live in an area near where the Doce Fire was in 2013. (near granite mountain in Prescott). We keep our property cared for and in compliance with Firewise. Our HOA is a firewise community. My concern is that there are a few homeowners and several lot owners (no home yet) who do not keep their property cleaned up per firewise. These people put all of us at risk due to their selfishness. The city should be able to force homeowners to keep properties in a manner to reduce the risk of wildfires.
- Important for neighbors to participate, in many cases their property is quite close to that of the homeowner
- Most concerning to me is Prescott National Forest land and Yavapai County land plus privately owned undeveloped property adjacent to my neighborhood that has not even treated in a "firewise" manner. Prescott's forested land is receiving some mitigation from PNF, the county and city, however this effort has not included public land south and west of my neighborhood (timber ridge).
- My biggest fire risks are an overgrown lot below me- owner lives in Long Island NY and has not been here in 18 yrs & I border state trust land & my house setback is 25! The state land is wild open land unmaintained.
- My concern revolves around the empty lots that are not attended too and the lack of enforcement by our board members and HOA. I hear a lot of talk but see NO action.
- My neighbor next door is a tree hugger! He is anti fire protection!
- Need to be more stringent with "vacant lot" clean up to comply with fire wise guide lines.
- Our 1300 square foot patio home was built in the early 2000's and we purchased our unit from an existing owner in 2005. He had used it about 2 months per year. The units are about 12-25 feet from each other. The rear lot boundary is about 15 foot from the back of the structures. The back yards boarder a narrow, unmaintained common area, which abuts a city easement that runs along a wash (with some sewer capacity/structures). On the other side of the wash are 5 acre lots on a steep down slope from neighboring street. All of the single family homes associated with those 5 acre lots are positioned high on the slope. The slope is thickly covered with shrub and brush, and has never been thinned. Although I plan to reduce the brush immediately behind my home, I would still feel vulnerable because of those unmaintained 5 acre lots.
- Our homeowner Associational talks a good game but is not aggressive in enforcing the rules i.e. 1. Vacant lots are not maintained and I have to notify the association about the condition before anything is done. Actually in most cases zero is done. 2) If they inspect they drive by the front of the house only to asses not leave the vehicle. They made an assessment of the vacant lot next door and said it was ours. 3) The biggest issue is that the firefighters no longer do a house to house to evaluation. This has not been done for years; probably due to budget cuts. When the firefighters did their evaluation they left with specific recommendations for the home owner. I believe that home owners listened to them seriously and did something.
- Out of state property owners do not keep land cleared and hoa does nothing! Homeowners association is concerned if the light on the mailbox is out. . . But don't care about significant overgrowth of vegetation or land owned by someone out of state. If that vegetation catches on fire-- my home is gone. . . regardless of how hard and how much $ I spend protecting my home.

- Since my home was recently built, I don't have much vegetation to be concerned about. However, I have a wash that could possibly be vulnerable to fire risk occasionally. Unfortunately the city allows my neighbor to keep dead trees and garbage on his property which I believe could be a fire hazard.
- We moved into neighborhood four years ago, which is a firewise community. It's too bad some of the development surrounding ours is NOT practicing firewise principles.
- With the Wildfires in California we see how dangerous these fires are for loss of home. We feel if there was a fire like California, No matter how much mitigation we have done there would be no stopping it from taking our home. Our HOA requirements are the strictest it will be costing us $5000+ to comply--hopefully it will be good for our neighborhood. The problems are the undeveloped lots where owners do nothing. We shall see if the HOA can force them to cooperate. Thank you for doing this study.

Experience of wildfire and mitigation

Long experience with wildfire or mitigation

- I have lived in mountain communities from childhood.

Little experience with wildfire or mitigation

- First, we just moved here in February and house was empty for 3 yrs.
- My experience with wildfires has been watching the yearly burns in Southern California. I moved to Prescott, Arizona three years ago & this is my first experience with wildfire risk reduction. I live in Yavapai Hills where each lot is 1/4 to 1/2 of an acre in size & in our section each lot has trees & bushes. It is my experience that fire prevention would limit damage in case of a house fire. But looking around the neighborhoods, a wildfire would be devastating. However, I will do my part to reduce risk in my yard.
- We just moved to Prescott from Chicago so wildfire risk reduction is a whole new thing for us. We built a new house and we were hoping that with all the inspections, including by the HOA that our home & lot were in good shape wildfire-wise; however, I don’t think all the natural vegetation on our 1/2 acre lot is smart from a fire perspective. Since we have to redo some of our original landscaping next year, we plan to include making sure our property is as protected as possible.

Municipalities role in wildfire and mitigation

Lack of regulations/enforcement/action

- A recent article in the Courier reminded people that weeds need to be cut down on their property. It seems to me that similar requirements from the City and County would be appropriate for wildfire risk reduction. We require people to mow their lawns, why not fuels reduction?
- Putting some teeth into enforcement could move the community toward greater safety.
- Having been employed as a wildland firefighter, environmental education teacher and public information officer for 54 years with the USDA Forest Service, I have seen many types of structures and communities destroyed. Present protection standards and protection information is a start, however, all levels of government. Local, state and federal must put more active effort into meeting the public where they live. I mean by that the fire fighting responsibilities are costly to the tax payer and those cots must be made personal to each taxpayer. Every community, including Prescott Arizona does not have clue what it costs them for fire, police and medical, much less the cost of rehabilitation and rebuilding a

community that has a disastrous fire. Until the Yarnel Fire three years ago. This community back in 1980 became the most popular place in the U.S. to live. Retirees from around the world came here to this mountain community to be in the beautiful mountains and clean air. Today, we are overwhelmed by more and more subdivisions being built up the steep mountain sides, we find that not one of these new landowners wants to be responsible for reducing the dangerous fuels that will be contributing to the power of a wildfire destroying the very reason they came here. As much as we hate more regulation, common sense over romantic illusion has to come to a stop. I believe that a coalition of all land management agencies, accepting their fire planning responsibilities manage and finance yearly suitable funds and regulations to make this community a manageable " fire safe" city.

- I believe more aggressive action in terms of fines, etc be levied against homeowners who do not currently take firewise actions on their properties in addition, I think a list of properties that have not taken action should be published and made public- imparting neighbors should NOT be allowed- bi annual inspections by qualified individuals should be provided at a nominal fee for homeowners
- I live in an area near where the Doce Fire was in 2013. (near granite mountain in Prescott). We keep our property cared for and in compliance with Firewise. Our HOA is a firewise community. My concern is that there are a few homeowners and several lot owners (no home yet) who do not keep their property cleaned up per firewise. These people put all of us at risk due to their selfishness. The city should be able to force homeowners to keep properties in a manner to reduce the risk of wildfires.
- My homeowners association is very proactive in wildfire control and helps with some funding to do wildfire control. However, we have not been able to get the City of Prescott or the fire dept. to help with our neighboring trailer park to the south to clean up and correct code violations. It is a MAJOR concern.
- Perhaps city ordinances are required to assure compliance with risk reduction actions.
- Since my home was recently built, I don't have much vegetation to be concerned about. However, I have a wash that could possibly be vulnerable to fire risk occasionally. Unfortunately the city allows my neighbor to keep dead trees and garbage on his property which I believe could be a fire hazard.
- The forest service has cleaned a 100 meter perimeter between our subdivision and the forest. The city of Prescott has done nothing to help prevent wildfires. In fact this year they cut back picking up branches. In my opinion the city is irresponsible as far as preventing wildfire and insuring our water supply.
- Enforce laws on code and you will reduce risk. Involve insurance companies.
- Urban wildfire district in Prescott is not enforcing their own rules as it pertains to high grass/weed control. They are more focused on imposing costs to new construction for fire sprinkler suppression.
- City of Prescott should provide more staff to aid with fuels reduction efforts.

Provides resources and services

- Prescott Fire Prevention crew on 6 occasions chipped brush and removed cut vegetation from property. Excellent service offered by city of Prescott.
- Good support in Prescott area.
- I am 72 with bad knees and hip. My husband has a severe shoulder injury and should not do yard work. Up until 3 years ago I tried to cut down as many invasive weeds as I could (mainly purple thistle) in our subdivision. My knees don't allow for this anymore. I personally still weed whack the road side of 4 nearby un-built on lots to keep down fire possibility. Our HOA doesn't do anything many members would eliminate it if they could. The city enforcement has helped me in the past to somewhat control

the weeds but I don't think the city does enough. I can't know or judge the other groups, county, etc. I really appreciate firefighters. I mourn for the 19 that died. I think the firewise program is great. I do what I physically can. We don't plan more construction. Our home build and roof don't fit into your categories. We will keep our roof free of debris.

- Our HOA was great with info. Someone came from the city(?) and looked at my property and explained what to do. I enjoy doing it and it makes property look nicer. Sometimes, it's hard to make time get all the brush to the dump.
- Prescott Fire Dept. has a chipper service that we use after we clean up dead branches from our property. It is greatly appreciated that they provide this service for us.

Rules and regulation on private land owners would be inappropriate

- Any effort by local government to mandate urban wildfire mitigation would not be appropriate. If a home is not defensible, then don't attempt to defend it.

HOA's role in wildfire and mitigation

Taking action to promote and support wildfire mitigation

- My neighborhood wants to look "natural" and so no green areas around homes here. Also HOA said leave 3 yrs of pine needles according to my neighbor, to hold moisture and nutrients in soil for trees and avoid runoff, but we cleared ours out for fear of fire and we lost a lot of soil that ran off the land and into the creek.
- I have attended our community firewise meetings and had the Prescott fire dept walk my property to review firewise needs and issues. Our HOA provides dumpsters each year for brush dumping at no cost to the neighborhood.
- I have very little to do with risk reduction. My homeowners' association has landscapers that take care of this for me and others in the patio homes,
- I'm a new board member of our HOA and I want to get the board, as well as the homeowners, involved in reducing fire fuel in our community green spaces/washed, as well as at individual residences. I'm hoping to organize a successful community involvement program.
- Neighborhood oversees fire mitigation in my neighborhood. Neighbors are well informed.
- Our HOA was great with info. Someone came from the city(?) and looked at my property and explained what to do. I enjoy doing it and it makes property look nicer. Sometimes, it's hard to make time get all the brush to the dump.
- HOA acting and doing a fairly good job of common area risk reduction.
- I live in a firewise community that has a homeowners association that has been active in getting residents to create defensible space to reduce wildfire risk.
- My answers as to risk/fear are based on living in an area surrounded by irrigated golf course. My HOA requires that all properties meet criteria of a firewise community which influenced my responses regarding neighbors and my own property.
- My homeowners association is very proactive in wildfire control and helps with some funding to do wildfire control. However, we have not been able to get the City of Prescott or the fire dept. to help with our neighboring trailer park to the south to clean up and correct code violations. It is a MAJOR concern.

To restrictive

- The HOA in years past has sometimes been overzealous in its desire to become/maintain firewise status.
- With the Wildfires in California we see how dangerous these fires are for loss of home. We feel if there was a fire like California, No matter how much mitigation we have done there would be no stopping it from taking our home. Our HOA requirements are the strictest it will be costing us $5000+ to comply--hopefully it will be good for our neighborhood. The problems are the undeveloped lots where owners do nothing. We shall see if the HOA can force them to cooperate. Thank you for doing this study.

Lack of support

- We bought our half acre w/ cabin under the pretense that the HOA would help clear it. After we bought it they said sorry-it has to be at least 10 years since it was last done, it had been 9. SO they wouldn't do it. We are a hand doing it a little at a time. :(We are in the forest, not in town.

Lack of coordination

- Have issue with HOA's myopic approach of each property performing mitigation when a more holistic approach, a plan per se, including adjacent neighbor lots would result in preservation of everyone's property values at same time as reducing wildfire risk.
- An association paying for wildfire management is totally ineffective unless residents are held responsible for the property and space IAW CC & R (?) Yavapai Hills is just such an example.

Lack of action/regulation/or enforcement

- Although the homeowners association talks firewise they do not walk the talk. Common areas are not kept cut back because the HOA likes the "natural/wild" look. Vegetation that should be removed, as such.
- I am 72 with bad knees and hip. My husband has a severe shoulder injury and should not do yard work. Up until 3 years ago I tried to cut down as many invasive weeds as I could (mainly purple thistle) in our subdivision. My knees don't allow for this anymore. I personally still weed whack the road side of 4 nearby un-built on lots to keep down fire possibility. Our HOA doesn't do anything many members would eliminate it if they could. The city enforcement has helped me in the past to somewhat control the weeds but I don't think the city does enough. I can't know or judge the other groups, county, etc. I really appreciate firefighters. I mourn for the 19 that died. I think the firewise program is great. I do what I physically can. We don't plan more construction. Our home build and roof don't fit into your categories. We will keep our roof free of debris.
- Most concerning to me is Prescott National Forest land and Yavapai County land plus privately owned undeveloped property adjacent to my neighborhood that has not even treated in a "firewise" manner. Prescott's forested land is receiving some mitigation from PNF, the county and city, however this effort has not included public land south and west of my neighborhood (timber ridge).
- Our homeowner Associational talks a good game but is not aggressive in enforcing the rules i.e. 1. Vacant lots are not maintained and I have to notify the association about the condition before anything is done. Actually in most cases zero is done. 2) If they inspect they drive by the front of the house only to asses not leave the vehicle. They made an assessment of the vacant lot next door and said it was ours. 3) The biggest issue is that the firefighters no longer do a house to house to evaluation. This has not been done for years; probably due to budget cuts. When the firefighters did their evaluation they left with

specific recommendations for the home owner. I believe that home owners listened to them seriously and did something.

- One neighbor's yard is covered with pine needles and thousands of old pine cones--no one has picked anything up in the 6+ months we have been here. Yet another neighbor paid landscapers to come and they hauled away 40 trash bags of pine needles--so some do it, and some do not, but the HOA doesn't seem to be making anyone do anything that I can see or have heard of in my limited time here.
- H/O association needs to phase in compliance, say 1-3 years, for ALL owners of occupied as well as vacant land. Absentee owners (dwelling or unimproved lot) need to either take action or be threatened with being billed for the necessary remediation work
- My concern revolves around the empty lots that are not attended too and the lack of enforcement by our board members and HOA. I hear a lot of talk but see NO action.
- Out of state property owners do not keep land cleared and HOA does nothing! Homeowners association is concerned if the light on the mailbox is out. . . But don't care about significant overgrowth of vegetation or land owned by someone out of state. If that vegetation catches on fire-- my home is gone. . . regardless of how hard and how much $ I spend protecting my home.

Regulations (CC&R's) not consistent with firewise

- Firewise community. Several homeowners have been told to notch roof to accommodate tree. Trees overhanging roofs. Trees through decks. Told trees were grandfathered in. My insurance company does not understand grandfathered! Tree right up against house and surround houses.
- Lightening struck pine across street a month ago and we are told that the empty lot behind our house was struck several years ago and burned the house down entirely. The threat is real. But the sound of chainsaws in our neighborhood don't go over very well. I think you have to have permission to cut anything of a certain diameter.
- In order to follow your directions to get growth 10 ft away from our home, the HOA would have to come ad approve many removals, and I have been told they don't like to do that.
- Juniper trees near my home (within 10 feet) are protected by the HOA and cannot be removed without HOA consent. They add to the beauty of the home. The branches can be trimmed that are close to the house.
- Our homes have wood siding and we have very strict HOA rules. How can we replace the siding?

Education provided to residents

- Neighborhood oversees fire mitigation in my neighborhood. Neighbors are well informed.
- Our HOA was great with info. Someone came from the city(?) and looked at my property and explained what to do. I enjoy doing it and it makes property look nicer. Sometimes, it's hard to make time get all the brush to the dump.

Prescott Fire Department

Importance of Official interactions in promoting mitigation action

- I have attended our community firewise meetings and had the Prescott fire dept walk my property to review firewise needs and issues. Our hoa provides dumpsters each year for brush dumping at no cost to the neighborhood.

- Our homeowner Associational talks a good game but is not aggressive in enforcing the rules i.e. 1. Vacant lots are not maintained and I have to notify the association about the condition before anything is done. Actually in most cases zero is done. 2) If they inspect they drive by the front of the house only to asses not leave the vehicle. They made an assessment of the vacant lot next door and said it was ours. 3) The biggest issue is that the firefighters no longer do a house to house to evaluation. This has not been done for years; probably due to budget cuts. When the firefighters did their evaluation they left with specific recommendations for the home owner. I believe that home owners listened to them seriously and did something.
- Our lot has been inspected by the fire department and is Firewise.

US Forest Service

Taking adequate action

- Forestry is working very hard clearing and controlled burns.
- Living in an area surrounding by a National Forest, in my case within 200 yards leads me to think the current leadership provided by the US Dept. of Forest needs to continue. Grants to property owners like those recently made available are important ad hopefully will continue.
- The forest service has cleaned a 100 meter perimeter between our subdivision and the forest. The city of Prescott has done nothing to help prevent wildfires. In fact this year they cut back picking up branches. In my opinion the city is irresponsible as far as preventing wildfire and insuring our water supply.

Lack of action

- The USFS isn't not doing anything in the area immediately adjacent to neighborhood because too close to homes to mechanically remove vegetation. (They could allow fire wood cutting in a 30 foot swath around subdivision. Neighbors could harvest fire wood and enhance fire safety at the same time).
- Most concerning to me is Prescott National Forest land and Yavapai County land plus privately owned undeveloped property adjacent to my neighborhood that has not even treated in a "firewise" manner. Prescott's forested land is receiving some mitigation from PNF, the county and city, however this effort has not included public land south and west of my neighborhood (timber ridge).

Insurance companies

Promoting mitigation

- My homeowners insurance company paid for an evaluation and guidance of wildfire risk reduction. I appreciate that.
- Enforce laws on code and you will reduce risk. Involve insurance companies.

Standards to strict and not flexible

- Firewise community. Several homeowners have been told to notch roof to accommodate tree. Trees overhanging roofs. Trees through decks. Told trees were grandfathered in. My insurance company does not understand grandfathered! Tree right up against house and surround houses.

Homeowner awareness

- I appreciate your bringing wildfire risk reduction to my attention. Though I am new to the area (originally from Illinois), I am aware that the Prescott area is and has been a wildfire risk area. I live on the south end of Prescott, very close to the Prescott National Forest, so am very close to a major source of wildfires. This survey has made me painfully aware of the reality of a wildfire in this area, and will give me the incentive to try and mitigate the risk.
- We also mitigated 16 yards in the wildwood estates area for our neighbors free of charge on 1/3 to 1/2 acre lots to show by example it can be done! Example lead to others doing the same. I also meet with all new homeowners to talk about this issue and a health forest and water table issues.
- I never thought about closing in underneath the steps of our deck. Our deck is wooden. Some thoughts to think about. Thank you for sending out this information.
- My experience with wildfires has been watching the yearly burns in Southern California. I moved to Prescott, Arizona three years ago & this is my first experience with wildfire risk reduction. I live in Yavapai Hills where each lot is 1/4 to 1/2 of an acre in size & in our section each lot has trees & bushes. It is my experience that fire prevention would limit damage in case of a house fire. But looking around the neighborhoods, a wildfire would be devastating. However, I will do my part to reduce risk in my yard.
- Neighborhood oversees fire mitigation in my neighborhood. Neighbors are well informed.
- We live in a moderate risk area. Hilly and quite a bit of foliage, pine trees etc. However we are very close to an active fire station and have city water and fire hydrants close by. We are also aware of fire dangers, and although we are not full time residents we try to maintain our property with wildfires in mind. I understand aircraft for fire suppression are costly; however a water dropping helicopter at the local municipal airport during fire season would make sense.
- You need strong awareness of the fire dangers. Always be willing to improve your knowledge and practice what you have learned. It is important to constantly be reminded by the Fire Dept. for them to have high profile and constant inspections. IT HAS TO BE MADE IMPORTANT.

