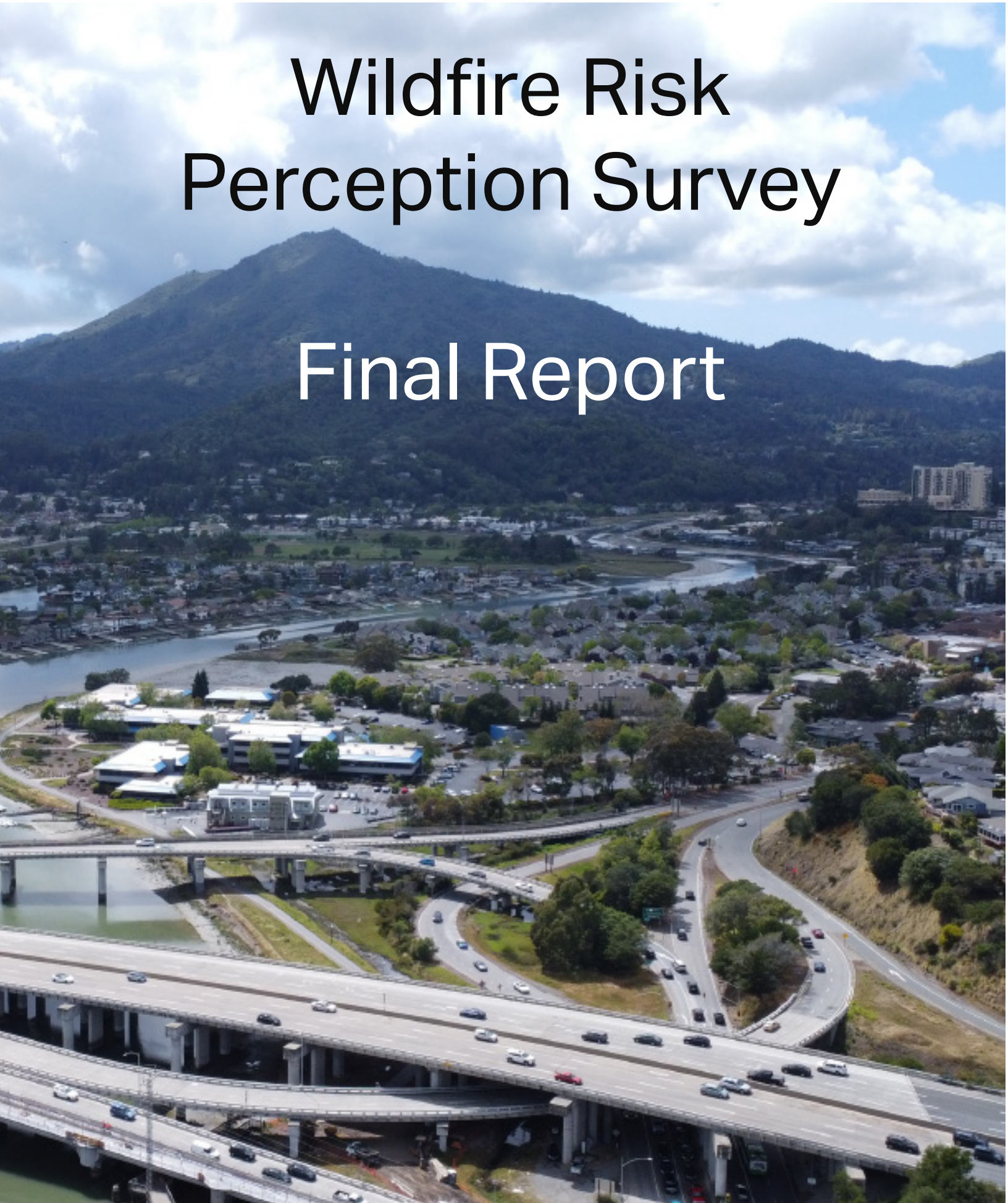


Wildfire Risk Perception Survey

Final Report



Prepared by FairPath Solutions LLC

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Disclaimer

FairPath Solutions values the contributions of Marin Wildfire, community partners, member agencies, and Fire Safe Marin. The report, however, does not necessarily reflect their views, nor does it serve as an endorsement of findings. Any errors are those of the authors.

1. Executive Summary

The Marin Wildfire Prevention Authority (Marin Wildfire) requested assistance in Spring of 2022 to design and implement the initial phases of a tracking and evaluation system for Marin Wildfire's programming. This phase in the tracking and evaluation system included:

1. A qualitative design phase involving building community partnerships, collaboratively running focus groups, and conducting semi-structured interviews; and
2. A quantitative survey implementation phase in collaboration with community partners.

The objectives of the survey

1) Maximizing the voices of those traditionally underrepresented in online and telephone surveys, which includes those from lower income communities, communities of color, older adults, and those with other access and functional needs. The underlying intention here was to make sure we could adequately identify any unmet programming needs so member agencies and partners could collaborate to fill those gaps. Our strategy focused on building community partnerships into the tracking and evaluation process itself through a co-design process.

2) Contributing to a benchmark of social perceptions of wildfire risk and access to prevention and preparation resources in Marin Wildfire JPA zones to assist with tracking and evaluation as Marin Wildfire's programming evolves. There have been prior online and telephone surveys focusing on this, so our intent in designing this survey was to work to fill gaps and align, as much as possible, with the data previously collected.

3) Building the foundations of a pipeline to support timely and consistent feedback about outcomes into ongoing work plans and programming. We focused on building stronger community partnerships that could become foundations for future community collaboration, outreach, and engagement in wildfire prevention and preparation work with Marin Wildfire and member agencies.

4) Tracking relationships between perception of risk and actual risk. As we worked through focus group discussions in the qualitative phase, and later the quantitative results of the survey phase, we added the objective of tracking mismatches between perception of risk and actual risk, at least where Marin Wildfire has projects that have more accurately quantified actual risk. In fact, perceived risk impacts actual risk in many arenas of Marin Wildfire's work, so this also serves to better illuminate this relationship to improve outcomes.

Methods

To meet the above goals most effectively, we engaged in a co-design process including Marin Wildfire and community organizations directly serving residents. During the qualitative design phase, we built initial partnerships with community organizations directly serving Marin residents underrepresented in traditional surveys, including low income residents, residents of color, and residents with access and functional needs. We took an initial bank of questions of interest to Marin Wildfire and member agencies and workshopped them with our community partners first, then with focus groups we partnered to facilitate with residents served by those community partners. The outcome of this process was over two hundred semi-structured interviews, over a dozen focus groups, and a set of questions that had now been iterated through direct resident feedback.

For the survey implementation phase, we piloted these final questions and then finalized them for our final survey instrument after simplifying and shortening. We ended up with a survey of 48 questions, including 38 content questions, and 10 demographic questions. The demographic questions were voluntary, while the majority of content questions required an answer to move on in the survey.

Our community partners for the survey implementation were:

- Marin County Cooperation Team in Marin City;
- Canal Alliance in the Canal neighborhood of San Rafael;
- North Marin Community Services in Novato;
- West Marin Community Services and San Geronimo Valley Community Services in West Marin; and
- The Marin Center for Independent Living, serving those with access and functional needs across all zones of Marin Wildfire JPA.

Each community partner took responsibility for surveying a target of 300 of the residents in the communities they served. We worked with community partners to design the most appropriate sampling and recruitment methods for the survey, and some very creative strategies emerged. For example, North Marin Community Services field surveyors found that surveying residents at places where they were already waiting in the community was an effective way to improve response rates and while being respectful of people's time. These locations included laundromats, community clinics, food pantries, and after school programs and events, among others. As a result of this process, response rates were high for almost all of our community partners.

In addition to the community partner surveys we added an area stratified random sample survey of several hundred residents to augment the convenience sampling of the community partners. We conducted this with advanced FIRE Foundry recruits and offseason Defensible Space Inspectors, building upon their already valuable community engagement experience. All survey respondents, both those surveyed by community partners and those surveyed by our team, were given \$20 gift cards upon completion of the survey.

This process resulted in over 1100 responses across Marin Wildfire JPA between November 2023 and March 2024. Adapting to the capacity constraints and working around existing programming obligations among our community partners was essential in supporting their engagement in this process.

Demographics of our respondents

Figure 1: Age

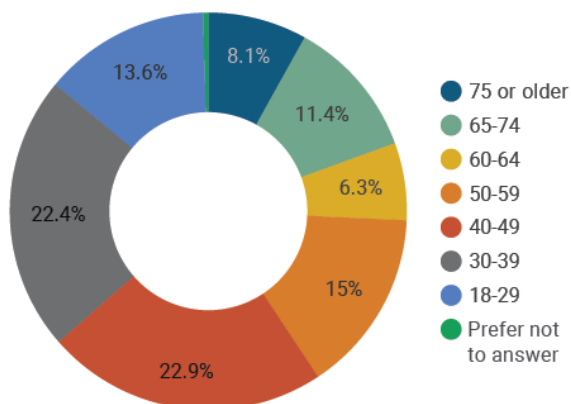


Figure 2: Race and Ethnicity

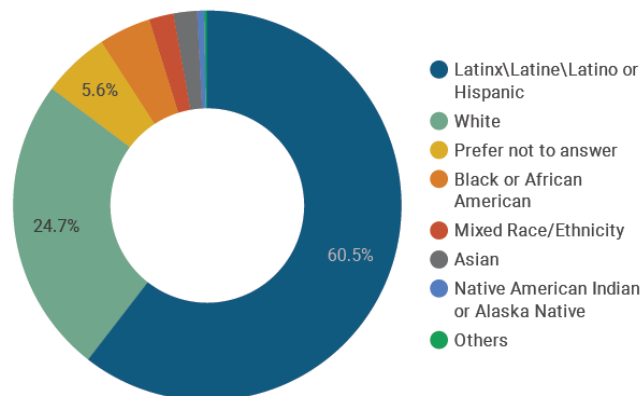


Figure 3: Household Income

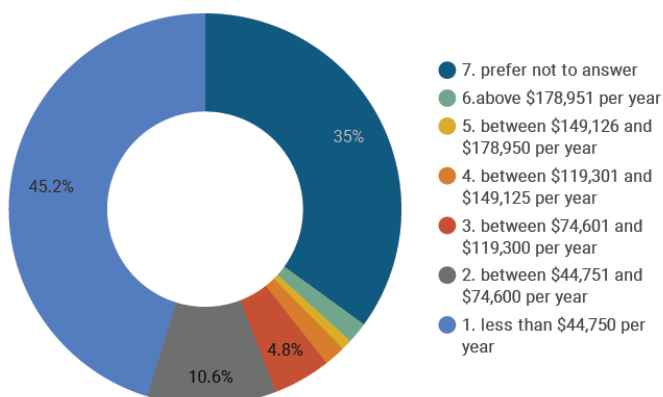
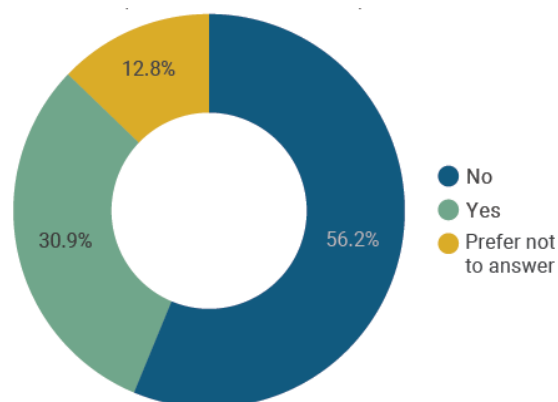


Figure 4: Access and Functional Needs (excluding age)



Summary of Results and Recommendations

Cross-cutting themes

40% of respondents were extremely concerned about wildfire risk, and another 21% very concerned, which is significant. Even during the winter of a wet year, with lower than average fire activity, 60% of respondents (surveyed between November 2023 and March 2024) still noted they were very to extremely concerned about wildfire. The public concern does not seem to have dissipated despite the brief reduction in fire

activity in California since 2020. Of particular note is that Latinx respondents, particularly those in the Canal neighborhood of San Rafael, expressed greater concern about wildfire risk than any other respondents in our survey. This is a great opportunity for collaboration between Marin Wildfire, San Rafael Fire Department, and Canal Alliance and the Canal community on outreach components of the next work plan to address this concern.

Renters and homeowners share a concern about getting and keeping wildfire insurance. This points to a reframing of the wildfire insurance problem as one larger than that merely affecting the housing market, one that affects resident well-being in a much broader sense. Renters are just as concerned about losing their homes, possessions, and memories to wildfires as homeowners, and this concern is likely as much about a sense of home, community and belonging as market value. This awareness may lend itself to ongoing investigations into community self-insurance and alternative community resilience insurance models emerging in the U.S.

Detection, Alert, Evacuation

Traffic emerged as a significant concern among respondents, something which closely matched the focus group discussions we held across Marin. While Latinx respondents in Canal, West Marin, and Novato expressed the greatest concern about traffic, there appears to be a concordance in concern about traffic across different communities in Marin. From our focus groups, we heard stories from older adults without a car who worry about getting out of their neighborhood in the hills along one-way streets, and from younger families in the Canal, Novato, and Marin City who worry about getting their family to safety knowing how bad traffic can get in Marin given limited exits from neighborhoods or typical 101 traffic conditions during rush hour.

The fact that 71% of respondents who were extremely concerned about traffic preventing their safe evacuation also reported not knowing where to safely take temporary refuge, points to a possible point of engagement. The lowest income residents were the least likely to know about a safe, local, temporary refuge, which also points to valuable work to fill that gap.

