

The Quality of Life: Environmental and Societal Issues in Oakland

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Overview

Climate change is of growing concern for both residents and government in Oakland. But the question of what environmental and societal issues most concern the people of Oakland have not been asked in the context of a changing climate. The five environmental issues included in this survey (flooding, wildfire, poor air quality, extreme heat and extreme cold) are based previous research done by WOEIP, in partnership with the Pacific Institute, and reflect primary impact of climate change that may be experienced in our region.

The purpose of this survey was to figure out what the residents of Oakland thought were important issues in their neighborhoods and to see if concerns varied by neighborhood. Following on other public health studies comparing demographic differences between the Oakland Hills and the flatlands neighborhoods, we sought to determine if differences in attitudes toward climate impacts also exist between these broad areas of our city.

After reaching out to 100 Oakland residents, the data was collected and the top 3 for each individual's ranking was taken into consideration. The data was analyzed upon three different factors: zip code, income, and age. In addition to the zip code, residents were also asked to give the nearest intersection to their homes to narrow down their location as a zip code covers a vast area.

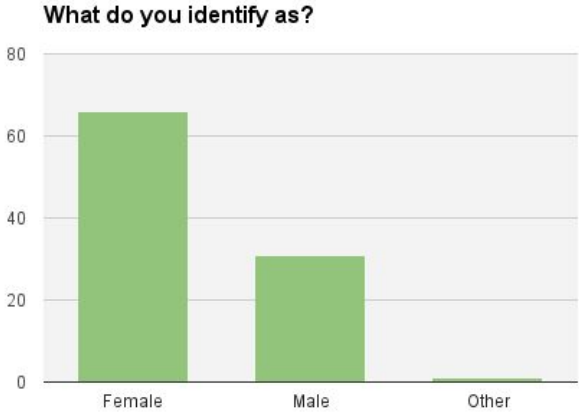
The survey itself asked for various factors that would give a better idea of the person that was ranking the environmental and societal issues and consisted of the following 10 questions:

1. *In what ZIP code is your home located?*
2. *What is the name of the nearest street intersection to your home?*
3. *What do you identify as?*
4. *Are you White, Black or African-American, American Indian, Asian, Native Hawaiian or other Pacific Islander, Mexican/Latino, or some other race?*
5. *What is your age?*
6. *What is the highest level of school that you have completed?*
7. *What is your approximate average household income?*
8. *Have you learned about climate change? If so, where?*
9. *Rank the following environmental issues in the order that concerns you the most in your neighborhood.*
10. *Rank the following social issues in the order that concerns you the most in your neighborhood.*

This report will summarize the data and explore the individual factors that played a significant or insignificant role in the ranking of environmental and societal issues by Oakland residents.

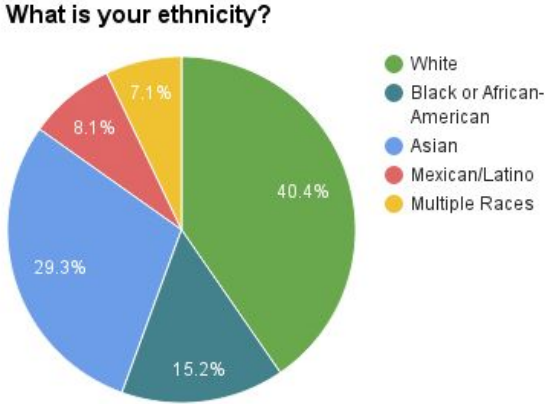
Demographics

Gender



As shown in the chart above, the number of females that took the survey is much greater than that of males, two time as many to be exact. The gender was included in the survey in hopes of discovering a connection or pattern in the ranking choices of each individual. However, gender was not a significant indicator in the opinions of each individual on the environmental and societal issues.