Wildfire mitigation education

Is a continual process

- Educational process is never completed for new residents and existing – not to mention out of state property owners.
- We also mitigated 16 yards in the wildwood estates area for our neighbors free of charge on 1/3 to 1/2 acre lots to show by example it can be done! Example lead to others doing the same. I also meet with all new homeowners to talk about this issue and a health forest and water table issues.
- Wildfires have become a huge factor in our communities in a more rural Arizona. They have PROVEN to have a catastrophic result for towns and families. The Arizona Government and local cities and towns should and to some degree, are, providing the education and recourse to do this. It must be continued and maintained in the same fashion seasonal drowning's are done.
- A recent article in the Courier reminded people that weeds need to be cut down on their property.

Need for homeowner education

- It would be very advantageous to see a comprehensive listing of combustibility of plantings from most dangerous to most fire resistant.
- Need more promotion at local and state levels.

Need for continued interaction/connection with agency and homeowners

- Having been employed as a wildland firefighter, environmental education teacher and public information officer for 54 years with the USDA Forest Service, I have seen many types of structures and communities be destroyed. Present protection standards and protection information is a start, however, all levels of government. local, state and federal must put more active effort into meeting the public where they live. I mean by that the fire fighting responsibilities are costly to the tax payer and those cots must be made personal to each taxpayer. Every community, including Prescott Arizona does not have clue what it costs them for fire, police and medical, much less the cost of rehabilitation and rebuilding a community that has a disastrous fire. Until the Yarnel Fire three years ago. This community back in 1980 became the most popular place in the U.S. to live. Retirees from around the world came here to this mountain community to be in the beautiful mountains and clean air. Today, We are overwhelmed by more and more subdivisions being built up the steep mountain sides, we find that not one of these new landowners wants to be responsible for reducing the dangerous fuels that will be contributing to the power of a wildfire destroying the very reason they came here. As much as we hate more regulation, common sense over romantic illusion has to come to a stop. I believe that a coalition of all land management agencies, accepting their fire planning responsibilities manage and finance yearly suitable funds and regulations to make this community a manageable " fire safe" city.
- You need strong awareness of the fire dangers. Always be willing to improve your knowledge and practice what you have learned. It is important to constantly be reminded by the Fire Dept. for them to have high profile and constant inspections. IT HAS TO BE MADE IMPORTANT.

Message needs to be clear and concise

- My biggest problem with the Firewise program during the time I've lived in an urban/wildlife interface community is the variety of conflicting recommendations. Every expert and website gives different dimensions for clearing: branch height from ground, distance from house, some say dead leaves are fine, others say they are dangerous, live brush is OK or not, etc. It would be really helpful to have ONE consistent set of guidelines for homeowners to use as they prepare for wildfire season each year. Thanks for your efforts with this!

Firewise Communities Program

- Firewise community very active in our area.
- Our community is VERY active in firewise.
- The Firewise activities make a difference in how the community responds to wildfire mitigation.

Suggestions

- Enhance evacuation procedures and education on how to evacuate. Enhance evacuation routes (there is only one road in and out of the subdivision). USFS should step up and assist in finding emergency evacuation routes.
- Is there a fund in place to help people get these tasks done if they cannot afford it on their own? I not, that might be a good place to begin. Another suggestion would be to get these firewise directions into the hands of all new residents --no one has told us what was recommended! Kill two birds with one
- I believe more aggressive action in terms of fines, etc be levied against homeowners who do not currently take firewise actions on their properties in addition, I think a list of properties that have not taken action should be published and made public- imparting neighbors should NOT be allowed- bi annual inspections by qualified individuals should be provided at a nominal fee for homeowners
- I feel the forest dept. should close campfires earlier in the year as in April not in May June. Make fireworks illegal.
- It would be very advantageous to see a comprehensive listing of combustibility of plantings from most dangerous to most fire resistant.
- My biggest problem with the Firewise program during the time I've lived in an urban/wildlife interface community is the variety of conflicting recommendations. Every expert and website gives different dimensions for clearing: branch height from ground, distance from house, some say dead leaves are fine, others say they are dangerous, live brush is OK or not, etc. It would be really helpful to have ONE consistent set of guidelines for homeowners to use as they prepare for wildfire season each year. Thanks for your efforts with this!
- You need strong awareness of the fire dangers. Always be willing to improve your knowledge and practice what you have learned. It is important to constantly be reminded by the Fire Dept. for them to have high profile and constant inspections. IT HAS TO BE MADE IMPORTANT.

Study related comments

- Survey too long and redundant to obtain requisite (unable to determine remaining response)
- Best of luck to you in your pursuits!
- Happy to do my part. Too bad everyone does not do this!
- Hi Eric, I am happy to participate in your research data collection. I have an Ed.D. and understand the process. Please provide participants the opportunity to purchase your final work. I'd really like to see your results. I will pay $:) I thought some of your questions were a little difficult to adapt to the perspective you were after (the likert scale) but I did. Perhaps other participants might not get that change in perspective. Best to you as you pursue your Ph.D., a noble goal.
- Good luck in your writing :)
- I felt this survey to be intensive but I answered as much of it as I could because I do believe in fire safety.
- I have to be honest - the questions were not well crafted. Some of the answers did not apply - for instance, the roof tiles on my home are made of cement. Some of the proposed answers were very confusing and could easily have been interpreted in differing ways. Wildfire Mitigation is extremely important and I expected the questions to be a little more directed.
- Little too long a survey!!

- Many of the questions are not going to achieve any material facts. Questions are sociological written and not practical. Not sure what this study will achieve if anything.
- Poorly written. Repetitive. 19 & 20 can be read 2 ways. 23 makes no sense.
- Regarding roof composition, should have added concrete tile/shingles as they prevalent in area - I have on my home.
- Some of your questions do not make a lot of sense- Nice you are doing the research.
- This is a serious subject. The questionnaire doesn't seem to get at anything other than to take time and give my wife a laugh at the ridiculous questions with obvious answers. Ask more about HOA rules, ask more about code regulation and how to get help if needed.
- THIS IS THE MOST RIDICULOUS SURVEY/QUESTIONNAIRE I HAVE EVER SEEN!!
- This survey is ridiculously long, tedious, and redundant.
- What was the purpose of this survey? Some questions made no sense.

Miscellaneous

- FIRE RUSS SCHUMATE FROM THE STATE LAND DEPT! I HAVE NUMEROUS REASONS FOR SAYING THIS.
- Help to ensure we are protected!
- Large tree planted less than 10 ft away from my house (bought the house with the tree present). Branches need trimmed and may also consider having the tree removed (depends on cost of tree removal).
- Pride of ownership!
- Smaller lots within a forested area do not allow the 30 foot distances mentioned, but the concepts still apply and are used in our subdivision.
- Two years ago after prepping my property for fire prevention I had extreme runoff and it cost me approx $3K to clean up and get it back in order. My home in general is pretty well protected.
- Yavapai Hills has done clearing with fire fighters I believe, several years ago. That type of clearing might need to be done again over the next year.

Follow-up

- I am interested in being a wildfire community. Can you please send info on this? For grants etc.
- On a fixed income, cost is always a problem. I can take care of part of the problem (brush, shrubs) but trees are more of a problem and in my environment of scrub oak re-growth of them posses more of a control problem. If you are interested in visiting my property and providing suggestions you are certainly welcome.
- What type of plants should I have planted around my home? What type of natural plants should I keep for helping with fire prevention?

Non-HOA sample comments

Attitude toward wildfire mitigation

Positive attitude

- I take this matter seriously and strive throughout the year to protect my property as best I can.
- I've been a Wildland firefighter, and I am currently on a incident management team for the southwest area. I've seen what fire can do regardless of defensible space around a property. I do however feel safe in my neighbor hood, because of the fuels and Prescott National Forest.
- Risk reduction actions would have a very positive effect on our property surviving a wildfire in our area. We live at the top of a steep, 100 foot hill full of combustible bushes and trees, and mitigation efforts would be VERY instrumental in surviving a wildfire in our neighborhood. Normally I can do the work myself but I'm physically unable at the present time. I may have to hire a local company to do the work for me. I am very aware of the risks we face and will not be comfortable until we accomplish something to mitigate destruction from wildfire.
- Since we moved to our current house we have taken several steps to clear our yard and make it more fire wise. We also lived in a wooded area northwest of Prescott for several years and cleared our property several times to be fire wise. It is very important!
- Think it is a good idea. If I had the money, I would cut down about 6 of the 10 trees on my property.

Poor attitude

- If it burns the natural vegetation, I don't want to live here.
- It's my family, my property, and my choice. I have put my family and property in a wildfire area. I know the dangers. I could have lived in a lower wildfire area but chose not to. If a wildfire injurs people or destroys property, that is the risk I take. I don't believe the government should do much to protect this risk I chose. I should be the one to do what I can including on my property. I also should pay this cost including higher insurance costs. To protect all the people and property in wildfire areas (if that is even possible against nature) there must be more than education or government assistance or laws. There must be behavior modifications. Most people will do the minimum until it hits their pocket books. Government penalties and higher insurance premiums would motivate people to protect their family and property and likely strengthen the entire community from what nature can bring.
- Our home is all natural. We have a large garden and we also have many flowers. Everything was thought out very well 36 years ago. With God's help our home will be safe from fires.
- Too costly, drops property value.
- Yavapai County does not have a Wildland-Urban- Interface regulation. A requirement for property owners to "firewise" their property with a penalty of the County mitigating hazards and placing a lien on the property would "encourage" owners to take action. Enclosing the underside of a deck will not protect the top side from being ignited. Requiring cement based siding will not protect a house. A metal roof, concrete block foundation and deck columns coupled with clearing combustibles around the structure ill provide some protection. There is no 100% protection from flaming brands that are flying a mile in front of a wildfire

Wildfire mitigation will not stop a fire from burring property

- If the US Forest Service does not allow commercial thinning to 60-100/acre, there will be no stopping a wildfire disaster! Should my property be perfectly preserved in a wildfire event? Why would I wish to continue to live when all other are burned out? Talk about crashed property values!
- Unless my whole neighborhood cuts down every tree around us, the whole wildfire risk reduction is pointless. Prescott Arizona is a wildfire risk, a risk the citizens take everyday by living there. Thanks
- We live in a vary rural area. Wagoner/Walnut Grove. Mitigation is necessary-yet a wild vegetation fire would over-run us. Think Yarnell-both were close to us. Neighboring ranches irrigated fields are over #1. backup plan.

Social norms

- Our neighborhood does not have an HOA, but rather a voluntary safety and security organization that fosters fire-wise management of our properties through annual presentations from our local Prescott City Fire Department representatives.
- Sorry it took so long to complete, I only get my mail once a month. Have been very ill this past year. Family and friends help keep my wildfire risk down.
- The area I live in "mountain Club" frowns on people removing large pines from property as it destroys the beauty of the area. We all have to work around that, with people taking offense if a tree is removed.

Behavioral controls

Constraints to wildfire mitigation

Age

- I retired on disability secondary to heart failure and spinal neck injury as well as diabetes and hypertension. I also have weak ankles and flat feet. It is difficult for me to walk around in the back yard (very sloping) I have done a lot of trimming but I can only work about one-two hours every few days, it is difficult to gt the debris up to the street, and there are large limbs that I can't cut with my hand clippers. I am not stable enough on my feet to use the power tools and I don’t know how to use them. Each year, I have worked on the yard but I can never get to the whole thing in one season. I am also worried about my neighbor’s yard and tall pines which overhang my roof and touch the side of the neighbor's house and roof. Our two houses are very close together. The neighbor's house has not been occupied since we moved here.

Concerns of Erosion

- Prescott is surrounded by steep rocky terrain. If a homeowner removes too much grass and brush sever erosion could occur. This could contribute to washed out driveways, yards, and ever structural damaged to a house garage or deck. We know we will have heavy rains every year or two. For wildfires we hope our heroes will be able to handle what may happen in town. The outlying neighborhoods are a different matter. Good luck with your research and I will be looking forward to your findings. The erosion issue is one reason I feel limited on what I can do on a second property I own. I do what I can.

Cost of mitigation

- A question you did not ask, that would have been helpful, is; Do you have resources to help you get your home better prepared? Some low-income people, like myself, and elderly people, need help with these things that don't cost a great deal of money. Or, they may need county or city help with clearing property at no cost to them. Thank you for this study. Some questions were difficult to answer clearly, but most were very to the point.
- I believe that most people (in my world) with the correct information, energy & financial resources would do their best to be firewise. I don't take care of my property because of outside pressures. When I just moved into this neighborhood we were provided with risk assessment by the fire department or wild land management. I realize that is expensive, but was very helpful.
- Available money to do all reductions in wildfire risk is not possible due to my limited income.
- Can't afford money to trim cut trees but try to keep weeds and debris picked up. I hate fires of any kind since a childhood incident. I'm on O2 and low income. I have a son living with me know who will help.
- Hired Firewise clearing crew 1 year ago. Difficult to afford expensive services; (absentee) neighbors pose a concerning fire hazard
- I pay someone to help me with yard work. May not always be able to afford it. When I moved in I had forestry inspect property and made necessary improvements like covering overhangs.
- I would do it if I was able physically and financially.
- In my old county in Maryland, the county maintained wood chippers that anyone could use and take home the mulch for gardening and landscaping. The state of Arizona should have the same program, as getting rid of brush is the main obstacle to fire safety. It is expensive to get rid of. No problem cutting it but it costs a lot of money to remove, hire a chipper, etc.
- It would be great if the county would provide free or low cost yard clean up every couple years. It gets tougher for me to manage my yard as I progress in age.
- It would help if the city would have regular pick-ups for cuttings. They do not fit into the garbage can easily- would be nice if there were groups that would assist the elderly on fixed incomes. Good Luck.
- It's my family, my property, and my choice. I have put my family and property in a wildfire area. I know the dangers. I could have lived in a lower wildfire area but chose not to. If a wildfire injurs people or destroys property, that is the risk I take. I don't believe the government should do much to protect this risk I chose. I should be the one to do what I can including on my property. I also should pay this cost including higher insurance costs. To protect all the people and property in wildfire areas (if that is even possible against nature) there must be more than education or government assistance or laws. There must be behavior modifications. Most people will do the minimum until it hits their pocket books. Government penalties and higher insurance premiums would motivate people to protect their family and property and likely strengthen the entire community from what nature can bring.
- Many of the risk factors are simply not financially possible for me.
- My home of 51 years was built into a hill covered in rock and scrub oak trees. There are 4 huge Ponderosa Pines trees near the house. The dead limbs have been trimmed from these trees several times. The cost of removing these trees is prohibitive and would be nearly impossible to get to . The area around the home is landscaped and kept clean of leaves, pine needles, and cones, etc. The shake cedar roof of about 20-25 years old was recently replaced with a fire resistant asphalt shingle roof. The home is next to a creek on one side and neighbor on the other side keep their property clean. The back of the property is a pile of huge rocks and scrub oak trees. It is felt that all that can be done short of

raising the entire property has been done. To keep the property free of fire risk. Please see page 1 of this questionnaire as I have indicated the things which have been done already from the recommended list.

- Previous owner built wood fence around property & we cannot afford to replace it. I asked at the hardware store for fire resistant paint & they laughed.
- Retirees need assistance in doing the work and to hire someone is costly. Also, if neighbors don't reduce fire risk, we would be at high risk.
- Some areas of Prescott are at higher risk than others. Keep in mind that a blanket approach to reduce the risk would be dysfunctional. Some sort of tiered approach may make most sense. Residential sprinklers systems for all new structures, regardless of size is a good idea as well as maintain landscape irrigation system. Cost of any approach will always be a factor. It will require a well thought out plan to be developed with all stakeholders involved with process.
- The top floor of our home is an actual log cabin. The bottom floor is brick and dry wall, with some logs and wood framing. We just had our entire lot cut back for fire-wise purposes last week. We have 3 neighbors, 1 of them partially cleared their land to be fire-wise, the other 2 I am not sure they have or will be doing anything. We did not live in this particular house in 2002, but we did live on this same street. That was the year that the Indian Fire hit Prescott, it was about 6-10 miles from our house, we had ash falling on our house and cars. You have to have some very specific, heavy duty, expensive tools, including a truck and trailer to accomplish truly clearing your lot to be fire-wise. Not many people have those types of funds. You also have to have an education on how to properly clear and not many people have that either. If you have further questions you can always email me
- Think it is a good idea. If I had the money, I would cut down about 6 of the 10 trees on my property.
- Too costly, drops property value.
- We are a full time working family (both parents) There is no time to complete the tasks you talk about, even though we really want to and know it is important. So, then that leaves for us to hire someone to do it, but we can't afford it on my teaching salary and my husband's job at the hospital. I really wish it was a different scenario. On our time off we are watching our small children who are 2 and 4 and that is another full time job in itself, plus very expensive. Maybe if there was a program to help out people who need the work and could be less cost to families things like making your home fire proof would be successful.
- We are part of a property owner's association. Our area is Firewise. We have spent thousands of dollars trying to maintain a Firewise property. Grants are available for initial mitigation, however maintenance after that is expensive and difficult. It would help our association members if grants were available for follow up every few years. We are retired, on fixed income and with medical issues.
- We(husband and wife) co-own this property and endeavored to complete this survey so as to reflect our combined thinking since we don’t fully agree. Some of these questions, frankly, are ridiculous. I would be interested in the response rate and feedback. I appreciate the opportunity to identify the challenges that come with owning acreage in a wildfire likely area. The cost to have this done is prohibitive and the task to perform are difficult and ongoing. We do the best we can.
- When you are a senior female living alone with two older cats on a fixed income, it is very difficult to maintain risk reduction. I just had a ponderosa pine tree removed from my front deck which cost me $1,000. I had to save a long time to have this done. I've been here 8 years and every year i was able to do some clearing around my property, but the last few years my health has prevented me from doing

much outside and I dont have the resources, financial or otherwise to do much. So I do what I can when I can. It is very important to stay safe no matter what the situation.

Health

- Can't afford money to trim cut trees but try to keep weeds and debris picked up. I hate fires of any kind since a childhood incident. I'm on O2 and low income. I have a son living with me know who will help.
- I retired on disability secondary to heart failure and spinal neck injury as well as diabetes and hypertension. I also have weak ankles and flat feet. It is difficult for me to walk around in the back yard (very sloping) I have done a lot of trimming but I can only work about one-two hours every few days, it is difficult to gt the debris up to the street, and there are large limbs that I can't cut with my hand clippers. I am not stable enough on my feet to use the power tools and I don't know how to use them. Each year, I have worked on the yard but I can never get to the whole thing in one season. I am also worried about my neighbor's yard and tall pines which overhang my roof and touch the side of the neighbor's house and roof. Our two houses are very close together. The neighbor's house has not been occupied since we moved here.
- Sorry it took so long to complete, I only get my mail once a month. Have been very ill this past year. Family and friends help keep my wildfire risk down.
- When you are a senior female living alone with two older cats on a fixed income, it is very difficult to maintain risk reduction. I just had a ponderosa pine tree removed from my front deck which cost me $1,000. I had to save a long time to have this done. I've been here 8 years and every year i was able to do some clearing around my property, but the last few years my health has prevented me from doing much outside and I dont have the resources, financial or otherwise to do much. So I do what I can when I can. It is very important to stay safe no matter what the situation.

Physical Ability

- Can't afford money to trim cut trees but try to keep weeds and debris picked up. I hate fires of any kind since a childhood incident. I'm on O2 and low income. I have a son living with me know who will help.
- I retired on disability secondary to heart failure and spinal neck injury as well as diabetes and hypertension. I also have weak ankles and flat feet. It is difficult for me to walk around in the back yard (very sloping) I have done a lot of trimming but I can only work about one-two hours every few days, it is difficult to get the debris up to the street, and there are large limbs that I can't cut with my hand clippers. I am not stable enough on my feet to use the power tools and I don't know how to use them. Each year, I have worked on the yard but I can never get to the whole thing in one season. I am also worried about my neighbor's yard and tall pines which overhang my roof and touch the side of the neighbor's house and roof. Our two houses are very close together. The neighbor's house has not been occupied since we moved here.
- I would do it if I was able physically and financially.
- Risk reduction actions would have a very positive effect on our property surviving a wildfire in our area. We live at the top of a steep, 100 foot hill full of combustible bushes and trees, and mitigation efforts would be VERY instrumental in surviving a wildfire in our neighborhood. Normally I can do the work myself but I'm physically unable at the present time. I may have to hire a local company to do the work for me. I am very aware of the risks we face and will not be comfortable until we accomplish something to mitigate destruction from wildfire.

