

East Palo Alto EJ+Safety Element Survey Final Report January 2025 Climate Resilient Communities

## **Executive Summary**

A coalition of community-based organizations conducted a survey for the City of East Palo Alto's Environmental Justice and Safety Element. From September 9, 2024 through January 20, 2025, online and in-person surveys were deployed throughout the city. 266 total responses were collected. This report summarizes the survey design and results. We found our sample to be generally representative of the overall city, per Census Bureau data comparisons, across neighborhood, race and ethnicity, age, tenure, and income. Given sufficient sample sizes across racial and ethnic groups in the city, i.e., Hispanic (113), Pacific Islander (86), Black (45), and Asian (20) respondents compared to White (49) respondents, we were able to make claims of statistical significance disaggregating by race and ethnicity. We were also able to measure disparities between financially burdened and unburdened households, based on receipt of public benefits and limited emergency savings. Of particular note are the following key findings and resultant recommendations:

- 1. A majority of respondents experienced traffic congestion as an adverse impact in the last ten years, and over a third of respondents experienced extreme indoor heat and cold, excessive outdoor noise, poor air quality, and poor tap water quality. *Non-White households and financially burdened households are significantly more likely to have experienced a range of adverse environmental impacts than their counterparts.* 
  - a. The next most common environmental impacts (experienced by at least a quarter of respondents) were indoor mold, difficulty accessing fresh groceries, floods affecting neighborhood travel, lack of usable open space, extreme outdoor heat, and loss (for a day or more) of electricity, water, or natural gas.
  - b. Particularly notable disparities between Hispanic and White households: poor air quality (51% vs. 30%), poor tap water quality (46% vs. 19%), presence of mold (44% vs. 21%), extreme outdoor heat (34% vs. 12%), and lack of working HVAC (33% vs. 12%).
  - c. Particularly notable disparities between Black and White households: extreme outdoor heat (34% vs. 12%).
  - d. Particularly notable disparities between Pacific Islander and White households: poor tap water quality (39% vs. 19%). In the other direction, Pacific Islander households experienced less traffic congestion (36% vs. 60%).
  - e. Particularly notable disparities between financially burdened and unburdened households: extreme indoor heat (52% vs. 36%), poor air quality (52% vs. 30%), poor tap water quality (48% vs. 27%), presence of mold (50% vs. 22%), extreme outdoor heat (40% vs. 20%), and interruption of utilities (40% vs. 20%).



- f. Recommendations: Implement traffic control, home weatherization programs, and noise pollution mitigation measures widely, as they benefit all groups similarly. Identify air pollution hotspots using public monitors and target mitigation measures accordingly. Target urban canopy programs in areas with greater pedestrian activity. Target home repair programs focused on water quality, mold abatement, utility upgrades, and HVAC to low-income and limited-English-speaking households.
- 2. Over a third of respondents experienced stress and anxiety as a health issue within their household in the last five to ten years, and over a quarter of respondents experienced asthma, high blood pressure or cholesterol, and diabetes. Non-White households and financially burdened households are significantly more likely to have experienced a range of health issues than their counterparts.
  - a. The next most common health issues were migraines, obesity, physical disability, heat stroke, and smoking-related issues.
  - b. Particularly notable disparities between Hispanic and White households: asthma (38 % vs. 12%) and diabetes (32% vs. 5%).
  - c. Particularly notable disparities between Pacific Islander and White households: asthma (39 % vs. 12%) and diabetes (33% vs. 5%).
  - d. Particularly notable disparities between financially burdened and unburdened households: stress and anxiety (50% vs. 31%), asthma (41% vs. 24%), high blood pressure and cholesterol (38% vs. 21%), migraines (32% vs. 18%), obesity (33% vs. 13%), smoking-related issues (16% vs. 4%), chronic respiratory disease (13% vs. 3%), and learning disability (12% vs. 1%).
  - e. Recommendations: Identify air pollution hotspots using public monitors and target mitigation measures accordingly. Target mental health resources, nutritional programs, and physical recreational activities to low-income households.
- 3. Over a fifth of respondents have spent more than \$100 in the past year on repairing or preventing weather damages, and over a third of respondents have delayed repairs because of cost. Fewer than half of renters have renter's insurance, and roughly half of those without flood insurance, earthquake insurance, or health insurance express a desire to acquire coverage, but for the cost. Non-White households and financially burdened households are significantly more likely to have experienced a range of financial stresses than their counterparts.
  - Particularly notable disparities between Hispanic and White households: desire to acquire earthquake insurance (38% vs. 12%), assistance from public benefit programs (43% vs. 19%), flood insurance (6% vs. 23%), and earthquake insurance (3% vs. 12%).
  - b. Particularly notable disparities between Black and White households: desire to acquire earthquake insurance (34% vs. 12%).
  - c. Particularly notable disparities between Pacific Islander and White households: desire to acquire earthquake insurance (33% vs. 12%) and desire to acquire health insurance (38% vs. 16%).



- d. Particularly notable disparities between financially burdened and unburdened households: health insurance (55% vs. 34%), renters (56% vs. 26%), desire to acquire flood insurance (50% vs. 27%), and desire to acquire earthquake insurance (49% vs. 21%).
- e. Recommendations: Implement home repair programs widely, as they benefit all groups similarly. Ensure existing insurance coverage options are targeted to limited-English-speaking households. Explore insurance coverage programs designed for low-income households, or rainy day fund programs.
- 4. More than a third of respondents would prioritize getting rid of mold in their house, and over half would prioritize window and roof repairs. Priorities differ by race/ethnicity and financial burden: for example, White and unburdened households are more likely to prioritize mold abatement, while Hispanic and burdened households are more likely to prioritize roof repairs.
  - a. Other household improvement priorities include air purifiers, air conditioning, ADA accessibility modifications, emergency kits, tap water, and heating.
  - b. Particularly notable disparities in priorities between Hispanic and White households: roof repairs as a #1 priority (28% vs. 16%).
  - c. Particularly notable disparities in priorities between financially burdened and unburdened households: mold abatement as a #1 priority (20% vs. 32%), ADA accessibility modifications as a #1 priority (4% vs. 1%), and medical expenses as a top 5 priority (5% vs. 2%).
  - d. Recommendations: Expand reduced cost home weatherization and retrofit programs, as well as air filter initiatives, as they benefit all groups similarly. Target reduced cost roof repairs in particular to limited-English-speaking households. Target reduced cost ADA modifications in particular to low-income households.
- 5. Neighborhood improvement priorities are more diverse than household improvement priorities. The most common priorities are improved roads and sidewalks, easier residential parking, more bus stops and routes, and safer biking routes. Priorities differ by race/ethnicity and financial burden: for example, Hispanic and burdened households are more likely to prioritize sidewalks and crosswalks.
  - i. Other neighborhood improvement priorities include crosswalks, more frequent buses, speed bumps, improved bus stops, and improved water supply.
  - Particularly notable disparities in priorities between Hispanic and White households: sidewalks as a #1 priority (19% vs. 5%), crosswalks as a #1 priority (16% vs. 0%), and crosswalks as a top 5 priority (20% vs. 2%).
  - Particularly notable disparities in priorities between financially burdened and unburdened households: sidewalks as a #1 priority (23% vs. 8%), sidewalks as a top 5 priority (27% vs. 10%), flood barriers as a top 5 priority (8% vs. 2%), and building code enforcement as a top 5 priority (4% vs. 10%).
  - iv. Recommendations: Expand pothole repair programs, as well as transit and bike infrastructure (as opposed to increasing street parking), as they



benefit all groups similarly. Target sidewalk and crosswalk improvements in limited-English-speaking and low-income neighborhoods, where there is greater pedestrian activity.

The survey clarifies the extent of environmental, health, and financial disparities across dimensions of race, ethnicity, and financial burden, with non-White and financially burdened households bearing the brunt of exposure to pollution and natural hazards, concentrating social and economic vulnerability. The implications for the City of East Palo Alto's Environmental Justice and Safety Elements, as part of the General Plan update, include a clear need to prioritize public investments and policy preferences that support low-income and limited-English-speaking residents in order to close longstanding disparities, shape culturally competent opportunities for these groups to provide specific, substantive input into policies and programs, and ensure that communities who have felt civically disengaged or ignored receive clear signals of real-world improvements and appreciation for their patience.

#### Acknowledgements

This survey would not have been possible without the support and leadership of the East Palo Alto Climate Change Community Team. The City of East Palo Alto provided useful comments in the survey design process. City Systems prepared survey tools, conducted data analysis, and drafted this report.