Residents expressing the greatest concern about getting out of their homes in time during an evacuation may be connected to the number of people in the home. Those reporting 4 or more people living in the home expressed the most concern about getting out of the house in time. The presence of school-age children and older, dependent adults with limited mobility in the household may explain this finding.

A quarter of all respondents reported being signed up for AlertMarin. White respondents were much more likely to report being signed up for an emergency alert system than African American or Latinx respondents. Working with community partners to understand why this is the case and collaboratively building appropriate and effective ways to reach all communities would be a valuable program.

11% of all respondents reported that they did not have a car with which to potentially evacuate. This is a significant concern, even with increasing identification of local, safe refuges. During our focus groups, we heard from several older adults in Central Marin that they would have to walk down to the nearest cross street from their address to wait to get picked up during an emergency. There is substantial room for community partners and member agencies to discuss options for cases like these.

Defensible Space and Home Hardening

Surveyed renters by and large did not know about defensible space evaluations. In a separate question, 21% of renters reported being responsible for maintaining the yard and landscaping, and only 11% of respondents reported not having the right to alter their properties, indicating that homeowners' involvement might be needed. As the Wildfire Risk Home Evaluation program continues to expand across all zones, the evaluations of higher density housing, including HOAs and apartment complexes, will provide an opportunity to reach into the represented communities regarding home hardening and defensible space needs. This in turn will expand access to Marin Wildfire's Grants Program, for which a Wildfire Risk Home Evaluation is a prerequisite.

The most common response among surveyed homeowners was that they could not physically do the work and didn't know where to find those that could help. This would appear to support the decision among member agencies to move towards direct assistance for the creation of defensible space in 2024.

Vegetation Management

With 50% of respondents believing the vegetation in open spaces near them is a fire risk, and the fact that this is one of the most significant efforts of Marin Wildfire and member agencies, this points to the need for several next steps. One, analyzing whether responses correlate with proximity to recent or ongoing vegetation management projects would be very useful here. Second, if there is indeed a gap in resident awareness of nearby vegetation management projects, this points to the need for additional work conveying the presence and value of this work to the public. Interestingly, the rate of awareness for vegetation work in Central Marin is the highest across all zones, supporting the current efforts of Marin Wildfire staff in communicating efforts on the Greater Ross Valley Shaded Fuel Break, the first of Marin Wildfire's vegetation management projects.

Younger adults are much less likely to know about a vegetation management project in our results, as are Latinx and African American respondents. Collaboration with the Community-based organizations should help existing communication efforts to better target the represented audiences.

Grants and Partnerships

Most of our respondents did not know about the availability of grants, or believed there were none available for defensible space work. The vast majority of respondents reported that either they did not know (52%) or they believed there was no financial assistance available to reduce fire hazards (37%). Considering these funding mechanisms have been evolving each year as valuable lessons are learned, it would be valuable for member agencies and community partners to discuss current approaches and outreach methods, together with an expansion of the Wildfire Risk Home Evaluation Program into certain neighborhoods.

Public Outreach and Education

There is a close tie between reported use of social media versus websites of public agencies for obtaining information about how to prepare for wildfires. This preference appears to vary by age, and thus supports ongoing efforts to engage in multi-modal education and outreach programming. How respondents prefer to obtain this information also varies by race and ethnicity, a result which lends itself to member agencies, Marin Wildfire, FireSafe Marin and community partner collaborations on outreach and education programming that are culturally aware and inclusive.

When asked what respondents would be willing to do to prepare for wildfires, respondents 60 and older are more likely to attend a small in-person neighborhood gathering (36%) compared to the youngest respondents 18-29 (21%), but younger adults are more likely to want to attend a large in-person community event. Independent online research is a close second choice.

Conclusion

Wildfire risk in the context of Marin County is geographically heterogeneous. Income, age, and race/ethnicity are also closely related to where people live in Marin County. The implication of these two relationships is likely strongly connected to what we have found among our sample of Marin residents in this survey – perspectives on wildfire risk and programming often correlate with different demographic groups. It is important to note that while geographic proximity may end up proving a strong relationship to responses in this survey, that does not exclude income, race/ethnicity, or age from being equally important in understanding those geographic patterns. Income, race/ethnicity, and to some degree, age, influence where people are able to or feel welcome to settle in Marin County, and thus the geography of neighborhoods is inextricably tied to these underlying social factors and histories.

Understanding this high-level set of relationships in the data is the first step. **The next step in the process will be for Marin Wildfire, member agencies, and community partners to drill down further into the relationships between proximity to**

heightened wildfire risk (or evacuation risk), and the perspectives shared in this survey. There may be some lucrative additional, quick investigations to delve deeper into some of these relationships, through a brief focus group or workshop. This mutual exploration and discussion of the data is an essential step in a community partnership. Working together on programming to fill any gaps will follow from this process.

This survey, and the focus groups and interviews which informed it, contribute to inform Marin Wildfire and member agencies' programming and program evaluation. As noted above, best practices in participatory, community engaged tracking and evaluation programs can be found at the State Level with the Transformative Climate Communities program, and at the Federal Level with emerging practices in EPA funding for community climate resilience. The common factor is consistent funding and ongoing work to maintain active community partnerships, regular updates to the baseline survey to track progress, and targeted further investigations into key areas where needed, with additional focus groups or other outreach approaches.

The real value of tracking and evaluation is not reporting on the success or failure of programming, but rather on its facilitation of deeper community partnerships that will ensure ongoing lessons learned are quickly fed back into programming. Creating a closer to real-time feedback loop to ensure programming is responsive to community needs is the optimal outcome of this process.

We will support Marin Wildfire, member agencies, and community partners as they set up those processes for next year's work plan.

2. Introduction

The Marin Wildfire Prevention Authority requested assistance in Spring of 2022 to design and implement the initial phases of a tracking and evaluation system for MWPA programming. Tracking and Evaluation is a formalized process which a majority of State and Federal agencies require to clearly identify the connections between programmatic activities and desired outcomes, to build transparency and accountability into agency work, and to create feedback learning systems to allow more effective iteration of programming to meet goals in evolving contexts. The best examples of these systems are from programs like California's Transformative Climate Communities (TCC), where the Strategic Growth Council and Department of Conservation require participatory, community-engaged tracking and evaluation work at a mandatory 3% of each grant provided. The goal behind a process like this is to: 1) ensure that all voices are heard in the community being served by the program, which requires active and intentional partnership and engagement; 2) build a baseline understanding of the issues being targeted by the program; and 3) build a pipeline of tracking and evaluation that can provide closer-to-real time feedback into ongoing work plans.

The reason participatory, community-engaged or co-designed processes are key to any tracking and evaluation process is to ensure that all voices in the community are included in evaluating the ongoing needs of the community and success of any programs. This is particularly important considering the quickest, easiest, and cheapest approaches to collecting information about communities – online and telephone polling or surveying – have been demonstrated to suffer from low response rates among some populations, particularly communities of color (Holbrook, Krosnick, and Pfent, 2007).

Therefore, similar to the TCC approach, we proposed to conduct the first steps in the tracking and evaluation process, a participatory, community co-designed survey of wildfire risk perspectives connected to each of Marin Wildfire's thematic focal areas.

Prior to the initiation of this survey, several prior surveys had been conducted relating to wildfire risk knowledge and attitudes in Marin, including one conducted in summer of 2022. The results of the present survey should be seen as additive with prior surveys, as methodology differed, and results thus represent different populations within Marin. For instance, the survey in summer of 2022 was an online and telephone survey pulling primarily from registered voter lists and secondarily from school registration lists. It employed text and email invitations which provided links to online surveys. These types of surveys are fast and affordable, and can thus be employed to quickly answer some questions needed during a current work plan development or evaluation event or to efficiently gather responses from those populations known to have high response rates for this modality of outreach. However, as noted above, online and telephone surveys have a tendency to underrepresented communities of color and populations that may have barriers to participation in online or telephone surveys. A traditional approach in post-survey methodologies is to re-weight the resulting survey demographics to match the demographics of the overall population being sampled (i.e. those living within Marin Wildfire JPA, in this case). This approach can result in misrepresentation of some

communities' perspectives, however, if the response numbers for any particular group are low enough to introduce large error margins.

To best address the strengths and limitations of different survey designs, we suggest here that they be treated as additive contributions to the knowledge about resident perspectives in Marin rather than replacements. Additionally, we suggest not re-weighting these surveys to attempt universal representation of all demographic groups in Marin, but rather leaving response numbers for each group transparent, allowing collaborators using the data to track when low response rates might make conclusions for particular groups meaningless or require targeted follow-up to address gaps. This is the strategy we have employed in our community co-designed survey, and we are clear when our results below are unlikely to be representative of certain populations.

An additional difference with prior surveys is that because we sampled from community partner neighborhoods, on the one hand, and specific addresses randomly selected as an additive sample, all of our survey responses can be tracked to specific census block groups, which will allow granular understanding of the relationships between location of residents and wildfire risk perspectives in follow-up analysis between community partners and member agencies.

2.1 Approach to Survey Objectives

1) Maximizing the voices of those traditionally underrepresented in online and telephone surveys, which includes those from lower income communities, communities of color, older adults, and those with other access and functional needs. The underlying intention here was to make sure we could adequately identify any unmet programming needs so member agencies and partners could collaborate to fill those gaps. Our strategy focused on building community partnerships into the tracking and evaluation process itself through a co-design process.

2) Contributing to a benchmark of social perceptions of wildfire risk and access to prevention and preparation resources in Marin Wildfire JPA zones to assist with tracking and evaluation as MWPA programming evolves. There have been prior online and telephone surveys focusing on this, so our intent in designing this survey was to work to fill gaps and align, as much as possible, with the data previously collected.

3) Building the foundations of a pipeline to support timely and consistent feedback about outcomes into ongoing work plans and programming. We focused on building stronger community partnerships that could become foundations for future community collaboration, outreach, and engagement in wildfire prevention and preparation work with Marin Wildfire and member agencies.

4) Tracking relationships between perception of risk and actual risk. As we worked through focus group discussions in the qualitative phase, and later the quantitative results of the survey phase, we added the objective of tracking mismatches between

perception of risk and actual risk, at least where Marin Wildfire has projects that have more accurately quantified actual risk. In fact, perceived risk impacts actual risk in many arenas of MWPA's work, so this also serves to better illuminate this relationship to improve outcomes.

3. Methodology

To meet the above goals most effectively, we set out to engage in a co-design process including Marin Wildfire and community organizations directly serving residents. We broke this process up into two phases, the qualitative community engagement and co-design phase, and the quantitative community co-implementation phase. This was important to ensure that organizations with existing trust networks in communities across Marin played design roles in the process itself.

3.1 Qualitative community engagement and co-design phase

This phase involved several important steps to ensure community partners were brought in as partners in the process.

1. Engage with community partners who have trusted connections with community residents as early in the process as possible

To ensure we reached residents traditionally underrepresented in traditional surveys, we worked with Marin Wildfire, member agencies, and pre-existing community partners to identify organizations that serve various communities across Marin County. To conduct focus groups for the qualitative phase of the survey design process, we worked with an extensive group of community partners, including:

- North Marin Community Services serving Novato;
- Multicultural Center of Marin serving San Rafael;
- Marin County Cooperation Team serving Marin City;
- San Rafael Public Library serving San Rafael;
- Ross Valley Seniors serving Central Marin;
- Mill Valley Library serving Mill Valley;
- San Geronimo Valley Community Services serving West Marin;
- West Marin Community Services serving West Marin;
- Inverness Paradise Ridge Estates serving Inverness; and
- Stinson Beach Fire Department serving Stinson Beach

Working with these partners, we held focus groups, a vast majority of which were in-person, at community centers, food banks, libraries, churches, and other community gathering places. In participatory research design, shared community spaces like these offer neutral and trusted common ground to build relationships and trust between interviewer and interviewee (Israel et al. 2017). Research has also shown that working

in partnership with existing community trust networks results in much more engaged participation in programs and projects (Minkler and Wallerstein, 2001).

It was through this early engagement process that we determined several important elements to survey design and implementation. For one, all partners agreed that it would be inequitable to expect residents to spend time answering our questions without compensation for that time, as not all residents can afford to donate their time equally. For the design phase interviews, we compensated people with \$5 gift cards. For the longer focus group discussions, we worked with our community partners to determine the most appropriate compensation for attendance. For some, this was \$20 gift cards, while for others it was a hosted dinner or lunch. During the implementation phase of the survey itself, we moved to standardize this across all partners, with each partner offering \$20 gift cards for completion of the survey.

2. Co-design the survey instrument with Marin Wildfire and community partners.

We worked with Marin Wildfire and member agencies to draft a long list of questions and thematic topics important to cover in the final survey. We then used this list of questions as the entry point to discussions with community partners and focus groups where we tested out the questions and explored, in a semi-structured process, resident perspectives, questions, and interests that fell outside the questions as written. We also conducted a significant number of ad-hoc interviews at grocery stores, food banks, and community centers to more robustly test the iterations of the questions and glean additional perspectives.

The initial question set was still quite long for most of those interviewed and for focus groups. We attempted to cover fourteen broad questions, many with several sub-questions, bringing total specific questions to around 52. As we conducted more interviews and focus groups, we consistently adapted the question set based on feedback from our participants and partners. Towards the end of the focus groups, we had reduced the number of questions to the low 20s.

Through each step in this process, we also adapted the phrasing of the questions to maximize clarity for community respondents. This meant we occasionally had to trade off precision in question language for simplicity and clarity for respondents.