Available time

- We are a full time working family (both parents) There is no time to complete the tasks you talk about, even though we really want to and know it is important. So, then that leaves for us to hire someone to do it, but we can't afford it on my teaching salary and my husband's job at the hospital. I really wish it was a different scenario. On our time off we are watching our small children who are 2 and 4 and that is another full time job in itself, plus very expensive. Maybe if there was a program to help out people who need the work and could be less cost to families things like making your home fire proof would be successful.

Physical terrain

- I retired on disability secondary to heart failure and spinal neck injury as well as diabetes and hypertension. I also have weak ankles and flat feet. It is difficult for me to walk around in the back yard (very sloping) I have done a lot of trimming but I can only work about one-two hours every few days, it is difficult to gt the debris up to the street, and there are large limbs that I can't cut with my hand clippers. I am not stable enough on my feet to use the power tools and I don't know how to use them. Each year, I have worked on the yard but I can never get to the whole thing in one season. I am also worried about my neighbor's yard and tall pines which overhang my roof and touch the side of the neighbor's house and roof. Our two houses are very close together. The neighbor's house has not been occupied since we moved here.
- We have a lawn 2200 sq ft. sprinkler system. A lot of trees. We spend around 1500 a year on tree trimming. Our yard is .62 acres and the back half is a steep hill with a fair amount of vegetation that we cannot really access, so it remains "wild".

Mitigation actions taken

- Have minimal veg. within 20-30 ft. of home. 2) asphalt shingles. 3) synthetic non flammable decking. 4) no shrubs close to house. 5) don't have screened in covered decks. so will consider this! Please send me a final report of the conclusions and recommendations of the findings of this study.
- Already did the fire abetment activities recommended by Yavapai County Fire Dept.
- Due to my work I stay well informed and involved in preparedness and emergency management. I have done most of the items discussed and live in an established neighborhood with mostly low volume plantings outside of the forested area of Prescott. In this area, the highest likelihood of fire spread would be house to house, not a true forest or grass fire.
- Home has gravel landscaping with drip system for vegetation. Same as neighbors. Have monthly trimming and weed abatement performed for me.
- I cut away brush and cleared loose and dried materials away from the home when purchased. I continued to maintain the property throughout our time there. We recently sold the property and no longer live in an area that needs that type of attention other than normal landscaping tending.
- I have someone do my yard work. Keeping all weeds and trees trimmed.
- I keep weeds and brush including Shrub oaks at least 30 ft. from my house.
- I own the property in Prescott but do not live there. I rent it out. I have reasonable expectations that my renters keep property raked and tidy (also cleaning out gutters). So many of these questions were difficult for me to answer, but with that being said, I do reside in another state where I have

experienced wildfires and do live in the trees. I feel that thinning out trees is very important. as well as taking down dead branches. Also having defensible space around your home.

- I pay someone to help me with yard work. May not always be able to afford it. When I moved in I had forestry inspect property and made necessary improvements like covering overhangs.
- I took down 4 large Junipers on our property (mostly for cosmetic reasons and they were too close to the house)
- I try to keep vegetation watered and maintained in the area of structures. I do have two (really four) large trees (pine (1), 3 oak near the house. They are watered and cleared underneath. If the fire department could evaluate the property and tell me what absolutely should be done, that would help greatly. Mary L …
- My area, Prescott Heights, was built in the 50's and is pretty controlled already. For example, cleaning away vegetation to 30 - 50' w/b across the street! I wouldn't mind hearing suggestions on how to optimize fire risk reduction and still keep those red plum trees that provide badly needed shade on the south side of the house. They are well watered also. to trim branches up 12' would pretty much destroy them.
- Keep it clean = I do
- My home of 51 years was built into a hill covered in rock and scrub oak trees. There are 4 huge Ponderosa Pines trees near the house. The dead limbs have been trimmed from these trees several times. The cost of removing these trees is prohibitive and would be nearly impossible to get to . The area around the home is landscaped and kept clean of leaves, pine needles, and cones, etc. The shake cedar roof of about 20-25 years old was recently replaced with a fire resistant asphalt shingle roof. The home is next to a creek on one side and neighbor on the other side keep their property clean. The back of the property is a pile of huge rocks and scrub oak trees. It is felt that all that can be done short of raising the entire property has been done. To keep the property free of fire risk. Please see page 1 of this questionnaire as I have indicated the things which have been done already from the recommended list.
- My property has had most of the work completed several years ago-- Now it is maintenance and it is done by hired help. A good survey.
- Reduce mainly underbrush of ladders. Possibly not cut down ponderosa in good shape. ???? ??? Snags or poorly growing trees. Cut all grasses when dry enough. Toss wood under deck. Keep decorative planters water in lose area and weeded. Is done now but not firewise materials. We use fabric (plastic) could considered redoing with more fire resistant fabric of ??? too expensive. Find out if their core ????.....
- Since we moved to our current house we have taken several steps to clear our yard and make it more fire wise. We also lived in a wooded area northwest of Prescott for several years and cleared our property several times to be fire wise. It is very important!
- The top floor of our home is an actual log cabin. The bottom floor is brick and dry wall, with some logs and wood framing. We just had our entire lot cut back for fire-wise purposes last week. We have 3 neighbors, 1 of them partially cleared their land to be fire-wise, the other 2 I am not sure they have or will be doing anything. We did not live in this particular house in 2002, but we did live on this same street. That was the year that the Indian Fire hit Prescott, it was about 6-10 miles from our house, we had ash falling on our house and cars. You have to have some very specific, heavy duty, expensive tools, including a truck and trailer to accomplish truly clearing your lot to be fire-wise. Not many people have

those types of funds. You also have to have an education on how to properly clear and not many people have that either. If you have further questions you can always email me

- We just hired someone to fire-wise property this year. If use keep it up we'll be in very good shape.

Perceived Risk

High to moderate perceived risk

- I live right on the border of the urban-wildland interface, so I tend to be more concerned about fire than my neighbors. The area is hilly and full of native brush and trees and lots of wildlife. Since the lots are long and narrow, I can only take care of the hill behind the house.
- I owned a year-round home at Mormon Lake 1970 to 1999. I am well aware of wildfires and risk and human stupidity and lack of common sense. I am well aware of the denial of responsibility of forest lands south and west of Prescott by the ownership of the state, BLM and county USDA and some of south and west Prescott. The Pit fire west of Prescott in 2013 or 14 could have been a disaster for Prescott HAD the winds been blowing east that day, instead of , them blowing north and it burned our Granite Mountain. And as everyone now knows, Prescott (City) eliminated the Granite Mountain Hotshots because they (city) is in denial of ANY responsibility for fires (wild) in our area, much less the responsibility and (or) liability for firefighters and any forest wildfires in our area. The entire resulting situation is a damn disgrace! By the way, you will recall that the 19 firefighter hotshots, Granite Mountain "Boys" who lost their lives at Yarnell was a GROSS screw up. Remember, forever, that that old retired bush pilot then living at Yarnell called it on the first day of fire a "Big" screw up that was ridiculous as hell. He said, then, that he flew planes with slurry for 38 years and never lost one, not one firefighter. However, he did apologize for having sprayed firefighters with slurry on a few occasions during those years. Good luck, but I truly believe your efforts should be on land-owners responsibility, liability and solutions before the fire gets to the homeowner but that would be a real disaster for you because it would open up a real live can of nasty worms.
- Unless my whole neighborhood cuts down every tree around us, the whole wildfire risk reduction is pointless. Prescott Arizona is a wildfire risk, a risk the citizens take everyday by living there. Thanks

Low perceived risk

- Fire hydrant and fire dept. are close by. No coincidence with that. House purchase was made with knowledge about fire insurance and the proximity of fire hydrant and fire dept.
- I live in an area where I feel it would be difficult for a wildfire to reach although I am concerned about the effects of a wildfire in my community.
- I live in the city of Prescott. I believe that I would not be threatened by a wildfire.
- I live very close to down town Prescott, I have a well landscaped area around my house and there are no dry or old shrubs around the property. Really couldn't answer a lot of questions.
- I've been a Wildland firefighter, and I am currently on a incident management team for the southwest area. I've seen what fire can do regardless of defensible space around a property. I do however feel safe in my neighbor hood, because of the fuels and Prescott National Forest.
- Living in town and are not by forest area so less trees fuels safer. Though smoke etc has been an issue in the past
- Most of my property is natural rock, no lawn and few trees!!!

- Our residence is located 4 blocks from courthouse plaza in downtown Prescott. City fire hydrant located directly across street. Based on the above prospects of a wildfire event ever effecting my city property are cosidered slim to non-existent.
- The house is in a subdivision with less than 50' of space around it. There is little to no privacy. There are some trees next to the house. A wildfire is thought to be in a forest, not in a neighborhood, so asking questions about this house in it's neighborhood dealing with a wildfire seems illogical, even silly. Many houses in Prescott have larger properties and are incorporated into the thick vegetation of the area. This particular house is not. Thus, wildfire risk is very low. Thank you. Also, this questionnaire is too long and wordy.
- The risk of a wildfire affecting my property seems pretty low.
- There is no risk in my neighborhood of wildfire destroying my home
- This does not pertain to my property. But I would like to maintain it. Last year I stumbled upon what would have become a major forest fire. Empty Vodka bottle and an unattended fire. This was in July. I firmly believe that there should not be any campfires or smoking in national forest when it is this dry. All it takes is one idiot.
- To clarify, I live in a dense urban neighborhood with no adjacent or even nearby wildland. The risk of wildfire here is minimal. If it came to my house it would have to wipe out most of the city.
- We live in a neighborhood that is not at very high risk of wildfire.

Concerns of evacuation

- I have only 2 apple trees and no dead vegetation. All pine trees are on neighbors' property. Back yard encircled by block wall fence. My concern would be evacuation as I live off Lopper Basin.
- My neighborhood is not very near to a wildfire area.

Concerns with adjacent properties

- City of Prescott owns 32 acres of open space behind our house. We have asked many times for them to clean it up, even a buffer zone would make us feel better. A vacant lot is on each side of our house. We wish the city would make the owners clean them up. Both the city open space and the vacant lots are full of over grown brush. We trip and clean up our yard every fall. We have even cleaned some of the brush on the edges of the vacant lots and the open space edge, but feel we can only go so far.
- Hired Firewise clearing crew 1 year ago. Difficult to afford expensive services; (absentee) neighbors pose a concerning fire hazard
- Home is in a suburban area relatively secure from wildfire though we do have several undeveloped areas near us that could use some wildfire mitigation work (e.g. thinning, brush removal).
- I have 1 neighbor that does not believe in wildfire risk reduction. He plants as many trees as possible and refuses to trim. He wants privacy. He complaining of my thinning of vegetation. He states that if there is a wildfire, he wants his house to burn down. He can take insurance and build somewhere else with the chard ground. He would rather move else ware than have to live in area with no vegetation or charred vegetation. I live down wind of his property, I am concerned that cinders from his property will blow downwind on to my house and my property to be firewise will be of no good.
- I have done everything necessary for fire reduction, but 15 ft. away my neighbor has a fire trap of dead limbs and brush because she likes the "natural look" of the forest. Her place would burn in a minute. My

yard is trimmed up 7 ft. off the ground, all dead limbs cut out of trees, no brush or bushes within 30 ft. but I can't convince her to trim her yard. I even volunteered to do some tree trimming for free when my tree trimmer was here, but she declined. I don't get it. If she sells her house, I plan to buy it, clean up the yard, and resell it.

- I retired on disability secondary to heart failure and spinal neck injury as well as diabetes and hypertension. I also have weak ankles and flat feet. It is difficult for me to walk around in the back yard (very sloping) I have done a lot of trimming but I can only work about one-two hours every few days, it is difficult to gt the debris up to the street, and there are large limbs that I can't cut with my hand clippers. I am not stable enough on my feet to use the power tools and I don't know how to use them. Each year, I have worked on the yard but I can never get to the whole thing in one season. I am also worried about my neighbor's yard and tall pines which overhang my roof and touch the side of the neighbor's house and roof. Our two houses are very close together. The neighbor's house has not been occupied since we moved here.
- My big complaint is my neighbors around me are fueling a wildfire if it ever happened. We are about 5 miles from a possible fire about 10 miles from disaster close to the Yarnell Fire.
- My closest neighbor has a nonchalant attitude regarding fire. I find this to be worrisome, as our homes are close. She feels no need to trim up her trees. I've always been concerned about fires and especially here in Arizona with the degrees and multiple fires. In my previous home (30 Years ago) a fire passed over our home and property. It was terrifying. This pamphlet is a good idea, and a good reminder to many to take fire responsibility.
- Next-door neighbor wants to live in a "forest" and has added 40 trees. Our property is basically 1.2 acres of D.G., so we're mostly protected. Trees are mostly oak...leaves don't burn.
- Retirees need assistance in doing the work and to hire someone is costly. Also, if neighbors don't reduce fire risk, we would be at high risk.
- Some homes in this area are built on the property lines. Even a 10 foot fire break would require your neighbor to approve the work.
- The top floor of our home is an actual log cabin. The bottom floor is brick and dry wall, with some logs and wood framing. We just had our entire lot cut back for fire-wise purposes last week. We have 3 neighbors, 1 of them partially cleared their land to be fire-wise, the other 2 I am not sure they have or will be doing anything. We did not live in this particular house in 2002, but we did live on this same street. That was the year that the Indian Fire hit Prescott, it was about 6-10 miles from our house, we had ash falling on our house and cars. You have to have some very specific, heavy duty, expensive tools, including a truck and trailer to accomplish truly clearing your lot to be fire-wise. Not many people have those types of funds. You also have to have an education on how to properly clear and not many people have that either. If you have further questions you can always email me
- We are retired and have kept our home in great shape and our landscape is rock and artificial grass. The neighbors on either side never cut their weeds and also do keep their yards full of junk. It was hard to answer most questions as we have always had great pride in our property!
- We cleaned up our property considerably when we moved here in 2012. The Yavapai Fire Dept. came out and chipped, which was VERY helpful. We understand that fire depts. cannot tell people to clean up, too bad as our neighbors house is an accident waiting to happen.

- We live next to large BLM parcel in log home on bridle path in williamson valley across from granite mtn! Most of equestrian #1 is not deed restricted and extremely overgrown properties! In event of fire, feel this whole area in this little valley will go fast.

Subjective Knowledge

- Due to my work I stay well informed and involved in preparedness and emergency management. I have done most of the items discussed and live in an established neighborhood with mostly low volume plantings outside of the forested area of Prescott. In this area, the highest likelihood of fire spread would be house to house, not a true forest or grass fire.
- one of the first things we did when we bought the home was to have the fire marshal come out and examine our property and gave us pointers for us to do to be firewise.
- Very interesting in receiving information about wildfire risk reduction. Very interesting in learning about the data, analysis, results of this study. Very interested in reading your dissertation. Very interested in providing more help if needed.
- I would like to attend a symposium/hands on education event for wildfire prevention.
- I would like to hear more wildfire prevention tips from the city, county, or state to determine what further action I can take to reduce risk of wildfire to my property.

Experience of wildfire and mitigation

- In response to wild fire events on page 3, Those questions are impossible for me to answer because fires have been numerous and are always alarming. I am always prepared to evacuate but have only done it once while living in the Sierra Foothills above Marysville, CA. I've lived in Arizona most of my life and have seen many fires.
- Just moved here in July- Just starting to learn how to be Fire wise. Our community's news letter helps us learn what to do!

Municipalities role in wildfire and mitigation

Inappropriate Zoning allowed

- Biggest factor, counties and municipalities allow zoning/building in areas where wildfire will happen. not if but when!

Lack of resources or services

- Exactly how often does the city, or county inspect private property areas for fire mitigation? If not, why not? I cannot remember every seeing a fire inspector in my area looking at property in the city, or county in my area.
- Wish there was more help from the city/county in picking up the trimming and debris. I've been cutting and trimming trees yet have to rent a trailer to haul it or hire someone. More pick up's are necessary to help out.

Lack of regulations/enforcement/action

- City of Prescott owns 32 acres of open space behind our house. We have asked many times for them to clean it up, even a buffer zone would make us feel better. A vacant lot is on each side of our house. We

wish the city would make the owners clean them up. Both the city open space and the vacant lots are full of over grown brush. We trip and clean up our yard every fall. We have even cleaned some of the brush on the edges of the vacant lots and the open space edge, but feel we can only go so far.

- Local city/county government should enforce risk reduction actions where required. Impose fines/add costs for corrective actions to property taxes. (absentee owners are a problem). Increase advertising of local fire departments free fire risk property assessment and brush pick up program. Reduce cost of taking brush to transfer stations. Require builders or owners to adequately clear lots prior to sale of lot or home.
- N/A The city has areas that they have authority over to cut back vegetation. They need to do their part.
- Yavapai County does not have a Wildland-Urban- Interface regulation. A requirement for property owners to "firewise" their property with a penalty of the County mitigating hazards and placing a lien on the property would "encourage" owners to take action. Enclosing the underside of a deck will not protect the top side from being ignited. Requiring cement based siding will not protect a house. A metal roof, concrete block foundation and deck columns coupled with clearing combustibles around the structure ill provide some protection. There is no 100% protection from flaming brands that are flying a mile in front of a wildfire.

Provides resources and services

- The City of Prescott requires new homes to comply wih the wildland fire code. During construction, the house was inspected to comply with that code.
- City of Prescott "Chip" program has really helped us maintain a safety zone for the house. This program has been a huge success and should be continued..
- Please share results/publications from research with participants. City of Prescott offers brush removal/chipping service free of charge (or at least they did a year ago). I've done a lot of shrub/brush removal and thinning because of this service. Thank you
- We cleaned up our property considerably when we moved here in 2012. The Yavapai Fire Dept. came out and chipped, which was VERY helpful. We understand that fire depts. cannot tell people to clean up, too bad as our neighbors house is an accident waiting to happen.
- It may slightly helpful to remind the masses that clearing dead wood also reduces pests like termites, carpenter ants, snakes and rodents, I believe. Remind the masses how fortunate we are to have our city do free garbage pick-up days and fire department clearing of our cut branches/trees. Enlighten those who can't clear their property of resources and cost of private property fire wise clearing. Many of us do not really know exactly who is maintain forest around us so some of your questions I was not fully educated on: bureau of land management versus forest service versus state or county.

Rules and regulation on private land owners would be inappropriate

- Except very cluttered, very un-kept weedy yards and obvious fire hazards, government should not dictate what I do on my property
- It's my family, my property, and my choice. I have put my family and property in a wildfire area. I know the dangers. I could have lived in a lower wildfire area but chose not to. If a wildfire injurs people or destroys property, that is the risk I take. I don't believe the government should do much to protect this risk I chose. I should be the one to do what I can including on my property. I also should pay this cost including higher insurance costs. To protect all the people and property in wildfire areas (if that is even

possible against nature) there must be more than education or government assistance or laws. There must be behavior modifications. Most people will do the minimum until it hits their pocket books. Government penalties and higher insurance premiums would motivate people to protect their family and property and likely strengthen the entire community from what nature can bring.

- My property is my responsibility. City needs to provide assistance but to my knowledge they do not. Im really opposed to being told what to do with my private property when it is NOT a risk to others. Let the forest service put grazing permits back in force. Shut down trails and campgrounds when fire danger is high. More manpower needed for patrols in public land but the government says no $ and people don't want to wash anyway.

Denial of responsibility

- I owned a year-round home at Mormon Lake 1970 to 1999. I am well aware of wildfires and risk and human stupidity and lack of common sense. I am well aware of the denial of responsibility of forest lands south and west of Prescott by the ownership of the state, BLM and county USDA and some of south and west Prescott. The Pit fire west of Prescott in 2013 or 14 could have been a disaster for Prescott HAD the winds been blowing east that day, instead of , them blowing north and it burned our Granite Mountain. And as everyone now knows, Prescott (City) eliminated the Granite Mountain Hotshots because they (city) is in denial of ANY responsibility for fires (wild) in our area, much less the responsibility and (or) liability for firefighters and any forest wildfires in our area. The entire resulting situation is a damn disgrace! By the way, you will recall that the 19 firefighter hotshots, Granite Mountain "Boys" who lost their lives at Yarnell was a GROSS screw up. Remember, forever, that that old retired bush pilot then living at Yarnell called it on the first day of fire a "Big" screw up that was ridiculous as hell. He said, then, that he flew planes with slurry for 38 years and never lost one, not one firefighter. However, he did apologize for having sprayed firefighters with slurry on a few occasions during those years. Good luck, but I truly believe your efforts should be on land-owners responsibility, liability and solutions before the fire gets to the homeowner but that would be a real disaster for you because it would open up a real live can of nasty worms.