# Survey Design

The survey was primarily based on an earlier survey conducted for the Menlo Park Environmental Justice and Safety Element in 2022<sup>1</sup>, which itself was co-designed with the Belle Haven Climate Change Community Team. This template was provided to the East Palo Alto Climate Change Community Team on September 12, 2024, and community stakeholders were invited to share feedback on how they might want to adapt the East Palo Alto version of the survey. One major point of feedback was that the East Palo Alto stakeholders were less concerned about the overall length of the survey, encouraging us to include more explicit checkbox options under the existing questions so as to capture more detail without necessarily creating too much of a survey burden. Therefore, a primary difference in the East Palo Alto version of the survey is the addition of many more checkbox options. Otherwise, the surveys are largely similar, which brings the additional benefit of enabling some cross-community comparisons.

## **Canvassing Strategy**

Climate Resilient Communities (CRC) implemented a comprehensive, community-centered canvassing strategy for the Environmental Justice Element survey in East Palo Alto during fall 2024. The organization prioritized in-person engagement, meeting residents where they naturally gathered. Canvassers were stationed at school pickup zones, local libraries, and the YMCA, ensuring accessibility for diverse community members. Additionally, CRC expanded its reach by engaging residents at food distributions, community giveaways, and local parks, fostering conversations about desired community changes. The team also connected with parents at after-school programs and engaged locals at laundromats and neighborhood businesses, further embedding the survey process in daily community life. CRC leveraged partnerships with 'Anamantangi Polynesian Voices and Nuestra Casa to host community workshops, further expanding their reach. The strategy's cornerstone event was the Resilience Fair, held on September 28th at Bloomhouse, which combined survey distribution with practical resource provision, including air purifiers, gardening kits, and energy-efficient light bulbs.

Despite initial attempts to include virtual options, CRC found that in-person interactions yielded the highest engagement and survey completion rates. This approach allowed staff to walk residents through the survey, providing real-time clarifications and ensuring more comprehensive responses. The organization's efforts were supplemented by promotion through city channels, including monthly newsletters and website updates, though word-of-mouth proved most effective in driving participation.

Midway through the survey period, CRC conducted a demographic analysis of respondents and identified an underrepresentation of White residents. In response, they adjusted their

<sup>1</sup> The final report for Menlo Park can be viewed starting page 145 at <u>https://menlopark.gov/files/sharedassets/public/v/1/community-development/documents/projects/housing-element-update/environmental-justice-element-20221212-public-review-draft.pdf</u>



canvassing routes to include areas with higher White populations, ensuring a balanced dataset for assessing racial and ethnic disparities across various outcomes of interest. This adaptive approach demonstrated CRC's commitment to gathering representative data while maintaining focus on historically marginalized communities.

The canvassing strategy's success was evident in the high number of completed surveys and workshop participants. By prioritizing face-to-face interactions, leveraging community partnerships, and remaining flexible in their approach, CRC effectively engaged East Palo Alto residents in the Environmental Justice Element survey. This method not only gathered crucial data but also strengthened community ties and provided tangible benefits through the Resilience Fair, aligning with best practices for environmental justice engagement.



## Full Questionnaire

The goal of this survey is to inform action on environmental justice (addressing unequal pollution and safety issues in our community now, and in the future as a result of climate change) in East Palo Alto. You will be asked about your direct experience of environmental harms, health challenges, and financial stress, as well as your priorities for household and neighborhood improvements. Our community is undergoing rapid change in our built and natural environment. Through community engagement, we can navigate these changes for the benefit of us all. Your feedback will directly inform the City of East Palo Alto's General Plan including the Environmental Justice and Safety Elements. Ask your survey administrator if you would like more information about these projects in your community. Thank you!





I

We want to make sure the survey captures the full range of environmental issues you've experienced.			
<ul> <li>Poor air quality</li> <li>Poor tap water quality</li> <li>Poor soil quality</li> <li>Presence of mold in my home</li> <li>Rain or flood water damage to my home</li> <li>Extreme heat in my home</li> <li>Extreme cold in my home</li> <li>Lack of working heating or air conditioning</li> <li>Lack of building insulation</li> <li>Home insurance claim</li> <li>Loss or cancellation of home insurance</li> <li>Loss (for a day or more) of electricity, water, or natural gas</li> </ul>	<ul> <li>Extreme heat preventing me from going outside</li> <li>Floods affecting neighborhood travel</li> <li>Difficulty in traveling to buy fresh groceries when desired</li> <li>Difficulty in traveling to healthcare when needed</li> <li>Traffic congestion</li> <li>Lack of usable open space (parks, trails)</li> <li>Excessive noise outside</li> <li>Other environmental issues:</li> </ul>		
<ol> <li>Have any of the following health issues last 5-10 years? Check all that apply.</li> </ol>	affected anyone in your household in the		

Environmental issues can cause health problems or make them worse. Local public health authorities may not know how often health problems happen in your



neighborhood. Sometimes not all health problems are addressed by healthcare.			
□ Asthma	Alzheimer's disease or dementia		
□ Chronic respiratory disease	□ Stroke		
Smoking-related issues	□ Migraines		
□ Heat stroke	$\square$ Stress and anxiety		
□ Cancer	Reproductive or birth challenges		
□ Heart disease	Other mental health problems:		
Diabetes			
□ Obesity			
□ High blood pressure or cholesterol	<sup>└</sup> Other chronic pain:		
Physical disability			
□ Learning disability	Other health issues:		
4 Which of the following applies to your household? Check all that apply			
Environmental issues can also cause financial stress, such as flood-related damage that			
in the community.			



	Flood Insurance		
$\square$ We rent our home.	We have flood insurance		
$\square$ We have renter's insurance.			
$\square$ We can comfortably cover the monthly	We would like more flood coverage than we have.		
rent/mortgage.	We do not have flood insurance.		
□ We can comfortably cover other regular	We would like flood insurance but can't afford		
healthcare.	it.		
$\square$ We receive assistance from Medi-Cal, SNAP,	Earthquake Insurance		
free school meals, or similar programs.	We have earthquake insurance.		
$\cup$ We have spent more than \$1,000 in the past	We would like more earthquake coverage		
household, including other family.	than we have.		
$\square$ We have spent more than <u>\$100</u> in the past	$\square$ We do not have earthquake insurance.		
year on repairing or preventing weather damages (like fixing a fence after a storm).	We would like earthquake insurance but can't afford it.		
$\Box$ We have spent more than \$1,000 in the past			
year on repairing or preventing weather	Health Insurance		
damages.	$\square$ We have health insurance.		
└ We have delayed repairs we want to do to our home (like roof, windows, mold) because of cost	We would like more health coverage than we have.		
□ If we faced a \$400 emergency expense, we	$\Box$ We do not have health insurance.		
would have to pay with a credit card or borrow	We would like health insurance but can't		
the money.	afford it.		
	Other financial challenges:		
<ul> <li>5. Which of the following would you priorit your household's environmental health a first choice, "2" for your second choice, "3" and "5" for your fifth choice. Read all the op Example: 1 2 3 4 5</li> </ul>	<b>ize if you had extra money to spend on</b> <b>and safety?</b> Write "1" in the box next to your for your third choice, "4" for your fourth choice, otions before making your selections.		
<ul> <li>5. Which of the following would you priorit your household's environmental health a first choice, "2" for your second choice, "3" and "5" for your fifth choice. Read all the op Example: 1 2 3 4 5</li> </ul>	<ul> <li>Other financial challenges:</li> <li>ize if you had extra money to spend on and safety? Write "1" in the box next to your for your third choice, "4" for your fourth choice otions before making your selections.</li> </ul>		



<ul> <li>Roof repairs</li> <li>Window repairs</li> <li>Getting rid of mold</li> <li>Other home repairs:</li> <li>ADA accessibility modifications</li> <li>Products to improve indoor air quality (air purifiers)</li> <li>Products to reduce extreme heat (air conditioning)</li> <li>Products to reduce extreme cold (heater)</li> <li>More energy-efficient appliances:</li> <li>Other energy-saving upgrades:</li> </ul>	<ul> <li>Solar panels</li> <li>Energy storage (batteries)</li> <li>Earthquake-related upgrades</li> <li>Emergency kit and other emergency provisions</li> <li>Home or renter's insurance</li> <li>Rainwater capture or other water recycling</li> <li>Tap water purification</li> <li>Healthier food from grocery stores</li> <li>Home garden</li> <li>Medical expenses</li> <li>Other personal/household priorities:</li> </ul>		
<ul> <li>6. Which of the following would you like to see prioritized for neighborhood improvements? Write "1" in the box next to your first choice, "2" for your second choice, "3" for your third choice, "4" for your fourth choice, and "5" for your fifth choice. Read all the options before making your selections.</li> <li>Example: 1 2 3 4 5</li> </ul>			
Improved sidewalks	Cool and clean air shelters		