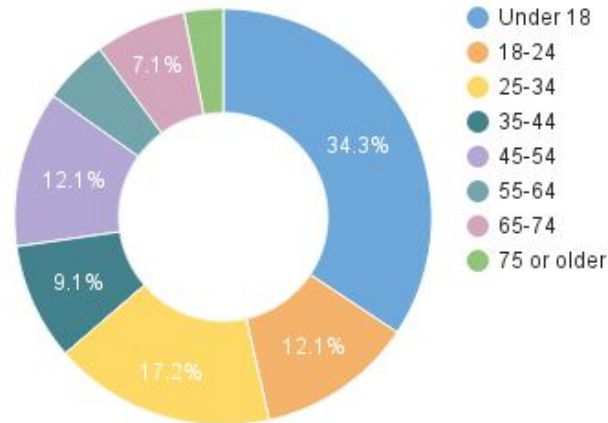
Ethnicity



Because of Oakland's diverse nature, ethnicity was a question in the survey due to the chance that different ethnic groups would have differing opinions regarding the rankings. Despite Oakland's diversity, the matter of ethnicity did not play a large role in the opinions of each individual.

Age

What is your age?

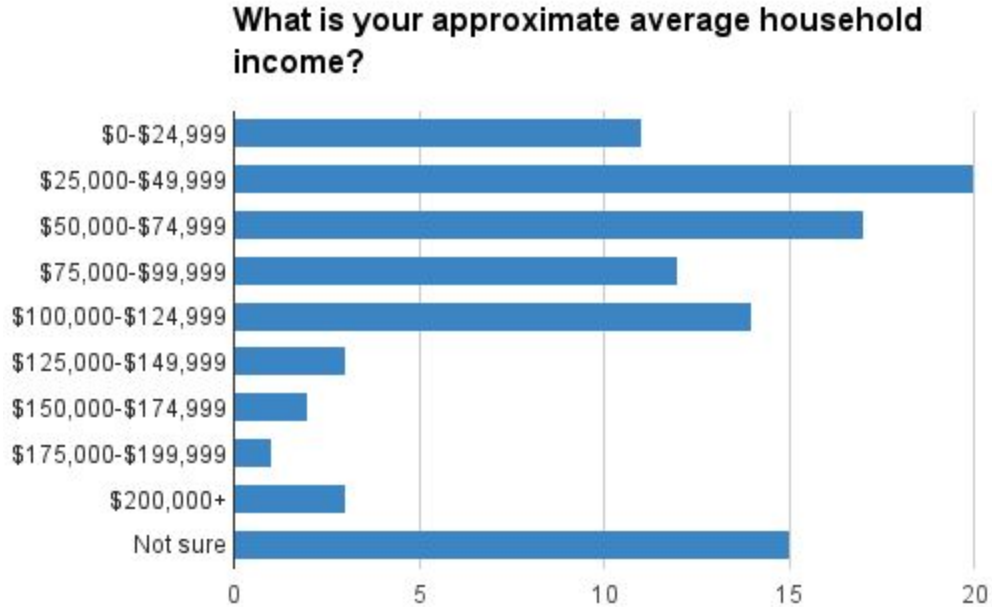


Almost half of the respondents were under the age of 24. Age is an important factor due to the differing opinions of various age groups. The almost equal split between people over 25 years of age and under 24 years of age, provides a clear difference in the concerns of each individual. It is pivotal to reach out to the younger individuals in Oakland due to the fact that in a decade or so, they will be the ones that will still be in Oakland. The younger individuals are the leaders of the next generation and thus incorporating their opinions is important in providing a guideline on what issues are most important and what should be done about them.

However, the survey pool was still too large to find an overarching trend and thus the data was divided into three categories: *0-24*, *25-54*, and *55+*.

0-24 Year Olds	25-54 Year Olds	55+
<ul style="list-style-type: none"> 64% listed poor air quality as #1 67% listed flooding as a minor concern 63% listed unemployment in top 3 10 people had the same response 	<ul style="list-style-type: none"> 72% listed poor air quality as #1 64% listed housing as #1 79% listed education in top 3 88% listed housing in top 3 	<ul style="list-style-type: none"> Poor air quality followed by extreme heat or cold is a common response 73% listed housing in top 3 60% listed extreme cold as a minor concern

