University of California, Los Angeles

Assessing Community Health in Inglewood

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1.0 Abstract

In Los Angeles County, residents of certain communities are at risk of poorer health due to their environment. Communities' relationship to health can be directly influenced by their natural and built surrounding environments. Through surveying residents of Inglewood in an open-question format, we aimed to get a better understanding of what their environmental health concerns are as a lower-income community consisting of 91% people of color. Using that information, we designed a second quantitative survey asking about Inglewood residents' concerns on air pollution, noise pollution, and access to healthy food to see if their opinions and current health conditions can lead us to better understand the quality of their surrounding environment, and potential environmental injustices. Using Santa Monica as a control group, we found that residents of Inglewood were more concerned about airplane air and noise pollution which may be due to their proximity to LAX, and, in addition, suffer higher rates of diseases such as asthma and cancer, amongst other findings. These responses are vital in bridging the research gap and have allowed us to better understand residents' personal concern about their environmental health.

2.0 Introduction

Environmental justice is a movement that addresses inequities disproportionately burdening communities of low-income and color. Inequities burdening these communities include greater exposure to environmental hazards such as air pollution and access to safe drinking water. Air pollution, noise pollution, and access to healthy, affordable food are three important aspects of environmental health that impact communities in a number of ways.

Air pollution originates from many different sources, each of which emit different, harmful toxins threatening residents overall health. Emissions from cars and trucks are known to cause asthmatic symptoms, cardiovascular mortality, and lung problems (Nawrot, T. S. et al., 2009). Additionally, airplanes are also linked to higher concentrations of particulate matter both globally and in proximity to airports such as the Los Angeles International Airport (LAX) (Yim et al., 2015; Hudda et al., 2014). Health issues linked to airplane air pollutants include premature mortality (Yim et al., 2015).

Noise pollution issues are becoming more prevalent as communities are increasingly aware of its health impacts and disturbances in residents daily lives (Maisonneuve et al., 2009;) Sources of noise pollution include freeways and airports (Stansfeld, 2003), and associated health impacts are loss in productivity, difficulty concentrating, and hearing loss (Mirowsky, 2013; Graeven, D. B., 1974; Cohen et al., 2007).

Finally, food accessibility is an additional concern that predominantly impacts communities of low income and color. Access to grocery stores that offer fresh and healthy food along with limited walkability to these grocery stores are issues related to food accessibility (Morland et al., 2002; Walker et al., 2010). In general, wealthier communities are more likely to have access to healthy food options compared to lower-income communities. In addition, predominantly white communities are more likely to have better food accessibility than predominantly black communities (Morland et al., 2002). Health impacts that result from a lack

of food accessibility include obesity, iron deficiency anemia, dental issues, and other diet-related issues (Bell et al., 2013).

Research is an essential component in correlating pollution sources to health impacts within a community. However, in many communities there exists a gap in research understanding what the actual community residents personal health concerns are and thus, identifying the most significant environmental pollution impacts causing these health concerns. This research gap is applicable for residents living in Inglewood, California. The city of Inglewood is a low-income, minority community located in close proximity to the Los Angeles International Airport. This community is racially composed of 46.4% black, 46% Latino, 4% white, 2.5% other, and 1.1% Asian community members (“Inglewood,” 2018). Some distinctive features in Inglewood are the Forum, a large concert venue, NBA Clippers Arena, and, in current construction, the NFL Chargers/Rams stadium. Its proximity to LAX and the 405 and 105 highways put this community at risk for exposure to higher levels of air pollution and noise pollution. Additionally, Inglewood has been identified by the County of Los Angeles Department of Health Services as a lower-income community where greater than 23% of households are affected by food insecurity (Fernando, 2004).

As the organization to implement the first community farmers market, the Social Justice Learning Institute reached out to UCLA due to their interest in researching the status of community environmental health. The Social Justice Learning Institute (SJLI) is a non-profit organization striving to improve the "education, health, and the well-being of youth and communities of color by empowering them to enact social change through research, training, and community mobilization." SJLI sought to comprehend those concerns in order to better understand the community and consequently, better address their needs. The objective of this study was to understand the status of household environmental health in Inglewood, California.

3.0 Methods

3.1 Phase 1: Qualitative Data

We implemented a two-phase plan approach to assess the status of household health of Inglewood. Phase one focused on conducting a pilot survey. The pilot survey is composed of four open-ended questions that aim to broadly understand the top health concerns of Inglewood residents. Our questions addressed concerns regarding biggest health problems within the respondents family and local community, neighborhood pollution and environmental pollution concerns, if the respondent believes the city and state government are doing enough to solve these concerns, and finally, whether the respondent has personally felt sick or had symptoms that may be attributed to pollution and the environment.

We drew upon extensive research on past health assessment surveys to determine what questions best allow respondents to talk freely without assuming any preconceptions about the community and their concerns (Srivastava et al., 2009;). The pilot survey was designed to provide qualitative data that allowed for the construction of the final, quantitative survey. The process of surveying took place over the course of five weekends. Surveying was conducted over two to five hours periods of time in areas that were previously selected on the random sample map (see 3.3 Random Sample). The team ensured that questions were being

asked in a similar manner by crafting a script for all members to follow. To ensure homogeneity in our questioning, the team collaborated at the beginning of each survey outing and communicated any changes that were necessary in the survey script. We also used four recorders, and at the beginning of each survey inquired whether we would be able to record the respondents answers.

Using a “snowball” effect, the end of surveying was determined when the team noticed similarities in answers for the set of four questions. Our final results included visiting 175 homes and receiving 36 responses. Any surveys that had been recorded were transcribed by team members. To analyze the results, each team member was assigned six surveys to review and highlighted key words pertaining to pollution, the environment, health, and government actions. These keywords were then organized by subject in an excel document. Different subjects include; air quality, construction, asthma, traffic, airplanes, and more. To indicate that a response mentioned the topic, we inserted the quote which included the key word. In order to ensure that no keywords or topics were missed, team members exchanged assigned surveys and reviewed them a second time, inserting any information they believed was missing into the excel sheet. After this was completed, a graph was created that organized the number of times a certain subject was mentioned. These topics included air pollution, airport related pollution, vehicle and airplane noise, neighborhood safety, food access, walkability and bikeability, gentrification, and green spaces.

3.2 Phase 2: Quantitative Data

Phase two was the quantitative survey. This final survey was crafted after analyzing the number of times certain topics were mentioned in the previous pilot survey. These trends then allowed us to focus on three predominant themes; air pollution, noise pollution, and food access. The final survey is comprised of 36 questions that address these topics, and significantly, also ask the respondent about best solutions for these environmental issues and who they believe is responsible for implementing those solutions. Team members went out to survey for five weekends including several week days for periods of two to six hours. Homes visited were again determined by the random sample map (see 3.3 Random Sample). In total, 1,128 homes were visited and 123 responses were received.

The survey was formulated to provide measurable data that would allow us to quantify community members’ reponses. These responses were then analyzed using excel. Team members went through each survey and then inputted the answers into the excel document using different sheets for each city. Each question and answer was assigned a numerical number or symbol (such as m for male and f for female). Team members then went through each column which corresponded to each question on the survey, and used the search and find function to analyze how many times each answer was given which allowed the statistics for each question to then be calculated. If questions had two or more responses, this was taken into account in another column that specified a 0 or 1 if they answered a certain response. This was then used to calculate the number of responses and converted into percentages. These results were then computed into bar graphs showing the results of Inglewood and Santa Monica side by side.

3.3 Random Sample

ArcGIS software was used to determine the area, zoning, and random sample for Inglewood and Santa Monica (Kumar, 2007). The U.S. Census Bureau provided the resources for county boundaries through the TIGER shapefiles 2012 city boundaries. These shape files were downloaded onto ArcGIS in order to finalize the areas for surveying.

Additionally, the county wide zoning shapefile provided by the Los Angeles County GIS Portal was used to determine different zoning areas in Inglewood and Santa Monica. In order to reduce bias in the responses, a random sample was conducted through the "Create Random Points" tool using ArcGIS software. Survey locations were determined based on the points that intersected housing units in the areas selected to survey. The selected areas were chosen with the goal of covering the greatest variety and largest area of Inglewood and Santa Monica. In the first phase of surveying, 1400 points were placed throughout the county of Inglewood. In the second phase, 10,000 points were randomly placed through the ArcGIS tool throughout Inglewood and Santa Monica County in order to increase the chances of receiving responses and improve walkability.

In order to track the survey progress, the application "Survey123" was used. The application tracked the progress by taking down the coordinates of each location visited, where responses were made, the date of the survey response, and which team member conducted the survey.

3.4 Control Group

Santa Monica was chosen as the control group because of demographic differences with Inglewood. Similarly, Santa Monica has a population size of 92,247 and an area of approximately 8.57 miles compared to Inglewood's population of 111,012 and area of 9.12 square miles. However, Santa Monica's racial composition differs from Inglewood. Within Santa Monica, 71.3 % of the population is white, 13.5% is Latino, 3.5% is Black, 7.1% is Asian, and 4.6% is other. Additionally, Santa Monica's median household income is $82,123 compared to Inglewood's $44,377 median household income. ("Inglewood," 2018;"Santa Monica," 2018; "Santa Monica, CA," 2016;"Inglewood, CA" 2016). Santa Monica is located approximately 10 miles from Inglewood, and also has an airport, though smaller in size, within the city's boundary. During the phase I of the qualitative survey in Inglewood, it was noted that many of the residents made comments regarding flight paths that were moved from the Santa Monica airport to LAX as a result of Santa Monica residents' complaints regarding noise and air pollution from planes (Cervantes, 2017; Negroni, 2014). This was additionally taken into account when determining the control group.

4.0 Results

After compiling data for the quantitative survey and visiting over 1,128 homes, there were some interesting results for all three aspects of the research project: air pollution, noise pollution, and accessibility to healthy foods. Beginning with air pollution it was found that after performing a chi square test, airplane traffic was a significant answer in the city of Inglewood when asking individuals what they thought the two biggest sources of air pollution were. With a Hochberg P-value of 0.0023377 it is interesting to see that Inglewood is more concerned with

airplane traffic, which could be due to the close proximity of the LAX airport (See figure 3). When asking Individuals in both Santa Monica and Inglewood what they thought the two main obstacles were to implementing solutions, “special interests oppose solutions” with a Hochberg P-value of 0.0010826093 and “government does not care” with a Hochberg P-value of 0.00269438326 were found to be significant answers, with Inglewood more concerned with lack of care by the government and Santa Monica focusing on special interests (See figure 11). Other significant results for air pollution include Inglewood respondents who answered “completely true” when reading the statement “If I compare this year to last year, traffic pollution from cars and trucks has gotten worse.” With a Hochberg P-value of 0.009415384615 it seems clear that air pollution has gotten worse over time, which could be due to factors such as a growing population (See figure 5.1 and 5.2). Lastly, after asking individuals in both cities who they think should be responsible for decreasing air pollution from cars and trucks, it was found that national government was a prominent answer with a Hochberg P-value of 0.01075683 (See figure 12).

Moving on to noise pollution, results showed that when asking individuals what they thought the two main causes of noise pollution were, construction with a Hochberg P-value of 0.00000000503277 and airplane traffic with a Hochberg P-value of 0.002094539825 were shown to be significant findings (See figure 14) with Inglewood more concerned about airplane traffic and Santa Monica about construction. These findings could possibly be due to airplanes constantly flying over homes in Inglewood due to the LAX airport and local construction for new homes in Santa Monica. When asking individuals what most bothered them about noise pollution results showed that Inglewood felt that flying over homes and frequency of flights was bothersome, while Santa Monica felt that they were not bothered by airplane noise or flying over homes (See figure 18). One of the most prominent answers to this question was “vibration/rumbling” by airplanes with a Hochberg P-value of 0.0107568316 which was only selected by Inglewood. Solutions to decrease airplane noise pollution varied between the two cities with the majority of Inglewood selecting noise canceling double-paned windows and Santa Monica answering that quietest in-class airplanes for nearby airports was a viable solution (See figure 19). Of the many options available for this question, it was found that noise-canceling doors with a Hochberg P-value of 0.00050855092, noise-canceling windows with a Hochberg P-value of 0.000037212286, noise-canceling insulation with a Hochberg P-value of 0.001312800714, and quietest in-class airplanes for nearby airports with a Hochberg P-value of 0.000060488448 were found to be significant results. Lastly, when asking individuals about obstacles to reducing noise pollution it was found that Inglewood felt that the government didn’t care while individuals also mentioned that there was lack of public funding, while Santa Monica mostly answered that special interests opposing solutions and lack of political power were obstacles. With a Hochberg P-value of 0.00670718, special interests opposing solutions was found to be a significant result.

Healthy food accessibility results showed that when individuals were read the statement, “local grocery stores in my neighborhood have high quality fruits and vegetables” most agreed that this statement was true; 76.47% in Inglewood vs 98% in Inglewood (See figure 23.2). Although there was a high percentage in both cities that agreed the statement was true, it was found that only around 40% of Inglewood thought it was completely true vs 91% in Santa

Monica; with a Hochberg P-value of 0.00000012917229 this was found to be a significant result. Further results showed that when asking individuals what they thought the two best solutions to improve access to healthy food were, having more grocery stores with affordable healthy food was a frequent response in both cities (See figure 26). With a Hochberg P-value of 0.01907816075 it was found that having more farmers markets was a significant result. Out of the three topics that were analyzed in this survey our final results showed that the majority of individuals were most concerned about air pollution from cars/trucks with over 50% of Santa Monica and 25% of Inglewood respondents highlighting this issue.

5.0 Discussion

5.1 Air Pollution

Figure 3 indicates that Inglewood's top concern is airplane traffic. Forty-five out of sixty-eight respondents concluded that this was one of their top concerns. Due to Inglewood's close proximity to LAX and the intersection of the flight paths with the city, it is apparent why airplane traffic would be the residents top concern ("14 CFR Part 150 Noise Exposure Map Report Update; Chapter 5," 2015). Figure 4 indicates the large proportion of residents, 57/68 in Inglewood and 45/54 in Santa Monica, who agreed that traffic related air pollution was a problem in their neighborhood. This result is reasonable due to the tremendous amount of traffic and people living in Los Angeles.

It is interesting to observe in figure 10 that both communities have similar top three solutions. The solution, "have tougher air pollution standards for cars and trucks," addresses air pollution issues in a broader scope that addresses the overall traffic related pollution commonly associated with Los Angeles. Speed bumps and stop signs are effective in addressing neighborhood traffic issues, concerns that both Santa Monica and Inglewood have, and increasing public transportation options is another solution that addresses the broader scope of Los Angeles traffic issues. Additionally, figure 11 shows that there isn't convergence on any one specific obstacle to finding solutions for air pollution from cars and trucks. Despite differences in socio-economic status between Santa Monica and Inglewood, both communities selected similar responses; the government doesn't care and special interests. Common health symptoms in both communities include asthma, allergies, irritation of eyes, nose and throat, and headaches. These health concerns are linked to air pollution and thus indicate potential links to higher air pollution concentration within this community (Neidell, 2004;Dales et al., 2009; Takizawa, 2011). However, a majority of community members stated that they did not experience any of these health symptoms.

5.2 Noise Pollution

Figure 14 shows that Inglewood's top two most often mentioned causes of noise pollution were airplane traffic and neighborhood traffic. Santa Monica most often answered, neighborhood traffic and construction. The most striking result was that in Inglewood 43 out of 68 respondents said that airplane traffic was a main cause of noise pollution in the neighborhood. In Santa Monica, 29 out of 54 respondents stated that neighborhood traffic was their main source of noise pollution. Interestingly, in Santa Monica helicopters was often

mentioned even though it was not directly stated in the survey, with 10 out 54 respondents speaking about them. Overall, we see that Inglewood is most burdened by all types of traffic as a source of noise pollution.

In figure 17 it is interesting to note that although Inglewood respondents said that airplane traffic was a main cause of noise pollution in their neighborhood, most of the respondents felt that the noise from airplanes had not changed from this year compared to last year.

Figure 19 indicates what community members thought were the best solutions to decrease airplane noise pollution. Interestingly, we find that in Inglewood, solutions that implied making direct changes to their homes, such as providing noise canceling windows, insulation, and door, were the most frequent responses. LAX provides a noise abatement compensation program for certain residents identified as being within the flight paths. This program provides compensation for noise canceling insulation, double-paned noise canceling windows, and noise canceling doors in order to help community members combat noise pollution in their homes. (“Noise Abatement and Curfew Regulation,” 2018). However, the next most mentioned solution after making changes to their homes was to have different flight paths. Santa Monica considered different solutions and most often mentioned requiring quietest-in-class airplanes and having different flight paths. It should be noted that 8 out of 54 respondents in Santa Monica said that airplane noise pollution did not impact them.

After asking the community members what the best solutions were, we also asked about the biggest obstacles to implementing these solutions were. Figure 21 shows that 30 out of 68 respondents in Inglewood felt that the government simply does not care. This is interesting because it reveals that community members do not feel that their government is doing enough to find solutions for their concerns. In the case of Santa Monica, 50% of the respondents felts that special interests were the ones that posed a threat to decreasing noise pollution in their neighborhood.

After understanding how the communities felt about noise pollution as a whole, it is interesting to observe health symptoms they experienced. A general trend between both communities regards sleep disruption and not experiencing any health issues. These health symptoms have been reported in other noise pollution survey responses and indicate a general trend between airports and increased noise pollution (Bronzaft, 1998). These results help shape residents concerns about different sources of noise pollution within their neighborhoods.

5.3 Food Access

Figure 23.1 indicates some differences between affordable healthy food in both communities. While Santa Monica agreed completely true in regards to having access to healthy, affordable food while Inglewood was divided between completely true and somewhat true. The differences between respondents for completely true is statistically significant. A greater portion of Inglewood responses answered somewhat untrue and completely untrue compared to Santa Monica. This may be associated with different locations of responses taken in Inglewood. While there are some differences in responses for figure 23.1, figure 24.2 reveals that both communities unanimously agreed, despite differences in annual household income, that healthy food is more expensive. Figures 32 and 33 indicate the differences in race and

income between respondents from these two communities. Inglewood annual household income is predominantly distributed between 20K and 200K, while Santa Monica residents income is concentrated from 80K to 200K and above. Additionally, our respondents from Inglewood are predominantly Latino and Black, while respondents from Santa Monica are white.

Lower-income and minority communities are unequally burdened with a lack of access to healthy food options (Walker et al., 2010). This relates to figure 26, wherein solutions to improve access to health food options are necessary. Inglewood's response regarding having more farmer's market in the neighborhood reveals the privileges that wealthier communities have access to. Santa Monica has four farmers markets, each which is open once a week on Wednesday, Saturday, and Sunday. This provides copious opportunities for Santa Monica residents to access healthy, affordable, local, fresh produce ("Farmers Market Locations and Garages," 2018). In comparison, Inglewood currently does not have any farmers markets. Farmers markets have the potential to increase access to healthy food and a variety of produce though research shows that there are disparities between the amount of and quality of produce offered between low-income, minority communities, and non-ethnic, affluent communities. However, farmers market would be a helpful addition to combat food insecurity in low-income, minority communities such as an overabundance of fast-food restaurants and a lack of convenient, affordable grocery stores (Lowery et al., 2016).