<ul> <li>Crosswalks</li> <li>Speed bumps</li> <li>Safer biking routes</li> <li>More biking routes</li> <li>Improved bus stops, benches, and signage</li> <li>More bus stops and routes</li> <li>More frequent buses, reduced wait, easier transfers</li> <li>Improved roads (repair potholes)</li> <li>Easier parking on street near home</li> <li>Easier parking at other locations in city</li> <li>Community gardening</li> <li>Improved maintenance of existing street trees</li> <li>More street trees</li> </ul>	<ul> <li>Flood barriers along rivers or bayfront</li> <li>Improved storm drainage in streets</li> <li>Improved water supply (safe drinking, firefighting)</li> <li>Air quality monitoring sensors in public spaces</li> <li>Improved building code enforcement</li> <li>Improved traffic enforcement (parking, speeding)</li> <li>Security cameras in public areas</li> <li>Emergency beacons (to call 911) in public areas</li> <li>Improved park amenities and maintenance</li> <li>More public facilities (schools, community centers, clinics, libraries)</li> <li>Other public investments:</li> </ul>	
<ul> <li>7. How many people live in your home? Provide a number for each age range. Example: 1 2 3 4 5</li> <li>8. What is your household race or ethnicity? Check all that apply.</li> <li>American Indian or Alaska Native:</li></ul>		



Asian Chinese Asian Indian Filipino	<ul> <li>Vietnamese</li> <li>Korean</li> <li>Japanese</li> <li>Other:</li> </ul>
Black or African American African American Jamaican Haitian	<ul> <li>Nigerian</li> <li>Ethiopian</li> <li>Somali</li> <li>Other:</li> </ul>
Hispanic or Latino - Mexican - Puerto Rican - Salvadoran	<ul> <li>Cuban</li> <li>Dominican</li> <li>Guatemalan</li> <li>Other:</li> </ul>
Middle Eastern or North African <ul> <li>Lebanese</li> <li>Iranian</li> <li>Egyptian</li> </ul>	<ul> <li>Syrian</li> <li>Iraqi</li> <li>Israeli</li> <li>Other:</li> </ul>
Native Hawaiian or Pacific Islander <ul> <li>Native Hawaiian</li> <li>Samoan</li> <li>Chamorro</li> </ul>	<ul> <li>Tongan</li> <li>Fijian</li> <li>Marshallese</li> <li>Other:</li> </ul>
White □ English (ancestors from England) □ German □ Irish	<ul> <li>Italian</li> <li>Polish</li> <li>Scottish</li> <li>Other:</li> </ul>
9. Home address (optional)	
<b>10. Phone number / Email address</b> (optional)	
11. Would you like any of the following via email?	Updates on the Environmental Justice + Safety Element
	□ Info about resources from local nonprofits
	Info about City of East Palo Alto programs, activities, and opportunities



Info about other assistance programs
Info about how to get more involved in community
Other:



## Results

## Analysis Methodology

As of January 20, 2025, we had access to 266 total survey responses. We begin by presenting results from the survey that are otherwise already measured by the American Community Survey. As such, we can compare our results to those from Census data to get a sense of how representative our respondents are to the overall East Palo Alto population, and also to gauge the general accuracy of our information. We can conduct this check on neighborhoods, race and ethnicity, age, tenure, and income.

Our primary findings are presented as prevalences, i.e., the percentage of respondents who responded affirmatively for a given outcome. These are typically presented first in the aggregated, for the entire sample, and then presented by race/ethnicity group, or by financially burdened vs. unburdened households (as defined by response to questions about public assistance and savings). The asterisks denote a statistically significant difference between the given non-White group and the White group, or between the financially burdened and unburdened groups: a single asterisk reflects 90% confidence, two asterisks reflect 95% confidence, and three asterisks reflect 99% confidence. Statistical significance is a function of the difference between the proportions of the two groups, as well as the number of respondents in each group. The larger the difference and the larger both samples, the greater our confidence in a true population-level disparity. Specifically, we conduct Fisher Exact probability tests, with Benjamini-Hochberg correction for multiple testing ( $\alpha = 0.5$  for racial disparities,  $\alpha = 0.05$  for financial burden), where the number of hypotheses is the number of pairwise combinations between two groups, across the outcomes in a table. This correction reduces the number of statistically significant findings we report for conservative reasons (*i.e.*, because we are testing so many small-sample estimates at the same time, it's more likely for a disparity to be observed simply due to chance), while still ensuring that our attention is directed towards substantive disparities for which we have the most confidence.

Across the different outcomes of interest, prevalences may sometimes be more or less difficult to interpret exactly. For example, for racial/ethnic categorization, respondents could select multiple race/ethnicity identities for their household, and we treated each individual response within multiple selections as a full response. For example, if a respondent identified as White and Asian, we counted that respondent's outcomes in full when calculating White prevalences, and also counted that respondent's outcomes in full when calculating Asian prevalences.

Ultimately, given its sample size and scope, this survey is designed to identify significant disparities that should be the subject of further examination, rather than purporting to identify highly accurate measurements of any particular population-level outcomes.



## **Neighborhoods**

Respondents were asked to select their neighborhood based on a map. We compared this coverage to the distribution of population across neighborhoods, per the 2020 Decennial Census.

Neighborhood	# Respondents	% Respondents	% East Palo Alto, Census (2020)		
Gardens	41	15.6	16.6		
University Corridor	27	10.3	3.7		
University Village	26	9.9	7.9		
Weeks	26	9.9	14.8		
Woodland	26	9.9	1'		
Palo Alto Park	25	9.5	16.8		
Willow	25	9.5	8.6		
Four Corners / Bay Road Corridor	21	8	12		
Ravenswood Employment District	21	8	4.6		
Kavanaugh	15	5.7	3.8		

16.6

3.7 7.9

14.8 11 16.8 8.6 12 4.6 3.8

0.3

Table 1. Distribution of survey respondents by neighborhood.

Overall, the survey achieved good coverage across the distinct neighborhoods of East Palo Alto, with the most underrepresentation in Palo Alto Park, Weeks, and Four Corners / Bay Road Corridor, and the most overrepresentation in Ravenswood Employment District, Kavanaugh, and University Corridor.

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3.4

## Race and Ethnicity

Gateway District

Respondents were asked to check all races/ethnicities that applied to their household. 23 respondents did not answer. Of the remaining 243 respondents, we compared the sample's racial/ethnic distribution with the racial/ethnic distribution of the overall East Palo Alto community, using American Community Survey data for 2019-2023. Fully disaggregated responses were provided, but we focused on the most prevalent subgroups (i.e., Mexican and Salvadoran within Hispanic, Tongan within Pacific Islander, Chinese within Asian) and combined the rest into "Other" categories. No respondents identified as Native American.

Table 2. Distribution of survey respondents by race and ethnicity.

			% East Palo Alto,
Race/Ethnicity	# Respondents	% Respondents	Census (2019-2023)



Mexican	95	39.1	50.5
White, Non-Hispanic	49	20.2	12.4
Black	45	18.5	11.9
Other Pacific Islander	45	18.5	1.5
Tongan	41	16.9	3
Other Asian	14	5.8	4.6
Salvadoran	13	5.3	6.3
Chinese	6	2.5	1.8
Other Hispanic	5	2.1	5.3

Overall, our sample has substantial overrepresentation of Pacific Islander populations (more than 7x), reflecting an intentional outreach within that community, as well as overrepresentation of White and Black populations.

#### Age

Respondents were asked to fill in the number of household members in different age tiers. Some respondents mistakenly checked boxes instead of filling in numbers; these were conservatively converted to 1s. "5+" responses were converted to 5. 39 respondents did not answer. Using the remaining 227 respondents, we compared the sample's household member age distribution to the overall East Palo Alto age distribution.