Income



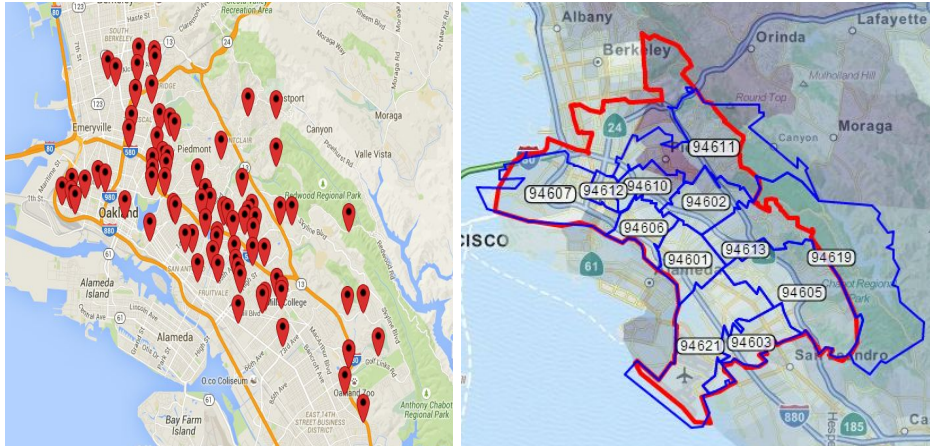
Income can determine many things, the neighborhood you live in, the school you go to, and the car you drive. However, income can also have an impact on the opinions of individuals as well when it comes to environmental and societal issues.

The data was first sorted into two income brackets: below \$74,999 and above \$75,000. However, it was very difficult to find a trend within these large categories, therefore the data was then separated into their own individual brackets. From there, it was much easier to find trends and such within the data since the survey pools were much smaller and less factors were included.

Income	Observations
\$0-\$24,999	<ul style="list-style-type: none"> ● 55% placed healthcare in top 3 ● 55% placed unemployment in top 3 ● 55% listed flooding as a minor concern ● 64% listed wildfires as a minor concern
\$25,000-\$49,999	<ul style="list-style-type: none"> ● 85% listed housing in top 3 ● 90% listed education in top 3 ● 75% of responses had both

	<p>extreme heat and poor air quality in top 3</p>
\$50,000-\$74,999	<ul style="list-style-type: none"> ● Poor air quality followed by extreme heat is a popular response ● 65% chose unemployment in top 3
\$75,000-\$99,999	<ul style="list-style-type: none"> ● Healthcare is not a major issue ● 70% listed extreme cold as a minor concern
\$100,000-\$124,999	<ul style="list-style-type: none"> ● 85% listed housing as a concern in the top 3 ● Poor air quality and extreme heat is a common response ●
\$125,000-\$149,999	<ul style="list-style-type: none"> ● Poor air quality and either flooding or wildfire is a popular ranking
\$150,000-\$174,999	<ul style="list-style-type: none"> ● Majority of responses contain poor air quality, extreme heat, and wildfire but in different orders ● Healthcare listed in top 3 of all responses
\$175,000-\$199,999	<ul style="list-style-type: none"> ● Poor air quality, wildfire, and extreme heat are popular responses.
\$200,000+	<ul style="list-style-type: none"> ● Poor air quality is listed in all responses ● Education is listed in the top 3 of all responses

Zip Code



The geographic location of the residents seemed to be the most influential factor in the ranking of the environmental and societal issues as it is also related to income. The data was divided according to zip code and the average ranking was calculated. The top three rankings for the following zip codes are shown below in addition to significant observations from the data.

Zip Code	Average Ranking	Observations
94611	<p>Average Environmental Ranking:</p> <ol style="list-style-type: none"> Poor Air Quality Wildfires Extreme Heat <p>Average Societal Ranking:</p> <ol style="list-style-type: none"> Housing Education Healthy Foods/Grocery Stores 	<ul style="list-style-type: none"> ● 80% of respondents listed housing in the top 3 ● Unemployment rate: 2.28% ● 80% of respondents listed poor air quality in top 3
94619	<p>Average Environmental Ranking:</p> <ol style="list-style-type: none"> Poor Air Quality Wildfires Extreme Heat <p>Average Societal Ranking:</p> <ol style="list-style-type: none"> Education Healthy Foods Unemployment 	<ul style="list-style-type: none"> ● 60% of respondents placed housing in top 3 due to the rise of real estate prices in the area ● New homes are under construction but are on the higher spectrum of affordability ● A lot of foreclosures in the area ● Unemployment rate:

		<p>6.76%</p> <ul style="list-style-type: none"> ● 54% listed flooding in the bottom
94601	<p>Average Environmental Ranking:</p> <ol style="list-style-type: none"> 1. Poor Air Quality 2. Extreme Cold 3. Flooding <p>Average Societal Ranking:</p> <ol style="list-style-type: none"> 1. Education 2. Housing 3. Healthcare/Unemployment 	<ul style="list-style-type: none"> ● 67% put educated in their top 3 ● Many homes are older and do not have cooling and heating systems ● Unemployment rate: 12.83%
94602	<p>Average Environmental Ranking:</p> <ol style="list-style-type: none"> 1. Poor Air Quality 2. Extreme Heat 3. Wildfires <p>Average Societal Ranking:</p> <ol style="list-style-type: none"> 1. Education 2. Housing 3. Unemployment 	<ul style="list-style-type: none"> ● Real estate prices are on the rise ● Unemployment rate: 5.41% ● 59% of respondents listed unemployment in top 3 ● 65% listed flooding as a 4 or a 5 ●
94607	<p>Average Environmental Ranking:</p> <ol style="list-style-type: none"> 1. Poor Air Quality 2. Extreme Heat 3. Flooding <p>Average Societal Ranking:</p> <ol style="list-style-type: none"> 1. Housing/Unemploy./ Healthy Foods 2. Education 3. Healthcare 	<ul style="list-style-type: none"> ● 75% of respondents listed unemployment in top 3 ● Unemployment rate: 14.93% ● 75% of respondents listed healthy foods/grocery stores in top 3 ● The third issue in the top three of each respondent is concerning a natural disaster: wildfire or flooding ● Extreme cold is not a major concern ● Poor air quality is listed as #1 for all respondents and extreme heat is listed #2 for 75%

<p>94605</p>	<p>Average Environmental Ranking:</p> <ol style="list-style-type: none"> 1. Poor Air Quality 2. Wildfires 3. Flooding <p>Average Societal Ranking:</p> <ol style="list-style-type: none"> 1. Education 2. Unemployment 3. Healthy Foods 	<ul style="list-style-type: none"> ● Healthy foods is listed in the top 3 of 70% of respondents ● There is one big grocery store in the area but it is in a bad part of the neighborhood which could deflect people from going there ● 50% of people listed flooding in top 3 ● All respondents listed poor air quality in top 3 ● Unemployment rate: 8.57% ● 63% of people listed wildfire in top 3 ● Public education is inadequate in this area
<p>94606</p>	<p>Average Environmental Ranking:</p> <ol style="list-style-type: none"> 1. Poor Air Quality 2. Extreme Heat 3. Flooding <p>Average Societal Ranking:</p> <ol style="list-style-type: none"> 1. Education 2. Unemployment 3. Housing/Healthy Foods 	<ul style="list-style-type: none"> ● Unemployment rate: 7.32% ● A lot of foreclosures in the area
<p>94610</p>	<p>Average Environmental Ranking:</p> <ol style="list-style-type: none"> 1. Poor Air Quality 2. Extreme Heat 3. Wildfires <p>Average Societal Ranking:</p> <ol style="list-style-type: none"> 1. Housing 2. Education 3. Healthcare 	<ul style="list-style-type: none"> ● Education is in every respondent's top 3 ● Healthcare is in 60% of responses ● All responses include poor air quality and extreme heat in top 3 ● Unemployment rate: 4.35%
<p>94618</p>	<p>Average Environmental Ranking:</p> <ol style="list-style-type: none"> 1. Poor Air Quality 2. Wildfires/Flooding 3. Extreme Heat <p>Average Societal Ranking:</p> <ol style="list-style-type: none"> 1. Education 	<ul style="list-style-type: none"> ● 2.97% Unemployment rate ● All responses include poor air quality and wildfire in the top 3 ● Education listed in the