Once we completed the focus groups and semi-structured interviews, we transcribed the recordings and our field notes, and entered them into a qualitative analysis software (QAS) database. We used Dedoose for our purposes, as an affordable QAS that still included the tools to allow for online collaboration and collective coding. Qualitative coding is the process by which we assign thematic labels to specific words, sentences, or paragraphs in the qualitative responses, thus allowing us to systematically analyze otherwise unwieldy qualitative transcripts. Through this approach, we then reviewed responses to our questions across all groups and zones, added questions that spoke to experiences of respondents which we had not anticipated in our original question sets,

and cut questions that did not resonate well with respondents. At the end of this process, we ended up with an initial quantitative survey instrument.

3.2 Quantitative Survey Co-implementation

From the initial quantitative survey instrument, we piloted the survey with our community partners, Marin Wildfire, and Fire Safe Marin, and then adjusted the questions with that feedback. It is important to note that not all feedback aligned, and where it did not, we prioritized the feedback from our community collaborators. They piloted the initial instrument with actual residents, and provided us feedback from them directly, which was our target audience. As a result of this, the final edit to the survey was to drastically simplify the language for ease of reading and brevity. We attempted to limit the survey to 15 minutes to ensure we were respectful of people's time and did not lose respondents half-way through the survey.

As an example of changes, in questions about willingness to pay for home hardening and defensible space work, we asked a general question about a one-time hypothetical payment, but did not drill down to specific elements of the yard or home they may be more or less willing to spend money on. That is a great topic for a more targeted follow-up survey. Additionally, we aired toward general representations of institutions involved in the fire prevention and preparation world, not specific entities. In general, in our collaborative question scoping at the beginning of this project, we were discouraged from asking questions about any specific organization or agency in Marin. After five iterations of the survey with feedback from MWPA, agencies, organizations, community partners, and the focus group discussion responses, we lost some nuance in the questions, but most likely gained responses and avoided confusion.

One example of a decision we had to make to simplify the survey, reduce survey response time, and meet the requirements of surveys conducted from mobile phones, was the elimination of matrix questions. These are very common questions in online surveys, but when administering a survey via mobile phone, or to keep a survey clear and concise for those reading surveys for respondents, matrix questions proved to be impractical. Converting matrix questions to individual questions increased our question count significantly, but reduced our survey completion time and eliminated mobile device formatting issues.

For our demographic questions, we pulled from standard U.S. Census questions, and simplified and localized to meet our needs. For income, for instance, we assumed an average household size of 2 (given Marin County's average of 2.46) in order to be conservative with income brackets for Marin. We then applied the US Department of Housing and Urban Development's (HUD) 2022 household income data for SF metropolitan region (of which Marin is a part and cannot be separated in the data) to derive income brackets for "extremely low income," "very low income," "low income," "median income," and "high income". The "Extremely Low Income" bracket is defined as greater of 60% of Section 8 very low income limit for the Department of Health and Human Services (DHHS) poverty guideline, while the "very low income" bracket is

defined as 50% of the median household income. “Low income” is equal to 80% of the median household income, and “high income” we defined as 120% of the median household income, although this high income bracket was not an official part of HUD methodology.

We ended up with a survey of 48 questions, including 38 content questions, and 10 demographic questions. The demographic questions were voluntary, while the majority of content questions required an answer to move on in the survey. What this means for the survey results is that we can compare responses to demographics, but also have a significant portion of respondents for certain demographic questions that opted out of a particular question. Income, for instance, was the least answered of our demographic questions.

We narrowed down the list of community partners for the implementation phase to organizations that worked extensively with underserved communities, particularly those with extensive experience collaborating with residents for direct service delivery or door-to-door engagement. For this reason, we settled on working with organizations that had been a significant part of the community-based pandemic response work, and who ran food banks and community service centers. For the quantitative survey implementation phase, we partnered with the following community organizations:

- Marin County Cooperation Team in Marin City;
- Canal Alliance in the Canal neighborhood of San Rafael;
- North Marin Community Services in Novato;
- West Marin Community Services and San Geronimo Valley Community Services in West Marin; and
- The Marin Center for Independent Living, serving those with access and functional needs across all zones of Marin Wildfire JPA.

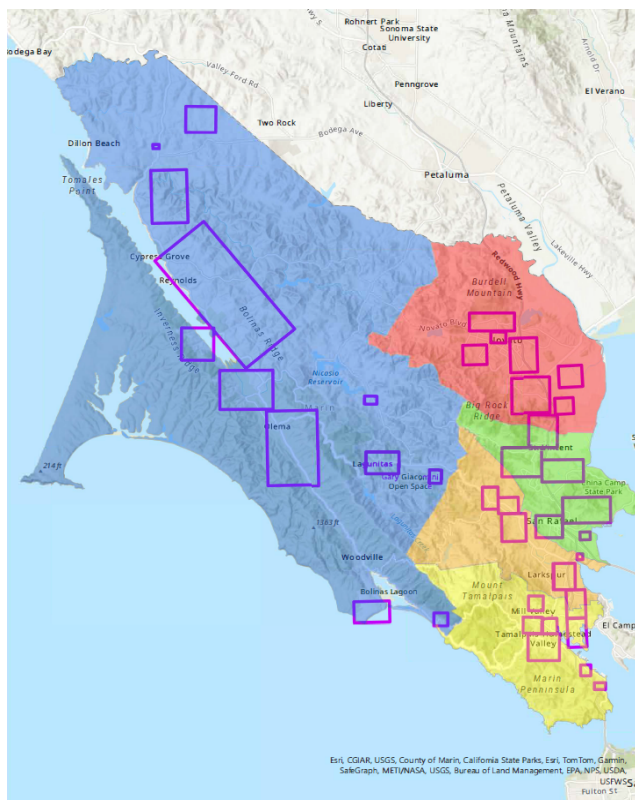
We would like to note here the significant amount of work each community partner did for the survey. It was not merely that each partner agreed to conduct the surveys required for each of their jurisdictions. They adjusted all of their other funded projects and obligations to make room for this survey project, given the importance of wildfire to their constituents. For most non-profits, particularly those at the scale of our community partners, work plans and budgets can be set by grants a year in advance. Yet all were willing to make room for the intense burst of work over several months that this field survey required of them. Because of this commitment, we encourage member agencies and Marin Wildfire to meet community partners at least half-way, and be flexible in adjusting timelines, budgets, and expectations to not put undue burdens on the already strained capacity that many may be experiencing.

3.3 Sampling methodology

Each community partner was responsible for conducting 300 surveys in their communities. West Marin Community Services and San Geronimo Community Services split that to cover 150 each, as they work together to serve the West Marin

community. We worked with each community partner to discuss the most appropriate sampling method for the surveys. This process also adjusted as partners encountered obstacles or challenges to survey implementation. In the end, although several partners started the surveys by attempting to conduct randomized surveying covering every 7th residence on a given block, all of the partners adjusted to more appropriate outreach methods to more equitably reach residents. For instance, North Marin Community Services, while originally attempting to go door-to-door during evenings, adjusted to collect resident responses at local community locations where people regularly had to wait. Expecting residents to take time out of their busy evenings to answer questions at their door was untenable, but asking residents to answer questions while they waited for their laundry to finish at the laundromat was reasonable. Likewise, in Marin City, the Marin County Cooperation Team warned that residents were quite exhausted with surveys and questionnaires. While they attempted to collect responses randomly for every seventh residence in the city, in the end, they added community events and after-school gatherings to reach more residents. In West Marin, door-to-door was very difficult due to the dispersed nature of residents, and the fact that many highly value the privacy of their home addresses, our community partners worked with field survey teams to conduct surveys at local neighborhood and community events, food banks, and after school programs.

Figure 5: Field surveying areas for area stratified random sample



In recognition of the challenges of obtaining a true random sample of residents underrepresented in traditional survey approaches, we added on a true random sample of 800 residents across Marin. This sample was constructed using an area stratified, disproportionate random sample, built as a custom variation of the Center for Disease Control's Community Assessment for Public Health Emergency Response (CASPER) sampling methodology. We used a disproportionate sample to ensure we sampled 160 residences from each of Marin Wildfire zones, despite variable populations across zones. The CASPAR method takes in pre-defined geographic boundaries (in our case the individual MWPA zones), and then randomly selects enough census blocks within those boundaries to reach the desired number of residents, assuming seven residences are surveyed on each block.

This meant we selected 23 census blocks in each zone. CASPAR automatically adjusts

slightly for population, but aims to retain geographic heterogeneity in addition to sampling areas with higher population densities. We ran for each zone individually after finding that the overall MWPA JPA process still resulted in too heavy a weighting towards large population centers in Marin.

Once we had the final set of census blocks, we ran a separate process to automatically select seven evenly distributed residences within each census block. With the address list resulting from this sampling approach, we created daily field survey maps for our internal field surveying team. This team was composed of several advanced FIRE Foundry recruits, and several off-season defensible space inspectors. All but one of our surveyors had previous experience as defensible space inspectors, which was invaluable experience for understanding how to best approach residents and encourage response. Our random sample surveyors As with community partner areas, all residents were offered \$20 gift cards upon completion of the survey. A majority of residents chose to fill out the survey with the surveyors via an online tablet or even phones rather than paper. In the end, our field survey results for the random sample further demonstrated the importance of working with community partners that have established, trusting relationships with the community. Our team was able to successfully survey 171 residents out of the 800 doors knocked on over a month. Community partners reached much higher response rates.

3.4 Data synthesis and analysis methodology

As community partners were completing surveys, we began the process of merging and synthesizing the survey data into a single database to process the results. Some community partners had requested additional questions for their internal processing and survey administration, so our first step was standardizing all survey response databases into a single set of responses. We used Google Big Query to manage the database and used SQL to standardize. We used Google forms for the survey, so integration with Big Query was relatively easy. Once we had the integration between the incoming form responses and our database, all subsequent survey responses fed into the automated synthesis and analysis pipeline.

The structure of most questions was such that analysis was relatively straightforward. However, for questions that allowed multiple answers, we had to employ one-hot-encoding to parse each respondent's multiple selections into individual answer option variables. Once this was completed, we could then re-tally the total number of selections for each response, although the totals add up to more than the total number of respondents due to the multiple select option.

In addition to the standardization of multiple selection responses, we also needed to account for non-responses to particular questions, address questions that were only available via skip-logic based on answers to prior questions (e.g. some of the alert questions), and process the optional write-in responses for many of the questions.

We anonymized all geospatial data on responses up to the census block group level to maintain confidentiality.

In the end, compiling and standardizing responses between six community partners' survey responses in addition to our randomized responses was a monumental task. Despite using standard online forms for all partner surveys, post-survey standardization work requires a substantial amount of time and effort when involving this many partners.

4. Demographic Profile of Respondents

4.1 Qualitative Design Phase

During the co-design phase of the survey, we conducted 15 focus groups which included 155 residents across all MWPA zones. Additionally, we conducted 65 semi-structured interviews with residents outside of grocery stores and community centers across all MWPA zones. Overall, we reached over 220 respondents for qualitative, semi-structured interviews and focus group discussions. We conducted these focus groups with residents of communities served by our community partners. While we collected some demographic data via optional individual questionnaires handed out after focus groups and interviews, low responses on these mean we have to be anecdotal in our assessment that respondents during this phase were representative of those traditionally underrepresented in traditional surveys. From our questionnaire responses, 39% of those that filled them out were 65 and older, 27% were 45-64, 34% were 28-44, and 1% were 18-27. We used a different approach to calculating income levels, so our categories are different for this phase than the survey. 59% of those that filled out our questionnaires during the design phase reported an annual household income of less than \$65k.

4.2 Quantitative Survey Implementation Phase

Community partners and our internal team completed a total of 1,177 survey responses. 45% of respondents earned less than \$45,000 household income per year, while 35% chose not to answer. 66% of respondents identified as female, while only 2% declined to answer. 61% identified as Latinx, 25% White, 4% African American, and 6% chose not to answer. 26% of respondents reported being older than 60 years of age, while 14% reported being 18-29 years of age. 33% of respondents reported they had access or functional needs, not including age (as we had asked age separately).