Despite differences between Santa Monica and Inglewood in affordable, healthy food options, both communities agreed that there should be more grocery stores in the neighborhood that have affordable, healthy food. Results also indicated that residents wanted stricter regulations on pesticides so that they would not need to purchase organic food which on average tends to be more expensive ("Cost of Organic Food," 2015). Figure 27 reveals the health consequences impacting the Inglewood community that may be related to unhealthy food options and choices. It is significant to observe the differences in health between these two communities. Inglewood respondents reported having high cholesterol, high blood pressure, pre-diabetes/diabetes, and being overweight or obese compared to Santa Monica respondents who predominantly reported that they have not experienced any of these health issues.

In conclusion, access to healthy, affordable food remains a concern for respondents in both communities despite differences in annual household income.

6.0 Research Question

What is the status of household environmental health in Inglewood?

7.0 Conclusion

Inglewood is a low-income community comprised of a majority of African American and Latino residents. Low-income and minority communities are at higher risks of environmental injustices including exposure to air pollution, noise pollution, and food access (Cutter, 1995).

Based on our research question, "What is the status of household environmental health in Inglewood," our team conducted a two-part survey to gain a holistic understanding of the community members' concerns and to quantify their responses. Our pilot survey was designed to gauge the community's views about their physical environment. We obtained 38 responses that shaped our quantitative data by highlighting three key issues: air pollution from cars, trucks,

and airplanes, noise pollution from cars, trucks, and airplanes, and lack of access to healthy food.

Next, we collected 68 responses from Inglewood and 54 from Santa Monica, the control group for Phase II. The data shows air pollution from cars and trucks to be the top concern of both communities; however, Inglewood also responded that air and noise pollution from airplanes is a large concern in their community. Given Inglewood's proximity to LAX, it is expected that residents would be impacted more heavily by airplane noise and air pollution rather than Santa Monica, which is in the process of closing down their local airport and relocating flight paths to LAX.

In addition, the data showed further statistical significance by stating that 63% of Inglewood residents indicated airplane as the main source of noise pollution, whereas 54% of Santa Monica residents cited neighborhood traffic as the main source of noise pollution.

Lastly, despite large differences in income distribution between Inglewood and Santa Monica, both communities agreed that their neighborhood had a lack of access to convenient and accessible food. When asked if healthy food was expensive, both communities overwhelming agreed that this statement was true. Residents also overwhelmingly agree that having stricter regulations on pesticides, would eliminate the need to buy organic and would overall improve access to healthy food dramatically.

Moving forward, this data could be further analyzed by researching more topics of interest to communities like Inglewood. Such topics include but are not limited to: green spaces, access to healthcare, police and gun violence. There is also further research that can be conducted to understand what environmental issues residents of Inglewood face, but may not be aware of.

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9.0 Appendix

Figure 1:

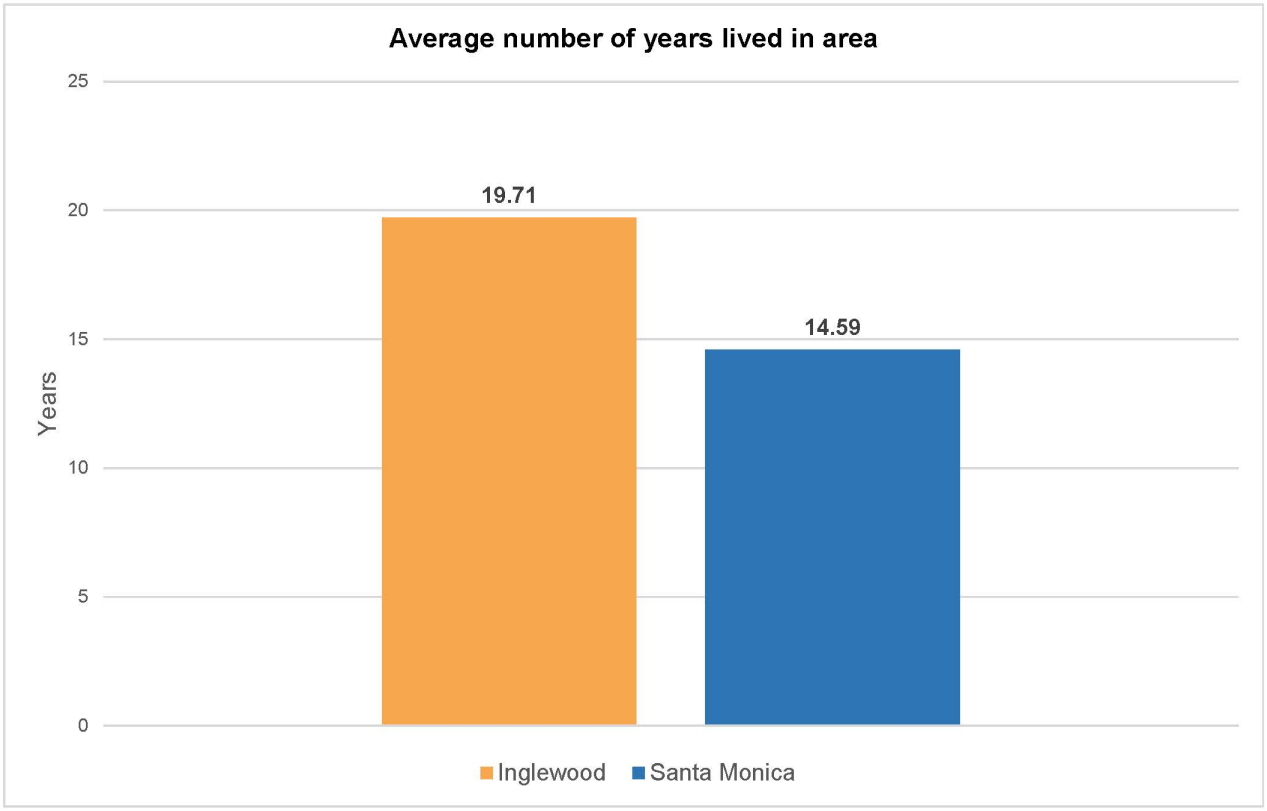


Figure 2:

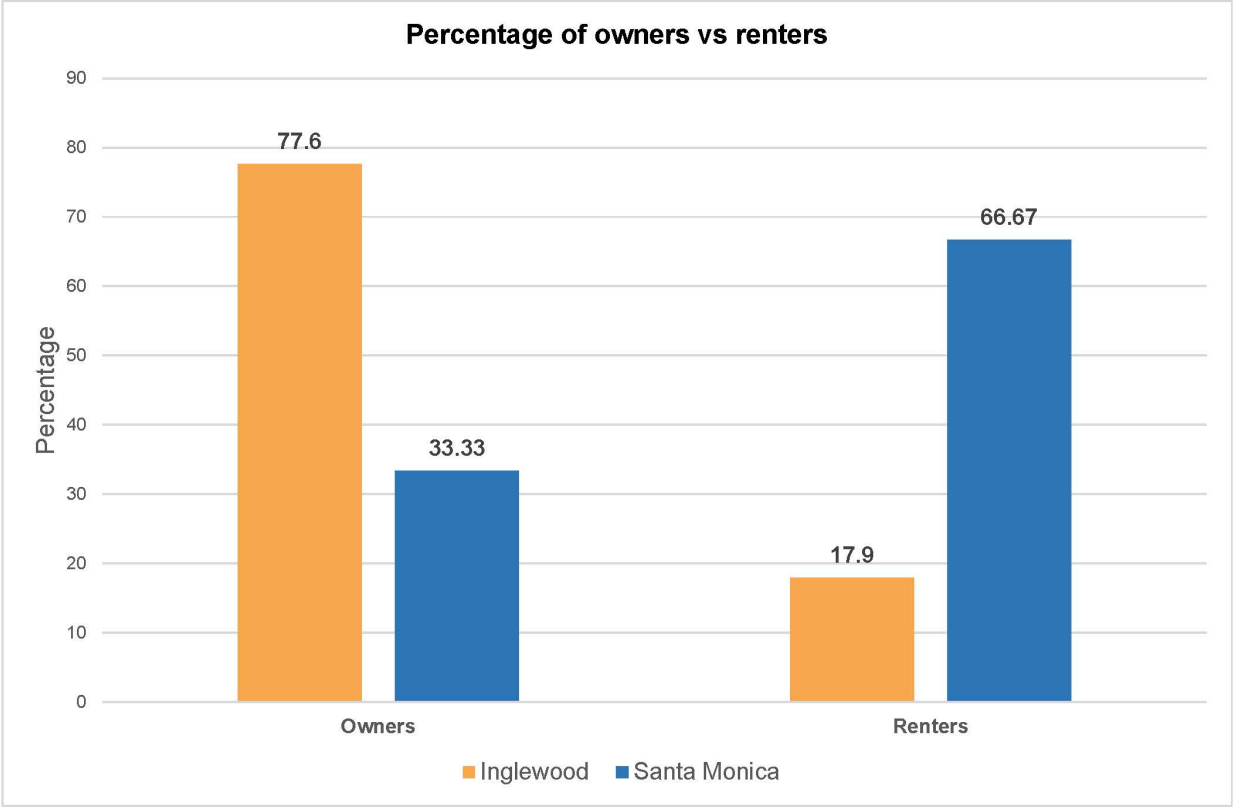


Figure 3:

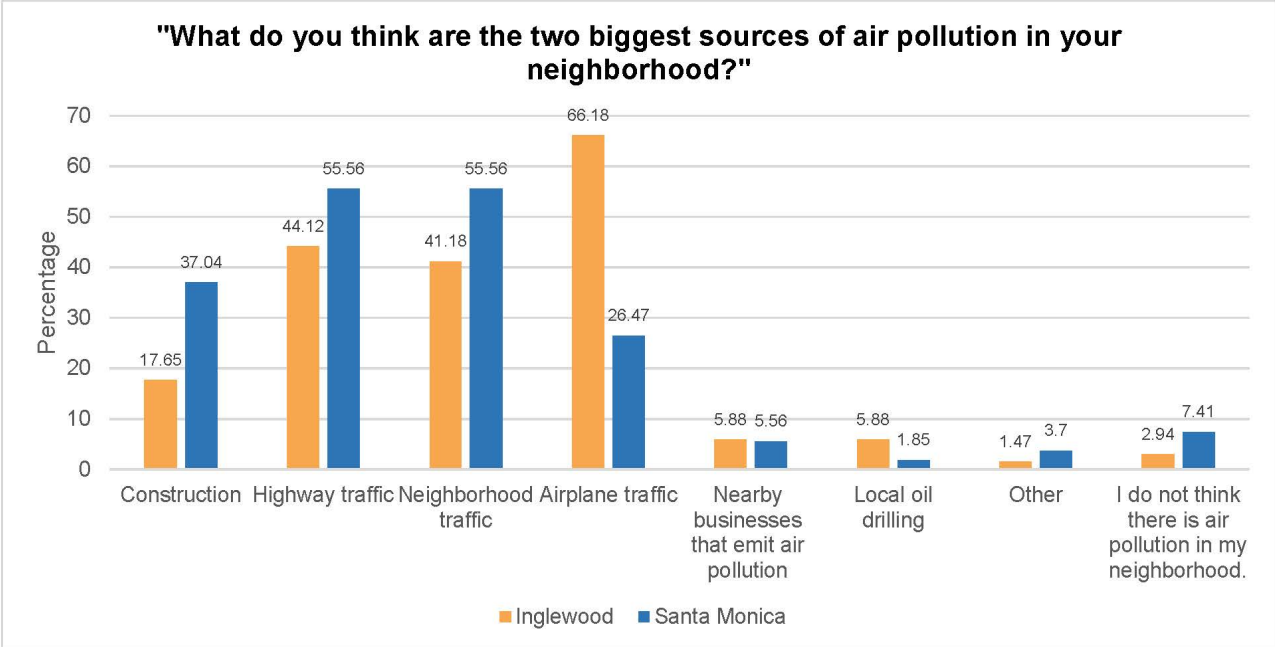


Figure 4.1:

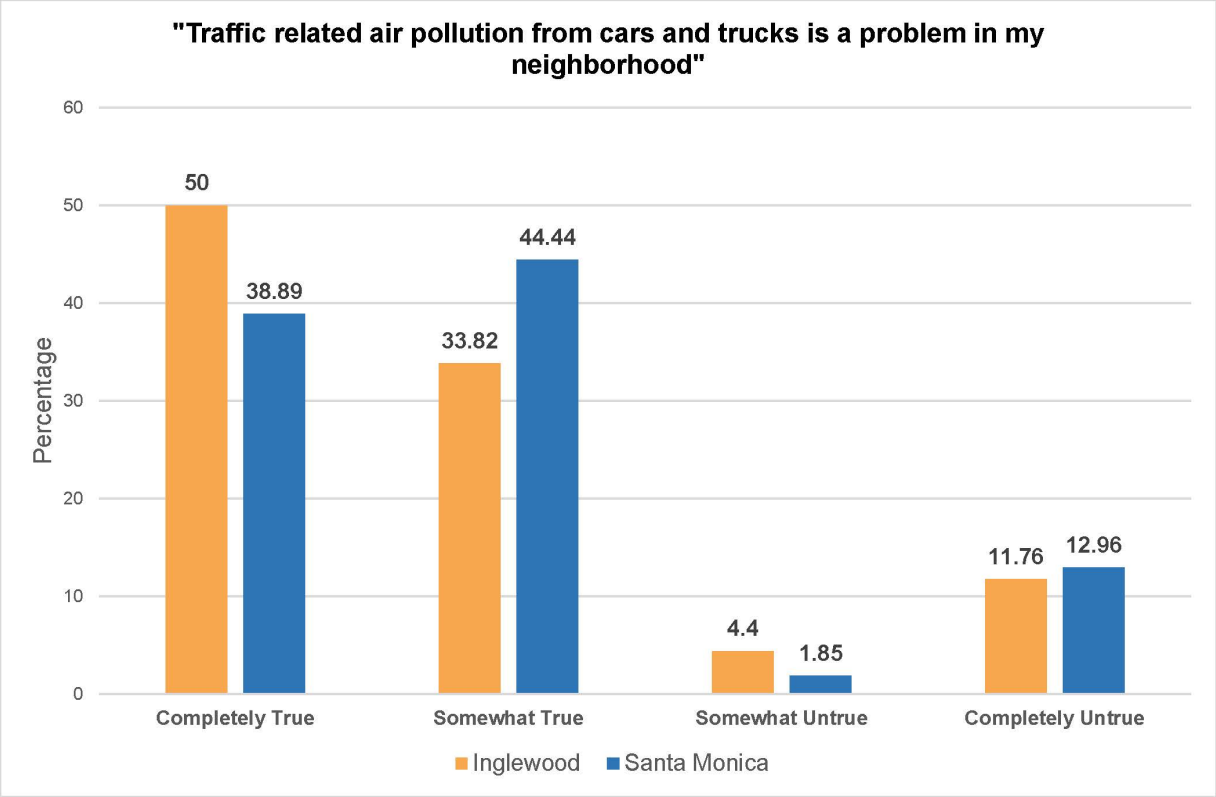

"Traffic related air pollution from cars and trucks is a problem in my neighborhood"
60
50
40
30
20
10
0
Percentage
50
38.89
33.82
44.44
4.4
1.85
11.76
12.96
Completely True
Somewhat True
Somewhat Untrue
Completely Untrue
Inglewood
Santa Monica

Figure 4.2:

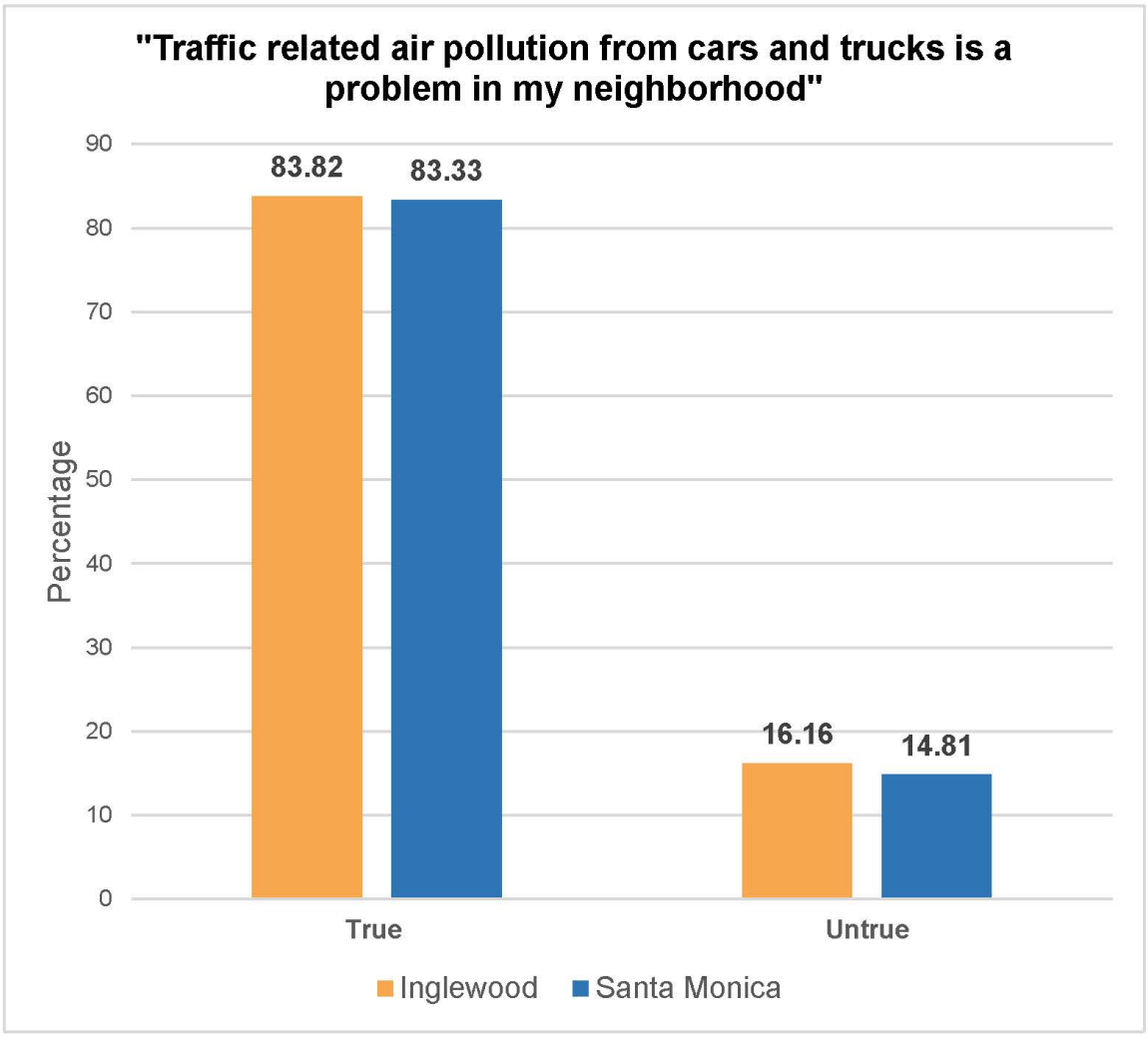

"Traffic related air pollution from cars and trucks is a problem in my neighborhood"
Percentage
90
80
70
60
50
40
30
20
10
0
83.82
83.33
16.16
14.81
True
Untrue
Inglewood
Santa Monica