Prescott Fire Department

Increase services

- Yavapai County Fire Dept. should schedule more cut branches pick up, once a year is not enough.

US Forest Service

Lack of action

- If the US Forest Service does not allow commercial thinning to 60-100/acre, there will be no stopping a wildfire disaster! Should my property be perfectly preserved in a wildfire event? Why would I wish to continue to live when all other are burned out? Talk about crashed property values!

Denial of responsibility

- I owned a year-round home at Mormon Lake 1970 to 1999. I am well aware of wildfires and risk and human stupidity and lack of common sense. I am well aware of the denial of responsibility of forest lands south and west of Prescott by the ownership of the state, BLM and county USDA and some of

south and west Prescott. The Pit fire west of Prescott in 2013 or 14 could have been a disaster for Prescott HAD the winds been blowing east that day, instead of , them blowing north and it burned our Granite Mountain. And as everyone now knows, Prescott (City) eliminated the Granite Mountain Hotshots because they (city) is in denial of ANY responsibility for fires (wild) in our area, much less the responsibility and (or) liability for firefighters and any forest wildfires in our area. The entire resulting situation is a damn disgrace! By the way, you will recall that the 19 firefighter hotshots, Granite Mountain "Boys" who lost their lives at Yarnell was a GROSS screw up. Remember, forever, that that old retired bush pilot then living at Yarnell called it on the first day of fire a "Big" screw up that was ridiculous as hell. He said, then, that he flew planes with slurry for 38 years and never lost one, not one firefighter. However, he did apologize for having sprayed firefighters with slurry on a few occasions during those years. Good luck, but I truly believe your efforts should be on land-owners responsibility, liability and solutions before the fire gets to the homeowner but that would be a real disaster for you because it would open up a real live can of nasty worms.

Need more monitoring of managed lands

- My property is my responsibility. City needs to provide assistance but to my knowledge they do not. Im really opposed to being told what to do with my private property when it is NOT a risk to others. Let the forest service put grazing permits back in force. Shut down trails and campgrounds when fire danger is high. More manpower needed for patrols in public land but the government says no $ and people don't want to wash anyway.

Insurance companies

Promoting mitigation

- The question 7 about insurance, My insurance has not provided incentives, however they have conducted a firewise inventory on our home similar to this questionnaire.

Homeowner awareness

- Local city/county government should enforce risk reduction actions where required. Impose fines/add costs for corrective actions to property taxes. (absentee owners are a problem). Increase advertising of local fire departments free fire risk property assessment and brush pick up program. Reduce cost of taking brush to transfer stations. Require builders or owners to adequately clear lots prior to sale of lot or home.
- Our neighborhood does not have an HOA, but rather a voluntary safety and security organization that fosters fire-wise management of our properties through annual presentations from our local Prescott City Fire Department representatives.
- We are aware of wildfire risk in Arizona from the news & newspaper but not much information from the City of Prescott. Good Luck.

Wildfire mitigation education

Is a continual process

- Its important to educate folks on a continual basis the need to be wildfire risk free of their property and community. Awareness is first.

- Some information on how to make property safe would be helpful.
- The top floor of our home is an actual log cabin. The bottom floor is brick and dry wall, with some logs and wood framing. We just had our entire lot cut back for fire-wise purposes last week. We have 3 neighbors, 1 of them partially cleared their land to be fire-wise, the other 2 I am not sure they have or will be doing anything. We did not live in this particular house in 2002, but we did live on this same street. That was the year that the Indian Fire hit Prescott, it was about 6-10 miles from our house, we had ash falling on our house and cars. You have to have some very specific, heavy duty, expensive tools, including a truck and trailer to accomplish truly clearing your lot to be fire-wise. Not many people have those types of funds. You also have to have an education on how to properly clear and not many people have that either. If you have further questions you can always email me

Need for homeowner education

- The ability to manage wildfire risk on our property has been answered knowing that my husband will also help. If I were to answer as a single person, the ratings would be different. I hope that more education will be disseminated to our community.
- I'm aware that I'm living in a high fire risk area. Not coming from this area & never being educated or seen any info on what needs to be done to prevent fire action on property. Currently, I'm self employed and very busy to educate myself on this matter. I think having a local pamphlet sent to residences every year w/ info & tips that homeowners can put on their fridge & follow would have me become more proactive :)
- Just moved here in July- Just starting to learn how to be Fire wise. Our community's news letter helps us learn what to do!
- My house was built in 1991. When I bought it in 2006, I was given guidelines for fire safety, I think by the Prescott Fire Department. The guidelines included trimming vegetation to a height of 12 inches for 10 feet around the houses and removing deadwood. Every year I hire a man to help me do this. My guidelines do not include any 30-50 feet from the house requirements. They also do not include a requirement for removing tree branches within 10 feet of the roof. That may be because this house was built next to two old growth juniper trees four to six feet from the house, and the builders constructed the concrete front deck around an existing pine tree. Let me also explain that my low number response to a survey in item containing the word "family" does not mean that I am indifferent to the welfare of my family. It means that I have no family.

Personal Responsibility

- My property is my responsibility. City needs to provide assistance but to my knowledge they do not. Im really opposed to being told what to do with my private property when it is NOT a risk to others. Let the forest service put grazing permits back in force. Shut down trails and campgrounds when fire danger is high. More manpower needed for patrols in public land but the government says no $ and people don't want to wash anyway.

Suggestions

- An evaluation (Free) would help.

- Have a new idea. Re structure prep & protection during an actual wild fire. Might be a good master's thesis. Excellent Timely & Applicable Thank You Larry … Prescott, AZ
- Have chipping available for brush cutting or free dumping is a big incentive. Have volunteers do vacant lots if desired.
- Helpful: Provide information to homeowners that have properties at risk. If a home owner doesn't receive a pamphlet of information it should be assumed a homeowner is doing what they should to keep the risk low.
- I'm aware that I'm living in a high fire risk area. Not coming from this area & never being educated or seen any info on what needs to be done to prevent fire action on property. Currently, I'm self employed and very busy to educate myself on this matter. I think having a local pamphlet sent to residences every year w/ info & tips that homeowners can put on their fridge & follow would have me become more proactive :)
- It may slightly helpful to remind the masses that clearing dead wood also reduces pests like termites, carpenter ants, snakes and rodents, I believe. Remind the masses how fortunate we are to have our city do free garbage pick-up days and fire department clearing of our cut branches/trees. Enlighten those who can't clear their property of resources and cost of private property fire wise clearing. Many of us do not really know exactly who is maintain forest around us so some of your questions I was not fully educated on: bureau of land management versus forest service versus state or county.
- It would be great if the county would provide free or low cost yard clean up every couple years. It gets tougher for me to manage my yard as I progress in age.
- It would be great if a person who knows about risk reduction would come through our neighborhood to assess what needs to be done.
- It would help if an agency would take Google or aerial photos of property that needs to be addressed, then contact those homeowners and their insurance companies.
- It would help if the city would have regular pick-ups for cuttings. They do not fit into the garbage can easily- would be nice if there were groups that would assist the elderly on fixed incomes. Good Luck.
- It would help my family to have an incentive to reduce wildfire risk. Some friends have spent a lot of money to have trees and brush removed. It would be great if the city county state provided some tax break or voucher to help in the cost.
- My property is my responsibility. City needs to provide assistance but to my knowledge they do not. Im really opposed to being told what to do with my private property when it is NOT a risk to others. Let the forest service put grazing permits back in force. Shut down trails and campgrounds when fire danger is high. More manpower needed for patrols in public land but the government says no $ and people don't want to wash anyway.
- One of the difficulties in controlling vegetation is a place to dispose of trimmings and trees cut down. There is no place to haul for a safe burn and I have no place I would want to burn on my property safely. I have contacted Prescott Fire and the Forest Service looking for a safe location to no avail. If they would organize a burn supervised area to haul trimmings safely to a supervised spot to facilitate burns for forested areas like mine. I have 5 acres and do not have anywhere I feel safe in burning it even during allowed seasons.
- Some areas of Prescott are at higher risk than others. Keep in mind that a blanket approach to reduce the risk would be dysfunctional. Some sort of tiered approach may make most sense. Residential sprinklers systems for all new structures, regardless of size is a good idea as well as maintain landscape

irrigation system. Cost of any approach will always be a factor. It will require a well thought out plan to be developed with all stakeholders involved with process.

- The city should put a fire hydrant close to our home. Part time residents should stay more on top of their yards.
- This does not pertain to my property. But I would like to maintain it. Last year I stumbled upon what would have become a major forest fire. Empty Vodka bottle and an unattended fire. This was in July. I firmly believe that there should not be any campfires or smoking in national forest when it is this dry. All it takes is one idiot.
- We have cut, hauled and dumped 21 tons of brush from out property surrounding the home. We have a 30 to 50 50 foot radius of cut brush. Fire came within 300 yards of our home. That is a human caused fire. Who is investigating it? Who is reporting on it? NO ONE. Why ask me all these questions if nothing is ever done?
- We live in a rural neighborhood and landscape is diverse between rural and low water installed/design. The best defense for our neighborhood would be to have fire hydrants.

Study related comments

- I hate to say this.. This is a terrible questionnaire. There are too many questions and unless one has studied fire safety or has time to research during this time the understanding of how the City, County, State, Bureau of Land Management, ETC. is slim to none.
- I thought some of the questions were ridiculous.
- Interesting questionnaire! nice and broad.
- None of your last questions should be important to a questionnaire concerning my opinion of wildfire protection. Don't pigeon-hole me.
- There should have been an option at the very beginning to choose that you have already completed a firewise risk assessment and a place to put in your occupation.
- This is one of the most confusing and repetitive questionnaires I have ever completed! Not user-friendly at all.
- This was way too long and complex. Simplify question and shorten each.
- Very confusing questions at times on this survey.
- Your question about what ethnicity I identify with is ridiculous. Please do not teach that political correctness to our children. I'm an American.
- Your recommendations about trees do not fit my area I am in town with only a few trees on our block. To remove all within 20 feet of a house would mean no trees on the block. That also has health risks (living with no trees) and you can see forest service research about that. Therefore, you are already giving out miss-information because it is not contextualized about areas. That is unfortunate for homeowners who might go out and cut down the last tree with in 5 blocks of any other tree. Towards the end your survey seemed less developed--there were some NA categories needed.

Miscellaneous

- Bear down, Arizona! :)
- Don't want any

- People camping on USFS land, partying, leaving fires burning. We put out 2 party fires summer 2016. People shooting during restricted times on USFS land.
- Please note- this is an old rental home owned by several people on an acre wooded lot. We have been building our own Firewise home in Paulden, AZ for the past few years (metal roof, water catchment, surrounded by gravel , stucco walls, etc) We will be completing it over the next 6-12 months and will not deal with the rental house after that time.
- Thanks for doing this. I found some of the question hard to understand or answer. I worked for the Forest Service a year and that was helpful.
- The main remediation I would need to do is cut down large trees planted 20+ years ago too close to the house. I don't want to lose these trees for their shade, beauty, and anti-pollution effects. Figuring out how to trim these so they are safer will be difficult but I'll look into it. If these trees were gone, I wouldn't have all the pine needles to worry about either. But losing these trees would be too high a cost for me now.
- You might want to define a wildfire. Most fires in our area seem human caused. I think the "A halfway" homes in the area increase fire risk. Many smoke and dispose of cigarettes inappropriately.

Follow-up

- Have minimal veg. within 20-30 ft. of home. 2) asphalt shingles. 3) synthetic non flammable decking. 4) no shrubs close to house. 5) don't have screened in covered decks. so will consider this! Please send me a final report of the conclusions and recommendations of the findings of this study.
- I try to keep vegetation watered and maintained in the area of structures. I do have two (really four) large trees (pine (1), 3 oak near the house. They are watered and cleared underneath. If the fire department could evaluate the property and tell me what absolutely should be done, that would help greatly. Mary L …
- I would like to attend a symposium/hands on education event for wildfire prevention.
- Some information on how to make property safe would be helpful.
- Thank you for inviting my input. I am a divorced 56 year old woman who lives alone in a home which needs some work. If there was a community organization that could help with fire proofing that would be cool.
- There is a seasonal creek behind my property. It would be helpful to have information on how to care for the banks and trees. Do you cut banks grasses or leave natural? I know that it can be eroded by high water from time to time if the banks are "too" groomed. At the time, I keep grass cut up to the top of the bank and leave the creek natural on the inside banks of the creek.
- We have several beautiful Ponderosa Pines within 10 feet of our house. Other vegetation is kept low and or it 20-30' from house. One Ponderosa is actually over the house. It is beautiful and provides lots of shade. Do we need to cut it down? Lightning is the most likely thing to cause us harm, risks?
- Would like to know what to do about possibility of lightning strikes during monsoon season. Home 2 streets away from ours was struck. Any defensive measures to be taken for an occurrence of lighting? Are metal structures in the year a bad idea?

Appendix C

Survey Instrument

Wildfire Risk Reduction Actions in Prescott, Arizona

A study of homeowner's action in reducing the impacts of wildfire on life and property.

Please complete the questionnaire and return in the postage paid envelope provided when you are finished.

Questionnaire may also be completed on-line at http://goo.gl/ygMkCT

Thank you for your help!

Yavapaifirewise.org

Appendix C: Survey Instrument

Dear Homeowner,

This research study seeks to learn about homeowner wildfire risk reduction behaviors in Prescott, Arizona. The aim of this research is to help inform your community about the unique dynamics concerning this topic. The study is part of a requirement for the completion of a dissertation and is cooperatively being conducted by the Prescott Area Wildland Urban Interface Commission, National Fire Protection Association, United Service Automobile Association, and Arizona State University. You are one of a small number of people randomly chosen to represent homeowners in the Prescott, Arizona region, so your opinions are important to us. You must be 18 years of age or older to participate.

Your participation in this survey will remain confidential and at no time will your name be identified with any results. All the information collected will be used for statistical purposes. Your response to this request is completely voluntary and the completion of the survey is considered your consent to participate. Your participation in this study is of great interest to us and your local community.

The survey will take approximately 30 minutes to complete.

For the purpose of this study, we offer the following clarifications:

What are wildfire risk reduction actions?

These are action one can take to reduce the impact of a wildfire (if one were to threaten your property) on your property's house, personal belongings, and life. These actions include use of fire proofing material on structures and regular maintenance on the yard's vegetation. Below is a short list of some actions recommended by the Firewise Communities Program. For more information on wildfire risk reduction actions and local efforts to create a resilient community, please visit YavapaiFirewise.org.

Actions on house	Actions on vegetation
Install non-combustible roof & keep free of debris	Branches removed within 10 feet of roof
Close all outside gaps & place screens over vents	Green vegetated area maintained w/in 30 ft. of home
Install fire resistant siding	Lower tree branches removed to 12 feet
Install tempered double pane windows	Dead vegetation, leaves, & needles regularly cleared w/in 30 ft of home
Enclose openings under decks & porches	

If you have any questions about the survey, please feel free to contact Eric Steffey at Arizona State University by email WildfireMitigationStudy@asu.edu or by phone at (928) 275-2083.

This study is being conducted under the direction of Dr. Megha Budruk, Associate Professor, School of Community Resources and Development, Arizona State University. You can contact her by email Megha.Budruk@asu.edu or by phone at (602) 496-0171.

This study has been reviewed and approved by the Arizona State University Institutional Review Board. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788.

Thank you!

The first section asks about your home ownership, property characteristics, and residency.

1. **How many days a year, on average, do you reside in the residence located in Prescott, Arizona? (*Please enter number of days*)**

   _____ Days

2. **How many years have you lived at/owned this property? (*Please enter number of years*)**

   _____ Years

3. **What type of housing unit is located on the property owned in Prescott, Arizona? (*please ✓one*)**

   ☐ Single family home ☐ Townhome ☐ Condominium

   ☐ Duplex, triplex, etc. ☐ Manufactured or mobile home

4. **How many stories is the home located on the parcel owned in Prescott, Arizona? (*please ✓one*)**

   ☐ 1 story ☐ 2 stories ☐ 3 or more stories

5. **What is the construction material of your home? (*please ✓one*)**

   ☐ Wood frame with vinyl siding ☐ Wood frame with wood siding

   ☐ Wood frame with stucco siding ☐ Wood frame with brick siding

   ☐ Wood frame with concrete siding ☐ Wood frame with metal siding

   ☐ Cinder block ☐ Concrete

6. **What type of roof is on the home? (*please ✓one*)**

   ☐ Cedar shake ☐ Asphalt shingles ☐ Metal ☐ Terra cotta tiles

7. **Has your homeowner's insurance company ever: (*please ✓one for each*)**

   Threatened to cancel your policy if wildfire risk reduction actions were not taken on your property?

   ☐ Yes ☐ No ☐ Not sure

   Provided incentives or discounts for taking wildfire risk reduction action on your property or for living in a registered Firewise Community?

   ☐ Yes ☐ No ☐ Not sure

8. **Is your home located in a neighborhood with an active Homeowner's Association? (*please ✓one*)**

   ☐ Yes ☐ No ☐ Not sure

   If yes, how would you rate the influence the association has on your actions concerning protecting your property from the risk of wildfire? *(Please circle one)*

   No influence 1 2 3 4 5 6 7 Much influence

This section asks about your personal experiences with and knowledge of wildfire.

9. How well informed do you consider yourself to be about wildfire risks to your property? (C*ircle one*)

Not at all informed 1 2 3 4 5 6 7 Very informed

10. To what extent do you find information about wildfires to be personally relevant? (C*ircle one*)

Not at all relevant 1 2 3 4 5 6 7 Very relevant

11. How motivated are you to learn more about the connection between wildfire risk and undertaking behaviors to create defensible space around your home? (C*ircle one*)

Not at all motivated 1 2 3 4 5 6 7 Very motivated

12. To understand impacts of wildfire events, please identify the year of your first and most recent experience for each of the following. Also, provide the number of times you have experienced that particular event. (*Please write in year and # of times experienced, if not experienced please write NA*)

Wildfire events	Year first experienced	Year most recently experienced	# of times experienced
Wildfire between 20 to 50 miles from property	_____	_____	_____
Wildfire between 10 to 20 miles from property	_____	_____	_____
Wildfire within 10 miles of property	_____	_____	_____
Prepared to evacuate property	_____	_____	_____
Evacuated property	_____	_____	_____
Home, structure, and/or property damaged	_____	_____	_____
Home, structure, and/or property destroyed	_____	_____	_____

This section asks about responsibility of risk reduction actions and your perceived risks.