Figure 6: Age

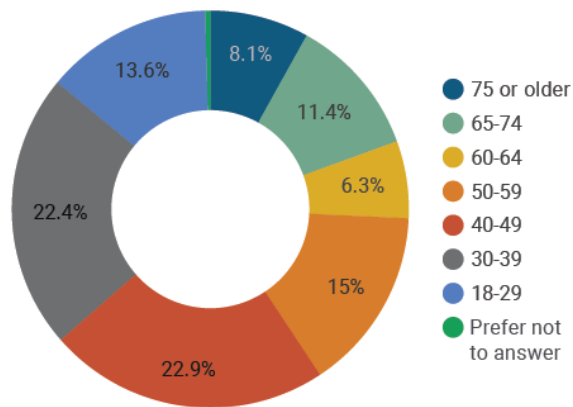


Figure 7: Race and Ethnicity

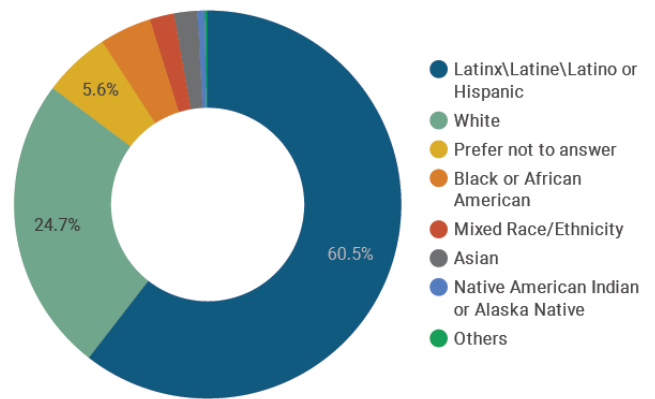


Figure 8: Household Income

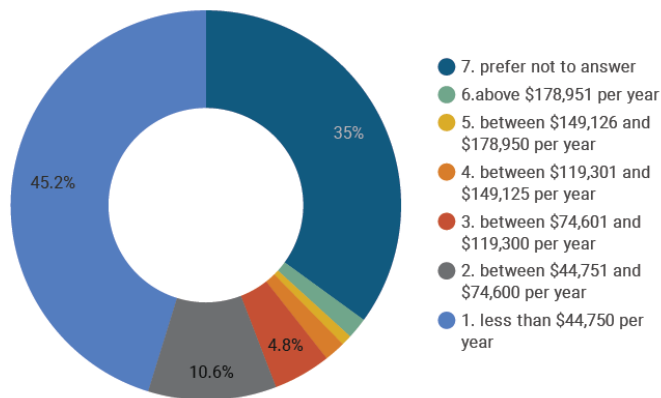
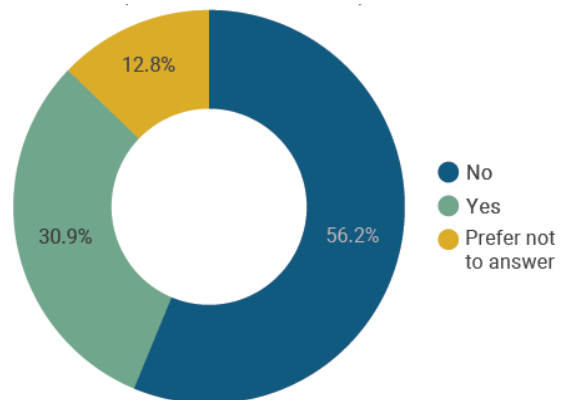


Figure 9: Access and Functional Needs (excluding age)



In addition to the common demographic questions above, we asked respondents some demographic questions more specific to MWPA programming. These included questions about the number of working vehicles and type of residence. 71% of respondents reported renting their residence, 23% owning, and 6% living with someone else without renting. 26% of respondents reported living in a single family stand-alone home. 32% of respondents reported living in apartment complexes with greater than 10 units, while 24% reported living in smaller apartment buildings with 2-9 units. 8% of respondents reported living in mobile homes. 8% reported living in a single-family home connected to another (e.g. an ADU). The vast majority (93%) of respondents reported their Marin address as their primary residence. Across all housing types 33% of respondents reported having 5 or more people living in their household, while 31% reported 2 or less.

7% of respondents reported not having any vehicles. 33% reported having one. African American respondents were far more likely to report not having any cars (26%) than Latinx (7%) or White (1%) respondents. When asked how many people could safely fit in the vehicles respondents reported owning, a majority of respondents reported 4 or 5.

5. Survey Findings

5.1 Assumptions and Caveats to Summary of Survey Results

This summary of discussion results is the first step in interpretation and use of the full survey result set. We present a summary of primary findings organized by each MWPA theme below.

The specifics of the survey design, sampling, and implementation noted in our methodology discussion are important to consider when framing the results. For instance, some demographic categories are less well represented than others due to a combination of sampling methods, survey fatigue, and question opt-outs. For income, the highest three income brackets (those above \$119k) are grouped in discussion of the results because there were too few respondents sharing income in those brackets to retain reasonable representativeness. For race and ethnicity, only respondents reporting their race or ethnicity as Latinx, African American, and White were sufficient in number to reasonably report representative results. Because there were sufficient respondents in each age category, representativeness is not a concern for this dimension.

This also means that while we have sufficient survey responses broken down by various demographic categories, we do not claim this is representative of Marin County as a whole. Choices to maximize response rates among those traditionally underrepresented, by ensuring community partner adaptability to the most appropriate outreach approaches, also means that we need to retain awareness of the geographies from which we sampled when we make claims about the results. **We can confidently report residents' perspectives from the following communities:**

- Canal Neighborhood of San Rafael,
- Lower income communities of Novato (those earning household incomes less than \$75k),
- Marin City,
- Lower income communities in West Marin (those earning household incomes less than \$75k), and
- Residents with access and functional needs served by the Marin Center for Independent Living across Marin County.

Additionally, from our area stratified random sample, we can make confident observations across MWPA JPA zones, albeit with lower total responses than when combined with community partner responses. We worked to combine the best of both random sampling and community convenience sampling through trust networks, but this still requires those using the data to be aware of its limitations.

Next step: Build on summary results below, attentive to potential limitations in broader representation due to sampling, and in partnership with member agencies and community partners, identify questions worth exploring in more depth, perhaps through follow up focus groups or community discussions.

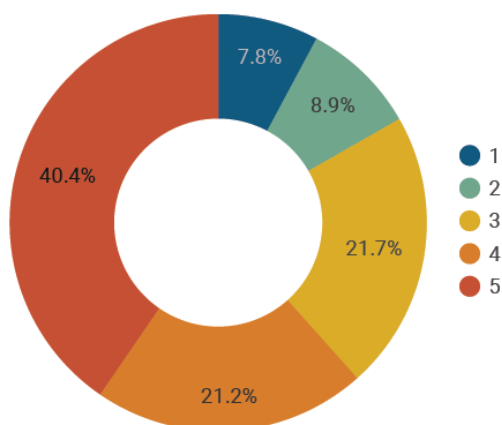
Throughout the summary results discussion, we focus on three demographic categories (income, age, and race/ethnicity), as full exploration of the results broken down by all demographic descriptors and combinations of content questions will require ongoing collaboration between member agencies, community partners, and Marin Wildfire for each zone. This step in the process should follow the same collaboration as the design and implementation process. This is an exciting next step for the work, and one that will continue to build upon the great relationships with community partners already strengthened through the design and implementation phase of the survey.

We focus our discussion of only the most significant results below to allow a more focused presentation.

5.2 Cross-cutting themes

The two primary cross-cutting questions covered in this survey were overall wildfire risk perceptions, and concern about wildfire insurance.

Figure 10: How concerned are you about the risk of wildfires to your household?



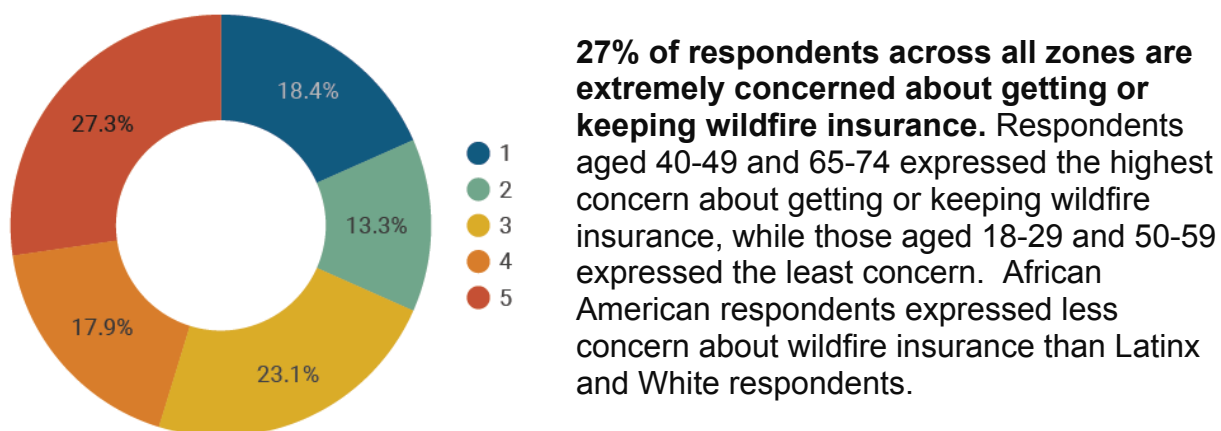
Over 40% of respondents are “Extremely Concerned” about wildfire risk to their households. Those aged 50-59 are more concerned about wildfire risk to their household than any other age group. This is followed by those 40-49, and then by those 30-39. Latinx respondents expressed the highest level of concern about wildfire risk to their households among those reporting race and ethnicity.

1=not at all concerned; 5=extremely concerned

White and African American respondents expressed much less concern than Latinx respondents. Only 26% (White) and 24% (African American) were “extremely concerned” about wildfire risk to their household compared to 46% of Latinx respondents.

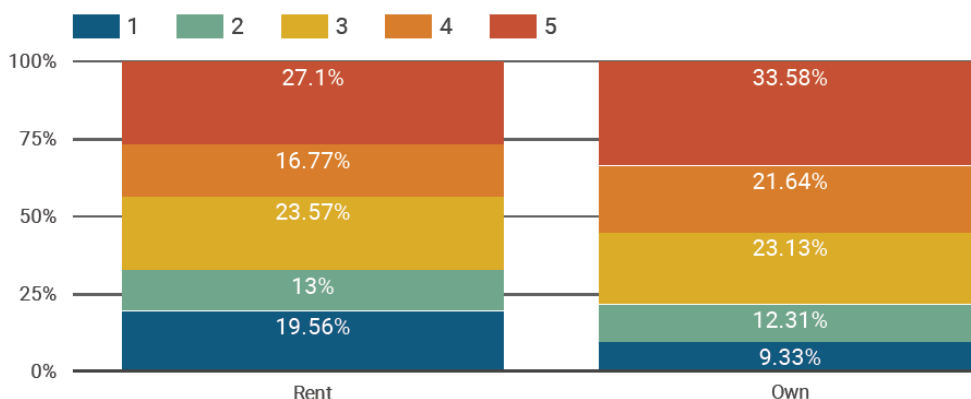
Next step: An important drill down analysis for this question will be geolocating responses by census block groups to evaluate perceived risk versus proximity to high-risk areas.

Figure 11: How concerned are you about getting or keeping insurance?



1=not at all concerned; 5=extremely concerned

Figure 12: Concern about wildfire insurance by renters versus owners



1=not at all concerned; 5=extremely concerned

Renters only showed only slightly less concern about getting or keeping wildfire insurance than homeowners. The vast majority of Latinx respondents reported renting their residences, while the majority of White respondents reported owning their residences, and slightly more than half of African American respondents reported renting their residences.

Next Steps: As with the above, focusing on a geospatial correlation by responses and location within census block groups will be a useful next step.

5.3 Detection, Alert, Evacuation

5.3.1 Concern about traffic, getting out of the home in time during an evacuation, and knowledge of temporary refuges

Traffic preventing timely evacuation was a significant concern for many respondents. 45% of all respondents reported being extremely concerned about the impact of traffic on ability to evacuate. Only 8% of respondents expressed being not at all concerned about traffic.

Residents aged 40-59 expressed the highest level of concern over traffic impacting evacuation – over 45% of these residents expressed extreme concern. 40% of residents aged 30-39 and those 60 and above were extremely concerned regarding traffic and evacuation. The lowest level of concern about traffic and evacuation was expressed by our youngest respondents, those aged 18-29.

Figure 13: How concerned are you about traffic preventing you from leaving your neighborhood during an evacuation?

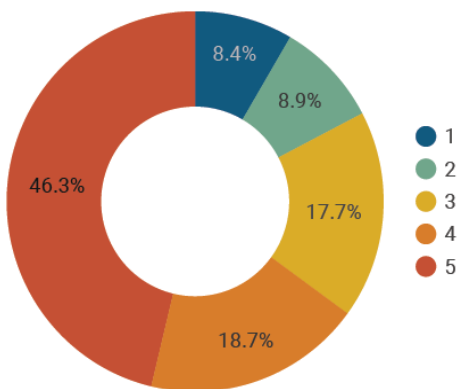
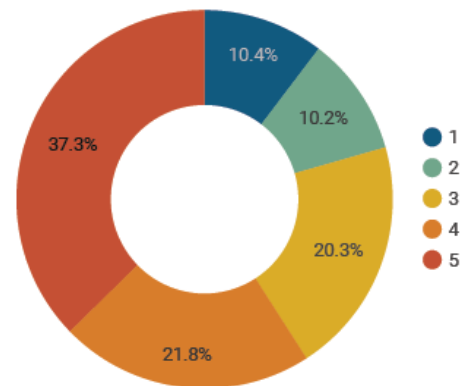


Figure 14: How concerned are you about getting out of your home quickly enough during an evacuation?



1=not at all concerned; 5=extremely concerned

Latinx residents expressed the highest concern about traffic impacts to evacuation, at 46%. 53% of Latinx residents in the Canal neighborhood of San Rafael expressed extreme concern, while 43-45% of Latinx residents in Novato and West Marin expressed extreme concern. About 25% of White and African American residents responded that they were extremely concerned about traffic and evacuation.

Compared to concerns about traffic for evacuation, fewer respondents reported extreme concern about getting out of their homes in time. **37% of respondents reported being extremely concerned about being able to get out of their homes in time during an evacuation.** Only 10% reported being not at all concerned.

There is an interesting difference between responses among the lowest income respondents and those one income bracket above. **38% of respondents earning less than \$44,750 in annual household income reported extreme concern about getting out of their homes quickly enough during an evacuation,** while only 23% of respondents with household incomes between \$44,751 and \$74,600 reported extreme concern about getting out of their homes quickly enough.

Next steps: It would be worth digging into this particular income group to better understand why respondents in the lowest income group reported the highest concern.