Figure 5.1:

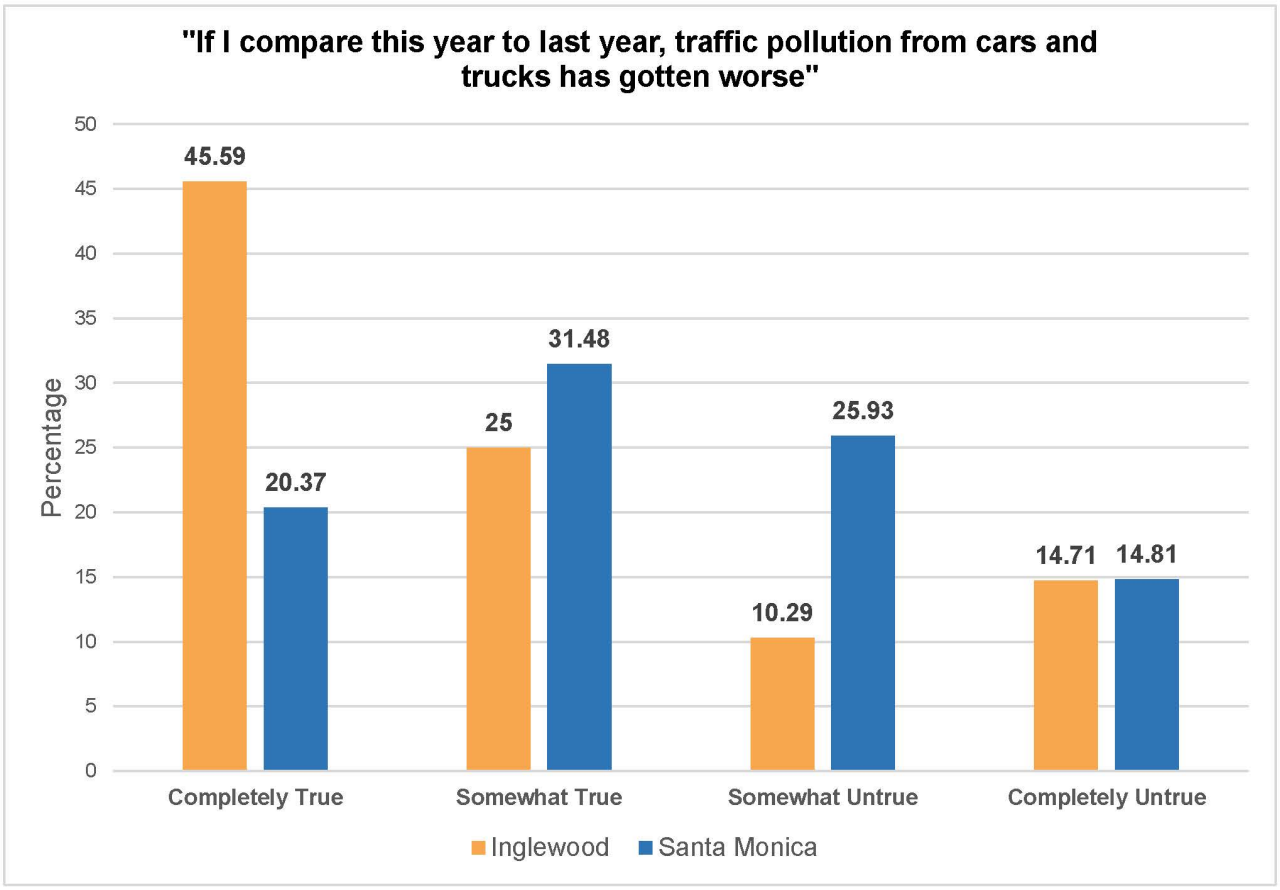

"If I compare this year to last year, traffic pollution from cars and trucks has gotten worse"
Percentage
50
45
40
35
30
25
20
15
10
5
0
45.59
20.37
25
31.48
10.29
25.93
14.71
14.81
Completely True
Somewhat True
Somewhat Untrue
Completely Untrue
Inglewood
Santa Monica

Figure 5.2:

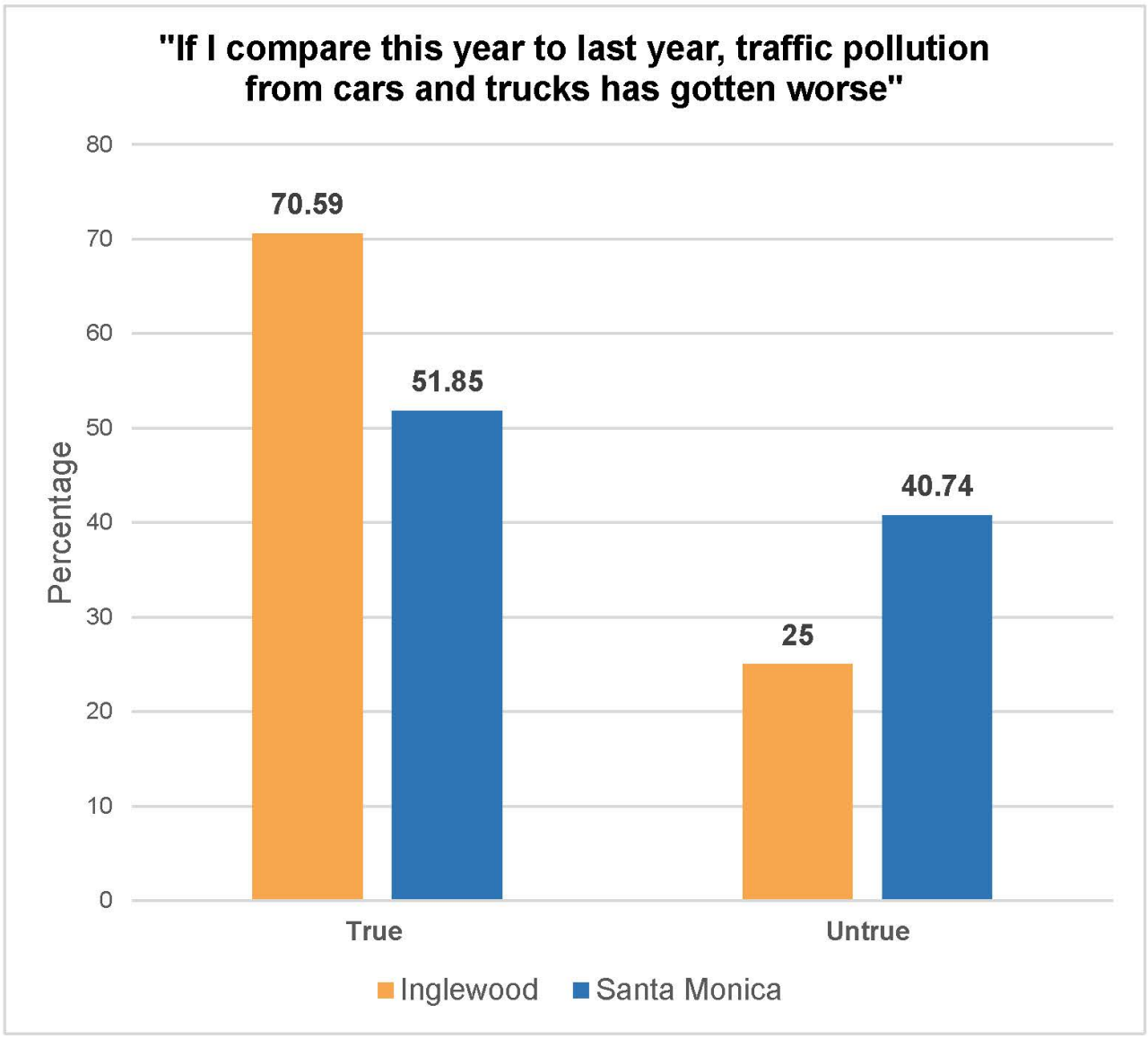

"If I compare this year to last year, traffic pollution from cars and trucks has gotten worse"
Percentage
80
70
60
50
40
30
20
10
0
70.59
51.85
25
40.74
True
Untrue
Inglewood
Santa Monica

Figure 6.1:

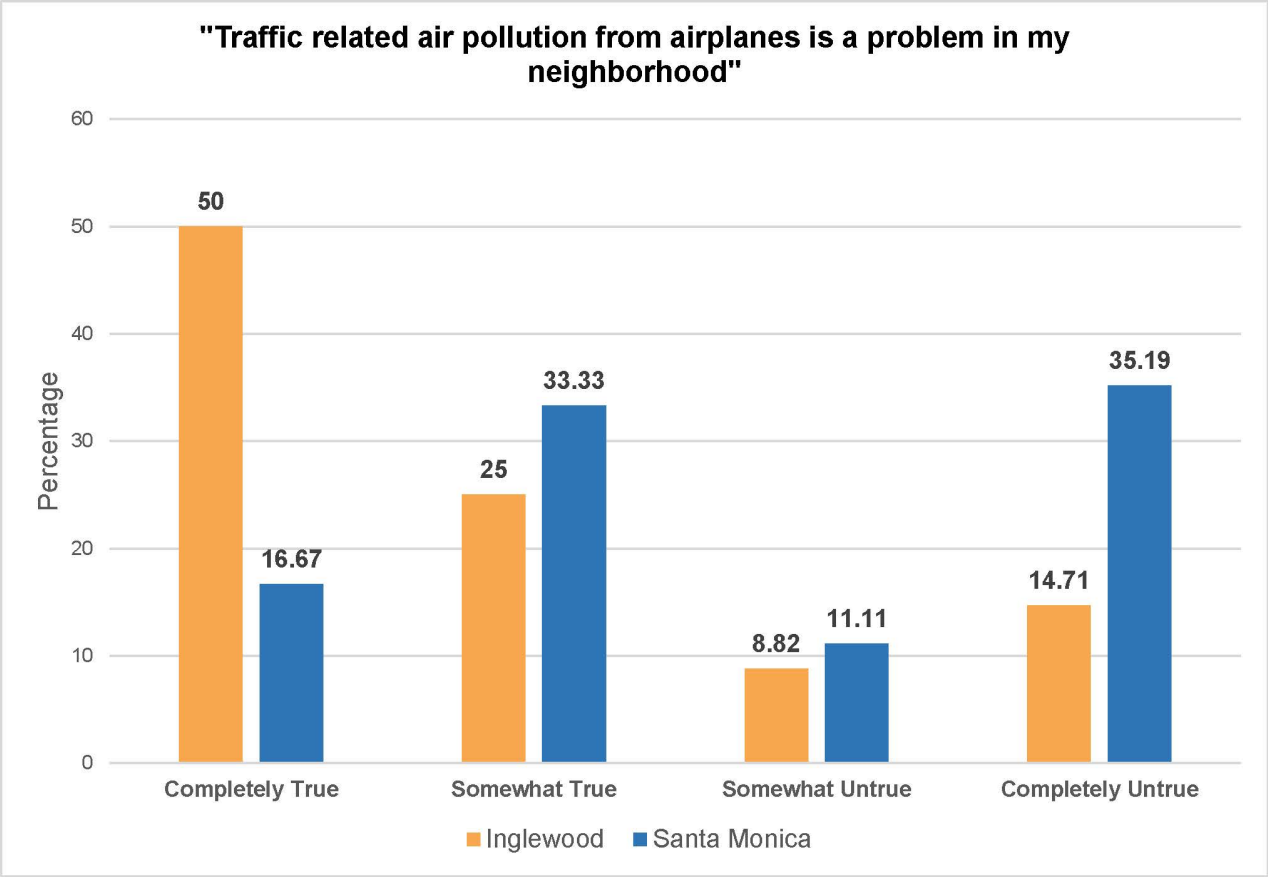

"Traffic related air pollution from airplanes is a problem in my neighborhood"
Percentage
60
50
40
30
20
10
0
50
16.67
25
33.33
8.82
11.11
14.71
35.19
Completely True
Somewhat True
Somewhat Untrue
Completely Untrue
Inglewood
Santa Monica

Figure 6.2:

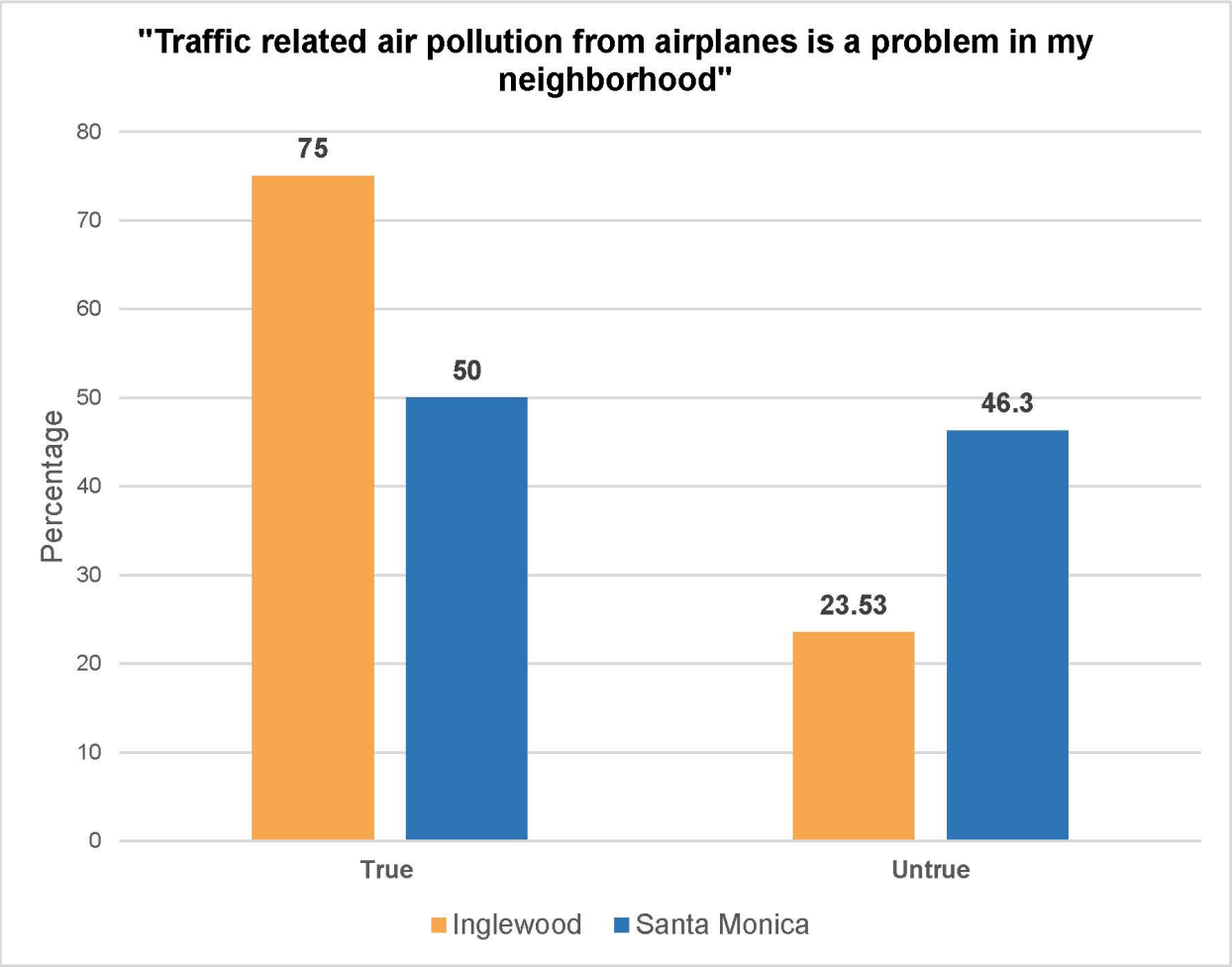

"Traffic related air pollution from airplanes is a problem in my neighborhood"
Percentage
80
70
60
50
40
30
20
10
0
75
50
23.53
46.3
True
Untrue
Inglewood
Santa Monica

Figure 7.1:

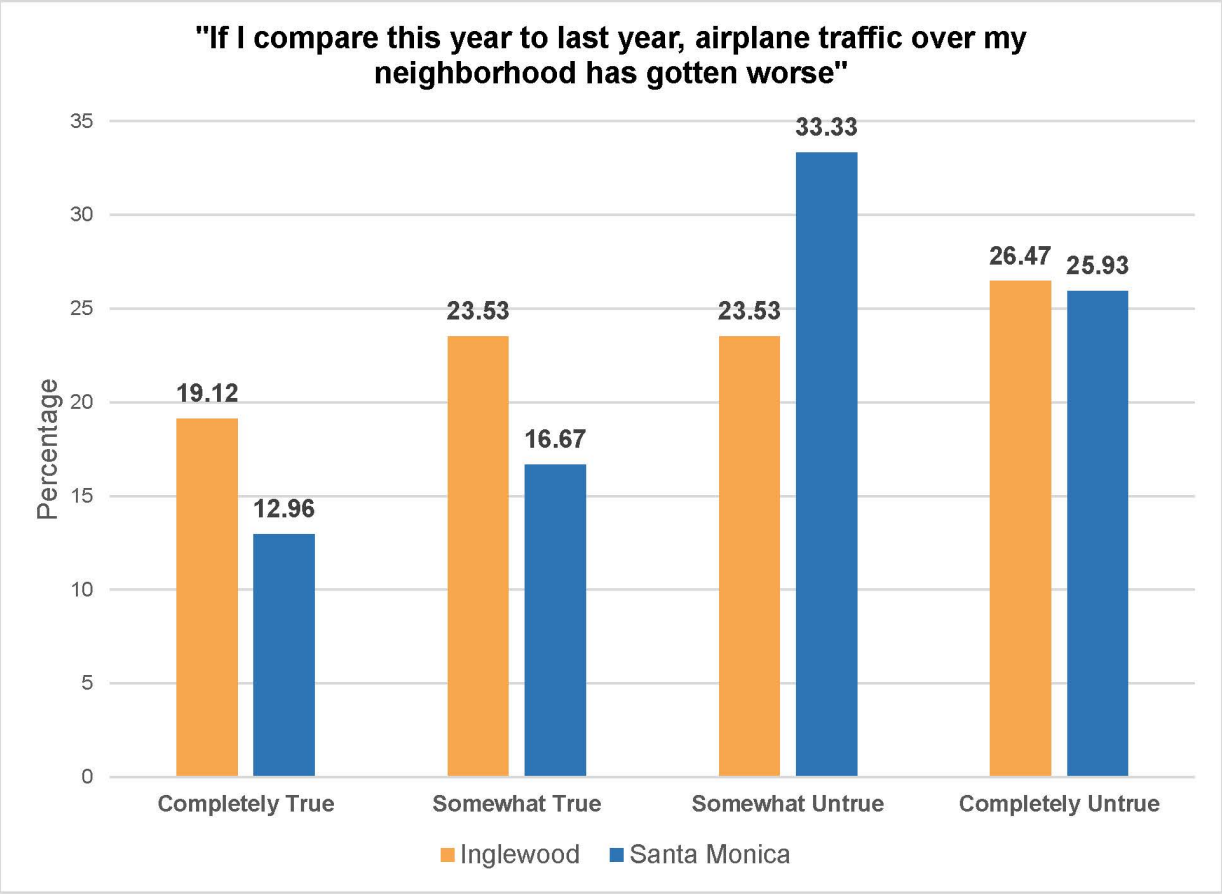

"If I compare this year to last year, airplane traffic over my neighborhood has gotten worse"
Percentage
35
30
25
20
15
10
5
0
19.12
12.96
23.53
16.67
23.53
33.33
26.47
25.93
Completely True
Somewhat True
Somewhat Untrue
Completely Untrue
Inglewood
Santa Monica