Age	# Household Members	% Household Members	% East Palo Alto, Census (2019-2023)
Children 0-17	185	18	22.7
Adults 18-29	288	28	19.9
Adults 30-59	410	39.9	40.3
Adults 60+	145	14.1	17.1

Table 3. Distribution of survey respondent household members by age.

Overall, the distribution of respondent household members by age well represents the real East Palo Alto age distribution, with mild overrepresentation of young adults.



## Tenure

Respondents also had the option of checking the box "We rent our home" on one question, and so assuming that those who check the box are renters, while those who do not check the box are owners, we compared this tenure distribution to the overall East Palo Alto tenure distribution.

Table 4.	Distribution	of survey	respondents	by tenure.
		•••••		

Tenure	# Respondents	% Respondents	% East Palo Alto, Census (2019-2023)
Owner	169	63.5	47.9
Renter	97	36.5	52.1

Our sample overrepresents owners and underrepresents renters.

We can also look at the breakdown of tenure by race and ethnicity in our sample, and compare it to the group-level distributions in East Palo Alto.

Race/Ethnicity	Tenure	# Respondents	% Respondents	% East Palo Alto, Census (2019-2023)
	Owner	12	63.2	55
Asian	Renter	7	36.8	45
	Owner	31	70.5	57
Black	Renter	13	29.5	43
	Owner	51	46.8	45
Hispanic	Renter	58	53.2	55
	Owner	36	59	37
Pacific Islander	Renter	25	41	63
	Owner	38	88.4	59
White, Non-Hispanic	Renter	5	11.6	41

Table 5. Distribution of survey respondents by tenure and race/ethnicity.

For Hispanic respondents, our sample is well-calibrated to the actual proportions of Hispanic homeowners and renters in East Palo Alto. However, for all other racial groups, particularly White respondents, our sample overrepresents owners. Therefore, to the degree that owners may be less vulnerable to some of the adverse impacts covered in the survey, our assessments of disparities between Hispanic and White respondents may *overestimate* some population-level disparities.



#### Income

While we did not directly ask respondents to report their earnings or household income, respondents had the option of checking the box: "We receive assistance from Medi-Cal, SNAP, free school meals, or similar programs. This was reported by 28.6% of respondents. We compared this rate to the prevalence of "public assistance income or food stamps/SNAP" as recorded in American Community Survey data for 2019-2023.

Table 6. Distribution of survey respondents by receipt of public assistance income or SNAP.

Receive public assistance income or SNAP	# Respondents	% Respondents	% East Palo Alto, Census (2019-2023)
••••			. ,
Yes	76	28.6	15.1

Our sample appears to overrepresent residents receiving public assistance. However, the description of assistance used in our survey may have been interpreted more expansively by residents than the description of assistance in the American Community Survey. Also, the public assistance rate for multiracial households in East Palo Alto, per Census data, is 21%, higher than the city's overall average, and many of our respondents identified multiracially.

Respondents also had the option of checking the box: "If faced a \$400 emergency expense, we would have to pay with a credit card or borrow the money". This was reported by 15.4% of respondents. For some subsequent analyses, we define the 34.6% of our sample who responded to either option as "financially burdened".

## **Environmental Impact**

Respondents were asked: "Have you or your family been affected by any of the following in the last 10 years? Check all that apply." 15 respondents did not check any options. The table below presents the overall prevalence of each response, as well as prevalence by race/ethnicity.

Table 7. % of survey respondents that experienced environmental impacts, by race and ethnicity. Fisher Exact probability test comparing proportions of White and other groups, with Benjamini-Hochberg correction for multiple testing ( $\alpha = 0.5$ ). \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.

Environmental Impact	All	White, Non-Hispanic	Hispanic	Black	Asian	Pacific Islander
Traffic congestion	51.5	60.5	54.1	56.8	68.4	36.1 **
Extreme heat in my home	41.4	32.6	47.7	34.1	42.1	37.7
Excessive noise outside	38.3	39.5	39.4	34.1	57.9	37.7



Poor air quality	38	30.2	51.4 **	43.2	36.8	29.5
Extreme cold in my home	35	30.2	40.4	22.7	31.6	34.4
Poor tap water quality	34.2	18.6	45.9 ***	38.6	42.1	39.3 **
Presence of mold in my home	31.6	20.9	44 **	22.7	26.3	26.2
Difficulty in traveling to buy fresh groceries when desired	30.8	32.6	31.2	22.7	26.3	24.6
Floods affecting neighborhood travel	28.6	23.3	29.4	25	21.1	32.8
Lack of usable open space (parks, trails)	27.8	23.3	33.9	22.7	10.5	26.2
Lack of building insulation	27.4	37.2	28.4	29.5	21.1	19.7
Extreme heat preventing me from going outside	27.1	11.6	33.9 **	34.1 **	31.6	14.8
Loss (for a day or more) of electricity, water, or natural gas	26.7	25.6	31.2	40.9	42.1	24.6
Lack of working heating or air conditioning	24.8	11.6	33 **	25	26.3	24.6
Poor soil quality	24.4	30.2	22	15.9	26.3	29.5
Rain or flood water damage to my home	21.8	18.6	23.9	20.5	15.8	21.3
Difficulty in traveling to healthcare when needed	18.4	16.3	20.2	13.6	21.1	16.4
Home insurance claim	12.8	14	5.5	15.9	10.5	14.8
Loss or cancellation of home insurance	12	9.3	10.1	11.4	10.5	14.8

Overall, the most commonly experienced environmental impact is traffic congestion, selected by over half of respondents. This is followed by extreme heat indoors, excessive noise outdoors, poor air quality (the question did not specify indoor or outdoor), extreme cold indoors, and poor tap water quality, selected by over a third of respondents.

In terms of racial/ethnic disparities, we see the most statistically significant disparities between White and Hispanic respondents. Hispanic respondents were more likely to report experiencing poor air quality by 21.1 percentage points [2.9-39.4, 95% confidence interval], poor tap water quality by 27.3 percentage points [10.7-43.8], mold in the home by 23.1 percentage points [6.2-40], extreme heat outdoors by 22.3 percentage points [7.6-37], and lack of working heating or air conditioning by 21.4 percentage points [6.7-36.1]. Black respondents were also more likely than White respondents to report experiencing extreme heat outdoors by 22.5 percentage points [3.2-41.7].



It is worth briefly reflecting here on the racial/ethnic disparities in experience of extreme heat outdoors. Our initial intuition may be that, since all respondents are from the same city, they should all be subject to similar outdoor temperatures. However, the experience of outdoor heat as an adverse impact may vary based on the means of transportation (personal vehicles versus walking, biking, or transit) and whether employment or other activities are based indoors versus outdoors. This result suggests that Hispanic and Black residents may have greater exposure to outdoor adverse impacts through their daily activities.

Air quality disparities are similar (statistically significant for the White-Hispanic gap, while the White-Black gap is similarly large but not statistically significant), though the question could have been interpreted by respondents as referring to either indoor or outdoor air quality issues. The other White-Hispanic disparities observed are more reflective of substandard housing quality.

We also note that Pacific Islander respondents tended to report fewer environmental impacts than other groups, sometimes statistically significantly so. For example, Pacific Islander respondents were less likely than White respondents to report experiencing traffic congestion by 24.4 percentage points [3.5-45.3]. In a similar survey carried out in Menlo Park in 2022, we saw the opposite: Pacific Islander respondents reporting substantially more environmental impacts than other groups. The only such case of significance we observed was that Pacific Islander respondents were more likely than White respondents to report experiencing poor tap water quality by 20.7 percentage points [1.9-39.6]. Given the possibility for some confounding of responses due to survey translation or interview format, we recommend caution in interpreting the White-Pacific Islander disparities in this table.

The table below presents the same prevalences, but disaggregated by those with and without financial burden (as defined previously).

senjamini-Hochberg correction for multiple testing ( $\alpha = 0.05$ ). "P < 0.10, ""P < 0.05, """"P < 0.01.						
Environmental Impact	All	Households not Financially Burdened	Households Financially Burdened			
Traffic congestion	51.5	48.3	57.6			
Extreme heat in my home	41.4	35.6	52.2 **			
Excessive noise outside	38.3	33.9	46.7			
Poor air quality	38	30.5	52.2 ***			
Extreme cold in my home	35	36.2	32.6			
Poor tap water quality	34.2	27	47.8 ***			
Presence of mold in my home	31.6	21.8	50 ***			

Table 8. % of survey respondents that experienced environmental impacts, by financial burden. Fisher Exact probability test comparing proportions of financially burdened and unburdened households, with Benjamini-Hochberg correction for multiple testing ( $\alpha = 0.05$ ). \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.