Those aged 30-59 were the most likely to be extremely concerned about getting out of their homes in time during an evacuation. Those aged 30-49 were far more likely to report having 4 or more people in their household, including potentially school-age children or older adults with limited mobility. It is also interesting to note that respondents aged 65-74 were the least likely to report extreme levels of concern about getting out of their homes in time during an evacuation, at 22% of respondents. Those aged 60-64, those 75 and older, and interestingly, those 18-29 years old had similar percentages of respondents reporting extreme levels of concern about getting out of their homes in time during an evacuation, at about 30%.

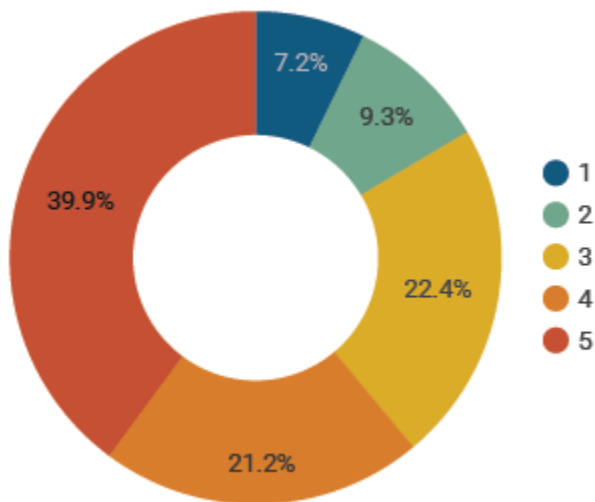
There was also a significant difference in responses broken down by race and ethnicity of respondents. **Latinx respondents were much likelier (51% of respondents) to have reported extreme concern about getting out of their homes in time during an evacuation compared to white (30% of respondents) or African American (37% of respondents).**

63% of all respondents reported knowing the location of a place to take safe, temporary refuge during an evacuation. **Importantly, 71% of respondents who were extremely concerned about traffic preventing their safe evacuation reported that they did not know where to safely take temporary refuge.** This points to a significant relationship between lack of knowledge of a local, safe refuge, and extreme concern about traffic during an evacuation.

There is a positive relationship between household income and knowledge of temporary refuge locations. **Only 31% of respondents among the lowest income bracket reported knowing the location of a safe, temporary refuge, while 65%-75% of respondents in the highest three income brackets reported knowing of one.** About 53% of respondents older than 60 reported knowing of a safe, temporary refuge, while only about 32% of respondents younger than 60 reported the same.

5.3.2 Alerts and sources of trusted, active wildfire information

Figure 15: How concerned are you about finding out about a wildfire in time to evacuate safely?



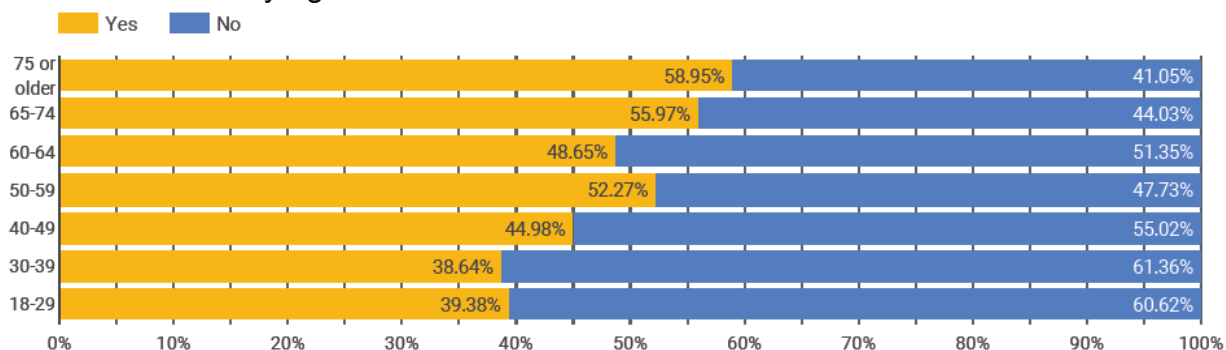
40% of all respondents noted being extremely concerned about finding out about a wildfire in time to evacuate. There is not much of a difference in the number of respondents reporting extreme concern between those that are signed up for alerts versus those who are not. More respondents who are not signed up for alerts reported not being at all concerned about finding out about a wildfire in time to evacuate safely.

1=not at all concerned; 5=extremely concerned

There is a break between the number of respondents in the lowest income bracket reporting extreme concern about finding out in time (41%), and those one income bracket above that (30%). This warrants more investigation. **Respondents aged 40-59 expressed the greatest concern about finding out about a fire in time to evacuate safely (~53% of respondents).** Fewer of those under 30 and those over 64 expressed extreme concern about finding out in time about a wildfire (34-37%). 50% of latinx respondents reported being extremely concerned about finding out in time to evacuate safely. 30% of white respondents and 37% of African American respondents reported the same.

Slightly fewer respondents reported not knowing *where* to find trustworthy information during a nearby wildfire than those that did (46% vs 54%). If we aggregate the low response upper income bracket categories into a single bracket above \$119k per year, then it appears that there is a positive relationship between income level and knowledge of trustworthy sources during active fires.

Figure 16: Do you know where to find trustworthy information when there is a nearby wildfire? Answers by age.



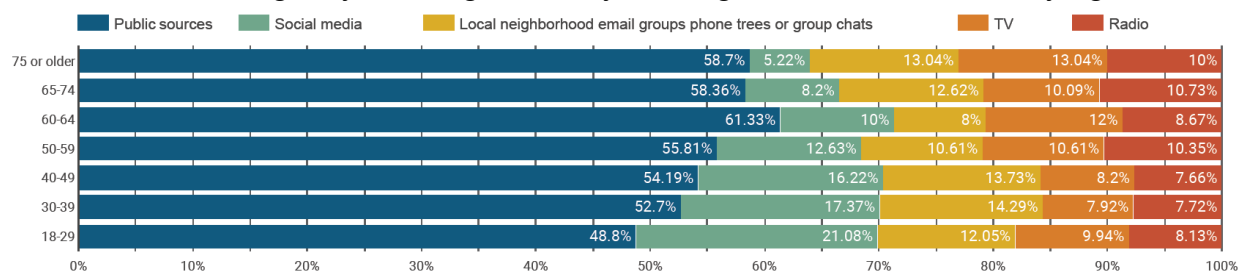
There is also a positive relationship between age and knowledge of trustworthy sources of information during wildfire events. African American respondents reported the least knowledge of trustworthy sources (30%), while White respondents reported the greatest (62%). 40% of Latinx respondents reported knowing trustworthy sources of information during active wildfires.

It should be noted that due to the way the question is worded, this could also be interpreted as the level of trust respondents have in the sources they know about, not just whether they know of sources.

The source selected as the most commonly trusted for information on active wildfires that might affect one's neighborhood were public sources. Social media and local neighborhood email groups or phone trees came in second and third, and both captured about 25% of the selected responses. Radio was selected the least as a trustworthy source about active wildfires, except for West Marin, where it was ahead of TV.

Income appears to have a positive relationship with trust in public sources, although all income groups reported more trust in public sources than others. Lower income respondents appear to have slightly higher trust in social media and TV than higher income respondents. Age also appears to have a positive correlation with trust in public sources, although not as linear as with income. Social media trust is inversely correlated with age, quite strongly.

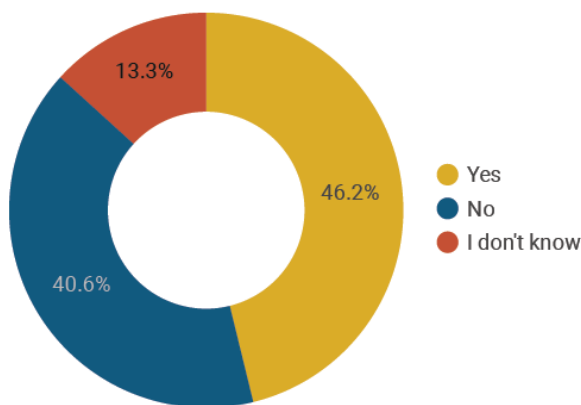
Figure17: Which of the following sources do you trust the most for information about an active wildfire emergency that might affect your neighborhood? Answers by age.



White respondents were more likely to report trust in public sources of information (62%) than Latinx and African American respondents (51%), although again, all groups trusted public sources more than any other. Latinx respondents reported higher trust in social media sources for active wildfires (18% vs 7% for white and 11% for African American respondents). Spanish speaking respondents were slightly less likely to report trust in public sources than English speaking respondents (51% vs 59%). They were more likely to report trust in social media as well (18% for Spanish speaking respondents vs 9% for English speaking).

In terms of how respondents prefer to receive information about active wildfire emergencies, a majority of respondents prefer receiving a text on their mobile phones (40%). A Phone call on their mobile phone was the second most preferred, and local sirens the third. This pattern holds true even for West Marin, where far more residents reported cell connectivity issues during focus groups and interviews. There is a negative relationship between age and preference for any type of contact on mobile phones (text or calls). There is a positive relationship between age and preference for landline phone calls. Sirens appear to be favored slightly more by young adults 18-29. More Spanish speaking respondents reported wanting a call on mobile than English respondents (28% vs 21%).

Figure 18: Are you signed up for any emergency alerting system?



Nearly half of respondents reported being signed up for an emergency alerting system. After merging the higher income brackets, we see a positive relationship between income and those reporting being signed up. This trend is also positive for age.

Those reporting they do not know increases for the youngest and oldest, but decreases for those in the middle age brackets. **Latinx respondents were much**

less likely to report being signed up for emergency alerting systems (33%) than white respondents (73%) or African American respondents (43%). Spanish speaking respondents were less likely to report being signed up than English speaking respondents (34% vs 63%).

When asked which emergency alerting system people were signed up for, respondents selected Nixle and AlertMarin in equal numbers. There is a positive correlation between income and Nixle signups. We do not see a discernible pattern for AlertMarin, although this warrants more investigation into the data. As with being signed up for alerts, both the youngest and oldest age groups were more likely to report not knowing which alert system they had signed up for. African American respondents reported fewer signups

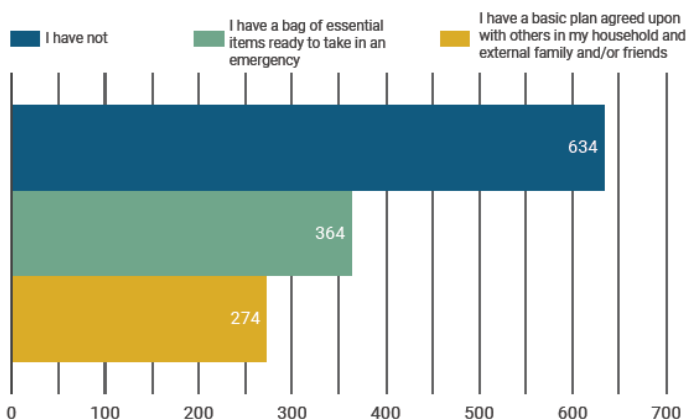
for Nixle (15%) than White (29%) or Latinx (33%). The pattern holds true for AlertMarin as well, but not as strongly (20%, 23%, and 30%).

The vast majority of respondents who said they were signed up for alerts said they had received alerts (80%). Considering AlertMarin does not often send alerts, and does not send a test alert after signing up as Nixle does, this appears to challenge the self-reporting on how many are signed up for Nixle. For the vast majority that reported receiving alerts, they also reported understanding the alerts.

When asked about the most difficult part of receiving and understanding emergency communications, poor cell coverage was the most selected reason. This is true even when controlling for West Marin.

5.3.3 Evacuation

Figure 19: How have you prepared for a potential evacuation?



There is a negative relationship between income and those reporting not having prepared – higher income respondents were less likely to report that they had not prepared. Likewise, there is a positive relationship between income and having a go-bag and having a basic plan agreed upon by family or friends. There is also a somewhat negative relationship between age

* Totals do not add up to our total number of respondents because respondents were allowed to select more than one answer here.

and those reporting not having a plan – older respondents were less likely to report having no preparation (22% in the oldest bracket vs 60% in the youngest brackets). There is a positive relationship between go bags and age, but little relationship between having a basic plan and age. Latinx respondents were the most likely to report not having a plan (65%) versus White (23%), and African American (52%).

When asked where would be the closest safe place to go during an evacuation, a majority of respondents selected “nearest community center/ school/ church/ parking lot” as the top choice. This is an interesting response, considering a majority of respondents reported not knowing the location of a safe, local, temporary refuge, and could point to the possibility that respondents did not understand the concept of a temporary refuge as explained by surveyors. The next most commonly selected places were “friends and family out of the area,” “evac shelters,” and finally “a hotel out of the area.”

There is a positive relationship between age and the number of respondents selecting the nearest community center/school/etc. Latinx and White respondents were similar in selection of nearest community centers/etc., but differed in selection of “friends and family outside the area”, with 38% of White respondents selecting this option, and 23% of Latinx respondents selecting this option. Both Latinx and African American respondents were more likely (21-22%) to select “evacuation shelters” than White respondents (9%). African American respondents were more likely to select “Hotel out of the Area” than White or Latinx respondents.

Regarding barriers to following evacuation orders, “not receiving the alerts” was the number one reason (37%) respondents cited for hypothetically disobeying an order, followed closely by traffic (30%). 18% selected “none of the above”, 14% “limited mobility of someone in the household”, and 12% “not understanding the order.” **11% (126 respondents) noted not having a car with which to evacuate.** 11% also noted not wanting to leave their residence or things behind as a reason to not follow an evacuation order. There appears to be a slightly positive correlation between age and respondents reporting traffic as the cause of disobeying.