13. To what extent do you feel concerned about the effects of wildfire? (*Circle one*)

Not at all concerned 1 2 3 4 5 6 7 Very concerned

14. How serious do you feel the negative consequences of wildfire are to you personally? (C*ircle one*)

Not at all serious 1 2 3 4 5 6 7 Extremely serious

15. How vulnerable do you feel about the possibility of wildfire physically affecting you or your family? (*Circle one*)

Not at all vulnerable 1 2 3 4 5 6 7 Extremely vulnerable

16. How vulnerable do you feel about the possibility of wildfire affecting your property and/or possessions? (*Circle one*)

Not at all vulnerable 1 2 3 4 5 6 7 Extremely vulnerable

17. How severe would the impact of a wildfire be where you live? (*Circle one*)

Not at all severe 1 2 3 4 5 6 7 Extremely severe

18. To what extent do you feel concerned about adjacent properties that have not taken wildfire risk reduction actions? (*Circle one*)

Not at all concerned 1 2 3 4 5 6 7 Very concerned

19. For protection of <u>your property and home</u> in the Prescott area, how responsible are each of the following in reducing wildfire risk? (*Please circle the level of responsibility for each*)

	Not at all responsible						**Very responsible**	
Myself	1	2	3	4	5	6	7	NA
My neighbors	1	2	3	4	5	6	7	NA
Homeowner association	1	2	3	4	5	6	7	NA
City of Prescott	1	2	3	4	5	6	7	NA
County of Yavapai	1	2	3	4	5	6	7	NA
State of Arizona	1	2	3	4	5	6	7	NA
Bureau of Land Management	1	2	3	4	5	6	7	NA
USDA Forest Service	1	2	3	4	5	6	7	NA

20. For overall protection of the <u>Prescott area</u>, how responsible are each of the following in reducing wildfire risk? (*Please circle the level of responsibility for each*)

	Not at all responsible						**Very responsible**	
Myself	1	2	3	4	5	6	7	NA
My neighbors	1	2	3	4	5	6	7	NA
Homeowner association	1	2	3	4	5	6	7	NA
City of Prescott	1	2	3	4	5	6	7	NA
County of Yavapai	1	2	3	4	5	6	7	NA
State of Arizona	1	2	3	4	5	6	7	NA
Bureau of Land Management	1	2	3	4	5	6	7	NA
USDA Forest Service	1	2	3	4	5	6	7	NA

21. The following list includes possible features of your home and actions that your household may have taken for the purpose of protecting your home from wildfires, or some other reason (e.g., yard beauty or protection from other natural hazards). (*For each feature and action below, please check the one box that best explains if or why your household took that action*)

	Not a feature of my home or property	Action is not necessary, as it existed when home was purchased	My household took this action primarily for wildfire safety reasons	My household took this action primarily for other reasons	Did not take action
Roof and rain gutters kept free of leaves, needles, and twigs	☐	☐	☐	☐	☐
Overhanging & dead branches are removed within 10 feet of roof	☐	☐	☐	☐	☐
Firewood & lumber are stacked at least 30 feet away from the home	☐	☐	☐	☐	☐
A green vegetated area is maintained at least 30 feet around the home	☐	☐	☐	☐	☐
Trees and shrubs are thinned within 30-50 feet from the home	☐	☐	☐	☐	☐
Shrubs & lower tree branches are removed	☐	☐	☐	☐	☐
Dead vegetation, leaves, & needles are cleared at least 30 feet from the home	☐	☐	☐	☐	☐
Home has fire-resistant roof (e.g. asphalt or metal)	☐	☐	☐	☐	☐
Home has screening installed on all vents	☐	☐	☐	☐	☐
Home construction material (e.g. siding & decks) are fire-resistant	☐	☐	☐	☐	☐
Underside of deck is enclosed to keep debris from collecting underneath	☐	☐	☐	☐	☐
Yard is landscaped with fire-resistant vegetation	☐	☐	☐	☐	☐

22. The following list includes possible features of your home and actions that your household could take in the next 12 months for the purpose of protecting your home from wildfires, or some other reason (e.g., yard beauty or protection from other natural hazards). (*For each feature and action below, please check the one box that best explains your household's future intentions to complete each action*)

	Not a feature of my home or property	Structural action is not necessary, as it was already completed	My household plans to take this action primarily for wildfire safety reasons	My household plans to take this action primarily for other reasons	My household does not plan to complete this action
Roof and rain gutters will be kept free of leaves, needles, and twigs	☐	NA	☐	☐	☐
Overhanging and dead branches will be removed within 10 feet of roof	☐	NA	☐	☐	☐
A green vegetated area will be maintained at least 30 feet around the home	☐	NA	☐	☐	☐
Trees and shrubs will be thinned out within 30-50 feet from the home	☐	NA	☐	☐	☐
Shrubs & lower tree branches are removed	☐	NA	☐	☐	☐
Dead vegetation, leaves, & needles will be cleared at least 30 feet from the home	☐	NA	☐	☐	☐
Firewood and lumber will be stacked at least 30 feet away from the home	☐	☐	☐	☐	☐
Home will have fire-resistant roof installed (e.g. asphalt or metal)	☐	☐	☐	☐	☐
Home will have screening installed on all vents	☐	☐	☐	☐	☐
Fire resistant construction materials will be installed on the home (e.g. siding, porches, & decks)	☐	☐	☐	☐	☐
Underside of deck will be enclosed to keep debris from collecting underneath	☐	☐	☐	☐	☐
Yard will be landscaped with fire-resistant vegetation	☐	☐	☐	☐	☐

This section asks questions about your attitudes, perception, and constraints.

23. Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months is: ***(Please circle one for each)***

Harmful	1	2	3	4	5	6	7	Beneficial
Bad	1	2	3	4	5	6	7	Good
Worthless	1	2	3	4	5	6	7	Valuable
Foolish	1	2	3	4	5	6	7	Wise
Useless	1	2	3	4	5	6	7	Useful
Punishing	1	2	3	4	5	6	7	Rewarding
Unenjoyable	1	2	3	4	5	6	7	Enjoyable
Undesirable	1	2	3	4	5	6	7	Desirable
Unimportant	1	2	3	4	5	6	7	Important

24. Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months will: ***(Please circle the likelihood for each)***

	Unlikely						Likely
Give me a sense of security	1	2	3	4	5	6	7
Provide safety for my family	1	2	3	4	5	6	7
Protect my property value	1	2	3	4	5	6	7
Still provide privacy around my home	1	2	3	4	5	6	7
Come at a significant cost	1	2	3	4	5	6	7
Reduce my risk to wildfire's impacts	1	2	3	4	5	6	7
Protect my personal belongings	1	2	3	4	5	6	7
Improve property appearance	1	2	3	4	5	6	7
Not stop a fire from burning down home	1	2	3	4	5	6	7

25. For the following, please provide your evaluation of each. ***(Please circle your rating for each)***

	Bad						Good
A sense of security is	1	2	3	4	5	6	7
Protecting my family is	1	2	3	4	5	6	7
Protection of my property value is	1	2	3	4	5	6	7
Privacy around my home is	1	2	3	4	5	6	7
Significant cost for mitigation is	1	2	3	4	5	6	7
Reducing my risk to wildfire's impact is	1	2	3	4	5	6	7
Protection of my belongings is	1	2	3	4	5	6	7
Improving my property's appearance is	1	2	3	4	5	6	7
My home burning down is	1	2	3	4	5	6	7

26. Most people who are important to me think that ___ perform wildfire risk reduction actions on my property's vegetation and home. (*Please circle one*)

I should not 1 2 3 4 5 6 7 I should

27. Most people whose opinion I value would approve of my performing wildfire risk reduction activities on my property's vegetation and home. (*Please circle one*)

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

28. It is expected of me that I complete wildfire risk reduction actions on my property's vegetation and home every year. (*Please circle one*)

Definitely false 1 2 3 4 5 6 7 Definitely true

29. Most of the residents in my neighborhood with whom I am acquainted with have preformed risk reduction activities on their property's vegetation and home to minimize the threat of wildfire. (*Please circle one*)

Definitely false 1 2 3 4 5 6 7 Definitely true

30. The following provides a list of individuals or groups who may think you should or should not perform wildfire risk reduction actions on your property's vegetation and home in the next 12 months. For each, please provide what you believe <u>their level of agreement would be</u> to you completing risk reduction actions on your property. (*Please circle one for each*)

	Should not take action						Should take action
My neighbors think that I	1	2	3	4	5	6	7
My friends think that I	1	2	3	4	5	6	7
My family think that I	1	2	3	4	5	6	7
My homeowner association thinks that I (*leave blank if not applicable*)	1	2	3	4	5	6	7
The City of Prescott and/or Yavapai County thinks that I	1	2	3	4	5	6	7

31. When it comes to reducing my risk from wildfires, I want to do what: (*Please circle one for each*)

	Disagree						Agree
My neighbors think I should do	1	2	3	4	5	6	7
My friends think that I should do	1	2	3	4	5	6	7
My family think that I should do	1	2	3	4	5	6	7
My homeowner's association thinks that I should do (*leave blank if not applicable*)	1	2	3	4	5	6	7
The City of Prescott and/or Yavapai County thinks that I should do	1	2	3	4	5	6	7

32. The following is a list of individuals or groups that you might be associated with. For each, please provide <u>their likelihood of performing wildfire risk reduction actions</u> on their property's vegetation and home in the next 12 months. (*Please circle one for each*)

	Would not take action						Would take action
My neighbors	1	2	3	4	5	6	7
My friends	1	2	3	4	5	6	7
My family	1	2	3	4	5	6	7
Owners of undeveloped property	1	2	3	4	5	6	7
Full-time residents	1	2	3	4	5	6	7
Renters	1	2	3	4	5	6	7
Out of state property owners	1	2	3	4	5	6	7
Seasonal/part-time residents	1	2	3	4	5	6	7

33. When it comes to matters of reducing risks from wildfires, how much do you want to be like: (*Please circle one for each*)

	Not at all						Very much
Your neighbors	1	2	3	4	5	6	7
Your friends	1	2	3	4	5	6	7
Your family	1	2	3	4	5	6	7
Owners of undeveloped property	1	2	3	4	5	6	7
Full-time residents	1	2	3	4	5	6	7
Renters	1	2	3	4	5	6	7
Out of state property owners	1	2	3	4	5	6	7
Seasonal/part-time residents	1	2	3	4	5	6	7

34. For myself to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is: (*Please circle one*)

Extremely difficult	1	2	3	4	5	6	7	Extremely easy

35. I am confident that if I wanted to I could complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months. (*Please circle one*)

False	1	2	3	4	5	6	7	True

36. For me to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is: (*Please circle one*)

Impossible	1	2	3	4	5	6	7	Possible

37. I feel in complete control over whether I perform wildfire risk reduction actions on my property's vegetation and home in the next 12 months. (*Please circle one*)

Definitely False	1	2	3	4	5	6	7	Definitely True

38. The number of events outside my control which could prevent me from performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months are: (*Please circle one*)

Numerous	1	2	3	4	5	6	7	Very few

39. Many factors can aid or hinder our ability to perform wildfire risk reduction actions on our property's vegetation and home. For each of the following statements, please provide your level of agreement that the event would impact your ability to perform risk reduction action on your property's vegetation and home. ***(Please circle your level of agreement for each)***

	Disagree						Agree
Being physical fit would enable me to perform wildfire risk reduction actions.	1	2	3	4	5	6	7
A debilitating illness would make it difficult for me to perform wildfire risk reduction actions.	1	2	3	4	5	6	7
Living on a fixed income would make it difficult for me to perform wildfire risk reduction actions.	1	2	3	4	5	6	7
Having the knowledge on how to protect my property would enable me to perform wildfire risk reduction actions.	1	2	3	4	5	6	7
Daily obligations such as family and work make it difficult to find time to perform wildfire risk reduction actions.	1	2	3	4	5	6	7
Having the appropriate tools would enable me to perform wildfire risk reduction actions.	1	2	3	4	5	6	7

40. In the next 12 months I will: ***(Please circle your level of likelihood for each)***

	Unlikely						Likely
Be physically fit	1	2	3	4	5	6	7
Experience a debilitating illness	1	2	3	4	5	6	7
Be on a fixed income	1	2	3	4	5	6	7
Have the knowledge on how to perform risk reduction actions	1	2	3	4	5	6	7
Not have the time to perform risk reduction actions	1	2	3	4	5	6	7
Have the tools needed to perform risk reduction actions	1	2	3	4	5	6	7

The final section asks basic demographic questions about yourself.

41. What is your gender? (*Please ✓one box*)

☐ Male ☐ Female

42. What was the year of your birth? (*Please enter year*)

19 ____

43. Please indicate which race or ethnic background you identify with. (*Please ✓all that apply*)

☐ White ☐ Black or African American

☐ American Indian or Alaska Native ☐ Asian

☐ Hispanic or Latino ☐ Native Hawaiian or Other Pacific Islander

☐ Other race or ethnicity? (*please specify*) _____

44. What is your current annual household income? (*Please ✓one box*)

☐ Less than $15,000 ☐ $15,000 - $29,999 ☐ $30,000 - $44,999

☐ $45,000 - $59,999 ☐ $60,000 - $74,999 ☐ $75,000 - $89,999

☐ $90,000 - $104,999 ☐ $105,000 – $119,999 ☐ $120,000 or more

45. What is the highest degree or level of school completed? (*Please ✓one box*)

☐ No schooling ☐ Some high school ☐ High school diploma/GED

☐ Some college ☐ Associate's degree ☐ Bachelor's degree

☐ Master's degree ☐ Professional degree ☐ Doctorate degree

46. What is your current employment status? (*Please ✓one box*)

☐ Working full-time ☐ Working part-time ☐ Retired ☐ Unemployed

47. Are you serving or have you ever served in the military? (*Please ✓one box*)

☐ Yes ☐ No

If yes, what is your current military status? (*Please ✓one box*)

☐ Active Duty ☐ Reserves ☐ Retired

48. Please tell us any additional thoughts you may have concerning wildfire risk reduction actions on your property. (*Please use the space below for your response*)

Thank you for your participation.

Your answers will be very helpful

If you have any questions, please contact:

Eric Steffey
411 N. Central Ave.
Suite 550
Phoenix, AZ 85004
(928) 275 - 2083
WildfireMitigationStudy@asu.edu

Participant Code

Appendix D

HOA Sample Results

Wildfire Risk Reduction Actions in Prescott, Arizona

A study of homeowner's action in reducing the impacts of wildfire on life and property.

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Thank you for your help!

Yavapaifirewise.org

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Your participation in this survey will remain confidential and at no time will your name be identified with any results. All the information collected will be used for statistical purposes. Your response to this request is completely voluntary and the completion of the survey is considered your consent to participate. Your participation in this study is of great interest to us and your local community.

The survey will take approximately 30 minutes to complete.

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What are wildfire risk reduction actions?

These are action one can take to reduce the impact of a wildfire (if one were to threaten your property) on your property's house, personal belongings, and life. These actions include use of fire proofing material on structures and regular maintenance on the yard's vegetation. Below is a short list of some actions recommended by the Firewise Communities Program. For more information on wildfire risk reduction actions and local efforts to create a resilient community, please visit YavapaiFirewise.org.

Actions on house	Actions on vegetation
Install non-combustible roof & keep free of debris	Branches removed within 10 feet of roof
Close all outside gaps & place screens over vents	Green vegetated area maintained w/in 30 ft. of home
Install fire resistant siding	Lower tree branches removed to 12 feet
Install tempered double pane windows	Dead vegetation, leaves, & needles regularly cleared w/in 30 ft of home
Enclose openings under decks & porches	

If you have any questions about the survey, please feel free to contact Eric Steffey at Arizona State University by email WildfireMitigationStudy@asu.edu or by phone at (928) 275-2083.

This study is being conducted under the direction of Dr. Megha Budruk, Associate Professor, School of Community Resources and Development, Arizona State University. You can contact her by email Megha.Budruk@asu.edu or by phone at (602) 496-0171.

This study has been reviewed and approved by the Arizona State University Institutional Review Board. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788.

Thank you!

The first section asks about your home ownership, property characteristics, and residency.

1. **How many days a year, on average, do you reside in the residence located in Prescott, Arizona? (*Please enter number of days*)**

   309.36 Days

2. **How many years have you lived at/owned this property? (*Please enter number of years*)**

   9.25 Years

3. **What type of housing unit is located on the property owned in Prescott, Arizona? (*please ✓one*)**

   100% Single family home **0%** Townhome **0%** Condominium

   0% Duplex, triplex, etc. **0%** Manufactured or mobile home

4. **How many stories is the home located on the parcel owned in Prescott, Arizona? (*please ✓one*)**

   47.7% 1 story **49.0%** 2 stories **3.3%** 3 or more stories

5. **What is the construction material of your home? (*please ✓one*)**

   5.7% Wood frame with vinyl siding **37.5%** Wood frame with wood siding

   47.2% Wood frame with stucco siding **1.3%** Wood frame with brick siding

   6.7% Wood frame with concrete siding **0.3%** Wood frame with metal siding

   0.7% Cinder block **0.7%** Concrete

6. **What type of roof is on the home? (*please ✓one*)**

   0.0% Cedar shake **71.2%** Asphalt shingles **2.3%** Metal **25.8%** Terra cotta tiles **0.7%** Other

7. **Has your homeowner's insurance company ever: (*please ✓one for each*)**

   Threatened to cancel your policy if wildfire risk reduction actions were not taken on your property?

   1.0% Yes **97.4%** No **1.6%** Not sure

   Provided incentives or discounts for taking wildfire risk reduction action on your property or for living in a registered Firewise Community?

   10.0% Yes **70.7%** No **19.3%** Not sure

8. **Is your home located in a neighborhood with an active Homeowner's Association? (*please ✓one*)**

   100% Yes ➪ **0.0%** No **0.0%** Not sure

   If yes, how would you rate the influence the association has on your actions concerning protecting your property from the risk of wildfire? *(Please circle one)*

   No influence **6.0%** **5.0%** **9.6%** **11.3%** **16.9%** **23.3%** **27.9%** Much influence

This section asks about your personal experiences with and knowledge of wildfire.

9. How well informed do you consider yourself to be about wildfire risks to your property? (C*ircle one*)

Not at all informed	**1.0%**	**2.0%**	**1.6%**	**5.9%**	**19.7%**	**30.6%**	**39.1%**	Very informed

10. To what extent do you find information about wildfires to be personally relevant? (C*ircle one*)

Not at all relevant	**0.3%**	**1.3%**	**3.0%**	**4.6%**	**13.2%**	**22.0%**	**55.6%**	Very relevant

11. How motivated are you to learn more about the connection between wildfire risk and undertaking behaviors to create defensible space around your home? (C*ircle one*)

Not at all motivated	**0.7%**	**0.7%**	**4.3%**	**7.6%**	**16.2%**	**27.5%**	**43.0%**	Very motivated

12. To understand impacts of wildfire events, please identify the year of your first and most recent experience for each of the following. Also, provide the number of times you have experienced that particular event. (*Please write in year and # of times experienced, if not experienced please write NA*)

Wildfire events	Year first experienced	Year most recently experienced	# of times experienced
Wildfire between 20 to 50 miles from property	**2013**	**2014**	**2.10**
Wildfire between 10 to 20 miles from property	**2013**	**2013**	**0.84**
Wildfire within 10 miles of property	**2013**	**2013**	**0.49**
Prepared to evacuate property	**2013**	**2013**	**0.30**
Evacuated property	**2009**	**2013**	**0.10**
Home, structure, and/or property damaged	**2013**	**2013**	**0.01**
Home, structure, and/or property destroyed	**2002**	**2002**	**0.01**

This section asks about responsibility of risk reduction actions and your perceived risks.