Difficulty in traveling to buy fresh groceries	20.9	27.6	27
when desired	30.0	27.0	37
Floods affecting neighborhood travel	28.6	28.7	28.3
Lack of usable open space (parks, trails)	27.8	26.4	30.4
Lack of building insulation	27.4	24.1	33.7
Extreme heat preventing me from going outside	27.1	20.1	40.2 ***
Loss (for a day or more) of electricity, water, or natural gas	26.7	20.1	39.1 ***
Lack of working heating or air conditioning	24.8	20.1	33.7
Poor soil quality	24.4	22.4	28.3
Rain or flood water damage to my home	21.8	17.2	30.4
Difficulty in traveling to healthcare when needed	18.4	15.5	23.9
Home insurance claim	12.8	10.9	16.3
Loss or cancellation of home insurance	12	12.1	12

Some disparities between financially burdened and unburdened respondents resembled the disparities observed between Hispanic and White respondents. Financially burdened respondents were more likely to report experiencing poor air quality by 21.7 percentage points [8.6-34.8], poor tap water quality by 20.8 percentage points [7.8-33.8], mold in the home by 28.2 percentage points [15.4-40.9], extreme heat outdoors by 20.1 percentage points [7.6-32.6], and lack of working heating or air conditioning by 13.6 percentage points [1.4-25.8].

One disparity is observable here that is not observed from a race/ethnicity perspective. Financially burdened respondents were more likely to report experiencing loss (for a day or more) of electricity, water, or natural gas by 19 percentage points [6.6-31.5]. One uncertainty here is whether the respondents were experiencing these losses due to missing bill payments and provider shutoffs, versus more neighborhood-wide outages.

#### Health Issues

Respondents were asked: "Have any of the following health issues affected anyone in your household in the last 5-10 years? Check all that apply." 67 respondents did not check any options.

Table 8. % of survey respondents that experienced health issues, by race and ethnicity. Fisher Exact probability test comparing proportions of White and other groups, with Benjamini-Hochberg correction for multiple testing ( $\alpha$  = 0.5). NAs denote insufficient data. \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.

Health Issue	All	White,	Hispanic	Black	Asian	Pacific
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		Non-Hispanic				Islander
Stress and anxiety	37.6	32.6	44	50	57.9	27.9
Asthma	30.1	11.6	38.5 ***	25	15.8	39.3 ***
High blood pressure or cholesterol	27.1	23.3	29.4	25	5.3	39.3
Diabetes	25.2	4.7	32.1 ***	13.6	5.3	32.8 ***
Migraines	22.6	25.6	23.9	27.3	26.3	24.6
Obesity	19.9	18.6	24.8	13.6	31.6	23
Physical disability	12.4	14	11	13.6	21.1	13.1
Heat stroke	9	9.3	5.5	11.4	21.1	14.8
Smoking-related issues	8.3	4.7	7.3	11.4	10.5	13.1
Cancer	7.9	4.7	4.6	9.1	NA	18
Stroke	7.9	7	7.3	11.4	10.5	9.8
Heart disease	6.4	4.7	2.8	6.8	NA	14.8
Chronic respiratory disease	6.4	4.7	7.3	4.5	5.3	9.8
Learning disability	4.9	2.3	6.4	6.8	5.3	9.8
Reproductive or birth challenges	4.1	7	2.8	4.5	NA	6.6
Alzheimer's disease or dementia	3.4	4.7	2.8	2.3	NA	6.6

Overall, the most commonly experienced health issue is stress and anxiety, selected by over a third of respondents. This is followed by asthma, high blood pressure or cholesterol, and diabetes, selected by over a quarter of respondents.

In terms of racial/ethnic disparities, Hispanic respondents were more likely than White respondents to report experiencing asthma by 26.9 percentage points [12-41.8] and diabetes by 27.5 percentage points [15-39.9]. Pacific Islander respondents were also more likely than White respondents to report experiencing asthma by 27.7 percentage points [10.2-45.3] and diabetes by 28.1 percentage points [12.8-43.5].

The table below presents the same prevalences, but disaggregated by those with and without financial burden.

Table 9. % of survey respondents that experienced health issues, by financial burden. Fisher Exact probability test comparing proportions of financially burdened and unburdened households, with Benjamini-Hochberg correction for multiple testing ( $\alpha$  = 0.05). NAs denote insufficient data. \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.

		Households	
		not Financially	Households
Health Issue	All	Burdened	Financially Burdened



Stress and anxiety	37.6	31	50 ***
Asthma	30.1	24.1	41.3 ***
High blood pressure or cholesterol	27.1	21.3	38 ***
Diabetes	25.2	20.7	33.7
Migraines	22.6	17.8	31.5 **
Obesity	19.9	13.2	32.6 ***
Physical disability	12.4	9.2	18.5
Heat stroke	9	6.3	14.1
Smoking-related issues	8.3	4	16.3 ***
Cancer	7.9	5.7	12
Stroke	7.9	8	7.6
Chronic respiratory disease	6.4	2.9	13 ***
Heart disease	6.4	5.2	8.7
Learning disability	4.9	1.1	12 ***
Reproductive or birth challenges	4.1	2.3	7.6
Alzheimer's disease or dementia	3.4	2.9	4.3

One disparity between financially burdened and unburdened respondents resembled the disparities observed between Hispanic-White respondents and between Pacific Islander-White respondents. Financially burdened respondents were more likely to report experiencing asthma by 17.2 percentage points [4.4-29.9]. We do not see a statistically significant diabetes disparity, as we did for Hispanic and Pacific Islander respondents.

Other disparities are observable here that were not observable from a race/ethnicity perspective. Financially burdened respondents were more likely to report experiencing stress and anxiety by 19 percentage points [5.8-32.1], high blood pressure or cholesterol 16.8 percentage points [4.3-29.2], migraines by 13.7 percentage points [1.8-25.6], obesity by 19.4 percentage points [7.7-31], smoking-related issues by 12.3 percentage points [3.4-21.2], chronic respiratory disease by 10.2 percentage points [2-18.3], and learning disability by 10.8 percentage points [3.2-18.5].

#### **Financial Stresses**

Respondents were asked: "Which of the following applies to your household? Check all that apply." They were also asked to check applicable statements related to flood, earthquake, and health insurance. 24 respondents did not check any options.



Table 10. % of survey respondents that experienced financial stresses, by race and ethnicity. Fisher Exact probability test comparing proportions of White and other groups, with Benjamini-Hochberg correction for multiple testing ( $\alpha = 0.5$ ). NAs denote insufficient data. \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.

Eineneiel Strees	A 11	White, Non-His	Hienenie	Block	Asian	Pacific
Financial Stress	All	panic	HISPANIC	Біаск	Asian	Islander
We do not have flood insurance	65.8	65.1	67.9	59.1	68.4	57.4
We do not have earthquake insurance	64.3	60.5	65.1	68.2	68.4	57.4
We do not have health insurance	42.5	53.5	33 **	36.4	42.1	45.9
We have health insurance	41.4	37.2	50.5	43.2	57.9	36.1
We rent our home	36.5	11.6	53.2 ***	29.5 *	36.8 **	41 ***
We have delayed repairs we want to do to our home (like roof, windows, mold) because of cost	36.1	44.2	33	27.3	31.6	34.4
We would like flood insurance but can't afford it	35	20.9	41.3 **	27.3	31.6	34.4
We would like earthquake insurance but can't afford it	30.8	11.6	38.5 ***	34.1 **	31.6	32.8 **
We receive assistance from Medi-Cal, SNAP, free school meals, or similar programs	28.6	18.6	43.1 ***	27.3	36.8	16.4
We would like health insurance but can't afford it	22.6	16.3	21.1	15.9	26.3	37.7 **
We have spent more than \$100 in the past year on repairing or preventing weather damages (like fixing a fence after a storm)	21.8	30.2	16.5	27.3	26.3	23
If faced with a \$400 emergency expense, we would have to pay with a credit card or borrow the money	15.4	9.3	18.3	18.2	15.8	13.1
We have spent more than \$1,000 in the past year supporting the needs of others outside our household, including other family	14.7	9.3	20.2	13.6	15.8	19.7
We have spent more than \$1,000 in the past year on repairing or preventing weather damages	12	18.6	11.9	4.5	15.8	18
We have renter's insurance	12	4.7	16.5	18.2	10.5	14.8
We would like more health coverage than we have	11.7	9.3	13.8	6.8	10.5	14.8
We can comfortably cover other regular expenses like transportation, food, and healthcare	11.3	18.6	12.8	11.4	21.1	9.8
We have flood insurance	10.9	23.3	5.5 ***	11.4	26.3	14.8
We have earthquake insurance	10.9	23.3	8.3 **	9.1	26.3	14.8
We can comfortably cover the monthly rent/mortgage	10.9	18.6	12.8	11.4	21.1	9.8
We would like more earthquake coverage than we have	4.5	11.6	2.8 *	4.5	10.5	4.9
We would like more flood coverage than we have	3.8	7	0.9	4.5	5.3	4.9