5.3.4 Red Flag Days

The most common answer selected by respondents regarding what to do during red flag days was to clear anything flammable from around the house (40% of respondents). 27% of respondents reported that they did not know what a red flag day meant. Not knowing what a red flag day was is negatively related to income – lower income respondents were more likely to report not knowing than higher income respondents. Likewise, age is positively correlated with self-reported knowledge about red flag days, with respondents above age 65 much less likely to report not knowing what to do.

5.4 Defensible Space and Home Hardening

5.4.1 Risk of vegetation at home and in neighborhood

Figure 20: Do you believe the vegetation in your yard or landscaping on your property is a fire risk?

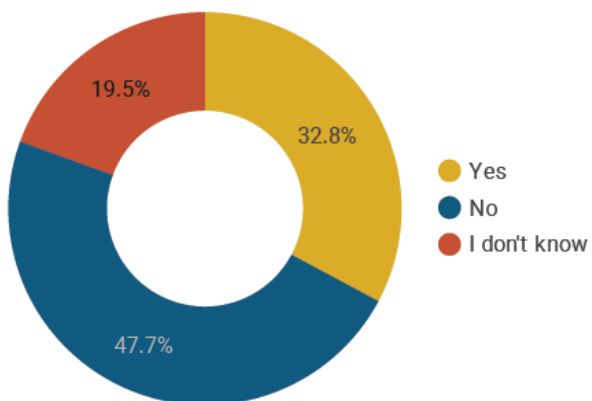


Figure 21: Do you believe that vegetation in your neighborhood is a fire risk?

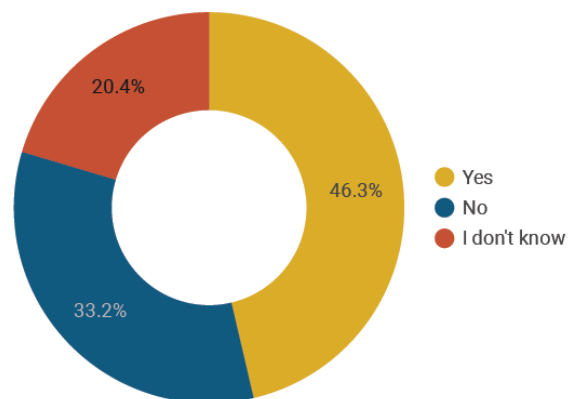


Figure 22: Do you believe the vegetation in the public open space near you is a fire risk?

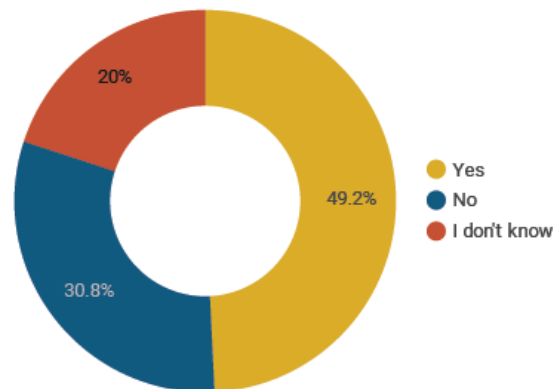


Figure 23: Comparison of those concerned about vegetation risk in their own yards versus their neighborhood

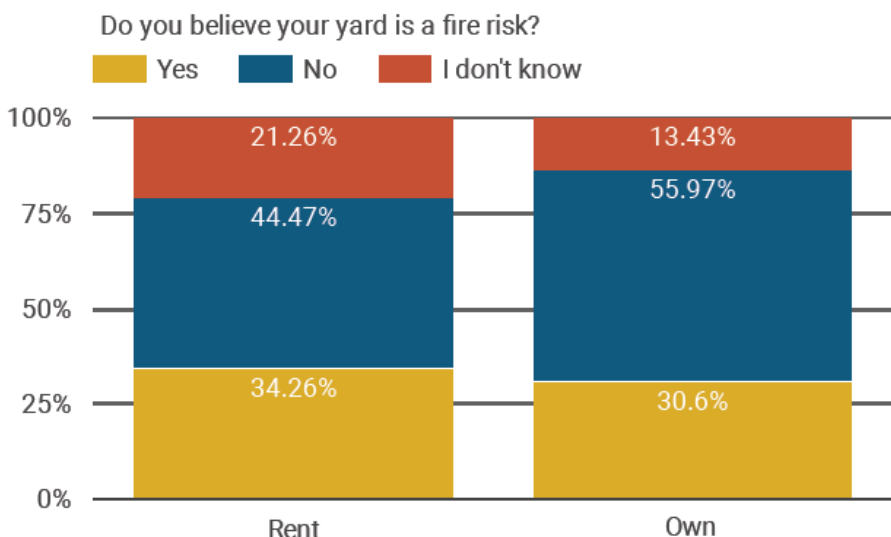
		Neighborhood			Grand total
		Yes	No	I don't know	
Yard	Yes	25.6%	3.4%	3.83%	32.82%
	No	14.29%	26.28%	7.14%	47.7%
	I don't know	6.46%	3.57%	9.44%	19.47%
	Grand total	46.34%	33.25%	20.41%	100%

33% of respondents believe vegetation in their yard is a fire risk; 48% believe it is not; and 19% do not know. There is a slightly positive correlation between age and belief that vegetation is not a risk in their yard or landscaping. White and Latinx respondents were more likely (45% and 55%, respectively) to report their yard as a fire risk than African American respondents (28%).

45% of respondents believe vegetation in their neighborhood is a fire risk; 34% do not; and 21% do not know. The lowest income bracket respondents reported less concern about fire risk of vegetation in their neighborhood than any other income bracket (46% versus 62% for all others). Age is positively correlated with belief that vegetation in the neighborhood is a fire risk. It is negatively correlated with not knowing whether it is a risk or not. White respondents reported being more concerned about risk of vegetation in their neighborhoods (58%) than Latinx (42%) or African American respondents (49%).

A majority of respondents answered the same way for both yard and neighborhood fire risk questions (i.e. yes for one and yes for the other, or the other way around). However, **14% of respondents believed that there was no fire risk from vegetation in their own yard, but there was a fire risk from vegetation in their neighborhood.**

Figure 24: Belief in one's yard being a fire risk broken down by renters versus homeowners



Interestingly, there is not a huge difference between renters and owners and belief that their yards and landscaping are a fire risk (34% for renters, 30% for owners). There is a slightly larger number of owners reporting their yards are not a fire risk (56%) than renters (45%), however. Aligned with this, more renters reported not knowing whether their landscaping was a fire risk than homeowners. This pattern is repeated for those responsible for yard maintenance versus those not.

5.4.2 Defensible Space

64% of respondents reported not knowing what defensible space evaluations were, but 86% of those reporting not knowing were renters. In our sample, there were strong positive correlations between home ownership and age, and homeownership and income, which follows into this question as well, with 73% of responses from those aged 18-39 being that they did not know about defensible space evaluations. There is likewise a positive relationship between knowing about defensible space and income. Interestingly, those with higher incomes also were more likely to believe that defensible space inspections were available to renters.

92% of Latinx respondents, 29% of White respondents, and 63% of African American respondents reported renting versus owning their residence. This context is evident in answers to this question as well, with 80% of responses from Latinx respondents (79%), 11% of responses from White respondents, and 70% of African American respondents being that they did not know what defensible space evaluations were.

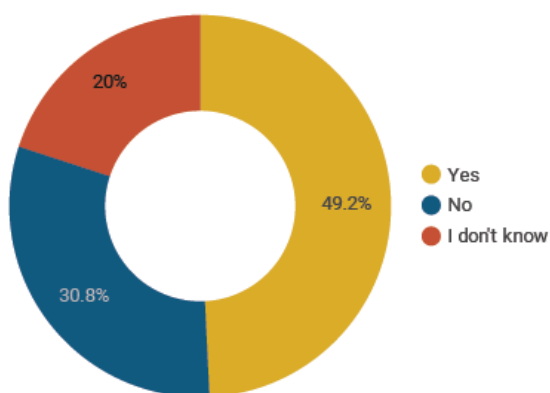
The predominance of renters in our sample also impacted answers to a question about the most challenging aspect, excluding cost, of reducing fire hazards on the exterior of the residence and surrounding yard. The most common response to this question was that the respondent did not have the right to alter the property and did not feel comfortable asking the owner. 47% of renters's responses included the answer that they did not have the right to alter the property. **However, in a separate question, 21% of renters reported being responsible for maintaining the yard and landscaping,** despite the large number reporting that they did not have the right to alter the property in this question about defensible space. 59% of renters who reported being responsible for their yard and landscaping reported that they did not know what defensible space evaluations were.

The most common response among homeowners (35% of responses) was that they could not physically do the work and didn't know where to find those that could help. 11% of homeowners' responses were that they did not have the right to alter the property, which could be connected to the presence of homeowners' associations that regulate landscaping.

When asked how much respondents would be able and willing to spend once to reduce fire risks of the exterior of their residence and the surrounding yard, 19% of homeowners said nothing. 74% of renters said they would be unable or unwilling to spend anything. Ability or willingness to pay is negatively correlated with income. Age appears to be positively correlated with ability or willingness to pay, although as above, there is a slightly positive correlation between age and income. Latinx respondents were the most likely to report an inability or unwillingness to pay anything (75%), compared to 32% of White respondents, and 52% of African American respondents.

5.5 Vegetation Management

Figure 25: Do you believe the vegetation in the public open space near you is a fire risk?



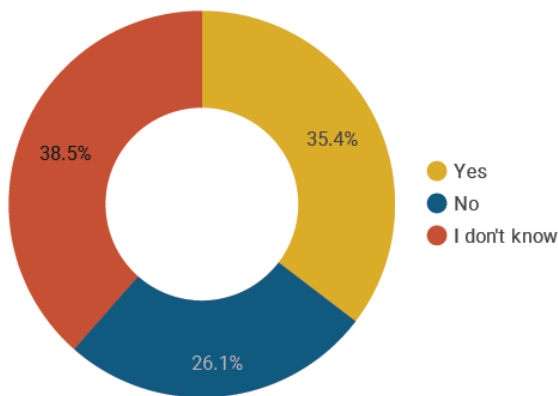
Nearly 50% of respondents believe vegetation in the public open space near them is a fire risk. There does not appear to be a strong correlation with income. There is a slightly positive relationship between age and belief that open spaces near them are a fire risk with older respondents more likely to believe vegetation in open spaces is a fire risk than younger respondents. The youngest age group (18-29), however, slightly alters this trend, as they are more likely to believe vegetation in open spaces

*This is the same chart as in the comparative section above with home yard and neighborhood risk charts, repeated here for ease of reference.

is a risk than those aged 30-49. White respondents were much more likely to believe public open space near them was a fire risk (63% compared to a little over 40% for Latinx and African American respondents).

Next steps: This is a set of questions that would very much benefit from comparing responses with proximity to open spaces and existing or recent vegetation management projects.

Figure 26: Have there been any projects to remove or manage vegetation to reduce fire risk in the open spaces near you?



When respondents were asked whether they knew about nearby vegetation management projects in open spaces, answers were pretty evenly split between “yes”, “no”, and “I don’t know”. This question is very much tied to whether there have actually been nearby vegetation management projects, however, so will need to be further analyzed with an overlay of recent or ongoing projects to understand the awareness of these projects as it relates to

proximity. Mindful of that necessary step, however, there are some interesting trends. The lowest income bracket was the least likely to report knowing about a vegetation management project near them (26%). Around 55% of respondents in the remaining income brackets reported knowing about a vegetation management project.

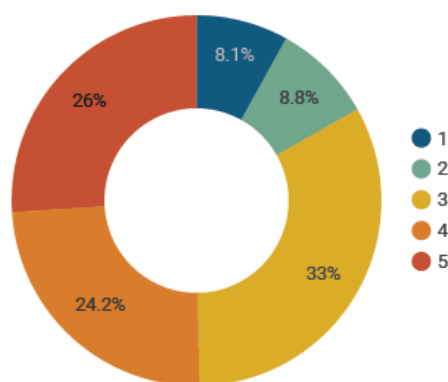
Next steps: Whether this was due to not knowing about existing projects, or whether there are less projects located near the lowest income areas is an important additional analysis.

There is a very clear positive relationship between age and reported knowledge about nearby vegetation management projects (ranging from 22% of the youngest, to 63% of the oldest). It is the clearest relationship for this question. This may again be due the strong correlation between home ownership and age in our sample, and either reflect the case that there are more vegetation management projects around homes in the JPA than apartments, or the fact that homeowners are more knowledgeable about nearby vegetation management projects than apartment dwellers. Latinx respondents were the least likely to report knowing about a nearby vegetation management project (21%). White respondents were the most likely (69%). 35% of African American respondents reported knowing about a nearby vegetation management project. Considering a majority of the African American respondents were surveyed in Marin City, this is likely a statement about awareness of the recent shaded fuel break in the hills above the city and ongoing vegetation management projects around it.

Across our entire sample, the most common response about responsible entities for vegetation management were “I don’t know”, at 40%. The second most common selection was “private landowners”, at 24%, and the third most common response was “Marin County Parks and Open Space”, at 18%. Respondents in the lowest income bracket reported were much more likely to report not knowing who was responsible for vegetation management in open spaces near them (40%), compared to annual income brackets between \$44k and \$119k (24%), and those above \$119k (11%). Age is again inversely related to knowing who is responsible for vegetation management in nearby open spaces, with a slight break in this trend among those aged 65-74, who reported not knowing more often (23%) than the age group below them (aged 60-64, 17%). **52% of the responses from the youngest respondents were that they did not know who was responsible for vegetation management in the open spaces nearby.** Responses from African American and White respondents (19% and 23%, respectively) were more likely to report knowing who was responsible for open space vegetation management near them than Latinx respondents (44%).