Figure 7.2:

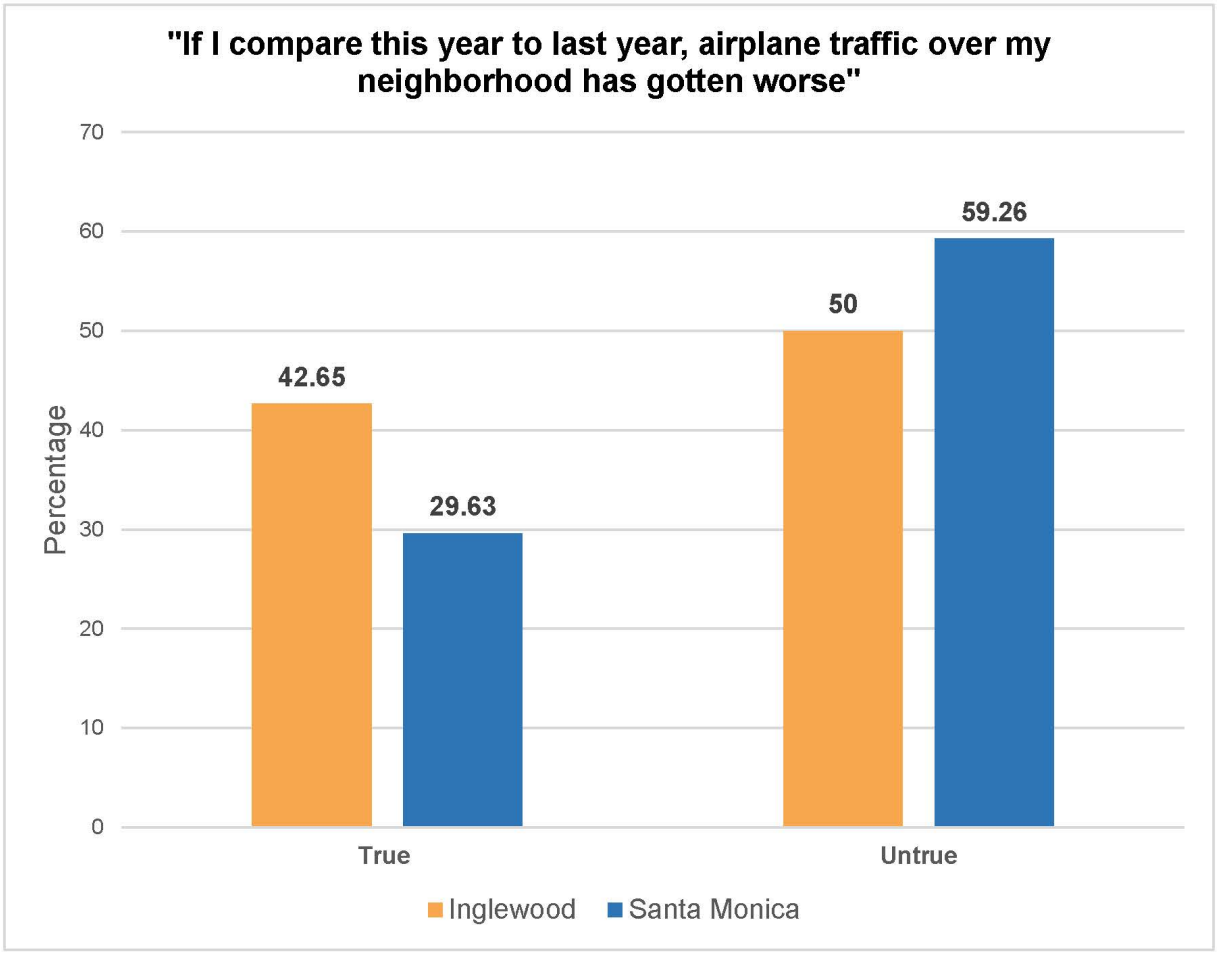

"If I compare this year to last year, airplane traffic over my neighborhood has gotten worse"
Percentage
70
60
50
40
30
20
10
0
42.65
29.63
50
59.26
True
Untrue
Inglewood
Santa Monica

Figure 8.1:

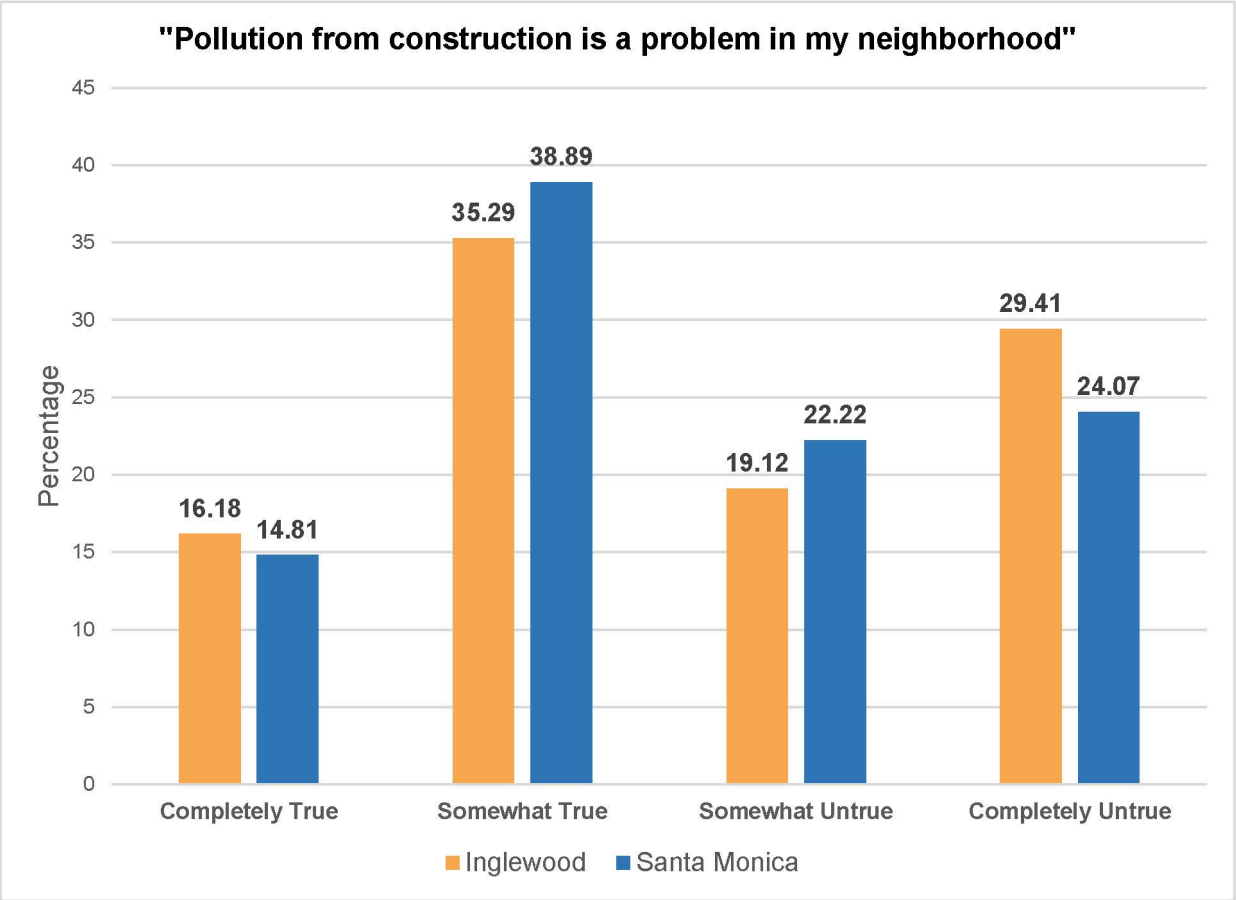

"Pollution from construction is a problem in my neighborhood"
Percentage
45
40
35
30
25
20
15
10
5
0
16.18
14.81
35.29
38.89
19.12
22.22
29.41
24.07
Completely True
Somewhat True
Somewhat Untrue
Completely Untrue
Inglewood
Santa Monica

Figure 8.2:

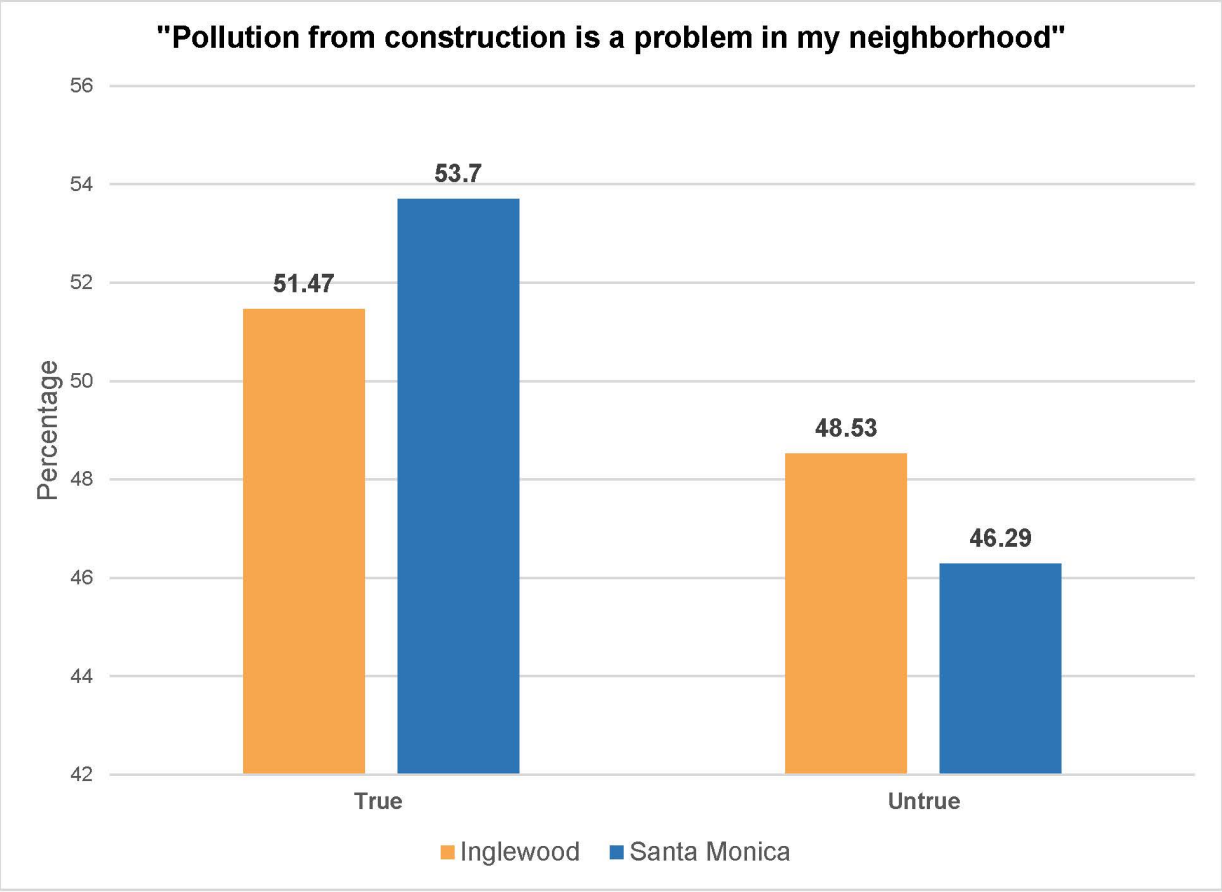

"Pollution from construction is a problem in my neighborhood"
56
54
52
50
48
46
44
42
Percentage
51.47
53.7
48.53
46.29
True
Untrue
Inglewood
Santa Monica

Figure 9.1:

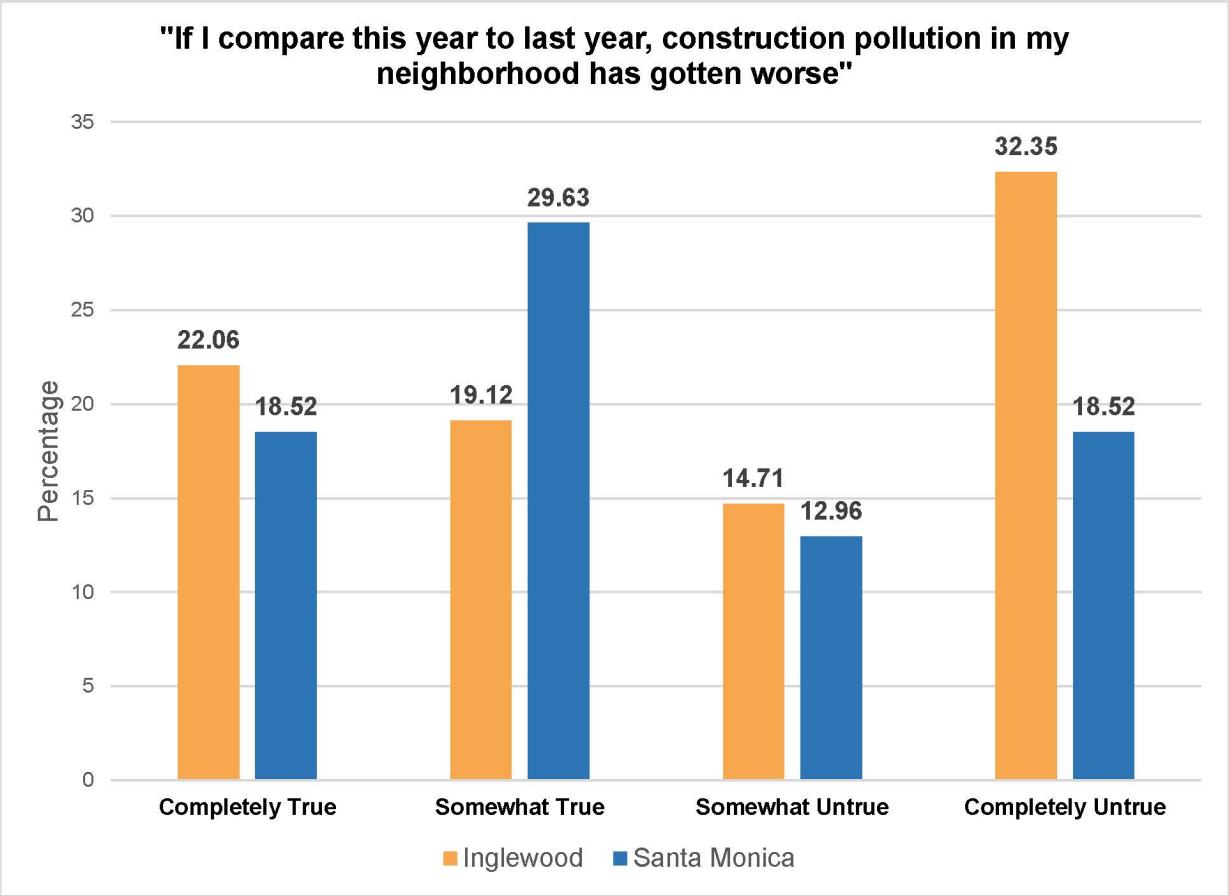

"If I compare this year to last year, construction pollution in my neighborhood has gotten worse"
Percentage
35
30
25
20
15
10
5
0
22.06
18.52
19.12
29.63
14.71
12.96
32.35
18.52
Completely True
Somewhat True
Somewhat Untrue
Completely Untrue
Inglewood
Santa Monica

Figure 9.2:

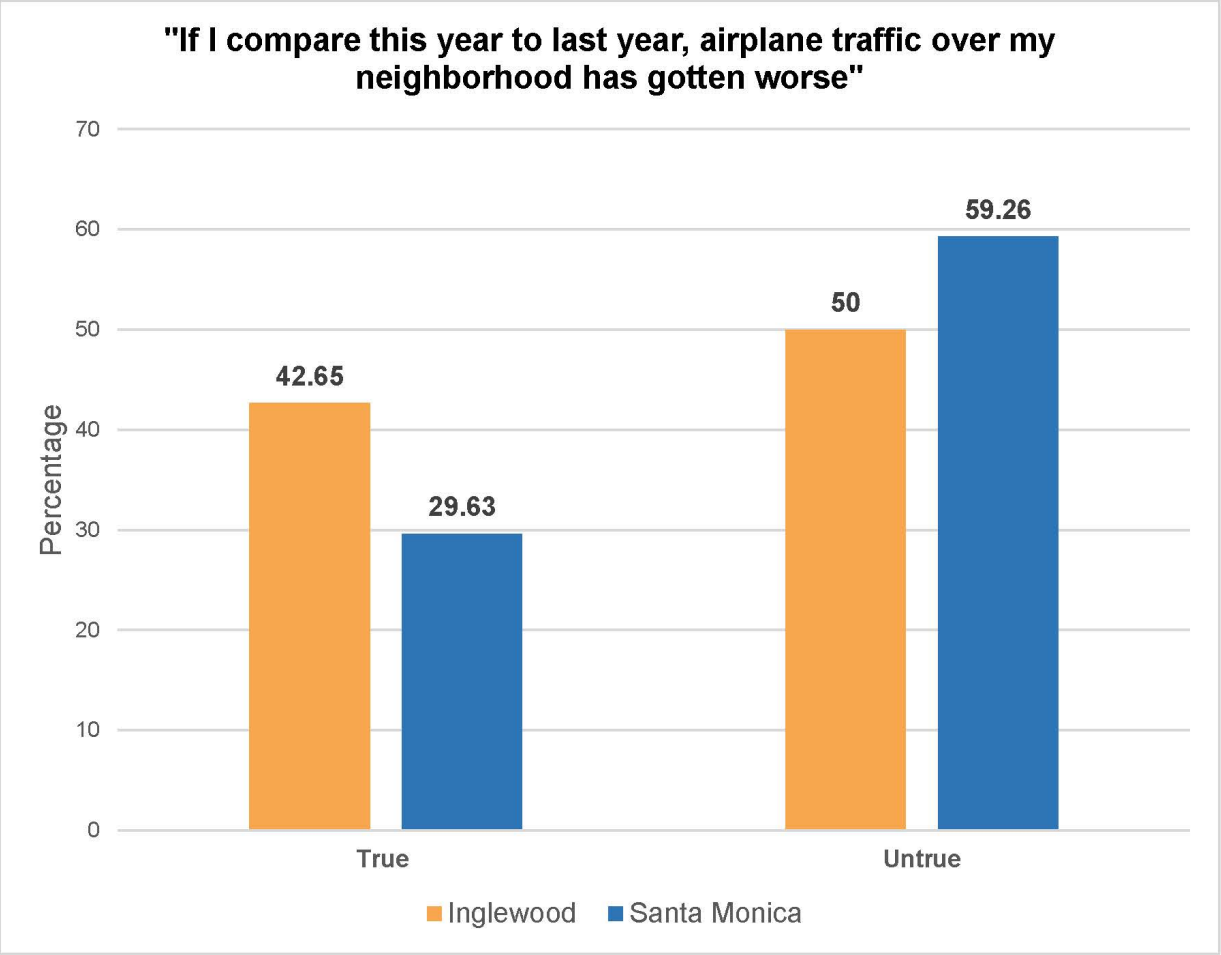

"If I compare this year to last year, airplane traffic over my neighborhood has gotten worse"
Percentage
70
60
50
40
30
20
10
0
42.65
29.63
50
59.26
True
Untrue
Inglewood
Santa Monica