13. To what extent do you feel concerned about the effects of wildfire? (*Circle one*)

Not at all concerned	**0.3%**	**2.0%**	**3.0%**	**6.6%**	**17.5%**	**21.5%**	**49.0%**	Very concerned

14. How serious do you feel the negative consequences of wildfire are to you personally? (C*ircle one*)

Not at all serious	**0.3%**	**1.7%**	**3.0%**	**8.3%**	**19.0%**	**24.3%**	**43.3%**	Extremely serious

15. How vulnerable do you feel about the possibility of wildfire physically affecting you or your family? (*Circle one*)

Not at all vulnerable	**4.0%**	**8.0%**	**8.3%**	**22.6%**	**23.9%**	**18.6%**	**14.6%**	Extremely vulnerable

16. How vulnerable do you feel about the possibility of wildfire affecting your property and/or possessions? (*Circle one*)

Not at all vulnerable	**2.3%**	**6.3%**	**11.6%**	**22.4%**	**22.8%**	**20.1%**	**14.5%**	Extremely vulnerable

17. How severe would the impact of a wildfire be where you live? (*Circle one*)

Not at all severe	**1.0%**	**2.3%**	**4.3%**	**10.9%**	**10.2%**	**21.5%**	**49.8%**	Extremely severe

18. To what extent do you feel concerned about adjacent properties that have not taken wildfire risk reduction actions? (*Circle one*)

Not at all concerned	**2.3%**	**7.3%**	**7.3%**	**15.7%**	**20.3%**	**18.3%**	**28.7%**	Very concerned

19. For protection of <u>your property and home</u> in the Prescott area, how responsible are each of the following in reducing wildfire risk? (*Please circle the level of responsibility for each*)

	Not at all responsible						**Very responsible**	NA
Myself	**0.7%**	**0.0%**	**0.3%**	**3.3%**	**8.7%**	**21.3%**	**65.0%**	**0.7%**
My neighbors	**1.7%**	**1.3%**	**3.7%**	**7.0%**	**19.1%**	**25.4%**	**40.%**	**1.3%**
Homeowner association	**1.7%**	**2.0%**	**4.4%**	**9.8%**	**13.2%**	**26.7%**	**41.2%**	**1.0%**
City of Prescott	**3.7%**	**2.0%**	**6.4%**	**12.5%**	**17.9%**	**23.0%**	**30.1%**	**4.4%**
County of Yavapai	**4.8%**	**1.4%**	**9.2%**	**13.0%**	**16.4%**	**23.6%**	**27.1%**	**4.5%**
State of Arizona	**6.9%**	**5.9%**	**10.0%**	**16.6%**	**15.6%**	**18.3%**	**20.0%**	**6.6%**
Bureau of Land Management	**11.8%**	**5.9%**	**7.6%**	**10.4%**	**17.3%**	**19.4%**	**19.7%**	**8.0%**
USDA Forest Service	**6.1%**	**3.7%**	**3.7%**	**8.1%**	**15.5%**	**22.6%**	**35.4%**	**5.1%**

20. For overall protection of the <u>Prescott area</u>, how responsible are each of the following in reducing wildfire risk? (*Please circle the level of responsibility for each*)

	Not at all responsible						**Very responsible**	NA
Myself	**1.0%**	**3.4%**	**5.7%**	**10.4%**	**11.4%**	**17.8%**	**49.7%**	**0.7%**
My neighbors	**1.7%**	**4.4%**	**8.1%**	**12.5%**	**17.8%**	**23.6%**	**31.0%**	**1.0%**
Homeowner association	**4.0%**	**5.1%**	**5.1%**	**13.5%**	**15.5%**	**21.9%**	**33.3%**	**1.7%**
City of Prescott	**2.7%**	**0.3%**	**4.8%**	**8.2%**	**14.4%**	**29.8%**	**36.6%**	**3.1%**
County of Yavapai	**3.1%**	**1.4%**	**5.1%**	**8.9%**	**14.3%**	**30.4%**	**33.8%**	**3.1%**
State of Arizona	**4.5%**	**4.1%**	**6.9%**	**10.3%**	**17.2%**	**23.1%**	**29.3%**	**4.5%**
Bureau of Land Management	**8.0%**	**4.9%**	**5.2%**	**7.0%**	**17.8%**	**20.9%**	**30.3%**	**5.9%**
USDA Forest Service	**3.7%**	**2.7%**	**2.7%**	**6.1%**	**12.1%**	**25.6%**	**42.8%**	**4.4%**

21. The following list includes possible features of your home and actions that your household may have taken for the purpose of protecting your home from wildfires, or some other reason (e.g., yard beauty or protection from other natural hazards). (*For each feature and action below, please check the one box that best explains if or why your household took that action*)

	Not a feature of my home or property	Action is not necessary, as it existed when home was purchased	My household took this action primarily for wildfire safety reasons	My household took this action primarily for other reasons	Did not take action
Roof and rain gutters kept free of leaves, needles, and twigs	**5.7%**	**9.4%**	**30.1%**	**47.8%**	**7.0%**
Overhanging & dead branches are removed within 10 feet of roof	**10.4%**	**3.7%**	**60.7%**	**15.8%**	**9.4%**
Firewood & lumber are stacked at least 30 feet away from the home	**58.7%**	**2.3%**	**22.8%**	**5.0%**	**11.1%**
A green vegetated area is maintained at least 30 feet around the home	**22.7%**	**10.8%**	**37.6%**	**16.9%**	**11.9%**
Trees and shrubs are thinned within 30-50 feet from the home	**3.1%**	**8.1%**	**62.7%**	**16.9%**	**9.2%**
Shrubs & lower tree branches are removed	**2.0%**	**3.7%**	**64.2%**	**18.1%**	**12.0%**
Dead vegetation, leaves, & needles are cleared at least 30 feet from the home	**4.0%**	**2.3%**	**67.3%**	**20.3%**	**6.0%**
Home has fire-resistant roof (e.g. asphalt or metal)	**8.1%**	**37.2%**	**34.1%**	**15.2%**	**5.4%**
Home has screening installed on all vents	**5.2%**	**42.8%**	**21.0%**	**18.6%**	**12.4%**
Home construction material (e.g. siding & decks) are fire-resistant	**12.3%**	**32.4%**	**17.1%**	**13.3%**	**24.9%**
Underside of deck is enclosed to keep debris from collecting underneath	**38.7%**	**10.4%**	**11.4%**	**8.8%**	**30.6%**
Yard is landscaped with fire-resistant vegetation	**13.5**	**18.7%**	**17.6%**	**15.6%**	**34.6%**

22. The following list includes possible features of your home and actions that your household could take in the next 12 months for the purpose of protecting your home from wildfires, or some other reason (e.g., yard beauty or protection from other natural hazards). (*For each feature and action below, please check the one box that best explains your household's future intentions to complete each action*)

	Not a feature of my home or property	Structural action is not necessary, as it was already completed	My household plans to take this action primarily for wildfire safety reasons	My household plans to take this action primarily for other reasons	My household does not plan to complete this action
Roof and rain gutters will be kept free of leaves, needles, and twigs	**5.9%**	NA	**40.3%**	**37.5%**	**16.3%**
Overhanging and dead branches will be removed within 10 feet of roof	**10.9%**	NA	**50.9%**	**17.5%**	**20.7%**
A green vegetated area will be maintained at least 30 feet around the home	**23.5%**	NA	**41.8%**	**13.7%**	**21,1%**
Trees and shrubs will be thinned out within 30-50 feet from the home	**3.1%**	NA	**56.6%**	**15.0%**	**25.2%**
Shrubs & lower tree branches are removed	**2.1%**	NA	**58.4%**	**16.8%**	**22.7%**
Dead vegetation, leaves, & needles will be cleared at least 30 feet from the home	**4.1%**	NA	**49.3%**	**13.8%**	**32.8%**
Firewood and lumber will be stacked at least 30 feet away from the home	**59.1%**	**9.1%**	**19.9%**	**3.4%**	**8.4%**
Home will have fire-resistant roof installed (e.g. asphalt or metal)	**8.2%**	**69.3%**	**8.9%**	**2.4%**	**11.3%**
Home will have screening installed on all vents	**5.2%**	**65.5%**	**13.1%**	**3.8%**	**12.4%**
Fire resistant construction materials will be installed on the home (e.g. siding, porches, & decks)	**12.2%**	**47.0%**	**6.1%**	**1.7%**	**33.1%**
Underside of deck will be enclosed to keep debris from collecting underneath	**39.1%**	**22.1%**	**9.2%**	**4.1%**	**25.5%**
Yard will be landscaped with fire-resistant vegetation	**13.4%**	**32.2%**	**12.3%**	**7.2%**	**34.9%**

This section asks questions about your attitudes, perception, and constraints.

23. Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months is: ***(Please circle one for each)***

Harmful	**0.0%**	**0.3%**	**0.7%**	**1.7%**	**6.0%**	**19.1%**	**72.1%**	Beneficial
Bad	**0.0%**	**1.0%**	**0.3%**	**2.4%**	**4.5%**	**18.3%**	**73.4%**	Good
Worthless	**0.3%**	**1.0%**	**1.0%**	**4.1%**	**5.8%**	**17.8%**	**69.9%**	Valuable
Foolish	**1.0%**	**0.3%**	**1.0%**	**2.1%**	**3.8%**	**16.4%**	**75.3%**	Wise
Useless	**0.7%**	**0.3%**	**1.4%**	**2.7%**	**6.1%**	**16.7%**	**72.0%**	Useful
Punishing	**1.0%**	**1.0%**	**2.4%**	**10.4%**	**14.5%**	**14.2%**	**56.4%**	Rewarding
Unenjoyable	**2.7%**	**3.1%**	**7.5%**	**19.5%**	**17.1%**	**11.0%**	**39.0%**	Enjoyable
Undesirable	**1.7%**	**0.7%**	**1.4%**	**5.1%**	**6.8%**	**20.2%**	**64.0%**	Desirable
Unimportant	**0.3%**	**0.7%**	**1.4%**	**2.4%**	**5.5%**	**16.4%**	**73.4**	Important

24. Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months will: ***(Please circle the likelihood for each)***

	Unlikely						Likely
Give me a sense of security	**3.7%**	**1.0%**	**2.0%**	**8.8%**	**20.3%**	**20.0%**	**44.1%**
Provide safety for my family	**3.1%**	**1.4%**	**2.0%**	**9.6%**	**19.1%**	**18.4%**	**46.4%**
Protect my property value	**3.1%**	**1.7%**	**3.1%**	**6.8%**	**18.3%**	**18.0%**	**49.2%**
Still provide privacy around my home	**7.2%**	**5.1%**	**5.1%**	**12.3%**	**18.8%**	**15.4%**	**36.2%**
Come at a significant cost	**13.4%**	**14.5%**	**10.7%**	**21.7%**	**13.8%**	**13.1%**	**12.8%**
Reduce my risk to wildfire's impacts	**1.7%**	**1.4%**	**4.1%**	**8.1%**	**16.9%**	**20.0%**	**47.8%**
Protect my personal belongings	**2.4%**	**1.0%**	**4.4%**	**8.5%**	**19.3%**	**20.7%**	**43.7%**
Improve property appearance	**5.8%**	**3.4%**	**5.1%**	**13.2%**	**14.9%**	**19.3%**	**38.3%**
Not stop a fire from burning down home	**10.8%**	**9.7%**	**9.0%**	**29.2%**	**17.0%**	**8.7%**	**15.6%**

25. For the following, please provide your evaluation of each. ***(Please circle your rating for each)***

	Bad						Good
A sense of security is	**0.0%**	**0.0%**	**0.3%**	**2.0%**	**8.8%**	**18.6%**	**70.2%**
Protecting my family is	**0.0%**	**0.0%**	**0.0%**	**1.4%**	**4.4%**	**12.6%**	**81.6%**
Protection of my property value is	**0.0%**	**0.0%**	**0.3%**	**1.4%**	**6.8%**	**14.7%**	**76.7%**
Privacy around my home is	**0.0%**	**0.7%**	**0.7%**	**7.8%**	**12.3%**	**19.1%**	**59.4%**
Significant cost for mitigation is	**13.1%**	**14.5%**	**12.1%**	**27.0%**	**12.1%**	**7.8%**	**13.5%**
Reducing my risk to wildfire's impact is	**0.0%**	**0.7%**	**1.7%**	**2.4%**	**7.5%**	**20.3%**	**67.5%**
Protection of my belongings is	**0.3%**	**0.3%**	**0.7%**	**1.7%**	**9.5%**	**17.7%**	**69.7%**
Improving my property's appearance is	**0.3%**	**1.0%**	**1.0%**	**4.7%**	**9.2%**	**22.0%**	**61.7%**
My home burning down is	**81.9%**	**2.8%**	**1.0%**	**2.4%**	**0.7%**	**2.1%**	**9.1%**

26. Most people who are important to me think that ___ perform wildfire risk reduction actions on my property's vegetation and home. (*Please circle one*)

I should not	**1.4%**	**2.1%**	**1.0%**	**12.4%**	**12.4%**	**20.6%**	**50.2%**	I should

27. Most people whose opinion I value would approve of my performing wildfire risk reduction activities on my property's vegetation and home. (*Please circle one*)

Strongly disagree	**1.0%**	**0.7%**	**1.0%**	**5.8%**	**11.2%**	**23.7%**	**56.6%**	Strongly agree

28. It is expected of me that I complete wildfire risk reduction actions on my property's vegetation and home every year. (*Please circle one*)

Definitely false	**2.7%**	**3.4%**	**2.7%**	**10.5%**	**12.9%**	**21.4%**	**46.3%**	Definitely true

29. Most of the residents in my neighborhood with whom I am acquainted with have preformed risk reduction activities on their property's vegetation and home to minimize the threat of wildfire. (*Please circle one*)

Definitely false	**2.7%**	**5.4%**	**7.5%**	**12.9%**	**26.9%**	**22.8%**	**31.8%**	Definitely true

30. The following provides a list of individuals or groups who may think you should or should not perform wildfire risk reduction actions on your property's vegetation and home in the next 12 months. For each, please provide what you believe <u>their level of agreement would be</u> to you completing risk reduction actions on your property. (*Please circle one for each*)

	Should not take action						Should take action
My neighbors think that I	**3/2%**	**2.1%**	**6.0%**	**16.5%**	**19.7%**	**20.1%**	**32.4%**
My friends think that I	**2.5%**	**3.2%**	**6.7%**	**21.2%**	**18.0%**	**16.6%**	**31.8%**
My family think that I	**2.8%**	**2.1%**	**5.7%**	**13.5%**	**13.8%**	**20.2%**	**41.8%**
My homeowner association thinks that I (*leave blank if not applicable*)	**1.8%**	**2.5%**	**4.3%**	**10.1%**	**8.3%**	**19.1%**	**53.8%**
The City of Prescott and/or Yavapai County thinks that I	**3.2%**	**2.9%**	**4.3%**	**14.1%**	**12.6%**	**19.9%**	**43.0%**

31. When it comes to reducing my risk from wildfires, I want to do what: (*Please circle one for each*)

	Disagree						Agree
My neighbors think I should do	**9.2%**	**7.1%**	**11.3%**	**26.2%**	**12.8%**	**13.1%**	**20.2%**
My friends think that I should do	**8.9%**	**6.4%**	**12.5%**	**24.9%**	**14.6%**	**13.5%**	**19.2%**
My family think that I should do	**5.3%**	**2.8%**	**3.9%**	**14.9%**	**14.2%**	**17.0%**	**41.8%**
My homeowner's association thinks that I should do (*leave blank if not applicable*)	**3.9%**	**2.2%**	**5.0%**	**19.0%**	**14.7%**	**20.1%**	**35.1%**
The City of Prescott and/or Yavapai County thinks that I should do	**3.2%**	**1.8%**	**6.0%**	**17.0%**	**15.6%**	**19.9%**	**36.5%**

32. The following is a list of individuals or groups that you might be associated with. For each, please provide <u>their likelihood of performing wildfire risk reduction actions</u> on their property's vegetation and home in the next 12 months. (*Please circle one for each*)

	Would not take action						Would take action
My neighbors	**2.5%**	**6.0%**	**8.8%**	**15.4%**	**28.1%**	**21.8%**	**17.5%**
My friends	**1.8%**	**3.5%**	**6.4%**	**22.0%**	**20.6%**	**25.2%**	**20.6%**
My family	**2.9%**	**2.9%**	**5.1%**	**12.9**	**13.2%**	**23.2%**	**39.7%**
Owners of undeveloped property	**22.6%**	**20.4%**	**18.6%**	**20.1%**	**9.9%**	**4.0%**	**4.4%**
Full-time residents	**0.7%**	**2.9%**	**2.9%**	**14.6%**	**25.0%**	**28.6%**	**25.4%**
Renters	**36.5%**	**20.6%**	**17.7%**	**15.5%**	**4.3%**	**2.2%**	**3.2%**
Out of state property owners	**29.4%**	**19.0%**	**19.0%**	**14.0%**	**9.0%**	**4.7%**	**5.0%**
Seasonal/part-time residents	**16.7%**	**14.2%**	**16.7%**	**23.8%**	**13.5%**	**8.2%**	**6.8%**

33. When it comes to matters of reducing risks from wildfires, how much do you want to be like: (*Please circle one for each*)

	Not at all						Very much
Your neighbors	**10.1%**	**5.1%**	**7.9%**	**19.1%**	**20.2%**	**16.2%**	**21.3%**
Your friends	**8.1%**	**3.7%**	**8.1%**	**22.3%**	**19.0%**	**15.4%**	**32.4%**
Your family	**4.9%**	**2.3%**	**5.7%**	**14.3%**	**15.8%**	**18.9%**	**38.1%**
Owners of undeveloped property	**45.7%**	**17.1%**	**13.0%**	**11.5%**	**6.3%**	**2.2%**	**4.1%**
Full-time residents	**5.5%**	**1.5%**	**4.7%**	**15.3%**	**21.9%**	**25.5%**	**25.5%**
Renters	**46.6%**	**20.1%**	**11.6%**	**11.6%**	**5.2%**	**1.1%**	**3.7%**
Out of state property owners	**44.1%**	**17.8%**	**13.0%**	**12.6%**	**5.6%**	**2.2%**	**4.8%**
Seasonal/part-time residents	**32.1%**	**17.0%**	**13.7%**	**18.5%**	**7.4%**	**4.8%**	**6.6%**

34. For myself to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is: (*Please circle one*)

Extremely difficult	**2.4%**	**4.8%**	**7.2%**	**16.6%**	**25.5%**	**23.8%**	**19.7%**	Extremely easy

35. I am confident that if I wanted to I could complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months. (*Please circle one*)

False	**1.4%**	**2.4%**	**2.4%**	**5.9%**	**11.5%**	**25.5%**	**50.7%**	True

36. For me to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is: (*Please circle one*)

Impossible	**0.7%**	**1.4%**	**3.1%**	**5.9%**	**12.6%**	**26.9%**	**49.3%**	Possible

37. I feel in complete control over whether I perform wildfire risk reduction actions on my property's vegetation and home in the next 12 months. (*Please circle one*)

Definitely False	**2.8%**	**1.4%**	**5.6%**	**8.0%**	**11.2%**	**23.1%**	**47.9%**	Definitely True

38. The number of events outside my control which could prevent me from performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months are: (*Please circle one*)

Numerous	**3.5%**	**4.2%**	**4.5%**	**11.5%**	**14.6%**	**25.8%**	**35.9%**	Very few

39. Many factors can aid or hinder our ability to perform wildfire risk reduction actions on our property's vegetation and home. For each of the following statements, please provide your level of agreement that the event would impact your ability to perform risk reduction action on your property's vegetation and home. ***(Please circle your level of agreement for each)***

	Disagree						Agree
Being physical fit would enable me to perform wildfire risk reduction actions.	**2.8%**	**2.4%**	**1.7%**	**6.3%**	**13.9%**	**22.9%**	**50.0%**
A debilitating illness would make it difficult for me to perform wildfire risk reduction actions.	**3.8%**	**5.2%**	**2.8%**	**7.6%**	**7.6%**	**21.5%**	**51.4%**
Living on a fixed income would make it difficult for me to perform wildfire risk reduction actions.	**10.1%**	**6.6%**	**10.8%**	**14.7%**	**13.6%**	**19.6%**	**24.5%**
Having the knowledge on how to protect my property would enable me to perform wildfire risk reduction actions.	**2.4%**	**0.7%**	**2.8%**	**5.6%**	**11.5%**	**26.6%**	**50.3%**
Daily obligations such as family and work make it difficult to find time to perform wildfire risk reduction actions.	**25.8%**	**16.4%**	**11.5%**	**13.6%**	**13.9%**	**12.2%**	**6.6%**
Having the appropriate tools would enable me to perform wildfire risk reduction actions.	**5.2%**	**4.2%**	**4.9%**	**11.9%**	**13.6%**	**24.8%**	**35.3%**

40. In the next 12 months I will: ***(Please circle your level of likelihood for each)***

	Unlikely						Likely
Be physically fit	**4.2%**	**2.8%**	**2.5%**	**12.6%**	**17.2%**	**22.8%**	**37.9%**
Experience a debilitating illness	**47.9%**	**25.0%**	**9.3%**	**11.4%**	**1.4%**	**2.9%**	**2.1%**
Be on a fixed income	**29.6%**	**8.1%**	**4.6%**	**6.3%**	**5.3%**	**9.5%**	**36.6**
Have the knowledge on how to perform risk reduction actions	**1.8%**	**0.4%**	**4.9%**	**9.5%**	**11.3%**	**26.4%**	**45.8%**
Not have the time to perform risk reduction actions	**29.2%**	**19.0%**	**12.3%**	**13.0%**	**12.0%**	**7.0%**	**7.4%**
Have the tools needed to perform risk reduction actions	**6.7%**	**5.3%**	**5.6%**	**12.3%**	**17.5%**	**20.0%**	**32.6%**

The final section asks basic demographic questions about yourself.