Overall, the most commonly experienced financial stresses are the lack of flood insurance and earthquake insurance, selected by almost two thirds of respondents each. However, we note



that the inverse options, affirmatively having earthquake insurance and flood insurance, were each selected by about 10 percent of respondents. Unless about 25% of respondents are genuinely unsure of whether they have these forms of insurance, this suggests some misunderstanding or misinterpretation of the insurance questions, and we should avoid over-interpreting the exact values. The next most common response was the lack of health insurance, at 42.5% of respondents, followed by affirmatively having health insurance, at 41.4% of respondents. Note that this uninsured rate is significantly higher than the official uninsured rate for East Palo Alto per the most recent Census data, which is 7%, but Census data also reports an uninsured rate of 20% for Pacific Islanders in East Palo Alto, which is one of the highest uninsured rates for a municipal race/ethnicity group in San Mateo County.

Respondents also noted whether they wanted a certain type of insurance but couldn't afford it. For those without flood insurance, 53% expressed a desire to have it. For those without earthquake insurance, 48% expressed a desire to have it. For those without health insurance, 53% expressed a desire to have it. It's worth noting that these rates of interest are similar.

The next most common response was identification as renters by over a third of respondents; recall we used this response to determine tenure and compared this distribution against East Palo Alto census data. Over a third of respondents also noted that they have delayed repairs to their property (like roof, windows, mold) because of cost.

We also note that this question included the responses for public assistance income and challenges with emergency expenses, which we previously described as being a proxy for low-income status and financial burden.

In terms of racial/ethnic disparities, Hispanic respondents were less likely than White respondents to report having flood insurance by 17.8 percentage points [2.8-32.7] and earthquake insurance by 15 percentage points [0.3-30.3], but were more likely than White respondents to report having health insurance. Hispanic, Black, and Pacific Islander respondents each expressed greater interest than White respondents in having more insurance coverage.

The table below presents the same prevalences, but disaggregated by those with and without financial burden. We remove the responses for "We receive assistance from Medi-Cal, SNAP, free school meals, or similar programs" and "If faced with a \$400 emergency expense, we would have to pay with a credit card or borrow the money", since these are used to define financial burden.



Table 11. % of survey respondents that experienced financial stresses, by financial burden. Fisher Exact probability test comparing proportions of financially burdened and unburdened households, with Benjamini-Hochberg correction for multiple testing ( $\alpha = 0.05$ ). NAs denote insufficient data. \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.

Financial Stress	All	Households not Financially Burdened	Households Financially Burdened
We do not have flood insurance	65.8	60.9	75
We do not have earthquake insurance	64.3	59.8	72.8
We do not have health insurance	42.5	45.4	37
We have health insurance	41.4	33.9	55.4 ***
We rent our home	36.5	26.4	55.4 ***
We have delayed repairs we want to do to our home (like roof, windows, mold) because of cost	36.1	31.6	44.6
We would like flood insurance but can't afford it	35	27	50 ***
We would like earthquake insurance but can't afford it	30.8	21.3	48.9 ***
We would like health insurance but can't afford it	22.6	20.1	27.2
We have spent more than \$100 in the past year on repairing or preventing weather damages (like fixing a fence after a storm)	21.8	19.5	26.1
We have spent more than \$1,000 in the past year supporting the needs of others outside our household, including other family	14.7	11.5	20.7
We have spent more than \$1,000 in the past year on repairing or preventing weather damages	12	9.2	17.4
We have renter's insurance	12	10.3	15.2
We would like more health coverage than we have	11.7	8.6	17.4
We can comfortably cover other regular expenses like transportation, food, and healthcare	11.3	12.1	9.8
We have flood insurance	10.9	13.2	6.5
We can comfortably cover the monthly rent/mortgage	10.9	10.9	10.9
We have earthquake insurance	10.9	10.9	10.9
We would like more earthquake coverage than we have	4.5	5.7	2.2
We would like more flood coverage than we have	3.8	5.2	1.1

Disparities between financially burdened and unburdened respondents resemble the disparities observed between racial groups. Financially burdened respondents were more likely to report having health insurance by 21.5 percentage points [8.3-34.7], being renters by 29 percentage points [16.1-41.9], desiring flood insurance but not being able to afford it by 23 percentage points [10-36], and desiring earthquake insurance but not being able to afford it by 27.6 percentage points [14.9-40.4]. As previously mentioned, the observed disparities in health



insurance are higher than expected given Census data, and the higher reporting by financially burdened respondents may primarily signal the greater amount of *public* health insurance coverage for lower-income households, as would be expected, particularly for lower-income households with children. However, it may be possible that the survey results are picking up on some precarity of *private* employer-provided health insurance for less burdened working households, which should be further investigated.

## Household Improvement

Respondents were asked: "Which of the following would you prioritize if you had extra money to spend on your household's environmental health and safety?" up to five priorities. 5 respondents did not provide any priorities. Some respondents selected many priorities without ranking them, in which case we treated them as #1 priorities having fractional weight. We analyzed either just the #1 priorities, or combined the top five priorities with consecutively reducing weight (i.e., one-half weight for #2 priorities, one-third weight for #3 priorities, etc.).



Table 12. Distribution of survey respondents by preferred household improvements, showing only #1 priorities. Fisher Exact probability test comparing proportions of White and other groups, with Benjamini-Hochberg correction for multiple testing ( $\alpha = 0.5$ ). NAs denote insufficient data. \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.

Household Improvements	All	White, Non-Hispanic	Hispanic	Black	Asian	Pacific Islander
Getting rid of mold	27.7	41.9	22.5	31.8	21.1	28
Roof repairs	21.1	9.3	24.8	15.9	21.1	21.5
Window repairs	18.5	16.3	13.8	20.5	15.8	21.5
Other home repairs	7.3	14	8.6	9.1	10.5	1.8
Products to improve indoor air quality (air purifiers)	5.3	0	6.4	4.5	5.3	3.4
Products to reduce extreme heat (air conditioning)	3.9	2.3	7.6	2.3	NA	1.8
Tap water purification	2.6	2.3	4.4	NA	5.3	1.8
Energy storage (batteries)	1.9	4.7	0.9	NA	5.3	5.1
ADA accessibility modifications	1.9	2.3	0.9	2.3	10.5	5.1
Solar panels	1.9	2.3	2.8	NA	NA	1.8
Products to reduce extreme cold (heater)	1.7	0	2.1	4.5	NA	0.2
Emergency kit and other emergency provisions	1.3	0	1.1	2.3	NA	1.8
Medical expenses	0.8	0	0.9	2.3	NA	0.2
Other energy-saving upgrades	0.8	0	0.9	2.3	NA	0.2
Healthier food from grocery stores	0.5	0	1.2	NA	NA	0.2
Other personal/household priorities	0.4	0	NA	2.3	NA	0.2
Home garden	0.4	0	0.9	NA	NA	0.2
More energy-efficient appliances	0.1	0	0.2	NA	NA	0.2
Earthquake-related upgrades	0	0	NA	NA	NA	0.2
Home or renter's insurance	0	0	NA	NA	NA	0.2
Rainwater capture or other water recycling	0	0	NA	NA	NA	0.2



Table 13. Distribution of survey respondents by preferred household improvements, showing the top five priorities combined. Fisher Exact probability test comparing proportions of White and other groups, with Benjamini-Hochberg correction for multiple testing ( $\alpha = 0.5$ ). NAs denote insufficient data. \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.