	<ol style="list-style-type: none"> 2. Healthy Foods 3. Housing 	top 3 of all responses
94612	<p>Average Environmental Ranking:</p> <ol style="list-style-type: none"> 1. Poor Air Quality 2. Extreme Heat 3. Flooding <p>Average Societal Ranking:</p> <ol style="list-style-type: none"> 1. Housing 2. Unemployment 3. Healthy Foods/Education 	<ul style="list-style-type: none"> ● Unemployment rate: 9.879% ● Poor air quality and wildfire are in the top 3
94609	<p>Average Environmental Ranking:</p> <ol style="list-style-type: none"> 1. Poor Air Quality 2. Extreme Heat 3. Wildfires <p>Average Societal Ranking:</p> <ol style="list-style-type: none"> 1. Housing 2. Unemployment 3. Healthcare 	<ul style="list-style-type: none"> ● Unemployment rate: 6.48% ● Flooding is listed in 80% of respondents' top 3
94603	<p>Average Environmental Ranking:</p> <ol style="list-style-type: none"> 1. Poor Air Quality 2. Extreme Heat 3. Extreme Cold <p>Average Societal Ranking:</p> <ol style="list-style-type: none"> 1. Education 2. Housing 3. Healthcare 	<ul style="list-style-type: none"> ● Housing is listed in all of respondents' top 3 ● Flooding is listed in 75% of top 3 ● Unemployment rate: 13.79%

Environmental Issue Ranking

Environmental Ranking: Total

	1	2	3	4	5
Flooding	8.42% 8	15.79% 15	18.95% 18	26.32% 25	30.53% 29
Wildfire	9.38%	22.92%	22.92%	26.04%	18.75%

	9	22	22	25	18
Extreme Heat	8.25% 8	40.21% 39	24.74% 24	21.65% 21	5.15% 5
Extreme Cold	3.16% 3	10.53% 10	26.32% 25	21.05% 20	38.95% 37
Poor Air Quality	70.71% 70	12.12% 12	7.07% 7	4.04% 4	6.06% 6

The overall environmental issue ranking was

1. **Poor Air Quality**
2. **Extreme Heat**
3. **Extreme Cold**
4. Flooding
5. Extreme Cold

The number one ranking environmental issue was poor air quality. This was chosen as the most concerning environmental issue by people who lived in the Oakland Hills and those who resided in the flatlands of Oakland. After years of public discussion on the topic of poor air quality, it is not a surprise that 71% of the respondents chose this as their number one most concerning issue. The second ranking environmental issue was extreme heat, which California is experiencing at the moment. On the opposite side of the spectrum, extreme cold was the top third choice of those responding. This suggests some uncertainty amongst the residents about climate change, *“What is going to happen next? Is it going to be extremely hot or cold?”* The United States has experienced both sides of the climate change spectrum, from the extreme blizzard on the east coast to the drought in California.

As predicted, the individuals who lived in the Oakland Hills listed wildfires as one of their top three environmental concerns, possibly due to the abundance of trees in the area and past occurrences of wildfires. A surprising detail from the survey is that many of those who lived in the flatlands were not worried about flooding. Although California is currently facing a drought and many may believe that it would be very unlikely for a flood to occur in Oakland now, due to climate change the risk of floods caused by sea

level rise in Oakland is increased. This would directly affect those living in the flatlands, especially the West Oakland community. This information suggests that the residents of Oakland need to be educated on the consequences of floods, or that some individuals think that the other issues not included in the survey are more important than flooding.

Societal Issue Ranking

Social Ranking: Total

	1	2	3	4	5
Affordable Housing	40.63% 39	17.71% 17	10.42% 10	12.50% 12	16.67% 16
Quality Education	29.90% 29	24.74% 24	21.65% 21	8.25% 8	13.40% 13
Healthy Foods	7.37% 7	22.11% 21	22.11% 21	25.26% 24	15.79% 15
Affordable Healthcare	7.37% 7	14.74% 14	22.11% 21	30.53% 29	24.21% 23
Unemployment	15.15% 15	20.20% 20	20.20% 20	18.18% 18	19.19% 19

The overall ranking for societal issues was:

1. **Affordable Housing**
2. **Quality Education**
3. **Quality Education**
4. Affordable Healthcare
5. Affordable Healthcare

In regard to the societal issues, the top-rated concern among survey respondents is Affordable Housing, followed by Quality Education standing in second and third place. The results were not surprising due to the fact that wages have remained stagnant while rent and mortgages have gone up, which means that housing is becoming less affordable. Quality Education has been a subject of concern in Oakland due to budget cuts and school closures. Schools in more affluent neighborhoods seem to be better than others, having more materials, and presumably better teachers, leaving schools in poorer neighborhoods to provide inadequate education for their students. Because of this information, it is no revelation that quality education would be ranked the second and third most concerning societal issue for the survey pool. In the third column in the chart above, quality education won the vote by only .5% which means that affordable healthcare and access to healthy foods/grocery stores are practically of equal concern.