Figure 10:

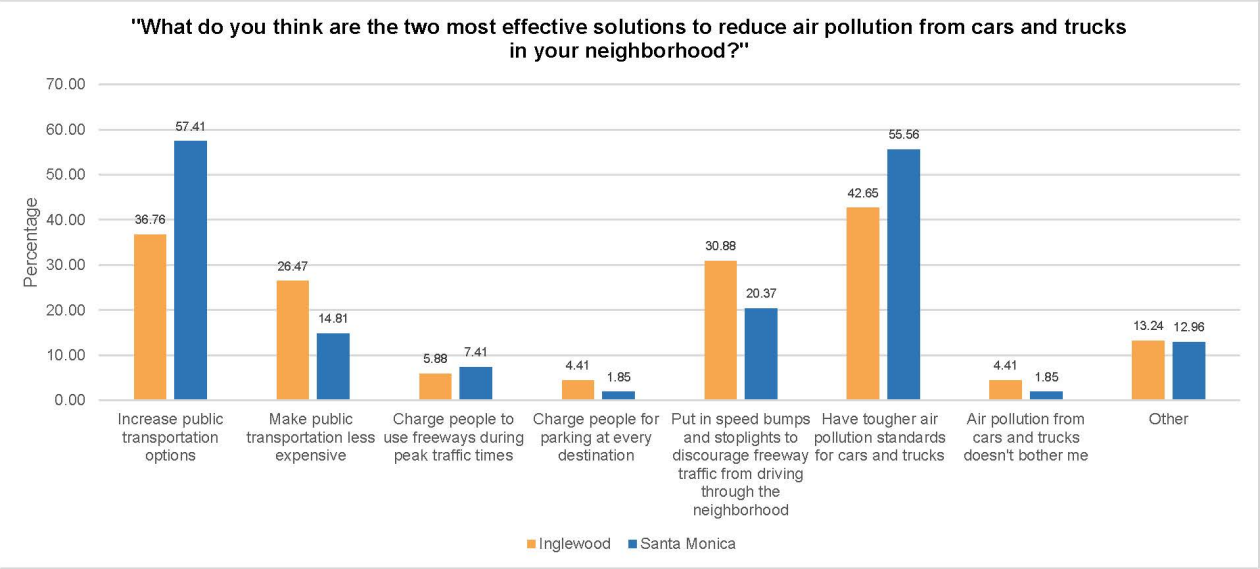


Figure 11:

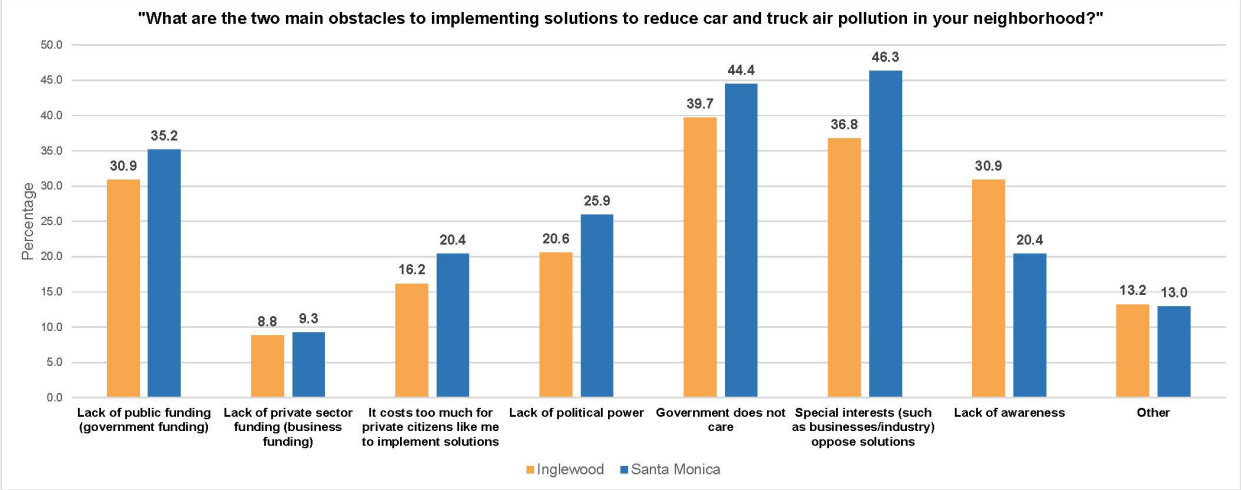


Figure 12:

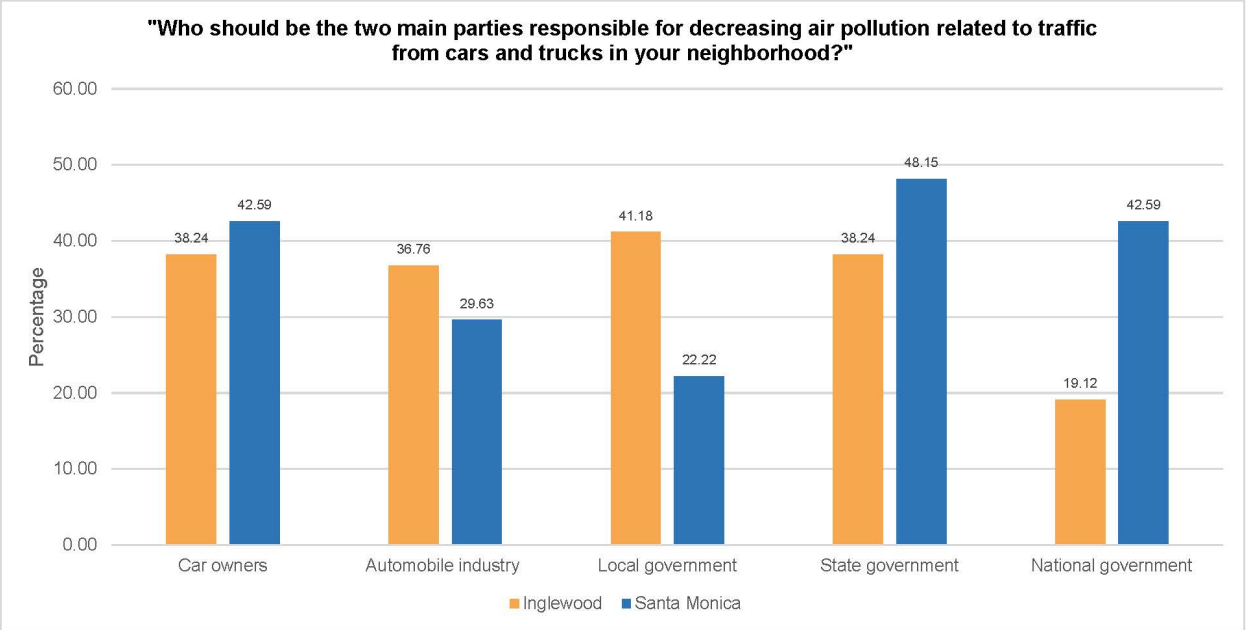
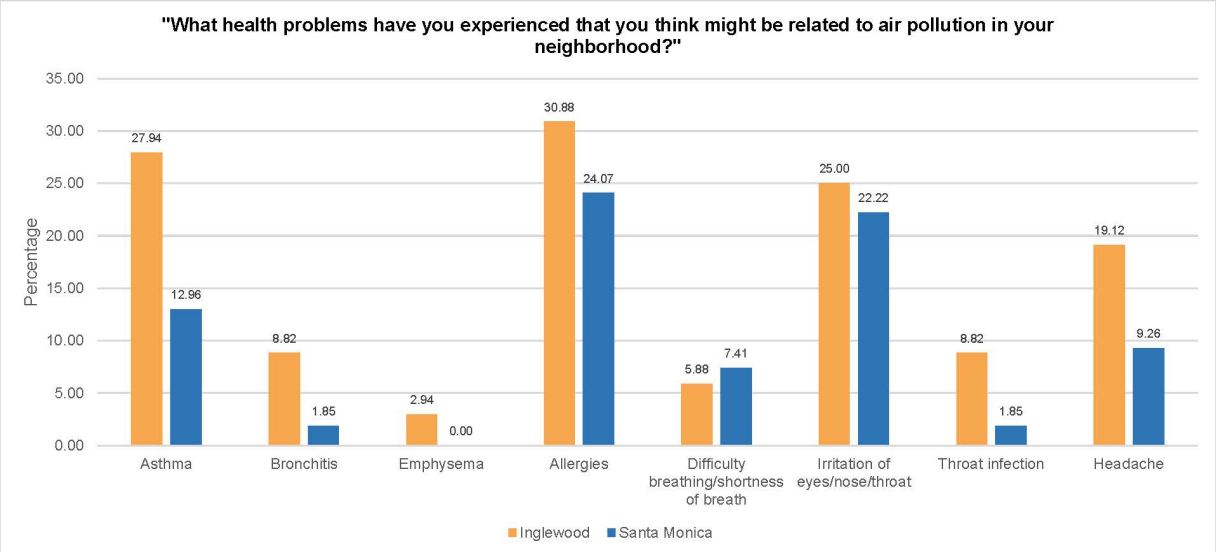
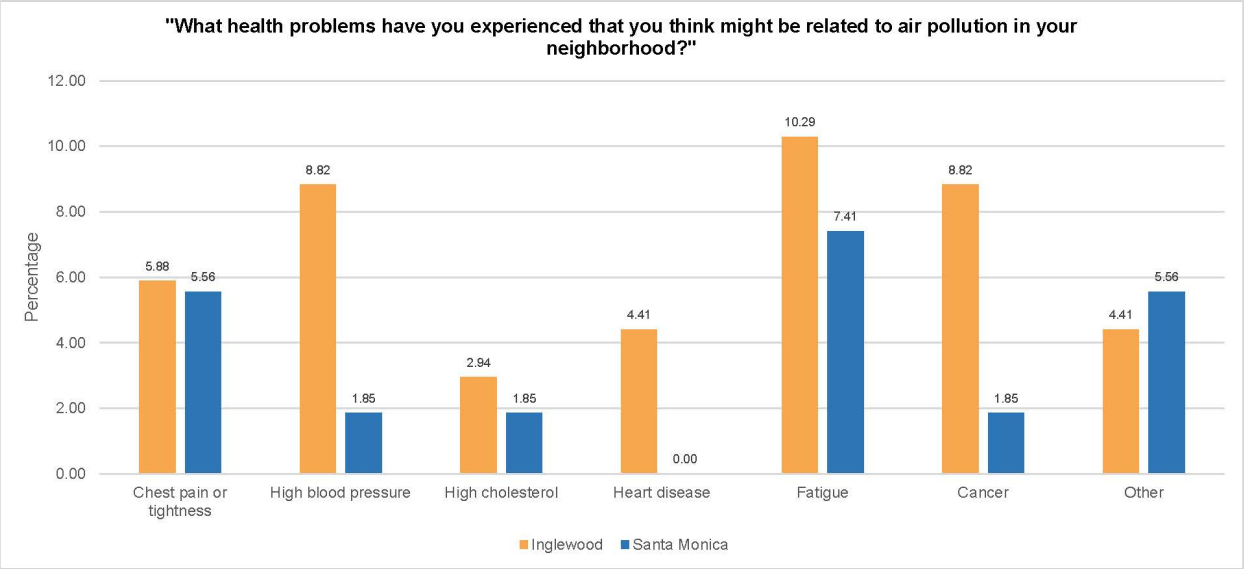


Figure 13:




"What health problems have you experienced that you think might be related to air pollution in your neighborhood?"
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Percentage
5.88
5.56
8.82
1.85
2.94
1.85
4.41
0.00
10.29
7.41
8.82
1.85
4.41
5.56
Chest pain or tightness
High blood pressure
High cholesterol
Heart disease
Fatigue
Cancer
Other
Inglewood
Santa Monica

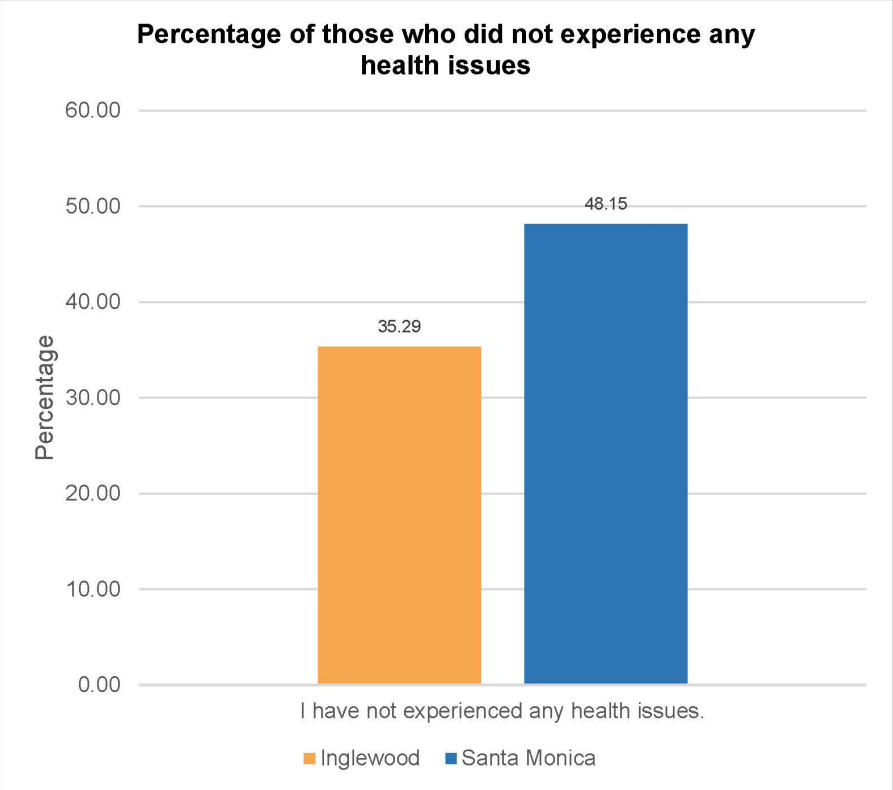

Percentage of those who did not experience any health issues
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Percentage
35.29
48.15
I have not experienced any health issues.
Inglewood
Santa Monica

Figure 14:

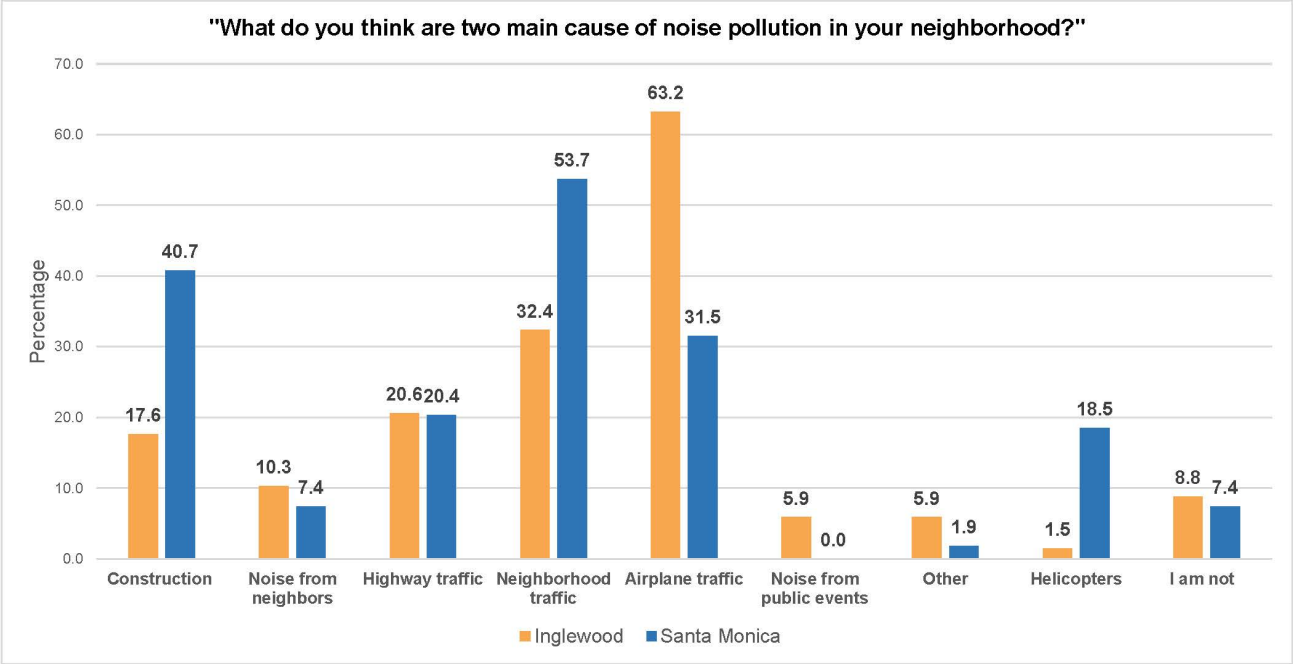


Figure 15:

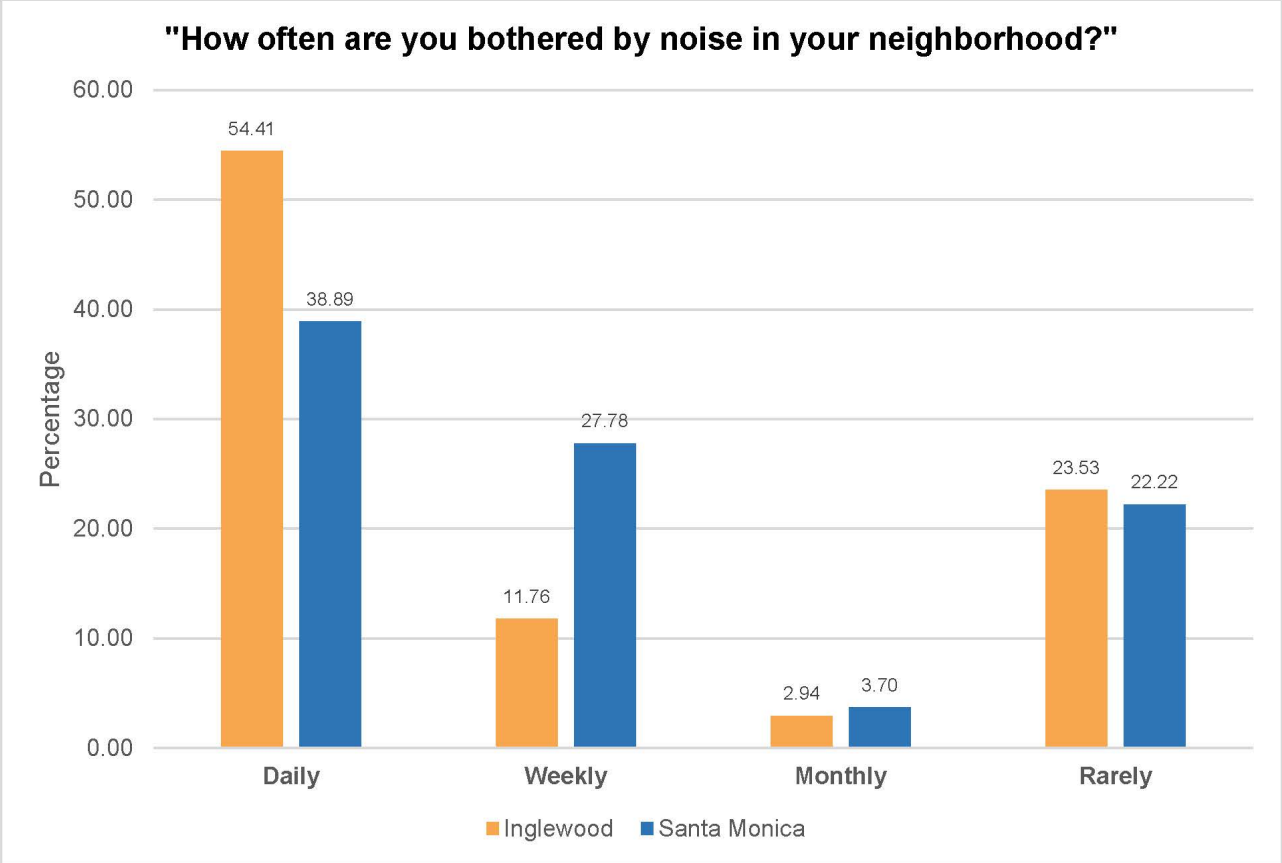


Figure 16:

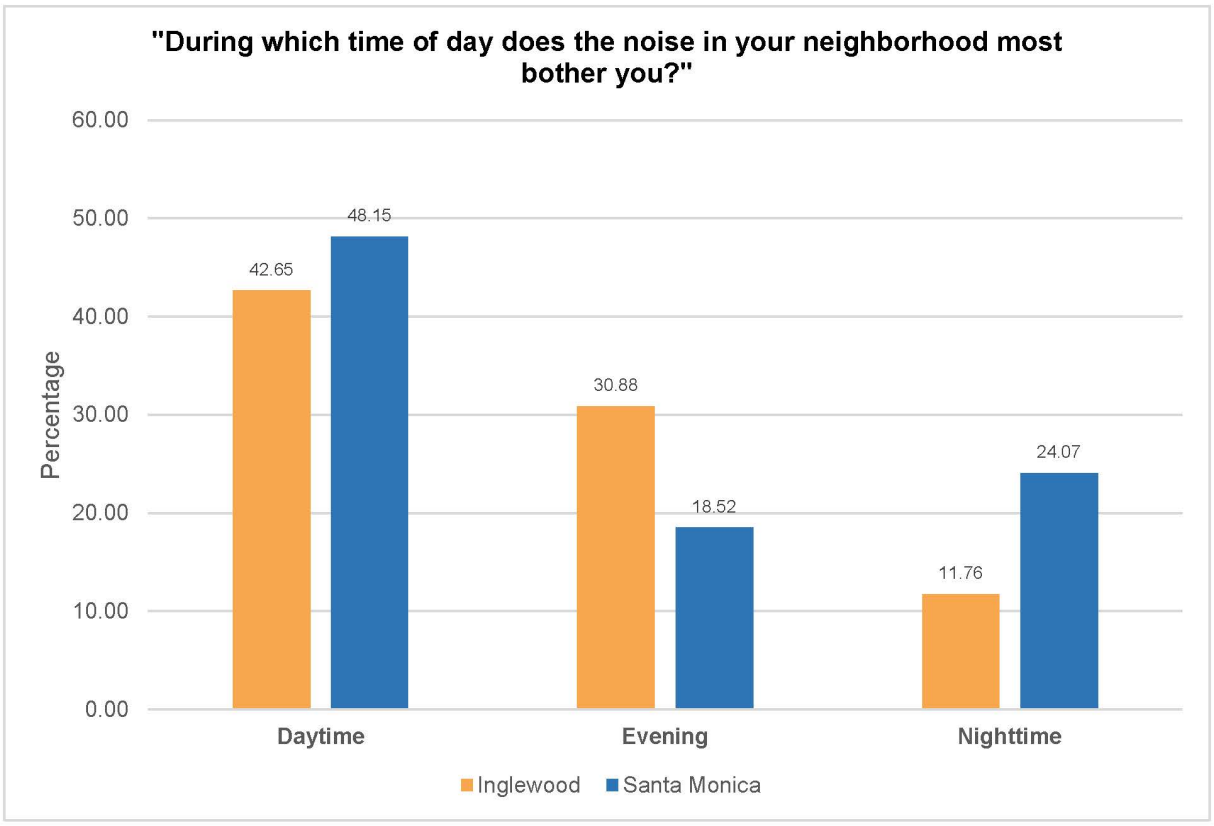

"During which time of day does the noise in your neighborhood most bother you?"
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Percentage
42.65
48.15
30.88
18.52
11.76
24.07
Daytime
Evening
Nighttime
Inglewood
Santa Monica

Figure 17:

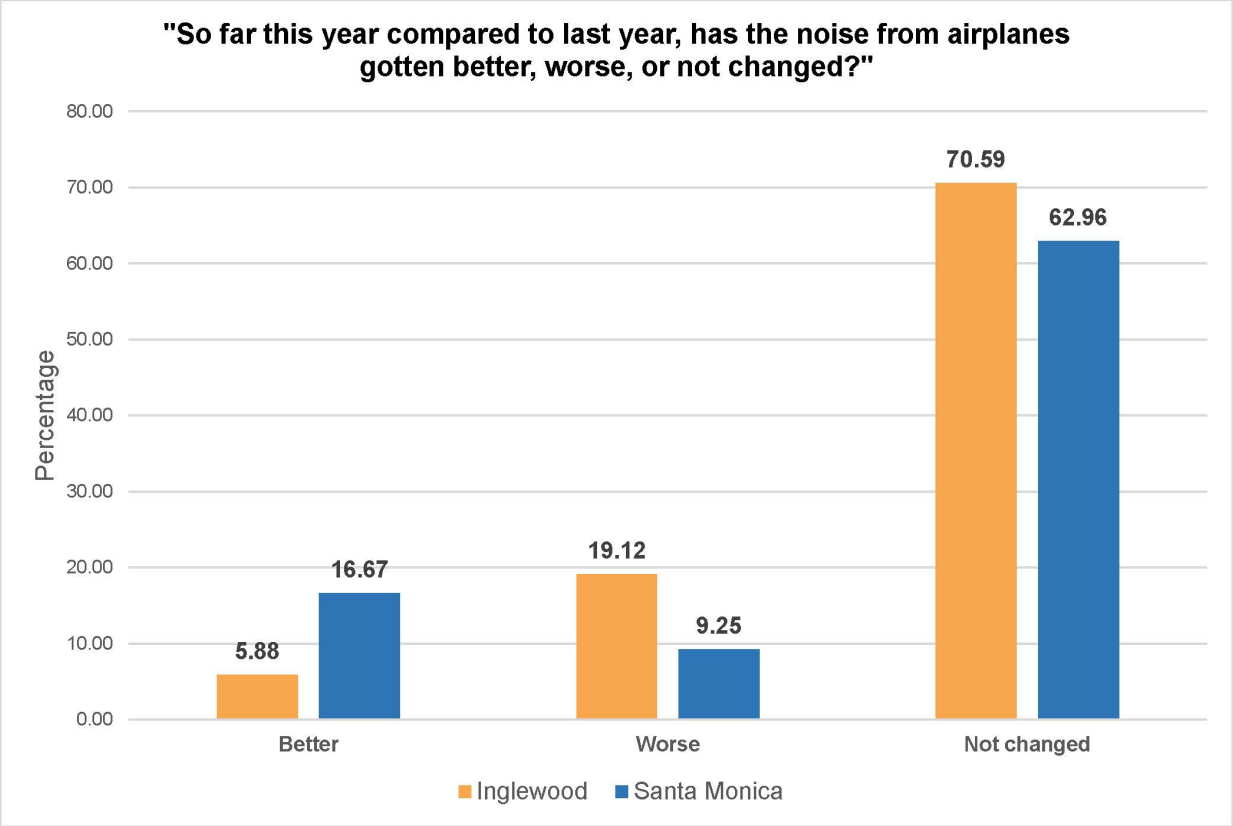

"So far this year compared to last year, has the noise from airplanes gotten better, worse, or not changed?"
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Percentage
5.88
16.67
19.12
9.25
70.59
62.96
Better
Worse
Not changed
Inglewood
Santa Monica

Figure 18:

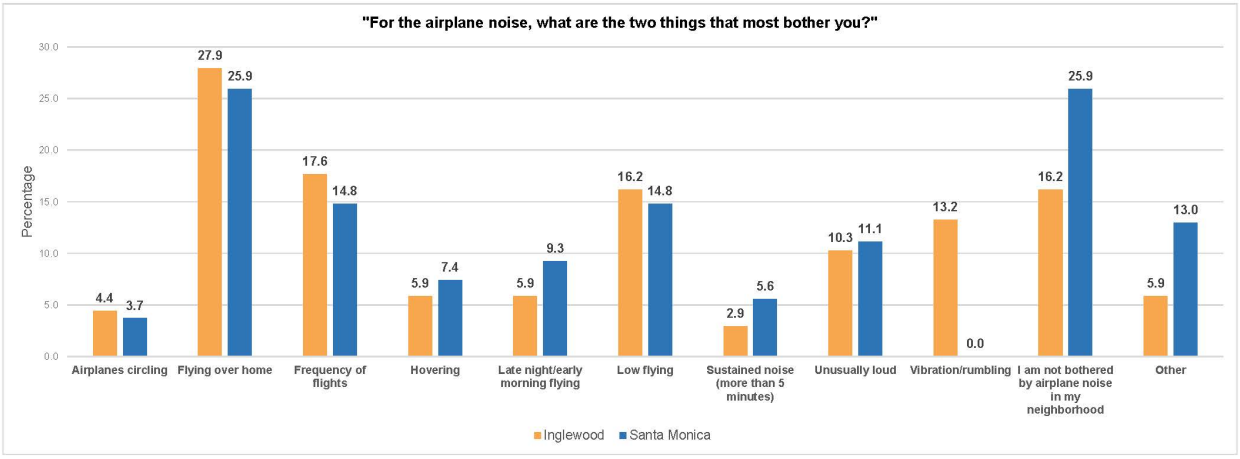


Figure 19:

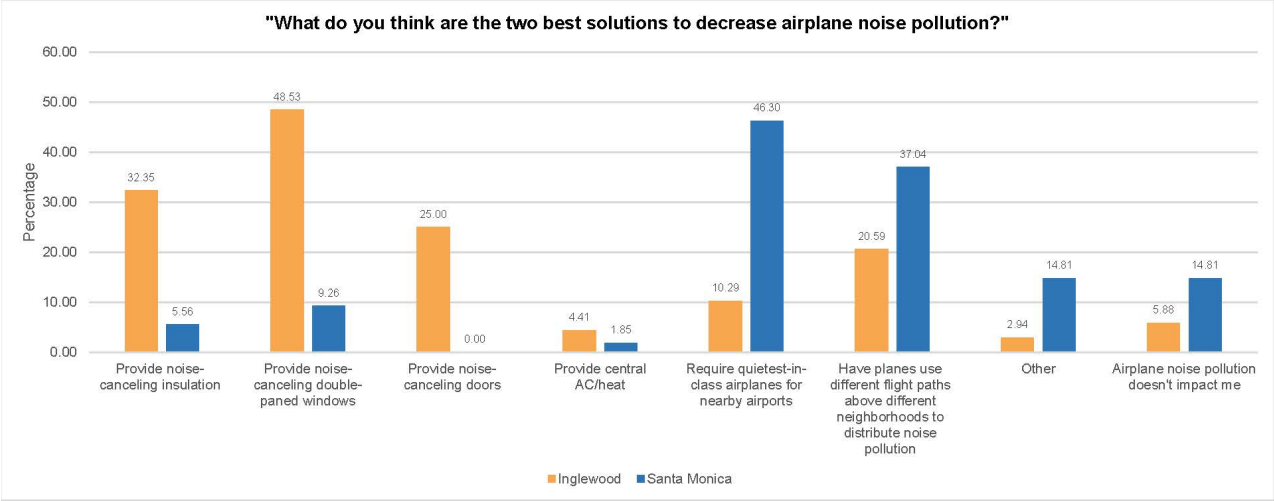


Figure 20:

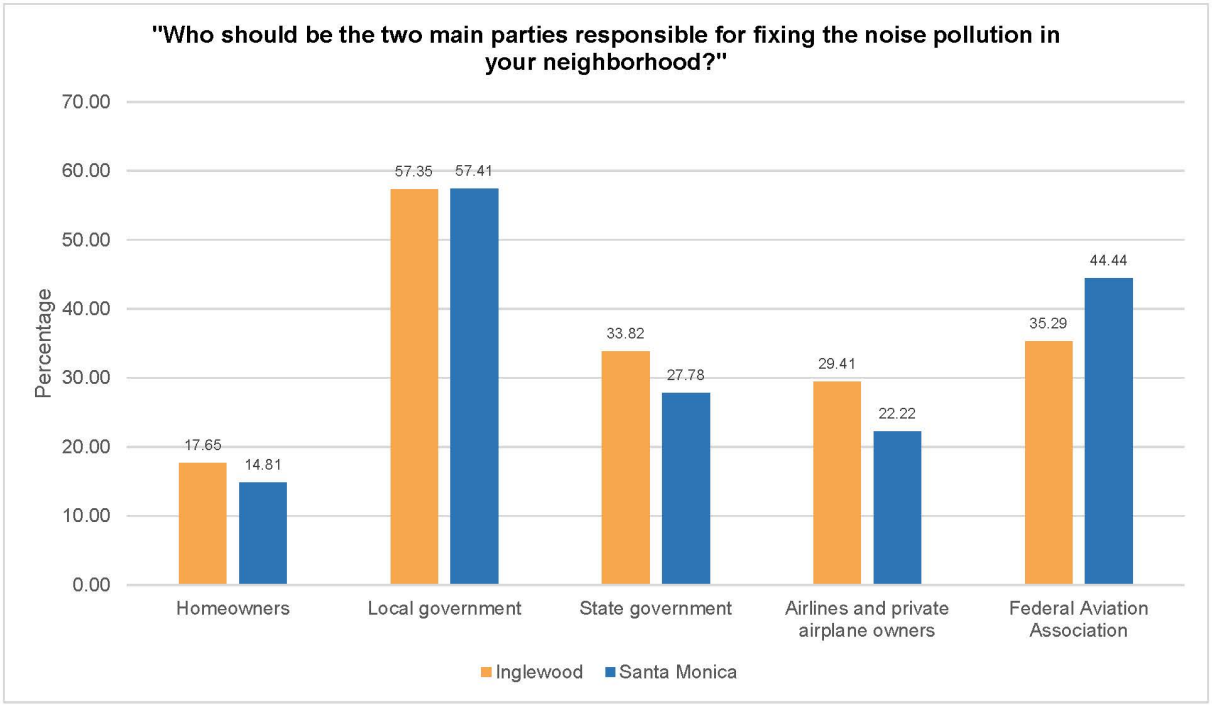


Figure 21:

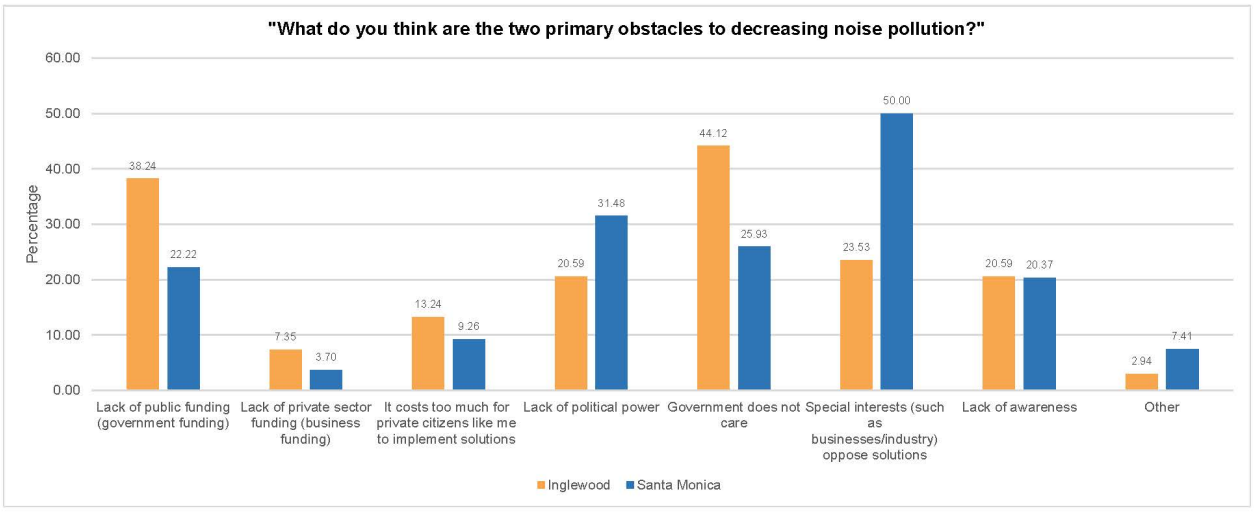


Figure 22:

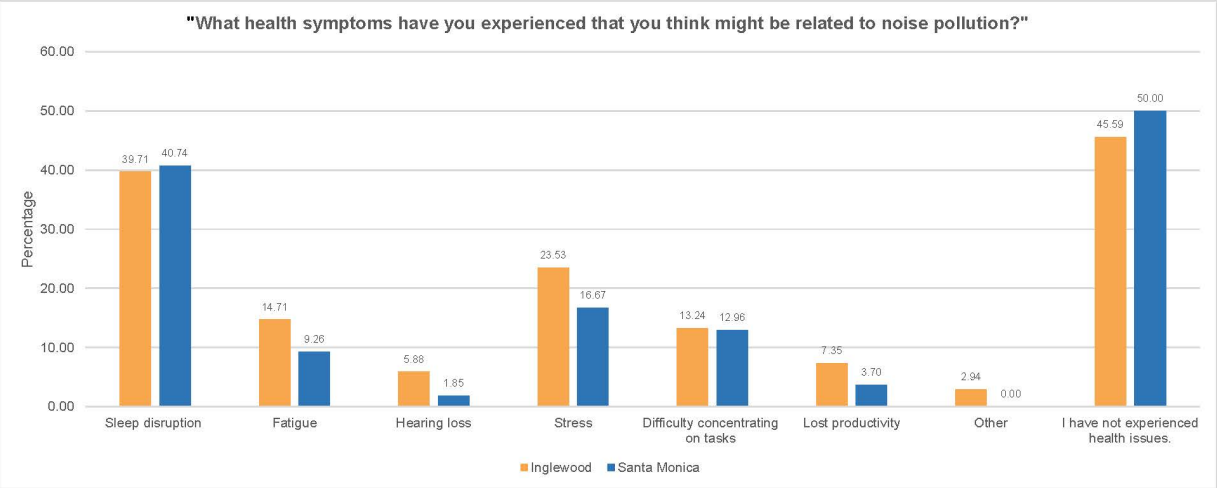


Figure 23.1:

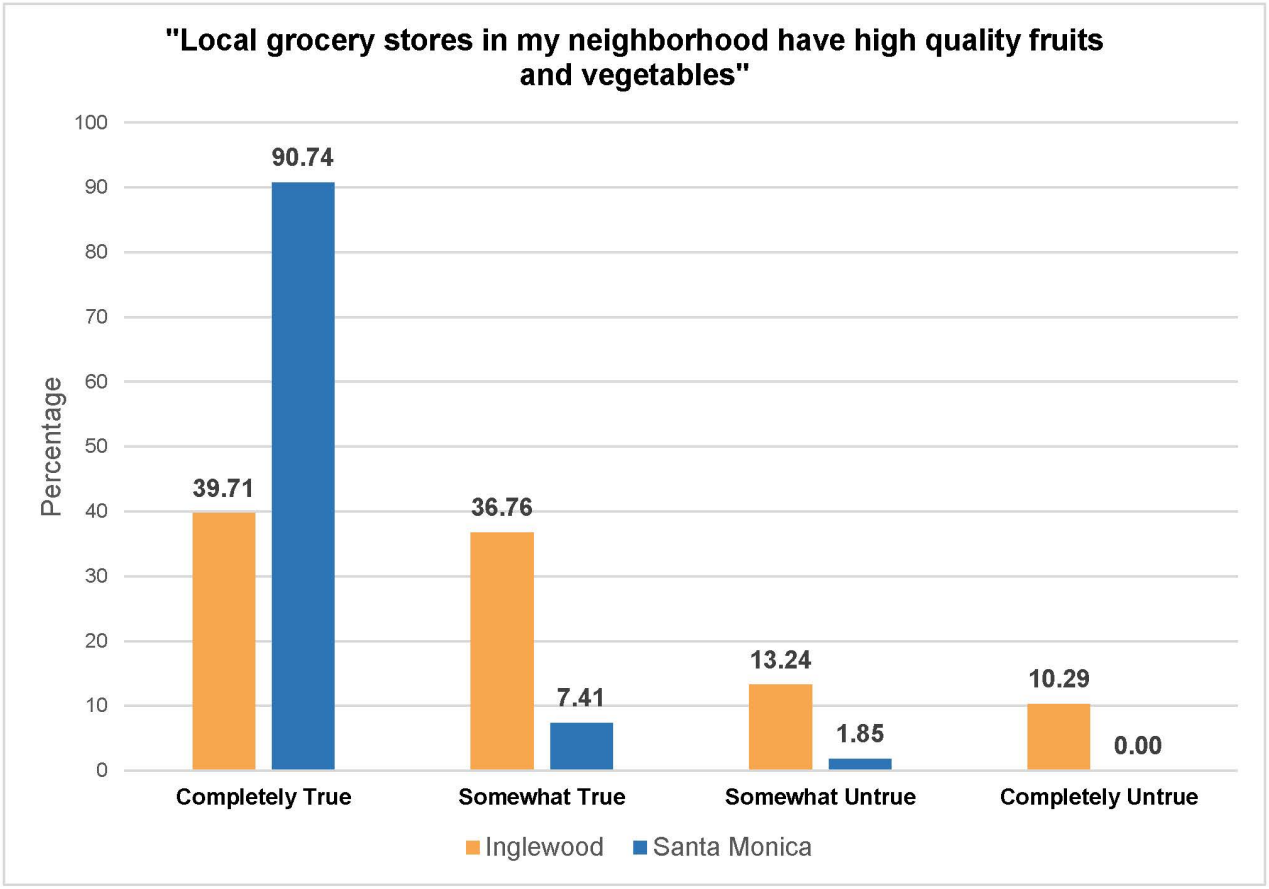


Figure 23.2:

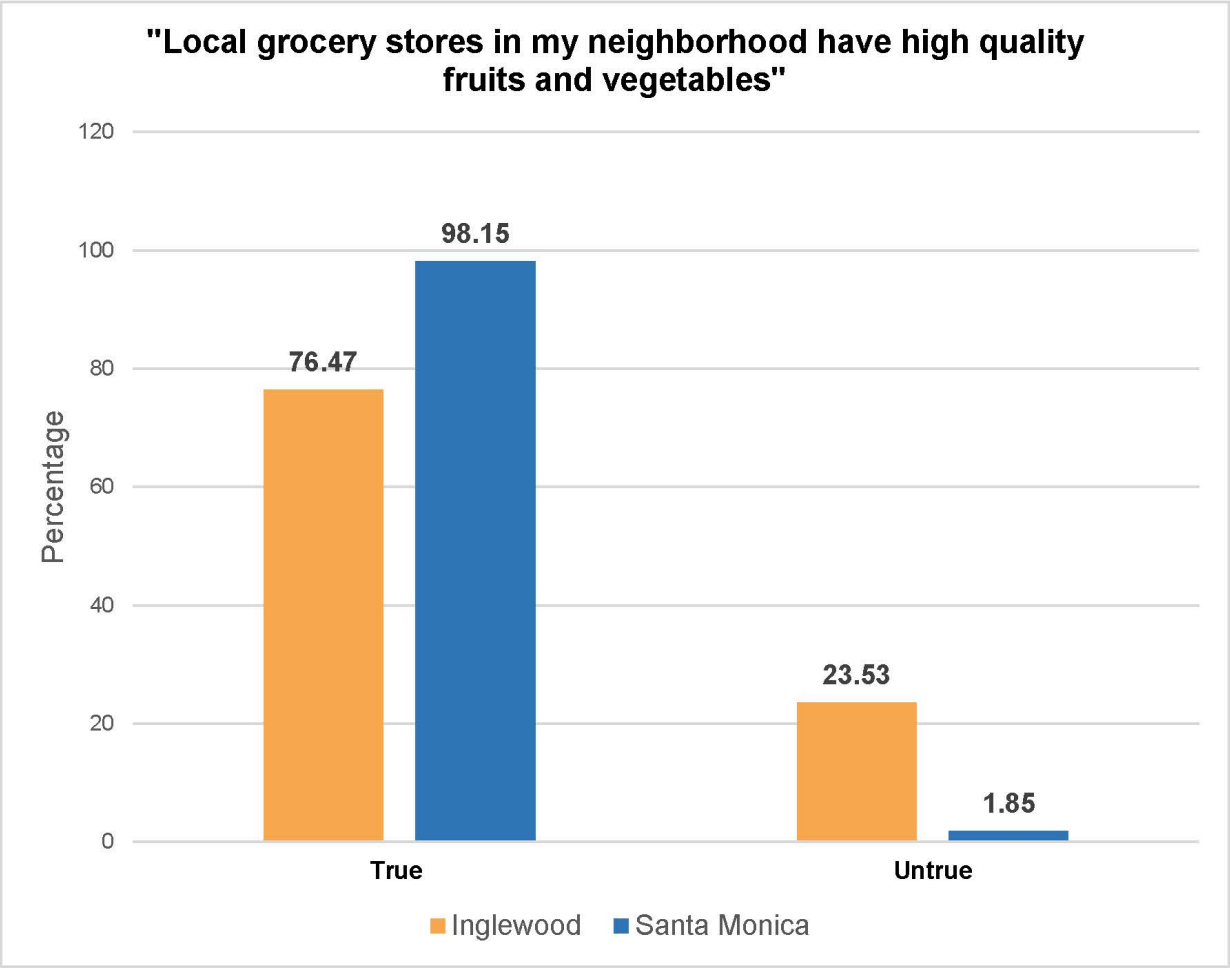

"Local grocery stores in my neighborhood have high quality fruits and vegetables"
120
100
80
60
40
20
0
Percentage
98.15
76.47
23.53
1.85
True
Untrue
Inglewood
Santa Monica

Figure 24.1:

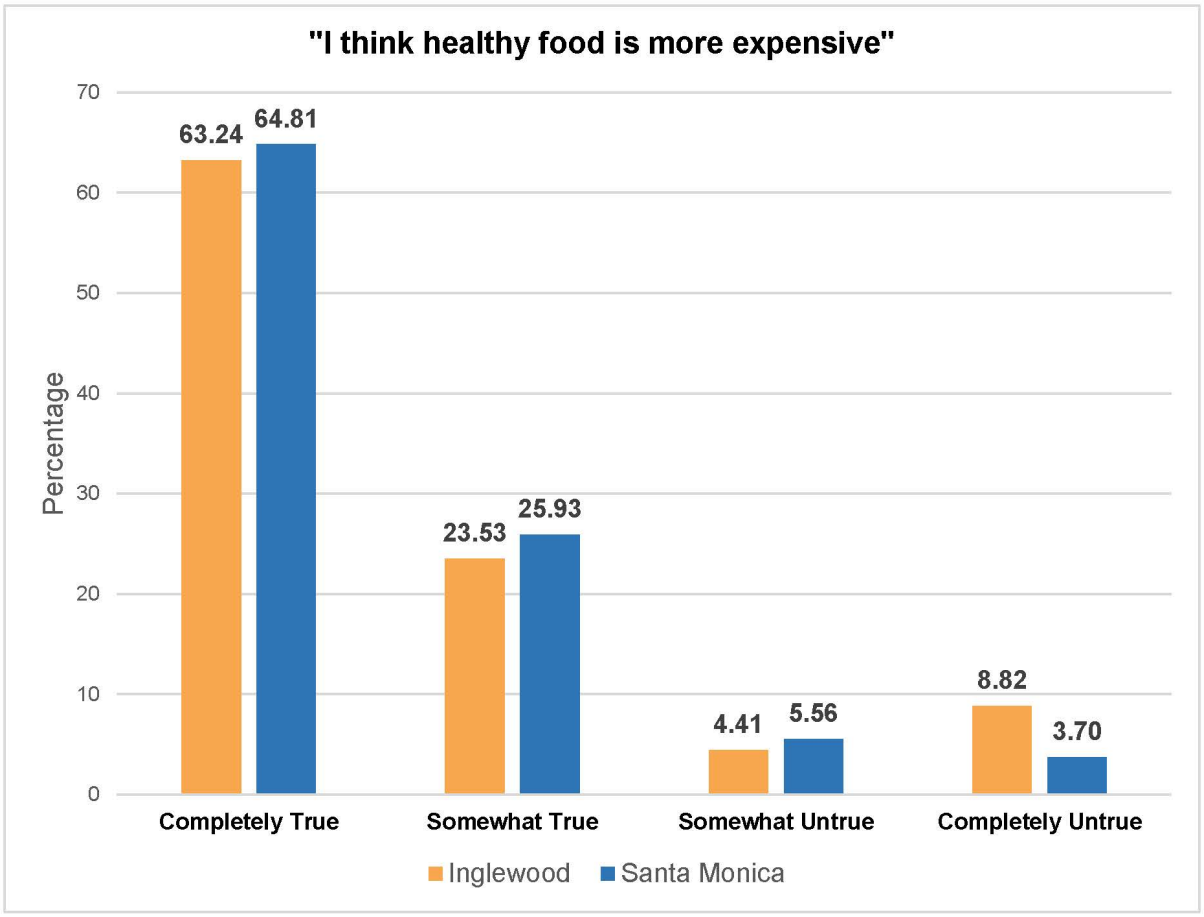

"I think healthy food is more expensive"
Percentage
70
60
50
40
30
20
10
0
63.24
64.81
23.53
25.93
4.41
5.56
8.82
3.70
Completely True
Somewhat True
Somewhat Untrue
Completely Untrue
Inglewood
Santa Monica

Figure 24.2:

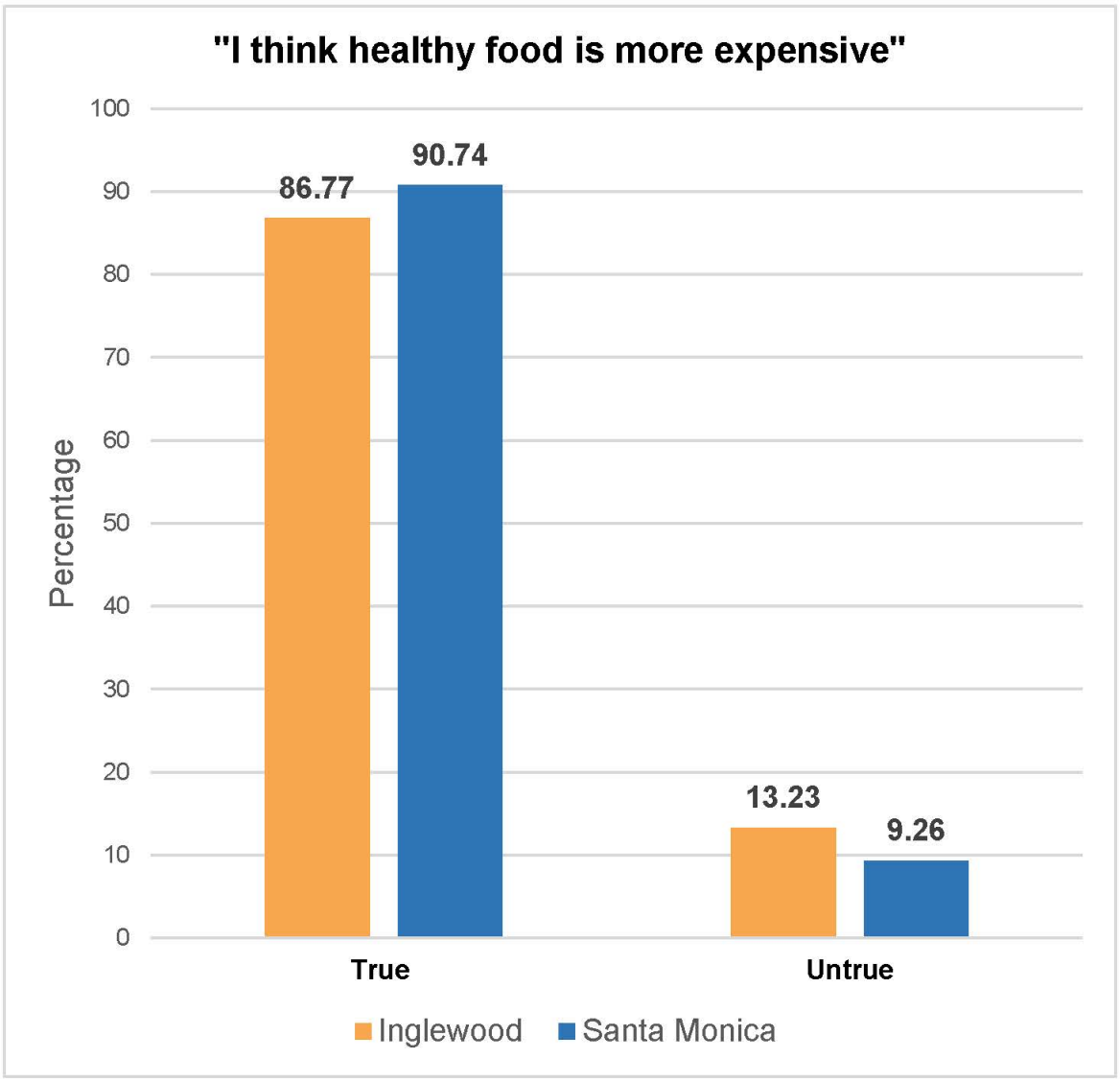

"I think healthy food is more expensive"
100
90
80
70
60
50
40
30
20
10
0
Percentage
86.77
90.74
13.23
9.26
True
Untrue
Inglewood
Santa Monica

Figure 25.1:

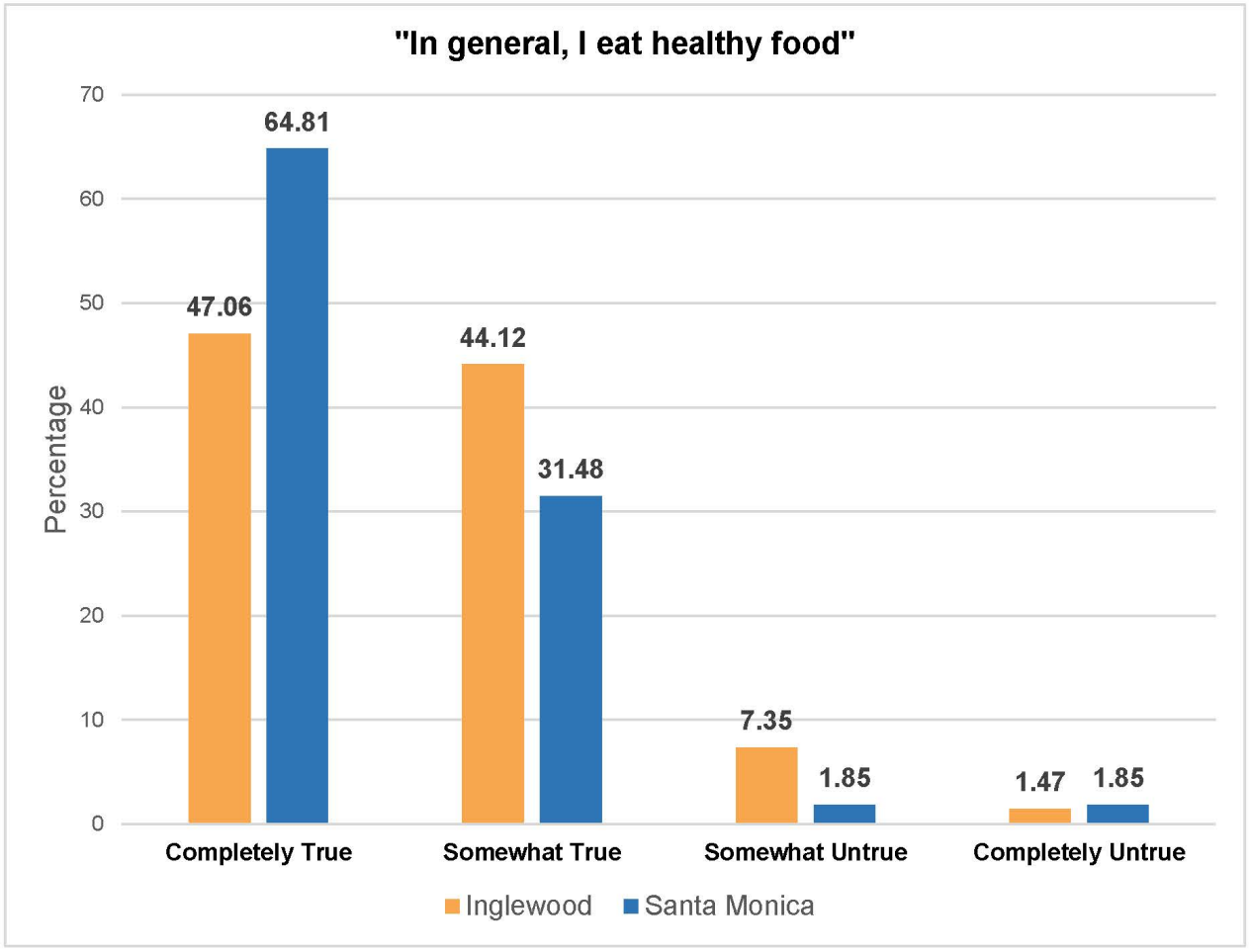

"In general, I eat healthy food"
Percentage
70
60
50
40
30
20
10
0
64.81
47.06
44.12
31.48
7.35
1.85
1.47
1.85
Completely True
Somewhat True
Somewhat Untrue
Completely Untrue
Inglewood
Santa Monica