Household Improvements	All	White, Non-Hispanic	Hispanic	Black	Asian	Pacific Islander
Getting rid of mold	37.9	45.9	35.4	37.3	32.5	40.2
Window repairs	27.9	26.2	23.7	27.3	22.4	31.6
Roof repairs	26	15.8	27.7	21.9	29.1	26.8
Products to improve indoor air quality (air purifiers)	19.7	19.4	19.2	16.4	16.1	15.9
Products to reduce extreme heat (air conditioning)	16.7	15.7	20.5	14.8	13.7	16
ADA accessibility modifications	13.2	13	9.9	15.3	21.6	13.4
Other home repairs	11	16.7	12.1	12.4	11.8	6.4
Emergency kit and other emergency provisions	9.3	4.9	11.3	10.5	10.8	5.6
Tap water purification	8.8	7.6	11.2	8	9.6	8.7
Products to reduce extreme cold (heater)	6.8	4.3	7.4	11.7	7.9	5.6
Solar panels	6.8	4.3	9	3.2	8.3	6.9
Home or renter's insurance	5.5	4.9	5.2	6.1	3.1	3.8
Energy storage (batteries)	4.9	8	3.8	2.3	12.5	7.9
Earthquake-related upgrades	3.9	6.5	3.2	2.8	2.6	3.3
Healthier food from grocery stores	3.3	3.5	3.9	3.9	NA	3.5
Rainwater capture or other water recycling	2.9	3.4	1.8	2.9	3.5	4.3
More energy-efficient appliances	2.9	2.6	3	4.5	4.1	3.1
Medical expenses	2.7	1.7	2.7	5.6	2.8	2.3
Home garden	2.3	2.7	3	1.7	2.8	2.8
Other energy-saving upgrades	1.8	1.4	2.5	2.3	1.1	0.2
Other personal/household priorities	1.1	0	0.9	3.9	NA	0.2

The #1 priorities are relatively consistent across all race/ethnicity groups: mold abatement, window repairs, roof repairs, and other home repairs (which only Pacific Islander respondents were less likely to report). Most notably, Hispanic respondents are more likely than White respondents to prioritize roof repairs by 15.5 percentage points [2-29], a finding that is statistically significant, but has a high chance of being a false discovery due to multiple testing



(*i.e.*, because we are testing so many small-sample estimates at the same time, it's more likely for a disparity to be observed simply due to chance; see previous Analysis Methodology section).

After combining the top five priorities, nearly all significant differences across groups disappear. Solar panels and batteries move out of the top 10, while heaters and emergency kits move into the top 10.

The tables below present #1 priorities and top 5 priorities, but disaggregated by those with and without financial burden.



Table 14. Distribution of survey respondents by preferred household improvements, showing only #1 priorities. Fisher Exact probability test comparing proportions of financially burdened and unburdened households, with Benjamini-Hochberg correction for multiple testing ( $\alpha = 0.05$ ). NAs denote insufficient data. \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.

Household Improvement	All Households	Households not Financially Burdened	Households Financially Burdened
Getting rid of mold	27.7	31.6	20.2
Roof repairs	21.1	19	25.1
Window repairs	18.5	21.3	13.1
Other home repairs	7.3	8.1	5.8
Products to improve indoor air quality (air purifiers)	5.3	2.9	9.8
Products to reduce extreme heat (air conditioning)	3.9	1.9	7.7
Tap water purification	2.6	3	1.7
ADA accessibility modifications	1.9	0.6	4.4
Energy storage (batteries)	1.9	1.8	2.2
Solar panels	1.9	1.8	2.2
Products to reduce extreme cold (heater)	1.7	2.3	0.4
Emergency kit and other emergency provisions	1.3	0.7	2.2
Medical expenses	0.8	0	2.2
Other energy-saving upgrades	0.8	1.2	0.1
Healthier food from grocery stores	0.5	0.6	0.4
Home garden	0.4	0	1.1
Other personal/household priorities	0.4	0.6	0.1
More energy-efficient appliances	0.1	0.2	0.1
Earthquake-related upgrades	0	0	0.1
Home or renter's insurance	0	0	0.1
Rainwater capture or other water recycling	0	0	0.1



Table 15. Distribution of survey respondents by preferred household improvements, showing the top five priorities combined. Fisher Exact probability test comparing proportions of financially burdened and unburdened households, with Benjamini-Hochberg correction for multiple testing ( $\alpha = 0.5$ ). NAs denote insufficient data. \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.

Household Improvement	All Households	Households not Financially Burdened	Households Financially Burdened
Getting rid of mold	37.9	39.2	35.6
Window repairs	27.9	28.1	27.6
Roof repairs	26	24	29.5
Products to improve indoor air quality (air purifiers)	19.7	19.6	20.1
Products to reduce extreme heat (air conditioning)	16.7	14.6	20.7
ADA accessibility modifications	13.2	13.5	12.6
Other home repairs	11	12.1	9
Emergency kit and other emergency provisions	9.3	7.6	12.3
Tap water purification	8.8	8.6	9
Products to reduce extreme cold (heater)	6.8	6	8
Solar panels	6.8	6.4	7.6
Home or renter's insurance	5.5	6.2	4.2
Energy storage (batteries)	4.9	4.8	5.2
Earthquake-related upgrades	3.9	4.1	3.6
Healthier food from grocery stores	3.3	3.3	3.3
Rainwater capture or other water recycling	2.9	3.4	2
More energy-efficient appliances	2.9	2.9	3.1
Medical expenses	2.7	1.5	4.9
Home garden	2.3	2.2	2.6
Other energy-saving upgrades	1.8	2.4	0.4
Other personal/household priorities	1.1	1.6	0.1

In terms of #1 priority, financially burdened respondents are less likely to prioritize mold abatement by 11.5 percentage points, and more likely to prioritize ADA accessibility modifications by 3.8 percentage points. These disparities are weakly statistically significant, but have a high chance of being false discoveries due to multiple testing.



In terms of top 5 priorities, financially burdened respondents are more likely respondents to prioritize medical expenses by 3.4 percentage points, a finding that is weakly statistically significant, but has a high chance of being a false discovery due to multiple testing.

## Neighborhood Improvement

Respondents were asked: "Which of the following would you prioritize for neighborhood improvements?" up to five priorities. 16 respondents did not provide any priorities.



Table 16. Distribution of survey respondents by preferred neighborhood improvements, showing only #1 priorities. Fisher Exact probability test comparing proportions of White and other groups, with Benjamini-Hochberg correction for multiple testing ( $\alpha = 0.5$ ). NAs denote insufficient data. \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.

Neighborhood Improvements	All	White, Non-His panic	Hispanic	Black	Asian	Pacific Islander
Improved sidewalks	13.6	4.7	19.3	18.2	10.5	13.2
Improved roads (repair potholes)	10.6	16.3	6.4	11.4	5.3	6.7
Easier parking on street near home	8.9	11.6	9.6	9.1	5.3	6.7
Crosswalks	8.3	0	15.6	2.3	5.3	8.3
More bus stops and routes	7.9	4.7	9.2	2.3	10.5	5
Safer biking routes	6	7	5.5	2.3	NA	10
More frequent buses, reduced wait, easier transfers	5.7	7	3.7	4.5	5.3	6.7
Speed bumps	4.5	4.7	4.6	4.5	5.3	1.8
Improved bus stops, benches, and signage	4.5	4.7	5.5	4.5	NA	3.4
Improved water supply (safe drinking, firefighting)	4	7	4.1	2.3	5.3	8.3
More biking routes	4	4.7	2.3	11.4	5.3	3.4
Easier parking at other locations in city	2.7	9.3	NA	2.3	5.3	0.1
Security cameras in public areas	2.6	0	1.7	NA	5.3	6.7
Improved park amenities and maintenance	1.9	0	0.9	2.3	10.5	1.8
Improved traffic enforcement (parking, speeding)	1.2	2.3	1.8	NA	NA	0.1
Air quality monitoring sensors in public spaces	1.2	2.3	0.9	NA	NA	3.4
Improved storm drainage in streets	1.2	0	1.8	2.3	NA	0.1
Flood barriers along rivers or bayfront	0.8	2.3	0.9	2.3	5.3	1.8
Cool and clean air shelters	0.8	2.3	NA	2.3	NA	1.8
More public facilities (schools, community centers, clinics, libraries)	0.8	2.3	NA	2.3	NA	1.8
Improved maintenance of existing street trees	0.8	0	NA	2.3	NA	1.8
More street trees	0.5	2.3	1.2	NA	NA	0.1
More community recreational events	0.5	0	0.3	2.3	5.3	0.1
Other public investments	0.4	0	0.9	NA	5.3	0.1
Community gardening	0.4	0	0.9	NA	NA	0.1
Improved building code enforcement	0.4	0	NA	NA	NA	0.1
Emergency beacons (to call 911) in public areas	0	0	NA	NA	NA	0.1



Table 17. Distribution of survey respondents by preferred neighborhood improvements, showing the top five priorities combined. Fisher Exact probability test comparing proportions of White and other groups, with Benjamini-Hochberg correction for multiple testing ( $\alpha = 0.5$ ). NAs denote insufficient data. \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.