41. What is your gender? (*Please ✓one box*)

64.4% Male **35.6%** Female

42. What was the year of your birth? (*Please enter year*)

19 **47**

43. Please indicate which race or ethnic background you identify with. (*Please ✓all that apply*)

97.1% White
0.4% Black or African American
0.4% American Indian or Alaska Native
0.4% Asian
1.1% Hispanic or Latino
0.0% Native Hawaiian or Other Pacific Islander
1.4% Other race or ethnicity? (*please specify*) _____

44. What is your current annual household income? (*Please ✓one box*)

2.1% Less than $15,000
5.5% $15,000 - $29,999
7.2% $30,000 - $44,999
17.4% $45,000 - $59,999
13.2% $60,000 - $74,999
8.1% $75,000 - $89,999
10.2% $90,000 - $104,999
9.4% $105,000 – $119,999
26.8% $120,000 or more

45. What is the highest degree or level of school completed? (*Please ✓one box*)

0.0% No schooling
0.4% Some high school
3.9% High school diploma/GED
15.1% Some college
9.2% Associate's degree
30.3% Bachelor's degree
26.4% Master's degree
7.0% Professional degree
7.7% Doctorate degree

46. What is your current employment status? (*Please ✓one box*)

22.2% Working full-time **10.4%** Working part-time **66.0%** Retired **1.4%** Unemployed

47. Are you serving or have you ever served in the military? (*Please ✓one box*)

30.9% Yes **69.1%** No

If yes, what is your current military status? (*Please ✓one box*)

1.2% Active Duty **3.7%** Reserves **93.8%** Retired

48. Please tell us any additional thoughts you may have concerning wildfire risk reduction actions on your property. (*Please use the space below for your response*)

Thank you for your participation.

Your answers will be very helpful

If you have any questions, please contact:

Eric Steffey
411 N. Central Ave.
Suite 550
Phoenix, AZ 85004
(928) 275 - 2083
WildfireMitigationStudy@asu.edu

Participant Code

Non-HOA Sample Results

Wildfire Risk Reduction Actions in Prescott, Arizona

A study of homeowner's action in reducing the impacts of wildfire on life and property.

Please complete the questionnaire and return in the postage paid envelope provided when you are finished.

Questionnaire may also be completed on-line at http://goo.gl/ygMkCT

Thank you for your help!

Yavapaifirewise.org

Dear Homeowner,

This research study seeks to learn about homeowner wildfire risk reduction behaviors in Prescott, Arizona. The aim of this research is to help inform your community about the unique dynamics concerning this topic. The study is part of a requirement for the completion of a dissertation and is cooperatively being conducted by the Prescott Area Wildland Urban Interface Commission, National Fire Protection Association, United Service Automobile Association, and Arizona State University. You are one of a small number of people randomly chosen to represent homeowners in the Prescott, Arizona region, so your opinions are important to us. You must be 18 years of age or older to participate.

Your participation in this survey will remain confidential and at no time will your name be identified with any results. All the information collected will be used for statistical purposes. Your response to this request is completely voluntary and the completion of the survey is considered your consent to participate. Your participation in this study is of great interest to us and your local community.

The survey will take approximately 30 minutes to complete.

For the purpose of this study, we offer the following clarifications:

What are wildfire risk reduction actions?

These are action one can take to reduce the impact of a wildfire (if one were to threaten your property) on your property's house, personal belongings, and life. These actions include use of fire proofing material on structures and regular maintenance on the yard's vegetation. Below is a short list of some actions recommended by the Firewise Communities Program. For more information on wildfire risk reduction actions and local efforts to create a resilient community, please visit YavapaiFirewise.org.

Actions on house	Actions on vegetation
Install non-combustible roof & keep free of debris	Branches removed within 10 feet of roof
Close all outside gaps & place screens over vents	Green vegetated area maintained w/in 30 ft. of home
Install fire resistant siding	Lower tree branches removed to 12 feet
Install tempered double pane windows	Dead vegetation, leaves, & needles regularly cleared w/in 30 ft of home
Enclose openings under decks & porches	

If you have any questions about the survey, please feel free to contact Eric Steffey at Arizona State University by email WildfireMitigationStudy@asu.edu or by phone at (928) 275-2083.

This study is being conducted under the direction of Dr. Megha Budruk, Associate Professor, School of Community Resources and Development, Arizona State University. You can contact her by email Megha.Budruk@asu.edu or by phone at (602) 496-0171.

This study has been reviewed and approved by the Arizona State University Institutional Review Board. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788.

Thank you!

The first section asks about your home ownership, property characteristics, and residency.

1. **How many days a year, on average, do you reside in the residence located in Prescott, Arizona? (*Please enter number of days*)**

   331.35 Days

2. **How many years have you lived at/owned this property? (*Please enter number of years*)**

   15.87 Years

3. **What type of housing unit is located on the property owned in Prescott, Arizona? (*please ✓one*)**

   100.0% Single family home **0.0%**Townhome **0.0%** Condominium

   0.0% Duplex, triplex, etc. **0.0%** Manufactured or mobile home

4. **How many stories is the home located on the parcel owned in Prescott, Arizona? (*please ✓one*)**

   47.7% 1 story **49.0%** 2 stories **3.3%** 3 or more stories

5. **What is the construction material of your home? (*please ✓one*)**

   6.8% Wood frame with vinyl siding 41.8**%** Wood frame with wood siding

   30.5% Wood frame with stucco siding **3.7%** Wood frame with brick siding

   4.0% Wood frame with concrete siding **1.5%** Wood frame with metal siding

   8.9% Cinder block **2.8%** Concrete

6. **What type of roof is on the home? (*please ✓one*)**

   0.6% Cedar shake **83.2%** Asphalt shingles **7.0%**Metal **9.2%** Terra cotta tiles

7. **Has your homeowner's insurance company ever: (*please ✓one for each*)**

   Threatened to cancel your policy if wildfire risk reduction actions were not taken on your property?

   1.2% Yes **96.7%** No **2.1%** Not sure

   Provided incentives or discounts for taking wildfire risk reduction action on your property or for living in a registered Firewise Community?

   3.0% Yes **79.0%** No **17.9%** Not sure

8. **Is your home located in a neighborhood with an active Homeowner's Association? (*please ✓one*)**

   0.0%Yes ➪ **100.0%** No **0.0%** Not sure

   If yes, how would you rate the influence the association has on your actions concerning protecting your property from the risk of wildfire? *(Please circle one)*

   No influence **NA** **NA** **NA** **NA** **NA** **NA** **NA** Much influence

This section asks about your personal experiences with and knowledge of wildfire.

9. How well informed do you consider yourself to be about wildfire risks to your property? (C*ircle one*)

Not at all informed	**1.2%**	**2.2%**	**4.0%**	**10.8%**	**20.6%**	**29.2%**	**32.0%**	Very informed

10. To what extent do you find information about wildfires to be personally relevant? (C*ircle one*)

Not at all relevant	**1.8%**	**1.2%**	**4.0%**	**7.1%**	**13.5%**	**20.2%**	**52.1%**	Very relevant

11. How motivated are you to learn more about the connection between wildfire risk and undertaking behaviors to create defensible space around your home? (C*ircle one*)

Not at all motivated	**2.1%**	**2.4%**	**6.1%**	**12.5%**	**17.7%**	**21.1%**	**37.9%**	Very motivated

12. To understand impacts of wildfire events, please identify the year of your first and most recent experience for each of the following. Also, provide the number of times you have experienced that particular event. (*Please write in year and # of times experienced, if not experienced please write NA*)

Wildfire events	Year first experienced	Year most recently experienced	# of times experienced
Wildfire between 20 to 50 miles from property	**2013**	**2013**	**2.17**
Wildfire between 10 to 20 miles from property	**2012**	**2013**	**1.03**
Wildfire within 10 miles of property	**2013**	**2013**	**0.68**
Prepared to evacuate property	**2012**	**2013**	**0.26**
Evacuated property	**2006**	**2006**	**0.06**
Home, structure, and/or property damaged	**2000**	**2000**	**0.01**
Home, structure, and/or property destroyed	**2013**	**2013**	**0.01**

This section asks about responsibility of risk reduction actions and your perceived risks.

13. To what extent do you feel concerned about the effects of wildfire? (*Circle one*)

Not at all concerned	**1.8%**	**2.4%**	**4.0%**	**8.8%**	**19.5%**	**19.5%**	**44.1%**	Very concerned

14. How serious do you feel the negative consequences of wildfire are to you personally? (C*ircle one*)

Not at all serious	**2.7%**	**3.6%**	**4.3%**	**9.7%**	**16.7%**	**18.8%**	**44.1%**	Extremely serious

15. How vulnerable do you feel about the possibility of wildfire physically affecting you or your family? (*Circle one*)

Not at all vulnerable	**5.8%**	**8.5%**	**12.8%**	**21.9%**	**22.5%**	**10.9%**	**17.6%**	Extremely vulnerable

16. How vulnerable do you feel about the possibility of wildfire affecting your property and/or possessions? (*Circle one*)

Not at all vulnerable	**5.5%**	**9.7%**	**14.6%**	**21.3%**	**21.9%**	**11.9%**	**15.2%**	Extremely vulnerable

17. How severe would the impact of a wildfire be where you live? (*Circle one*)

Not at all severe	**2.7%**	**4.3%**	**4.9%**	**9.1%**	**11.6%**	**17.1%**	**50.3%**	Extremely severe

18. To what extent do you feel concerned about adjacent properties that have not taken wildfire risk reduction actions? (*Circle one*)

Not at all concerned	**7.0%**	**8.3%**	**10.7%**	**16.2%**	**17.4%**	**18.3%**	**22.0%**	Very concerned

19. For protection of <u>your property and home</u> in the Prescott area, how responsible are each of the following in reducing wildfire risk? (*Please circle the level of responsibility for each*)

	Not at all responsible						**Very responsible**	NA
Myself	**0.6%**	**0.6%**	**2.5%**	**6.5%**	**9.3%**	**24.7%**	**53.7%**	**2.2%**
My neighbors	**3.4%**	**3.1%**	**5.6%**	**16.6%**	**20.1%**	**21.3%**	**27.3%**	**2.5%**
Homeowner association	**7.1%**	**0.3%**	**0.3%**	**3.0%**	**1.3%**	**3.0%**	**3.4%**	**81.5%**
City of Prescott	**4.5%**	**2.9%**	**5.4%**	**9.3%**	**14.4%**	**17.6**	**29.5**	**16.3**
County of Yavapai	**4.7%**	**3.1%**	**8.5%**	**10.7%**	**17.6%**	**19.5%**	**29.9%**	**6.0%**
State of Arizona	**7.1%**	**4.5%**	**9.3%**	**12.5%**	**15.4%**	**15.7%**	**26.0%**	**9.6%**
Bureau of Land Management	**8.4%**	**4.5%**	**4.9%**	**10.4%**	**13.0%**	**15.6%**	**24.4%**	**18.8%**
USDA Forest Service	**7.9%**	**1.9%**	**3.5%**	**8.9%**	**14.6%**	**16.5%**	**34.0%**	**12.7%**

20. For overall protection of the <u>Prescott area</u>, how responsible are each of the following in reducing wildfire risk? (*Please circle the level of responsibility for each*)

	Not at all responsible						**Very responsible**	NA
Myself	**2.2%**	**2.5%**	**5.0%**	**11.5%**	**15.2%**	**19.6%**	**42.2%**	**1.9%**
My neighbors	**4.1%**	**5.4%**	**5.7%**	**15.9%**	**18.7%**	**18.1%**	**28.6%**	**3.5%**
Homeowner association	**6.8%**	**1.0%**	**1.4%**	**2.0%**	**1.7%**	**4.8%**	**10.9%**	**71.4%**
City of Prescott	**2.2%**	**1.6%**	**4.5%**	**9.0%**	**12.5%**	**22.4%**	**41.0%**	**6.7%**
County of Yavapai	**2.9%**	**1.9%**	**6.4%**	**6.1%**	**12.4%**	**22.6%**	**43.3%**	**4.5%**
State of Arizona	**4.2%**	**3.5%**	**6.8%**	**10.0%**	**12.3%**	**20.0%**	**34.8%**	**8.4%**
Bureau of Land Management	**5.1%**	**2.6%**	**4.5%**	**7.1%**	**11.9%**	**20.3%**	**34.7%**	**13.8%**
USDA Forest Service	**3.5%**	**1.3%**	**2.2%**	**7.3%**	**10.8%**	**21.3%**	**47.6%**	**6.0%**

21. The following list includes possible features of your home and actions that your household may have taken for the purpose of protecting your home from wildfires, or some other reason (e.g., yard beauty or protection from other natural hazards). (*For each feature and action below, please check the one box that best explains if or why your household took that action*)

	Not a feature of my home or property	Action is not necessary, as it existed when home was purchased	My household took this action primarily for wildfire safety reasons	My household took this action primarily for other reasons	Did not take action
Roof and rain gutters kept free of leaves, needles, and twigs	**4.6%**	**5.3%**	**23.8%**	**61.6%**	**4.6%**
Overhanging & dead branches are removed within 10 feet of roof	**6.3%**	**2.5%**	**39.9%**	**32.4%**	**18.9%**
Firewood & lumber are stacked at least 30 feet away from the home	**38.4%**	**0.6%**	**31.4%**	**12.7%**	**16.8%**
A green vegetated area is maintained at least 30 feet around the home	**21.1%**	**8.2%**	**24.0%**	**29.0%**	**17.7%**
Trees and shrubs are thinned within 30-50 feet from the home	**6.3%**	**2.8%**	**40.0%**	**29.4%**	**21.6%**
Shrubs & lower tree branches are removed	**3.2%**	**2.8%**	**40.8%**	**33.2%**	**19.9%**
Dead vegetation, leaves, & needles are cleared at least 30 feet from the home	**4.1%**	**1.3%**	**46.9%**	**37.5%**	**10.3%**
Home has fire-resistant roof (e.g. asphalt or metal)	**8.9%**	**32.7%**	**26.0%**	**24.4%**	**7.9%**
Home has screening installed on all vents	**9.0%**	**30.1%**	**16.3%**	**25.6%**	**18.9%**
Home construction material (e.g. siding & decks) are fire-resistant	**12.9%**	**25.1%**	**13.5%**	**13.8%**	**34.7%**
Underside of deck is enclosed to keep debris from collecting underneath	**39.2%**	**8.7%**	**8.4%**	**10.9%**	**32.8%**
Yard is landscaped with fire-resistant vegetation	**14.7%**	**11.8%**	**10.2%**	**18.5%**	**44.7%**

22. The following list includes possible features of your home and actions that your household could take in the next 12 months for the purpose of protecting your home from wildfires, or some other reason (e.g., yard beauty or protection from other natural hazards). (*For each feature and action below, please check the one box that best explains your household's future intentions to complete each action*)

	Not a feature of my home or property	Structural action is not necessary, as it was already completed	My household plans to take this action primarily for wildfire safety reasons	My household plans to take this action primarily for other reasons	My household does not plan to complete this action
Roof and rain gutters will be kept free of leaves, needles, and twigs	**4.9%**	NA	**25.9%**	**53.4%**	**15.9%**
Overhanging and dead branches will be removed within 10 feet of roof	**6.5%**	NA	**42.0%**	**28.0%**	**23.5%**
A green vegetated area will be maintained at least 30 feet around the home	**22.0%**	NA	**26.0%**	**23.0%**	**28.9%**
Trees and shrubs will be thinned out within 30-50 feet from the home	**6.5%**	NA	**39.5%**	**25.2%**	**28.8%**
Shrubs & lower tree branches are removed	**3.3%**	NA	**39.7%**	**31.3%**	**25.7%**
Dead vegetation, leaves, & needles will be cleared at least 30 feet from the home	**4.2%**	NA	**37.7%**	**26.6%**	**31.5%**
Firewood and lumber will be stacked at least 30 feet away from the home	**39.0%**	**18.4%**	**18.4%**	**11.6%**	**12.6%**
Home will have fire-resistant roof installed (e.g. asphalt or metal)	**9.1%**	**65.9%**	**4.5%**	**5.5%**	**14.9%**
Home will have screening installed on all vents	**9.2%**	**56.9%**	**8.2%**	**6.6%**	**19.1%**
Fire resistant construction materials will be installed on the home (e.g. siding, porches, & decks)	**13.2%**	**39.1%**	**3.9%**	**4.9%**	**38.8%**
Underside of deck will be enclosed to keep debris from collecting underneath	**39.6%**	**18.8%**	**6.8%**	**5.8%**	**28.9%**
Yard will be landscaped with fire-resistant vegetation	**15.0%**	**29.4%**	**7.2%**	**9.5%**	**38.9%**

This section asks questions about your attitudes, perception, and constraints.

23. Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months is: ***(Please circle one for each)***

Harmful	**0.0%**	**0.3%**	**0.0%**	**4.8%**	**7.0%**	**21.4%**	**66.5%**	Beneficial
Bad	**1.3%**	**0.6%**	**0.3%**	**5.5%**	**4.9%**	**21.4%**	**65.9%**	Good
Worthless	**1.3%**	**0.7%**	**1.0%**	**5.6%**	**6.2%**	**22.5%**	**62.7%**	Valuable
Foolish	**2.6%**	**1.3%**	**0.0%**	**4.9%**	**5.2%**	**17.5%**	**68.5%**	Wise
Useless	**2.6%**	**0.7%**	**0.0%**	**5.6%**	**5.9%**	**22.0%**	**63.3%**	Useful
Punishing	**2.3%**	**1.0%**	**2.0%**	**11.2%**	**11.5%**	**22.0%**	**50.0%**	Rewarding
Unenjoyable	**6.8%**	**5.2%**	**5.5%**	**17.5%**	**17.5%**	**16.9%**	**30.5%**	Enjoyable
Undesirable	**2.0%**	**1.6%**	**1.0%**	**8.5%**	**10.1%**	**21.9%**	**54.9%**	Desirable
Unimportant	**2.6%**	**0.0%**	**1.0%**	**4.8%**	**7.4%**	**21.8%**	**62.5%**	Important

24. Performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months will: ***(Please circle the likelihood for each)***

	Unlikely						Likely
Give me a sense of security	**2.9%**	**1.6%**	**3.5%**	**9.8%**	**18.1%**	**19.4%**	**44.8%**
Provide safety for my family	**2.6%**	**1.9%**	**2.6%**	**9.0%**	**17.0%**	**23.8%**	**43.1%**
Protect my property value	**2.9%**	**1.9%**	**4.8%**	**9.3%**	**16.0%**	**21.1%**	**44.1%**
Still provide privacy around my home	**8.0%**	**4.5%**	**7.4%**	**13.8%**	**17.6%**	**16.7%**	**32.1%**
Come at a significant cost	**11.0%**	**8.7%**	**10.3%**	**16.5%**	**14.2%**	**14.2%**	**25.2%**
Reduce my risk to wildfire's impacts	**2.9%**	**3.2%**	**2.9%**	**9.6%**	**16.3%**	**19.5%**	**45.7%**
Protect my personal belongings	**2.9%**	**2.6%**	**2.9%**	**8.7%**	**17.1%**	**22.3%**	**43.5%**
Improve property appearance	**6.1%**	**2.6%**	**4.5%**	**15.0%**	**18.8%**	**18.2%**	**34.8%**
Not stop a fire from burning down home	**11.6%**	**5.8%**	**12.9%**	**22.6%**	**14.2%**	**11.6%**	**21.3%**