Considering geographic location and neighborhoods surveyed, it would be tempting to view this result as tied to proximity to vegetation management projects. This should be investigated further. However, for Latinx and White respondents, there was little variation between the number of respondents selecting “I don’t know” between zones with sufficient responses to evaluate. African American respondents primarily resided in Marin City, which has several recent vegetation management projects in the hills immediately surrounding the city.

Figure 27: How would you rate the performance of the entities responsible for removing vegetation to reduce fire risks?

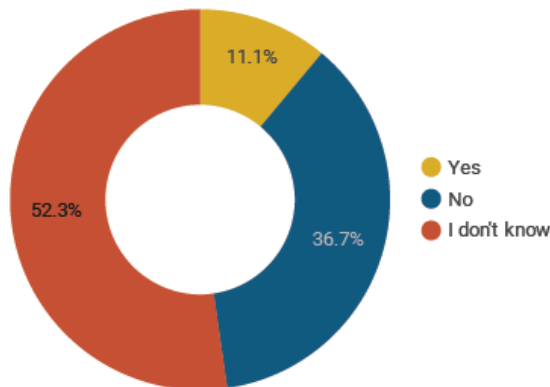


When asked to rate the performance of entities responsible for reducing vegetation fire risk in nearby open spaces, 50% of respondents rated entities a 4 or 5, with 1 being “unacceptable”, and 5 being “outstanding”. 33% rated the performance of vegetation management entities at a 3, the most commonly chosen rating. There is not a clear relationship between income and rating. There is a slightly negative relationship between age and those rating local vegetation management entities at a 5, except for those aged 18-29, who

were the least likely to give local entities a 5 rating, and the most likely to rate them a 1 or a 3. Latinx respondents were the most likely to rate local entities responsible for vegetation management the highest (32%), compared to White respondents (16%) or African American respondents (10%). African American respondents were more likely to rate local entities a 1 or 2 (40%) than Latinx (13%) or White respondents (17%).

5.6 Grants and Partnerships

Figure 28: Is there public financial assistance to help you reduce fire hazards on the exterior of your residence and in the surrounding yard?



The vast majority of respondents reported that either they did not know (52%) or they believed there was no financial assistance available to reduce fire hazards (37%). Only 11% of respondents reported believing there was financial assistance available. Only 11% of respondents reported believing there was financial assistance available. There is a slightly positive correlation between age and belief that there is financial assistance available – 7%-12% of those under 60 believed there is financial assistance, while

15%-18% of those above 60 believe the same. Latinx respondents were the least likely to report believing financial assistance was available (6%). White respondents were three times more likely to report believing financial assistance was available (18%). African American respondents were likewise more likely to report believing that financial assistance was available (22%).

5.7 Public Outreach and Education

Much like the response to the question about trusted sources of information about an *active* wildfire, respondents again reported having the most trust in public sources for information about *preparing* for future wildfires. **Websites of public agencies ranked highest in responses for trust in preparation information, but was nearly tied with social media.** To repeat a methodology note shared in the methodology section above, after multiple iterations and feedback from member agencies and community partners, it was determined that the possible answers to this question should be left broad rather than specific. The way this question was phrased can be seen in appendix 1 below, but included generic answers. For instance, one answer was: "Websites of public agencies (e.g. Marin County, Fire Departments, CalFire, MWPA, Parks, etc.)". Other answer options included only general types of sources rather than any specific to Marin.

The second most commonly selected source for wildfire preparation information was "social media", followed by TV, local organizations, neighborhood emergency groups, and radio. There is a slightly negative relationship between income and selections of "social media" as the preferred source of information (27% for the lowest income group, 18% for the highest income groups). **Age presents a very clear negative relationship to selection of "social media", with only 10% of the oldest**

respondents versus 33% of the youngest selecting this source. Neighborhood emergency groups are the opposite, with 23% of the oldest group, and only 6% of the youngest selecting this source. The remaining sources are not clearly related to age. Latinx respondents were most likely to select “social media” as a preferred source (29%), African American respondents were most likely to select TV (24%), and White respondents were the most likely to select “websites of public agencies” (32%).

When respondents were asked how they would prefer to learn more about preparing for wildfires, preference was evenly split between in-person events and virtual. **The most popular single option was “attend an in-person, small, neighborhood gathering,” but the selections were very evenly matched across respondents (38% of respondents selected “in-person, small, neighborhood gathering” versus 30% selecting the least selected option, “online webinar or workshop”).** Age presents the clearest set of correlations. There is a positive relationship between age and those willing to attend an in-person, small neighborhood gathering (21% for the youngest group, and 36% for the oldest). Those willing to attend a large in-person community event were more likely to be those between 30 and 59 years of age. There is not a strong variation by race and ethnicity in those willing to attend an in-person, small, neighborhood gathering. Latinx and African American respondents were more likely to select large community events as a preference than White respondents (~30% versus 14%). This is the opposite for those selecting “search online,” with 18% of African American respondents, 24% of Latinx respondents, and 31% of White respondents selecting this option.

6. Recommendations & Next Steps

Wildfire risk in the context of Marin County is geographically heterogeneous. Income, age, and race/ethnicity are also closely related to where people live in Marin County. The implication of these two relationships is likely strongly connected to what we have found among our sample of Marin residents in this survey – perspectives on wildfire risk and programming often correlate with different demographic groups. It is important to note that while geographic proximity may end up proving a strong relationship to responses in this survey, that does not exclude income, race/ethnicity, or age from being equally important in understanding those geographic patterns. Income, race/ethnicity, and to some degree, age, influence where people are able to or feel welcome to settle in Marin County, and thus the geography of neighborhoods is inextricably tied to these underlying social factors and histories.

Understanding this high-level set of relationships in the data is the first step. **The next step in the process will be for Marin Wildfire, member agencies, and community partners to drill down further into the relationships between proximity to heightened wildfire risk (or evacuation risk), and the perspectives shared in this survey.** There may be some lucrative additional, quick investigations to delve deeper into some of these relationships, like a quick focus group or workshop. This mutual exploration and discussion of the data is an essential step in a community partnership. Working together on programming to fill any gaps will emerge from this process.

In addition to the general process recommendations above, we identified several interesting patterns in the data that may warrant further exploration within the collaboration teams taking this forward. While all questions would benefit from a geospatial correlation analysis to factors relevant to the question and wildfire risk, in general, there are a couple that would be particularly valuable:

- Knowing about potential local, temporary refuges would be interesting to understand in relation to proximity to an actual safe, local, temporary refuge location;
- Traffic concerns can be easily analyzed in relation to the existing evacuation risk map;
- Respondent perspectives on alerts can be related to actual signups from Nixle or AlertMarin;
- Difficulties in receiving alerts can be connected with cell coverage maps;
- Info about homeowner knowledge and perspectives on defensible space can be connected to the FireAside database on DSpace inspections;
- Views on vegetation management projects can be analyzed with proximity to recent or on-going projects;
- Considering the substantial use of public agency websites and social media for information about how to prepare for wildfires, tracking views on social media posts and visits to websites may be a useful way to understand which of these pages and posts garner the most attention and connect them back to survey results.

From what we can see already in the results of this survey, there are some initially evident patterns worth better understanding for upcoming work plans.

Cross-cutting themes

The fact that 40% of respondents were extremely concerned about wildfire risk, and another 21% very concerned is significant. Even during the winter of a wet year, with lower than average fire activity (November 2023 - March 2024 was when surveys were collected), 60% of respondents still noted they were very to extremely concerned about wildfire. The public concern does not seem to have dissipated despite the brief reduction in fire activity in California. Of particular note is that Latinx respondents, particularly those in the Canal neighborhood of San Rafael, expressed greater concern about wildfire risk than any other respondents in our survey. This is a great opportunity for collaboration between Marin Wildfire, San Rafael Fire Department, and Canal Alliance and the Canal community on outreach components of the next work plan to address this concern.

Renters and homeowners share a concern about getting and keeping wildfire insurance. This points to a reframing of the wildfire insurance problem as one larger than that merely affecting the housing market, one that affects resident well-being in a much broader sense. Renters are just as concerned about losing their homes, possessions,

and memories to wildfires as homeowners, and this concern is likely as much about a sense of home, community and belonging as market value. This awareness may lend itself to ongoing investigations into community self-insurance and alternative community resilience insurance models emerging in the U.S.

Detection, Alert, Evacuation

Traffic emerged as a significant concern among respondents, something which closely matched the focus group discussions we held across Marin. While Latinx respondents in Canal, West Marin, and Novato expressed the greatest concern about traffic, there appears to be a concordance in concern about traffic across different communities in Marin. Older adults without a car worry about getting out of their neighborhood in the hills along one-way streets, while younger families in the Canal, Novato, and Marin City worry about getting their family to safety knowing how bad traffic can get in Marin given limited exits from neighborhoods or typical 101 traffic conditions during rush hour.

The fact that 71% of respondents who were extremely concerned about traffic preventing their safe evacuation also reported not knowing where to safely take temporary refuge, points to a possible point of engagement. The lowest income residents were the least likely to know about a safe, local, temporary refuge, which also points to valuable work to fill that gap.

Residents expressing the greatest concern about getting out of their homes in time during an evacuation may be connected to the number of people in the home. Those reporting 4 or more people living in the home expressed the most concern about getting out of the house in time. This may have to do with the presence of school-age children and older, dependent adults with limited mobility in the household.

A quarter of all respondents reported being signed up for AlertMarin. White respondents were much more likely to report being signed up for an emergency alert system than African American or Latinx respondents. Working with community partners to understand why this is the case and collaboratively building appropriate and effective ways to reach all communities would be a valuable program.

11% of all respondents reported that they did not have a car with which to potentially evacuate. This is a significant concern, even with increasing identification of local, safe refuges. During our focus groups, we heard from several older adults in Central Marin that they would have to walk down to the nearest cross street from their address to wait to get picked up during an emergency. There is substantial room for community partners and member agencies to discuss options for cases like these.

Defensible Space and Home Hardening

Renters by and large did not know about defensible space evaluations. Clearly there is a lack of knowledge about defensible space evaluations and the work Marin Wildfire and member agencies are doing across Marin among renters. While renters may not

hold the authority to alter their landscapes or invest in defensible space improvements on the properties they rent, it is still important that they have access to information about this work. With more information, they may end up playing a significant role in bringing more property owners into the system. In a separate question, 21% of renters reported being responsible for maintaining the yard and landscaping, so there may also be roles for them within current responsibilities.

The most common response among homeowners was that they could not physically do the work and didn't know where to find those that could help. This would appear to support the decision among member agencies to move towards direct service in defensible space work for homeowners. The 11% of homeowners that reported not having the right to alter their properties likely points to the need to bring in HOA management to the Defensible Space programs.

Vegetation Management

With 50% of respondents believing the vegetation in open spaces near them is a fire risk, and the fact that this is one of the most significant efforts of Marin Wildfire and member agencies, this points to the need for several things. One, analyzing whether responses correlate with proximity to recent or ongoing vegetation management projects would be very useful here, although responses in Marin City appear to downplay that relationship. Second, if there is indeed a gap in resident awareness of nearby vegetation management projects, this points to the need for additional work conveying the presence and value of this work to the public.

Younger adults are much less likely to know about a vegetation management project in our results, as are Latinx and African American respondents. Considering the relatively universal reliance on the websites of public agencies and social media for non-emergency information about wildfires, this lends itself to collaborative discussions between member agencies and community partners about how to share information about these projects.

Grants and Partnerships

Most of our respondents did not know about grants, or believed there were none available for defensible space work. Renters were much more likely to report there being no financial assistance, but homeowners were equally likely to state there was as there wasn't financial assistance. Considering these funding mechanisms have been evolving each year as valuable lessons are learned, it would be valuable for member agencies and community partners to discuss current approaches and outreach methods.

Public Outreach and Education

There is a close tie between reported use of social media versus websites of public agencies for obtaining information about how to prepare for wildfires. This preference

appears to vary by age, and thus supports ongoing efforts to engage in multi-modal education and outreach programming. How respondents prefer to obtain this information also varies by race and ethnicity, a result which lends itself to member agency, MWPA, FireSafe Marin and community partner collaborations on outreach and education programming that are culturally aware and inclusive.

7. Conclusion

This survey, and the focus groups and interviews which informed it, are the first steps in the development and implementation of an MWPA-Member Agency and community partner co-designed tracking and evaluation system for MWPA programming. As noted above, best practices in participatory, community engaged tracking and evaluation programs can be found at the State Level with the Transformative Climate Communities program, and at the Federal Level with emerging practices in EPA funding for community climate resilience. The common factor is consistent funding and ongoing work to maintain active community partnerships, allow regular updates to the baseline survey to track progress, and to allow the collaborative teams to dig deeper into key areas where needed, with additional focus groups or other outreach approaches.

The real value of tracking and evaluation is not reporting on the success or failure of programming, but rather on its facilitation of deeper community partnerships that will ensure ongoing lessons learned are quickly fed back into programming. Creating a closer to real-time feedback loop to ensure programming is responsive to community needs is the optimal outcome of this process.

As needed, we will support Marin Wildfire, member agencies, and community partners as they set up those processes for next year's work plan.