		White, Non-His				Pacific
Neighborhood improvements	All	panic	Hispanic	віаск	Asian	Islander
Improved roads (repair potholes)	16.8	21.7	14.8	16.7	11.9	13.3
Improved sidewalks	16.2	8.1	22.2	21	15.8	16.6
Easier parking on street near home	16.2	21.8	17.8	15.3	11.8	12.7
More bus stops and routes	12.8	10.7	13.1	7.2	12.3	8.9
Safer biking routes	12.6	11.8	13.9	9.5	9.8	13.2
Crosswalks	11.8	2.3	19.7	6	8.9	11.5
More frequent buses, reduced wait, easier transfers	10.2	11	8.3	8.9	10.9	9.9
Speed bumps	10.1	9.4	9.9	9.4	13.5	9.2
Improved bus stops, benches, and signage	9.6	11.6	10.6	8.6	5.4	7.6
Improved water supply (safe drinking, firefighting)	9.5	13.8	8.7	6.8	12.9	15.1
Improved traffic enforcement (parking, speeding)	9.4	12.9	7.5	12.6	4.6	5.8
More biking routes	9.2	10.9	7.4	12.8	10.7	8.3
Security cameras in public areas	8.8	7	5.6	6	15.8	16
Air quality monitoring sensors in public spaces	8.6	8.5	8.3	4	5	13.6
Improved building code enforcement	8.1	11.5	7	5.4	5	4.5
Improved park amenities and maintenance	5.8	1.8	4.1	8.1	15.3	5.2
Improved storm drainage in streets	5.8	5.3	6	9.5	6.3	6.1
Easier parking at other locations in city	5.4	9.8	4.8	3.8	5.3	1.9
Flood barriers along rivers or bayfront	4.6	2.9	6.6	5.3	5.3	4.9
Cool and clean air shelters	3.5	2.3	3.5	4.1	1.8	6.7
Emergency beacons (to call 911) in public areas	2.9	5.1	2.1	3.4	10.5	2.6
More street trees	2.8	5.1	5.3	1.3	2.6	0.9
Community gardening	2.8	3.1	4.6	0.8	4.4	2.6
More community recreational events	1.9	0	1	4.7	5.3	3
Improved maintenance of existing street trees	1.4	0.7	0.5	2.3	NA	2.6
More public facilities (schools, community centers, clinics, libraries)	1.3	2.3	0.4	4.4	NA	1.8
Other public investments	0.8	0	1.8	NA	5.3	0.1

The #1 priorities are relatively inconsistent across all race/ethnicity groups. Most notably, Hispanic respondents are more likely than White respondents to prioritize sidewalks by 14.6 percentage points [3.3-26] and crosswalks by 15.6 percentage points [7.3-23.9]. These



disparities are statistically significant, but have a high chance of being false discoveries due to multiple testing.

After combining the top five priorities, the top 10 priorities remain the same, with some slight rank changes. Hispanic respondents are again more likely than White respondents to prioritize crosswalks by 17.3 percentage points [7.3-27.4], a finding that is very statistically significant, but has a high chance of being a false discovery due to multiple testing.

The tables below present #1 priorities and top 5 priorities, but disaggregated by those with and without financial burden.



Table 18. Distribution of survey respondents by preferred neighborhood improvements, showing only #1 priorities. Fisher Exact probability test comparing proportions of financially burdened and unburdened households, with Benjamini-Hochberg correction for multiple testing ( $\alpha = 0.05$ ). NAs denote insufficient data. \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.

Household Improvement	All Households	Households not Financially Burdened	Households Financially Burdened
Improved sidewalks	13.6	86	22.9
Improved roads (repair potholes)	10.6	10.9	9.8
Fasier parking on street near home	8.9	92	8.2
Crosswalks	8.3	7.5	9.8
More bus stops and routes	7.9	9.8	4.4
Safer biking routes	6	6.3	5.5
More frequent buses, reduced wait, easier transfers	5.7	5.8	5.5
Improved bus stops, benches, and signage	4.5	6.3	1.1
Speed bumps	4.5	5.8	2.2
Improved water supply (safe drinking, firefighting)	4	3.5	4.9
More biking routes	4	3.5	4.9
Easier parking at other locations in city	2.7	3.5	1.1
Security cameras in public areas	2.6	1.9	3.8
Improved park amenities and maintenance	1.9	1.7	2.2
Air quality monitoring sensors in public spaces	1.2	0	3.3
Improved storm drainage in streets	1.2	0.6	2.2
Improved traffic enforcement (parking, speeding)	1.2	1.2	1.1
Flood barriers along rivers or bayfront	0.8	0	2.2
Cool and clean air shelters	0.8	1.2	0
Improved maintenance of existing street trees	0.8	0.6	1.1
More public facilities (schools, community centers, clinics, libraries)	0.8	0.6	1.1
More community recreational events	0.5	0.2	1.1
More street trees	0.5	0.8	0
Community gardening	0.4	0	1.1
Improved building code enforcement	0.4	0.6	0
Other public investments	0.4	0.6	0
Emergency beacons (to call 911) in public areas	0	0	0



Table 19. Distribution of survey respondents by preferred neighborhood improvements, showing the top five priorities combined. Fisher Exact probability test comparing proportions of financially burdened and unburdened households, with Benjamini-Hochberg correction for multiple testing ( $\alpha = 0.5$ ). NAs denote insufficient data. \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.01.

Household Improvement	All Households	Households not Financially Burdened	Households Financially Burdened
Improved roads (repair potholes)	16.8	16.8	16.4
Improved sidewalks	16.2	10.4	27 ***
Easier parking on street near home	16.2	15.8	16.9
More bus stops and routes	12.8	14	10.7
Safer biking routes	12.6	13.7	10.7
Crosswalks	11.8	9.9	15.3
More frequent buses, reduced wait, easier transfers	10.2	9.9	10.7
Speed bumps	10.1	10.9	8.7
Improved bus stops, benches, and signage	9.6	11.3	6.6
Improved water supply (safe drinking, firefighting)	9.5	9.1	10.2
Improved traffic enforcement (parking, speeding)	9.4	9.8	8.4
More biking routes	9.2	7.9	11.7
Security cameras in public areas	8.8	8	10.1
Air quality monitoring sensors in public spaces	8.6	7.6	10.4
Improved building code enforcement	8.1	10	4.5
Improved park amenities and maintenance	5.8	5.4	6.5
Improved storm drainage in streets	5.8	5.1	7
Easier parking at other locations in city	5.4	5	5.9
Flood barriers along rivers or bayfront	4.6	2.5	8.5
Cool and clean air shelters	3.5	3.9	2.7
Emergency beacons (to call 911) in public areas	2.9	3.1	2.7
Community gardening	2.8	2	4.2
More street trees	2.8	2.7	2.9
More community recreational events	1.9	1.1	3.3
Improved maintenance of existing street trees	1.4	1.4	1.3
More public facilities (schools, community centers, clinics, libraries)	1.3	1	1.8
Other public investments	0.8	1.2	0

In terms of #1 priority, financially burdened respondents are more likely to prioritize sidewalks by 14.2 percentage points [3.9-24.6], a finding that is very statistically significant, but has a high chance of being a false discovery due to multiple testing. Furthermore, financially burdened



respondents are more likely to prioritize sidewalks by 3.3 percentage points, a finding that is weakly statistically significant, but has a high chance of being a false discovery due to multiple testing.

In terms of top 5 priorities, financially burdened respondents are more likely to prioritize sidewalks by 14.2 percentage points [3.9-24.6]. Financially burdened respondents are also more likely to prioritize flood barriers by 6 percentage points [2.4-22.8], a finding that is very statistically significant, but has a high chance of being a false discovery due to multiple testing. Lastly, financially burdened respondents are *less* likely to prioritize building code enforcement by 5.6 percentage points [1.4-21.9], a finding that is statistically significant, but has a high chance of being a false discovery due to multiple testing.