25. For the following, please provide your evaluation of each. ***(Please circle your rating for each)***

	Bad						Good
A sense of security is	**0.0%**	**0.0%**	**0.6%**	**3.8%**	**6.0%**	**17.8%**	**71.7%**
Protecting my family is	**0.0%**	**0.3%**	**0.3%**	**1.6%**	**5.4%**	**13.5%**	**78.8%**
Protection of my property value is	**0.0%**	**0.0%**	**0.6%**	**2.6%**	**8.0%**	**18.5%**	**70.3%**
Privacy around my home is	**0.0%**	**1.0%**	**1.9%**	**4.2%**	**14.1%**	**18.0%**	**60.8%**
Significant cost for mitigation is	**17.9%**	**9.4%**	**12.1%**	**22.8%**	**11.4%**	**9.1%**	**17.3%**
Reducing my risk to wildfire's impact is	**0.0%**	**0.3%**	**0.6%**	**5.1%**	**8.9%**	**20.7%**	**64.3%**
Protection of my belongings is	**0.0%**	**0.3%**	**0.3%**	**3.5%**	**7.3%**	**22.9%**	**65.6%**
Improving my property's appearance is	**0.0%**	**0.3%**	**0.6%**	**6.1%**	**11.8%**	**214%**	**59.7%**
My home burning down is	**78.5%**	**2.9%**	**0.6%**	**2.6%**	**2.3%**	**2.9%**	**10.3%**

26. Most people who are important to me think that ___ perform wildfire risk reduction actions on my property's vegetation and home. (*Please circle one*)

I should not	**3.2%**	**2.6%**	**4.2%**	**20.4%**	**14.1%**	**16.3%**	**39.3%**	I should

27. Most people whose opinion I value would approve of my performing wildfire risk reduction activities on my property's vegetation and home. (*Please circle one*)

Strongly disagree	**1.3%**	**1.3%**	**1.9%**	**13.1%**	**10.8%**	**22.9%**	**48.7%**	Strongly agree

28. It is expected of me that I complete wildfire risk reduction actions on my property's vegetation and home every year. (*Please circle one*)

Definitely false	**7.3%**	**3.8%**	**5.1%**	**14.9%**	**13.6%**	**13.9%**	**41.5%**	Definitely true

29. Most of the residents in my neighborhood with whom I am acquainted with have preformed risk reduction activities on their property's vegetation and home to minimize the threat of wildfire. (*Please circle one*)

Definitely false	**10.5%**	**9.9%**	**10.2%**	**24.8%**	**19.4%**	**10.5%**	**14.6%**	Definitely true

30. The following provides a list of individuals or groups who may think you should or should not perform wildfire risk reduction actions on your property's vegetation and home in the next 12 months. For each, please provide what you believe <u>their level of agreement would be</u> to you completing risk reduction actions on your property. (*Please circle one for each*)

	Should not take action						Should take action
My neighbors think that I	**9.6%**	**3.1%**	**9.6%**	**29.2%**	**15.8%**	**14.1%**	**18.6%**
My friends think that I	**8.6%**	**5.1%**	**8.9%**	**28.4%**	**15.8%**	**13.7%**	**19.5%**
My family think that I	**8.3%**	**3.5%**	**10.1%**	**22.9%**	**13.5%**	**17.4%**	**24.3%**
My homeowner association thinks that I (*leave blank if not applicable*)	**29.0%**	**4.8%**	**6.5%**	**30.6%**	**6.5%**	**4.8%**	**17.7%**
The City of Prescott and/or Yavapai County thinks that I	**6.7%**	**2.5%**	**7.7%**	**15.8%**	**12.0%**	**18.0%**	**37.3%**

31. When it comes to reducing my risk from wildfires, I want to do what: (*Please circle one for each*)

	Disagree						Agree
My neighbors think I should do	**22.1%**	**8.7%**	**8.0%**	**24.2%**	**12.5%**	**8.7%**	**15.9%**
My friends think that I should do	**19.0%**	**8.7%**	**8.0%**	**26.3%**	**13.5%**	**8.0%**	**16.6%**
My family think that I should do	**13.5%**	**3.8%**	**5.5%**	**17.0%**	**15.2%**	**16.6%**	**28.4%**
My homeowner's association thinks that I should do (*leave blank if not applicable*)	**45.3%**	**5.3%**	**4.0%**	**17.3%**	**4.0%**	**8.0%**	**16.0%**
The City of Prescott and/or Yavapai County thinks that I should do	**9.4%**	**4.2%**	**5.2%**	**19.4%**	**17.4%**	**17.0%**	**27.4%**

32. The following is a list of individuals or groups that you might be associated with. For each, please provide <u>their likelihood of performing wildfire risk reduction actions</u> on their property's vegetation and home in the next 12 months. (*Please circle one for each*)

	Would not take action						Would take action
My neighbors	**9.7%**	**11.3%**	**11.3%**	**25.0%**	**23.7%**	**8.0%**	**11.0%**
My friends	**5.7%**	**6.1%**	**11.5%**	**28.4%**	**21.3%**	**13.9%**	**13.2%**
My family	**5.0%**	**5.8%**	**5.8%**	**23.0%**	**16.2%**	**19.1%**	**25.2%**
Owners of undeveloped property	**34.4%**	**23.3%**	**12.8%**	**17.0%**	**5.2%**	**3.1%**	**4.2%**
Full-time residents	**5.8%**	**4.8%**	**3.4%**	**25.5%**	**21.1%**	**22.1%**	**17.3%**
Renters	**44.4%**	**24.1%**	**10.5%**	**14.7%**	**2.8%**	**1.4%**	**2.1%**
Out of state property owners	**38.3%**	**24.1%**	**10.3%**	**17.7%**	**2.8%**	**3.2%**	**3.5%**
Seasonal/part-time residents	**25.2%**	**21.0%**	**20.3%**	**17.5%**	**5.6%**	**5.6%**	**4.9%**

33. When it comes to matters of reducing risks from wildfires, how much do you want to be like: (*Please circle one for each*)

	Not at all						Very much
Your neighbors	**20.4%**	**9.4%**	**8.7%**	**24.7%**	**14.0%**	**8.0%**	**14.7%**
Your friends	**13.7%**	**7.2%**	**9.2%**	**29.1%**	**15.1%**	**9.2%**	**16.4%**
Your family	**11.0%**	**3.2%**	**6.4%**	**22.3%**	**14.2%**	**15.2%**	**27.7%**
Owners of undeveloped property	**47.1%**	**16.6%**	**9.0%**	**16.6%**	**4.5%**	**2.1%**	**4.2%**
Full-time residents	**12.7%**	**3.8%**	**6.9%**	**24.7%**	**16.8%**	**16.8%**	**18.2%**
Renters	**54.4%**	**15.4%**	**6.7%**	**16.1%**	**3.9%**	**0.4%**	**3.2%**
Out of state property owners	**51.9%**	**14.6%**	**7.3%**	**16.0%**	**4.5%**	**1.0%**	**4.5%**
Seasonal/part-time residents	**43.4%**	**16.0%**	**8.7%**	**18.4%**	**5.2%**	**1.7%**	**6.6%**

34. For myself to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is: (*Please circle one*)

Extremely difficult	**5.1%**	**6.7%**	**12.2%**	**20.8%**	**19.2%**	**15.7%**	**20.2%**	Extremely easy

35. I am confident that if I wanted to I could complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months. (*Please circle one*)

False	**3.5%**	**3.2%**	**4.8%**	**10.8%**	**12.1%**	**22.6%**	**43.0%**	True

36. For me to complete wildfire risk reduction actions on my property's vegetation and home in the next 12 months is: (*Please circle one*)

Impossible	**2.9%**	**3.5%**	**3.2%**	**14.0%**	**15.0%**	**23.6%**	**37.9%**	Possible

37. I feel in complete control over whether I perform wildfire risk reduction actions on my property's vegetation and home in the next 12 months. (*Please circle one*)

Definitely False	**3.2%**	**2.5%**	**3.2%**	**10.5%**	**13.4%**	**22.0%**	**45.2%**	Definitely True

38. The number of events outside my control which could prevent me from performing wildfire risk reduction actions on my property's vegetation and home in the next 12 months are: (*Please circle one*)

Numerous	**5.1%**	**3.5%**	**7.7%**	**15.3%**	**16.9%**	**19.5%**	**31.9%**	Very few

39. Many factors can aid or hinder our ability to perform wildfire risk reduction actions on our property's vegetation and home. For each of the following statements, please provide your level of agreement that the event would impact your ability to perform risk reduction action on your property's vegetation and home. ***(Please circle your level of agreement for each)***

	Disagree						Agree
Being physical fit would enable me to perform wildfire risk reduction actions.	**1.9%**	**1.9%**	**1.6%**	**6.4%**	**12.2%**	**24.7%**	**51.3%**
A debilitating illness would make it difficult for me to perform wildfire risk reduction actions.	**6.1%**	**2.6%**	**2.9%**	**5.1%**	**6.7%**	**19.5%**	**57.2%**
Living on a fixed income would make it difficult for me to perform wildfire risk reduction actions.	**9.6%**	**8.7%**	**5.8%**	**10.9%**	**12.5%**	**17.7%**	**34.7%**
Having the knowledge on how to protect my property would enable me to perform wildfire risk reduction actions.	**1.9%**	**3.9%**	**2.9%**	**10.7%**	**11.4%**	**19.8%**	**49.4%**
Daily obligations such as family and work make it difficult to find time to perform wildfire risk reduction actions.	**18.6%**	**10.3%**	**9.0%**	**12.2%**	**16.7%**	**13.5%**	**19.6%**
Having the appropriate tools would enable me to perform wildfire risk reduction actions.	**6.1%**	**4.5%**	**3.5%**	**10.0%**	**12.9%**	**20.6%**	**42.4%**

40. In the next 12 months I will: ***(Please circle your level of likelihood for each)***

	Unlikely						Likely
Be physically fit	**5.9%**	**3.6%**	**5.6%**	**9.8%**	**15.7%**	**18.0%**	**41.3%**
Experience a debilitating illness	**46.2%**	**22.9%**	**9.0%**	**12.3%**	**3.3%**	**2.7%**	**3.7%**
Be on a fixed income	**25.5%**	**8.5%**	**7.5%**	**11.4%**	**3.3%**	**9.8%**	**34.0%**
Have the knowledge on how to perform risk reduction actions	**2.3%**	**2.6%**	**4.9%**	**15.0%**	**11.4%**	**24.8%**	**38.9%**
Not have the time to perform risk reduction actions	**23.9%**	**14.4%**	**12.1%**	**16.7%**	**12.4%**	**10.8%**	**9.8%**
Have the tools needed to perform risk reduction actions	**10.9%**	**7.6%**	**5.9%**	**14.5%**	**10.2%**	**20.7%**	**30.3%**

The final section asks basic demographic questions about yourself.

41. What is your gender? (*Please ✓one box*)

46.8% Male **53.2%** Female

42. What was the year of your birth? (*Please enter year*)

19 **51**

43. Please indicate which race or ethnic background you identify with. (*Please ✓all that apply*)

96.4% White
0.0% Black or African American
1.3% American Indian or Alaska Native
0.7% Asian
3.6% Hispanic or Latino
0.0% Native Hawaiian or Other Pacific Islander
1.3% Other race or ethnicity? (*please specify*) _____

44. What is your current annual household income? (*Please ✓one box*)

3.6% Less than $15,000
10.8% $15,000 - $29,999
12.2% $30,000 - $44,999
17.6% $45,000 - $59,999
17.3% $60,000 - $74,999
9.0% $75,000 - $89,999
7.6% $90,000 - $104,999
4.3% $105,000 – $119,999
17.6% $120,000 or more

45. What is the highest degree or level of school completed? (*Please ✓one box*)

0.3% No schooling
0.3% Some high school
6.9% High school diploma/GED
25.6% Some college
9.1% Associate's degree
29.3% Bachelor's degree
18.3% Master's degree
5.0% Professional degree
5.0% Doctorate degree

46. What is your current employment status? (*Please ✓one box*)

32.5% Working full-time **11.7%** Working part-time **53.9%** Retired **1.9%** Unemployed

47. Are you serving or have you ever served in the military? (*Please ✓one box*)

18.4% Yes **81.6%** No

If yes, what is your current military status? (*Please ✓one box*)

O.O% Active Duty **3.6%** Reserves **92.9%** Retired **3.6%** Honorable Discharge

48. Please tell us any additional thoughts you may have concerning wildfire risk reduction actions on your property. (*Please use the space below for your response*)

Thank you for your participation.

Your answers will be very helpful

If you have any questions, please contact:

Eric Steffey
411 N. Central Ave.
Suite 550
Phoenix, AZ 85004
(928) 275 - 2083
WildfireMitigationStudy@asu.edu

Participant Code

Appendix E

IRB Exemption Letter

EXEMPTION GRANTED

Megha Budruk
Community Resources and Development, School of 602/496-0171
Megha.Budruk@asu.edu

Dear Megha Budruk:

On 7/20/2016 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Predicting homeowner wildfire mitigation behaviors in the wildland urban interface
Investigator:	Megha Budruk
IRB ID:	STUDY00004620
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Questionnaire, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Reminder Postcard, Category: Recruitment Materials; • Cover Letter, Category: Recruitment Materials; • Study Protocal, Category: IRB Protocol; • Consent page from questionnaire, Category: Consent Form; • Press Release, Category: Recruitment Materials;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 7/20/2016.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,
IRB Administrator

Eric Steffey Eric Steffey Megha Budruk

Appendix F

Definition of Terms

The following provides definitions of terms used in the proposal.

Attitude: "disposition or tendency to respond with some degree of favorableness or unfavorableness to a psychological object" (Fishbein & Ajzen, 2010, p. 76).

Behavior: Observable act or event that encompasses four elements; action to be performed, target that the action is directed towards, context that the action is performed in, and timeframe in which the action is performed in (Fishbein & Ajzen, 2010, p. 29).

Beliefs: Beliefs are defined in this study in terms of behaviors, injunctive norms, descriptive norms, and controls. Behavioral beliefs are defined as the "subjective probability that performing a behavior leads to a certain outcome" (Fishbein & Ajzen, 2010, p. 221). Injunctive normative beliefs refer to the "subjective probabilities that particular referents prescribe or proscribe performance of a behavior" (Fishbein & Ajzen, 2010, p. 221). Descriptive normative beliefs refer to "subjective probabilities that particular referents are or are not performing the behavior" (Fishbein & Ajzen, 2010, p. 221). Control beliefs refer to "subjective probabilities that a particular factor that can facilitate or impede performance of the behavior will be present" (Fishbein & Ajzen, 2010, p. 221).

Fuel: The organic material that grows and accumulates as live and dead material that is susceptible to ignition (National Wildfire Coordination Group Training Working Team, 2006).

Homeowner: An individual or trust that holds deed to real property.

Homeowner Association, HOA (neighborhood association): According to the Arizona Revised Statutes, homeowner associations are defined as "a non-profit corporation or unincorporated association of owners that created pursuant to a declaration … that has the power under the declaration to assess association members to pay the costs and expenditures incurred in the performance of the association's obligations under the declaration"("Ariz. Rev. Stat. Prop. ," 2015).

Intention (behavioral intentions): The "readiness to engage in a behavior" (Fishbein & Ajzen, 2010, p. 43).

Mitigation (risk reduction): "The effort to reduce loss of life and property by lessening the impact of disasters" (Wildland Urban Interface Mitigation Committee, 2014, p. 9).

Neighborhoods: A residential area where people live near one another, usually with distinguishing characteristics. Boundaries often defined by planned development or physical features (*The American Heritage Dictionary*, 1985).

Norms (normative): Influence the social environment can exert on an individual's intentions and actions (Fishbein & Ajzen, 2010, p. 129).

Responsibility (locus of responsibility): A homeowner's perception of who is responsible for the protection of their property and the community from the risk of wildfire (Kent et al., 2003; Martin et al., 2009).

Risk (perception of risk): A homeowner's perceived risk that a wildfire could impact their life through evacuation, damage or loss of property, or loss of life (Kent et al., 2003; Martin et al., 2009).

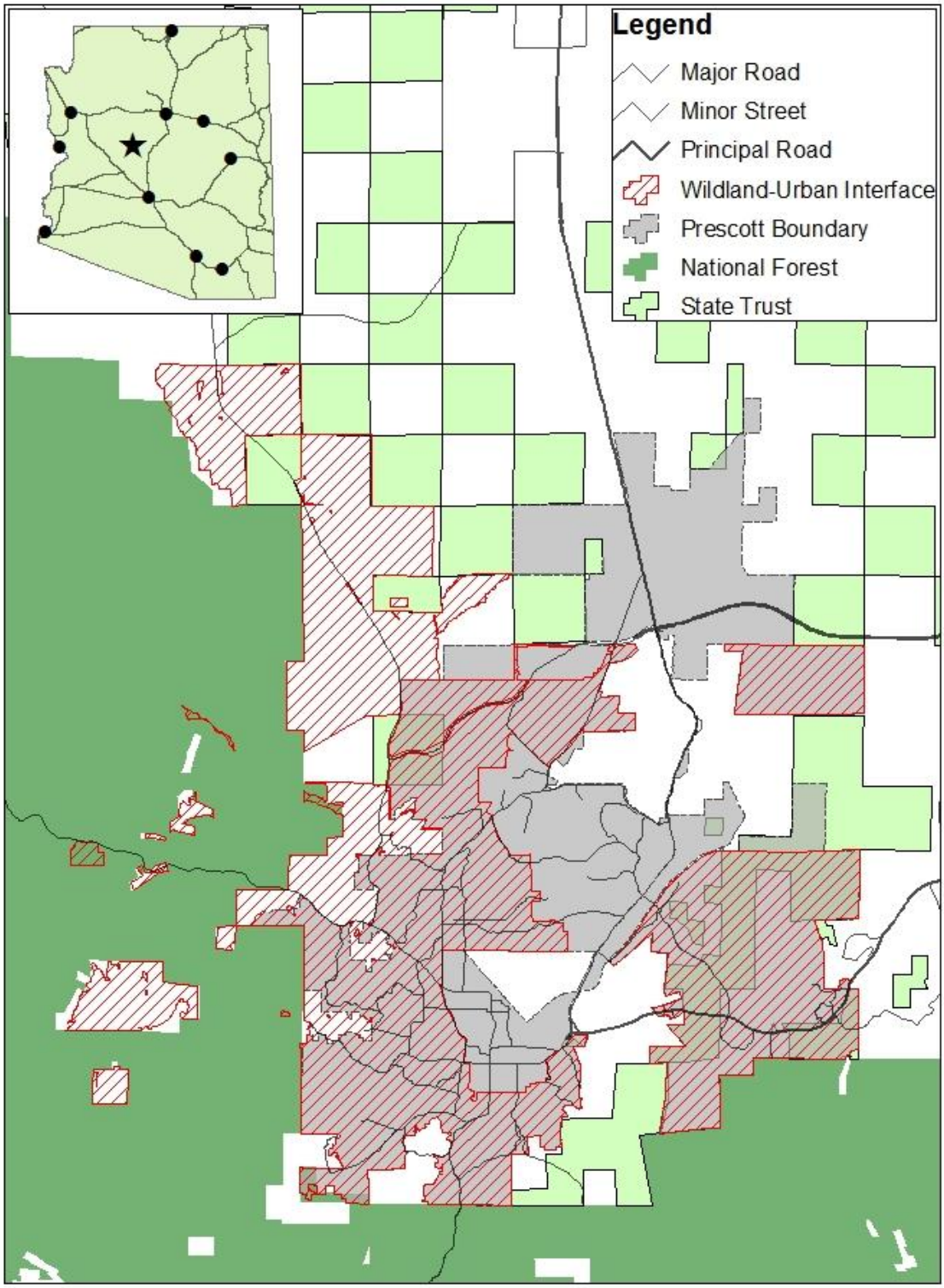
Trusts: a property interest held by one or a group or person(s) for the benefit of another (*The American Heritage Dictionary*, 1985).

Wildfire (wildland fire): Fire burning in a natural environment that is not confined or controlled (Pyne, 1997).

Wildland Urban Interface/Intermix: The zone where undeveloped/unoccupied land transitions (*interface*) and intermingles (*intermix*) with structures and other human development (Wildland Urban Interface Mitigation Committee, 2014, p. 9).

Appendix G

Map of Study Area



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School of Community Resources and Development
College of Public Programs
Arizona State University
411 N. Central Ave., Ste. 550
Phoenix, AZ 85004-0690
(602) 496-0550
Eric.Steffey@asu.edu