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8. Appendices

Appendix 1: Survey Instrument

MWPA Wildfire Risk Perceptions Survey

The Marin Wildfire Prevention Authority (MWPA) is an agency created and funded through a voter-approved parcel tax in 2020 to fund wildfire risk reduction and fire prevention work across Marin. As part of this, MWPA is conducting a resident survey on wildfire risks and risk reduction programs in Marin. The survey will identify any gaps in programming, inform improvements to MWPA's programs in the future, and track progress of the current work as set by their mandate.

This survey should take approximately 10 minutes to complete.

All responses are strictly confidential.

Thank you for your participation. In consideration of your time taking the survey, we will give you a \$20 gift card upon completion.

* Indicates required question

1. Address? *

2. How concerned are you about the risk of wildfires to your household? *

Mark only one oval.

1 2 3 4 5

Not ☐ ☐ ☐ ☐ ☐ Extremely concerned

3. How concerned are you about traffic preventing you from leaving your neighborhood during an evacuation? *

Please rate on a scale from 1 (Not at all concerned) to 5 (Extremely concerned)

Mark only one oval.

1 2 3 4 5

Not ☐ ☐ ☐ ☐ ☐ Extremely concerned

4. How concerned are you about getting out of your home quickly enough during an evacuation? *

Please rate on a scale from 1 (Not at all concerned) to 5 (Extremely concerned)

Mark only one oval.

	1	2	3	4	5	
Not	☐	☐	☐	☐	☐	Extremely concerned

5. Do you believe the vegetation in your yard or landscaping on your property is a fire risk? *

Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ I don't know

6. Do you believe the vegetation in the public open space near you is a fire risk? *
- Public open space refers to public parks, open space district lands, or other public lands

Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ I don't know

7. Do you believe the vegetation in your neighborhood is a fire risk? *

Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ I don't know

8. Do you know where to safely go for temporary refuge during an evacuation? *

Mark only one oval.

- ☐ Yes
☐ No
☐ I don't know

9. How concerned are you about finding out about a wildfire in time to evacuate safely? *

Please rate on a scale from 1 (Not at all concerned) to 5 (Extremely concerned)

Mark only one oval.

	1	2	3	4	5	
Not	☐	☐	☐	☐	☐	Extremely concerned

10. Do you know where to find trustworthy information when there is a nearby wildfire? *

Mark only one oval.

- ☐ Yes
☐ No
☐ I don't know

11. How concerned are you about getting or keeping wildfire insurance? *

Please rate on a scale from 1 (Not at all concerned) to 5 (Extremely concerned)

Mark only one oval.

	1	2	3	4	5	
Not	☐	☐	☐	☐	☐	Extremely concerned

12. Do you have a concern not previously listed about wildfire risk to your household?

13. Which of the following sources do you use **the most** to get information about **preparing** for future wildfires?

Check any that apply

Check all that apply.

- ☐ Websites of public agencies (e.g. Marin County, Fire Departments, CalFire, MWPA, Parks, etc.)
- ☐ TV
- ☐ Radio shows
- ☐ Local organizations (e.g. community centers, churches, schools, etc.)
- ☐ Social Media
- ☐ Neighborhood Response Group, Disaster Council, Fire Wise Community, Community Emergency Response Team
- ☐ Other: _____

14. Which of the following would you **most likely** do to better prepare for wildfires? *

Check any that apply

Check all that apply.

- ☐ Attend an in-person large community event
- ☐ Attend an in-person small neighborhood gathering
- ☐ Attend an online webinar or workshop
- ☐ Search online for information by myself
- ☐ Other: _____

15. Which of the following methods would you prefer to get information about an **active** wildfire emergency? *

Check any that apply

Check all that apply.

- ☐ Call on my mobile phone
- ☐ Text on my mobile phone
- ☐ Call on my landline
- ☐ Sirens from local public buildings (e.g. fire stations, post offices, schools, etc.)
- ☐ Alert on radio
- ☐ Other: _____

16. Which of the following sources do you trust the most for information about an **active** wildfire emergency that might affect your neighborhood? *

Check any that apply

Check all that apply.

- ☐ Local neighborhood email groups, phone trees or group chats
- ☐ Marin County Emergency Portal
- ☐ My local fire department
- ☐ Other public agency websites
- ☐ Social media
- ☐ Radio
- ☐ TV
- ☐ Other: _____

17. Are you signed up for any emergency alerting system? *

Mark only one oval.

- ☐ Yes
- ☐ No *Skip to question 24*
- ☐ I don't know *Skip to question 19*

18. Which emergency alerting system are you signed up for? *

Mark only one oval.

- ☐ Nixle
- ☐ AlertMarin
- ☐ Nixle and AlertMarin
- ☐ I don't know which, but I know I have received the alerts before
Skip to question 20
- ☐ Other: _____

19. Have you received emergency alerts before? *

Mark only one oval.

- ☐ Yes *Skip to question 20*
- ☐ No *Skip to question 22*
- ☐ I don't know *Skip to question 22*

20. Were you able to understand the alerts you received? *

Mark only one oval.

- ☐ Yes *Skip to question 22*
- ☐ No *Skip to question 21*

21. Why were you not able to understand the alerts? *

Check all that apply

Check all that apply.

- ☐ They were not translated correctly
- ☐ They were not in my language
- ☐ Other: _____

22. What is your preferred language for receiving emergency alerts? *

Mark only one oval.

- ☐ Chinese
- ☐ English
- ☐ French
- ☐ German
- ☐ Hindi
- ☐ Hmong
- ☐ Italian
- ☐ Korean
- ☐ Mixteco
- ☐ Portuguese
- ☐ Purepecha
- ☐ Russian
- ☐ Spanish
- ☐ Tagalog
- ☐ Vietnamese
- ☐ Zapoteca
- ☐ Other: _____

23. What is the most difficult part of receiving and understanding emergency communications? *

Check all that apply.

- ☐ Hearing the alerts or sirens
- ☐ Seeing the alerts, emergency lights, or signage
- ☐ Reading the alert notifications or signage
- ☐ Understanding the emergency communications despite being in my preferred language
- ☐ Inaccurate translations
- ☐ Understanding emergency communications in English
- ☐ Limited access to a cell phone or landline during an emergency
- ☐ Poor cell network coverage during an emergency
- ☐ Nothing
- ☐ Other: _____

24. What do you know about defensible space evaluations run by fire agencies in Marin? *

Check any that apply

Check all that apply.

- ☐ I don't know what these are
- ☐ They are evaluations of fire hazards inside a residence
- ☐ They are evaluations of fire hazards outside a residence and in my yard
- ☐ These evaluations are free
- ☐ These evaluations are not free
- ☐ They are available to renters
- ☐ They are available to homeowners

25. Do you rent or own your residence in Marin County?

Mark only one oval.

- ☐ Rent
- ☐ Own
- ☐ I do not rent or own, but live with someone at their residence
- ☐ Other: _____

26. Are you responsible for maintaining the exterior of the building you live in?

For instance, exterior paint, roofing, siding, gutters, etc.

Mark only one oval.

- ☐ Yes
- ☐ No

27. Are you responsible for maintaining the yard/land around the building you live in?

For instance, landscaping, fencing, walkways, etc.

Mark only one oval.

- ☐ Yes
- ☐ No

28. Is there public financial assistance to help you reduce fire hazards on the exterior * of your residence and in the surrounding yard?

Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ I don't know

29. Besides cost, what is the most difficult thing about reducing fire hazards on the exterior of your residence and in the surrounding yard? *

Check any that apply

Check all that apply.

- ☐ You don't have the right to alter the property and you don't feel comfortable asking the owner
- ☐ You physically can't do the work yourself and don't know where to find those that can help you
- ☐ You don't know what you need to do and where to find out
- ☐ You don't have the time to arrange the work you need to do

30. How much would you be able and willing to spend once to reduce fire risks of the exterior of your residence and the surrounding yard? *

Not annual costs, but things you would only have to do once, like redoing landscaping, replacing roofing, installing new vents, etc.

Mark only one oval.

- ☐ Nothing
- ☐ \$1 - \$800
- ☐ \$801 - \$1,500
- ☐ \$1,501 - \$3,000
- ☐ \$3,001 - \$6,000
- ☐ \$6,001 - \$12,000
- ☐ More than \$12,001

31. How have you prepared for a potential evacuation? *

Check all that apply.

- ☐ You have not
- ☐ You have a basic plan agreed upon with others in your household and external family and/or friends
- ☐ You have a bag of essential items ready to take in an emergency
- ☐ Other: _____

32. Where would be the closest safe place to go during an evacuation? *

Check all that apply.

- ☐ Nearest Community Center / School / Church / Parking lot of shopping area
- ☐ Hotel out of the area
- ☐ Friends and/or family out of the area
- ☐ Evacuation shelter
- ☐ Other: _____

33. Which of the following would prevent you from following an evacuation order? *

Check all that apply.

- ☐ The limited mobility of someone in your household
- ☐ You don't have access to a car
- ☐ You wouldn't receive the notification to evacuate
- ☐ You wouldn't understand the notification to evacuate
- ☐ You believe the risk to you and your family would be too high during an evacuation
- ☐ You wouldn't want to leave your residence and/or things behind
- ☐ You couldn't evacuate your animals
- ☐ There would be too much traffic
- ☐ None of the above
- ☐ Other: _____

34. What are suggested practices during red flag warnings? *

Check all that are true for you

Check all that apply.

- ☐ I don't know what a Red Flag warning is
- ☐ Don't park on grasses
- ☐ Temporarily leave the area because I have mobility or other evacuation challenges
- ☐ Clear anything flammable from around my home
- ☐ Don't use BBQ or other sources of heat or flames outside

35. Have there been any projects to remove or manage vegetation to reduce fire risk in the open spaces near your home? *

Open spaces can include wilderness areas, parks, open space district areas, large private lands or other large open wild areas. Types of vegetation management could be cutting back branches on trees, removing bushes, widening or clearing vegetation along roads or fire roads, etc.

Mark only one oval.

- ☐ No
- ☐ Yes
- ☐ I don't know

36. Which entities, if any, are responsible for managing vegetation to reduce fire risk in the open spaces near your home? *

Check all that apply

Check all that apply.

- ☐ No one
- ☐ State Parks
- ☐ Golden Gate National Recreation Area
- ☐ Point Reyes National Seashore
- ☐ Marin Municipal Water District
- ☐ Marin County Parks and Open Space
- ☐ Marin County Housing Authority
- ☐ Private landowners
- ☐ My fire department
- ☐ I don't know
- ☐ Other: _____

37. How would you rate the performance of the entities responsible for removing vegetation to reduce fire risks?

Mark only one oval.

	1	2	3	4	5	
Unacceptable	☐	☐	☐	☐	☐	Outstanding

The following demographic questions will allow us to better understand equitable and inclusive access to fire prevention information and resources

All answers will be kept strictly confidential

38. Which best describes the residence in which you live?

If you live in a large apartment or condo complex, please count all units in the entire complex

Mark only one oval.

- ☐ Mobile home
- ☐ One-family house detached from any other house
- ☐ One-family house attached to one or more houses
- ☐ Residence with 2 units
- ☐ Residence with 3-4 units
- ☐ Residence with 5-9 units
- ☐ Residence with 10-19 units
- ☐ Residence with 20-49 units
- ☐ Residence with 50 or more units
- ☐ House-boat
- ☐ Boat (not houseboat), RV, van or other vehicle
- ☐ Other: _____

39. Is this your primary residence?

Mark only one oval.

- ☐ Yes
- ☐ No, I stay here only several days per week
- ☐ no, I stay here only part of the year
- ☐ no, this is a short-term vacation rental
- ☐ Other: _____

40. How many people live in your household, including yourself?

Mark only one oval.

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5 or more

41. How many working vehicles does your household have?

Mark only one oval.

☐ 0

☐ 1

☐ 2

☐ 3

☐ 4 or more

42. How many people can safely fit in all of your working vehicles?

Enter a number only

43. What is your age?

Mark only one oval.

- ☐ 18-29
- ☐ 30-39
- ☐ 40-49
- ☐ 50-59
- ☐ 60-64
- ☐ 65-74
- ☐ 75 or older

44. What best describes your race and ethnicity?

Check all that apply

Check all that apply.

- ☐ Latinx\Latine\Latino or Hispanic
- ☐ Black or African American
- ☐ Native American Indian or Alaska Native
- ☐ Asian
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ White
- ☐ Prefer not to answer
- ☐ Other: _____

45. What best describes your gender?

Mark only one oval.

- ☐ Male
- ☐ Female
- ☐ Non-binary
- ☐ Transgender
- ☐ Prefer not to answer
- ☐ Other: _____

46. Which best estimates your average household income over the last year?

Mark only one oval.

- ☐ Less than \$3,729 per month (or \$44,750 per year)
- ☐ Between \$3,730 per month and \$6,217 per month (or between \$44,751 per year and \$74,600 per year)
- ☐ Between \$6,218 per month and \$9,942 per month (or between \$74,601 per year and \$119,300 per year)
- ☐ Between \$9,943 per month and \$12,427 per month (or between \$119,301 and \$149,125 per year)
- ☐ Between \$12,428 per month and \$14,912 per month (or between \$149,126 and \$178,950 per year)
- ☐ Above \$14,912 per month (or above \$178,951 per year)
- ☐ Prefer not to answer

47. Are any of the below true for anybody living in your household?
- Lives with any physical, development or intellectual disabilities
 - Lives with chronic conditions or injuries
 - Experiences limitations understanding English
 - Is dependent on public transit

Mark only one oval.

☐ Yes

☐ No

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