Figure 25.2:

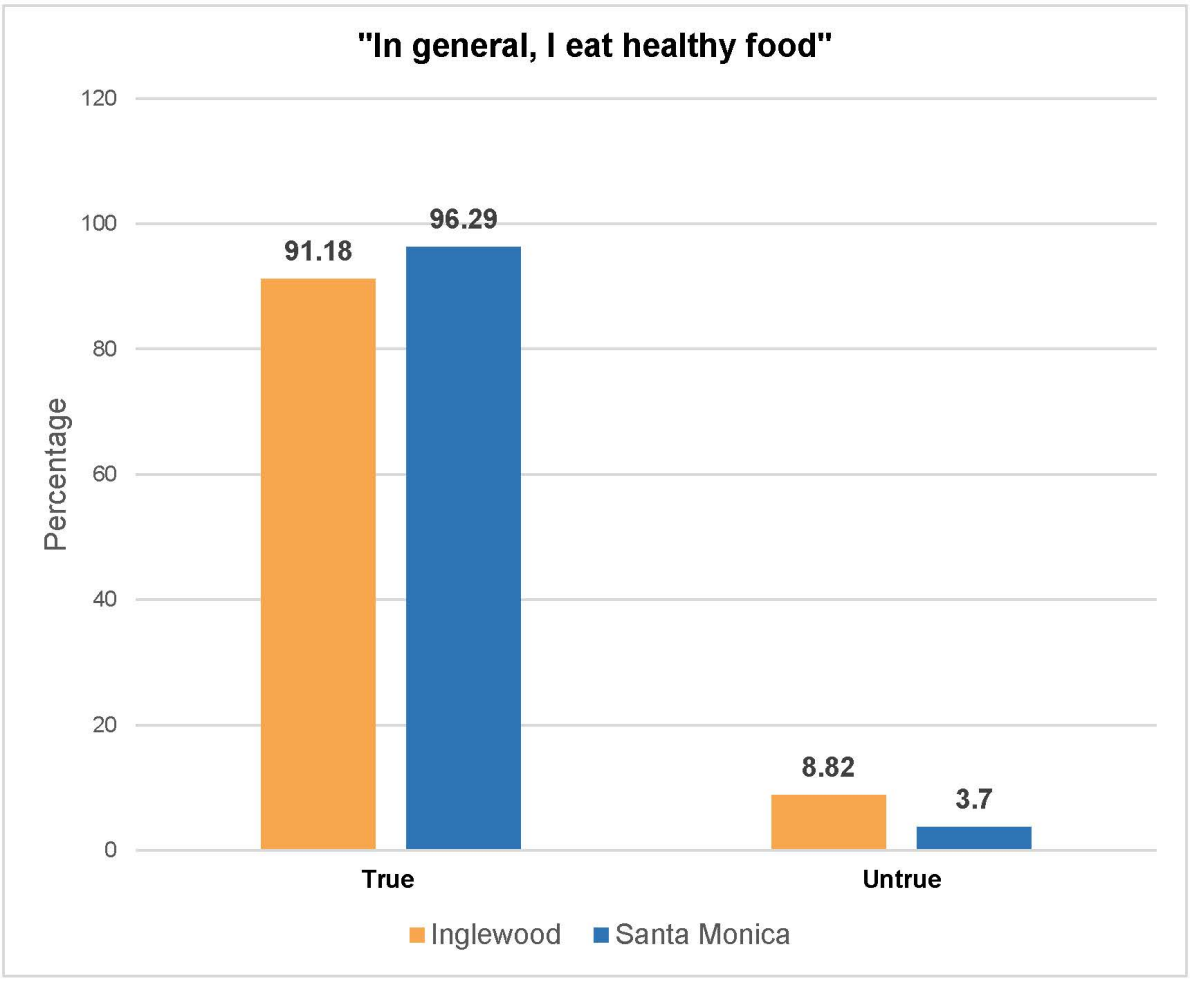
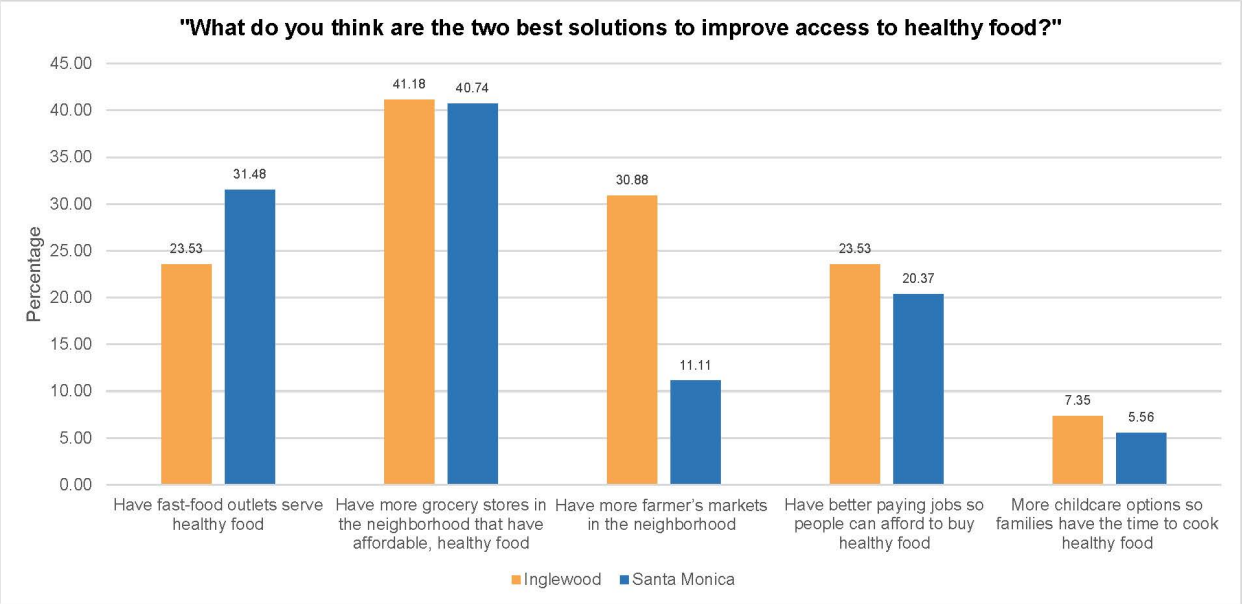

"In general, I eat healthy food"
120
100
80
60
40
20
0
Percentage
91.18
96.29
8.82
3.7
True
Untrue
Inglewood
Santa Monica

Figure 26:


"What do you think are the two best solutions to improve access to healthy food?"
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
Percentage
23.53
31.48
41.18
40.74
30.88
11.11
23.53
20.37
7.35
5.56
Have fast-food outlets serve healthy food
Have more grocery stores in the neighborhood that have affordable, healthy food
Have more farmer's markets in the neighborhood
Have better paying jobs so people can afford to buy healthy food
More childcare options so families have the time to cook healthy food
Inglewood
Santa Monica

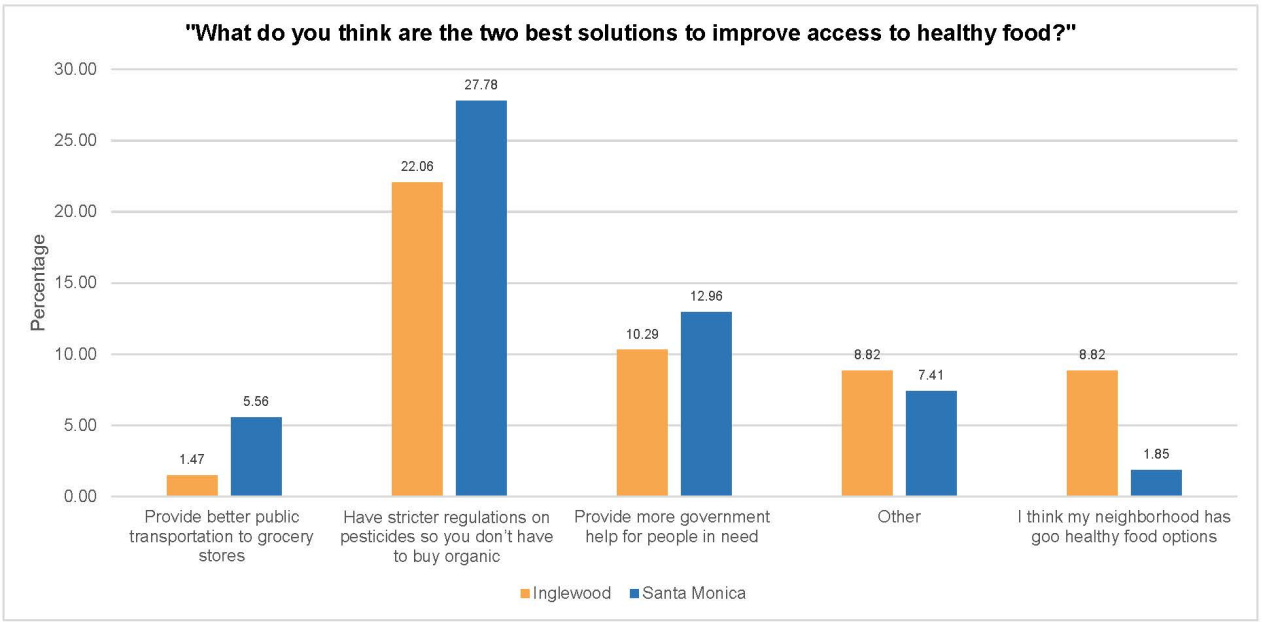
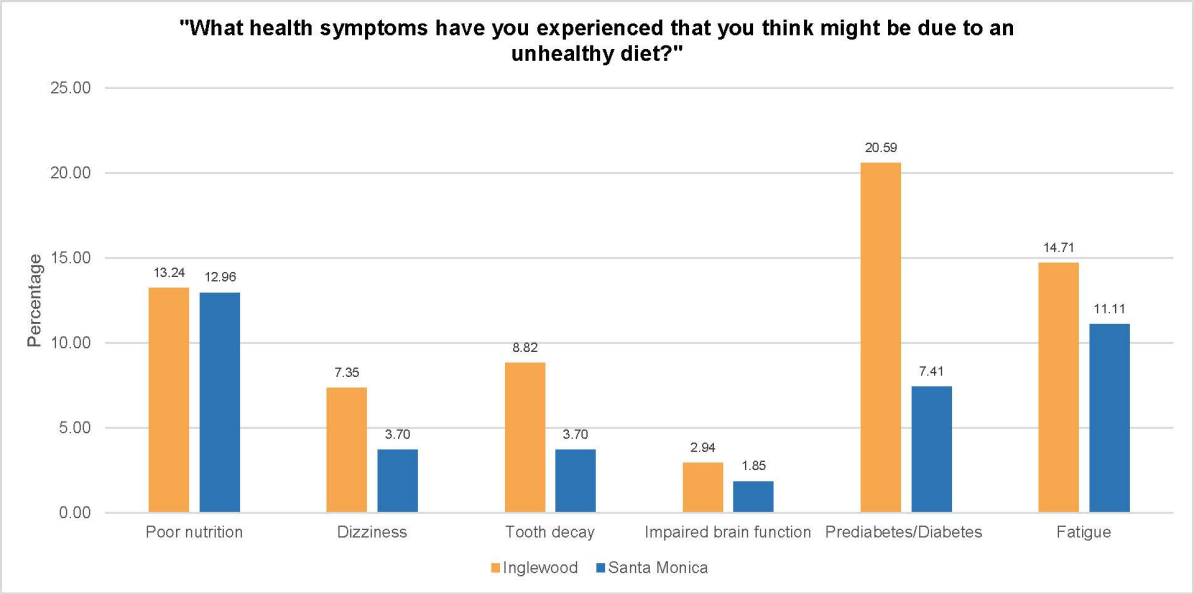
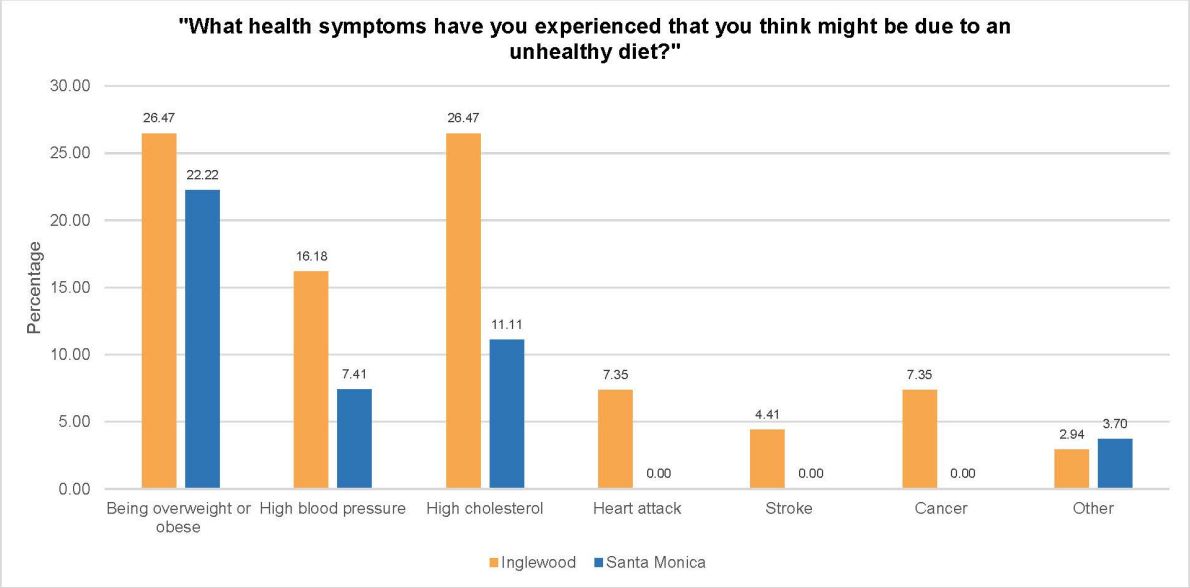

"What do you think are the two best solutions to improve access to healthy food?"
30.00
25.00
20.00
15.00
10.00
5.00
0.00
Percentage
1.47
5.56
22.06
27.78
10.29
12.96
8.82
7.41
8.82
1.85
Provide better public transportation to grocery stores
Have stricter regulations on pesticides so you don't have to buy organic
Provide more government help for people in need
Other
I think my neighborhood has goo healthy food options
Inglewood
Santa Monica

Figure 27:


"What health symptoms have you experienced that you think might be due to an unhealthy diet?"
25.00
20.00
15.00
10.00
5.00
0.00
Percentage
13.24
12.96
7.35
3.70
8.82
3.70
2.94
1.85
20.59
7.41
14.71
11.11
Poor nutrition
Dizziness
Tooth decay
Impaired brain function
Prediabetes/Diabetes
Fatigue
Inglewood
Santa Monica


"What health symptoms have you experienced that you think might be due to an unhealthy diet?"
30.00
25.00
20.00
15.00
10.00
5.00
0.00
Percentage
26.47
22.22
16.18
7.41
26.47
11.11
7.35
0.00
4.41
0.00
7.35
0.00
2.94
3.70
Being overweight or obese
High blood pressure
High cholesterol
Heart attack
Stroke
Cancer
Other
Inglewood
Santa Monica

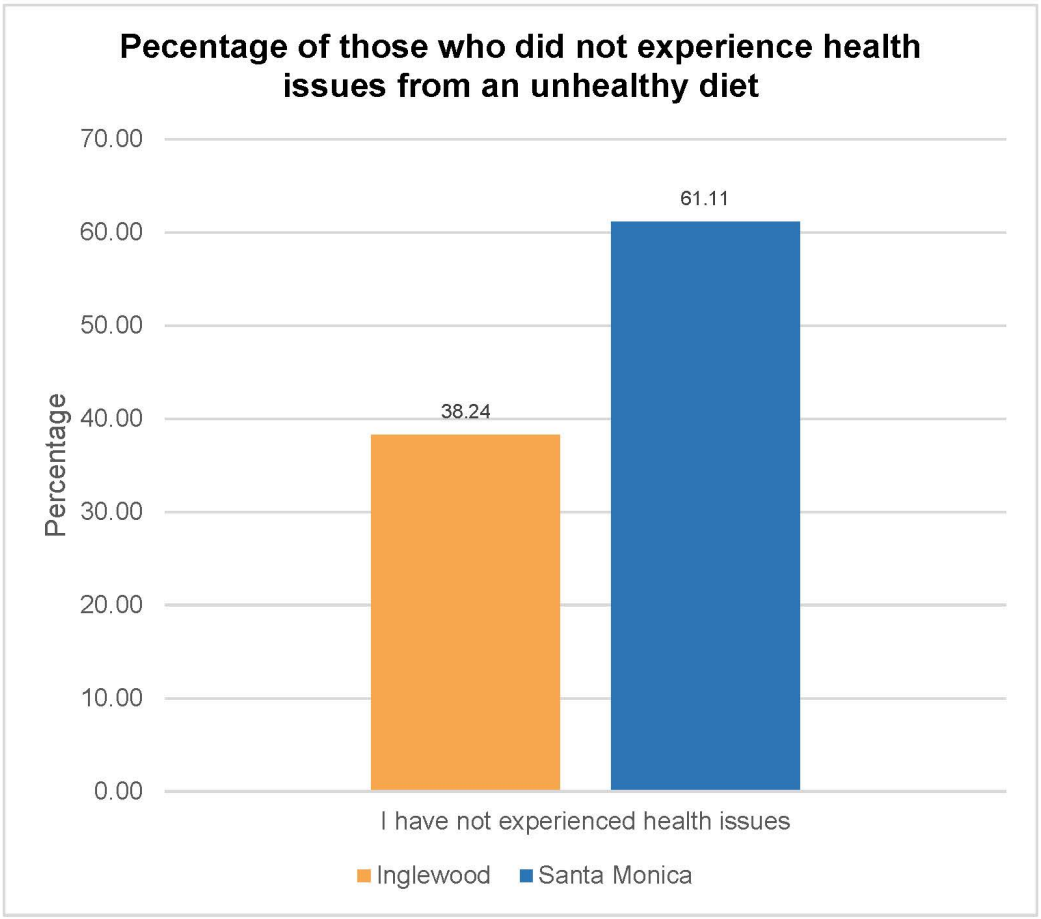

Pecentage of those who did not experience health issues from an unhealthy diet
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Percentage
38.24
61.11
I have not experienced health issues
Inglewood
Santa Monica

Figure 28:

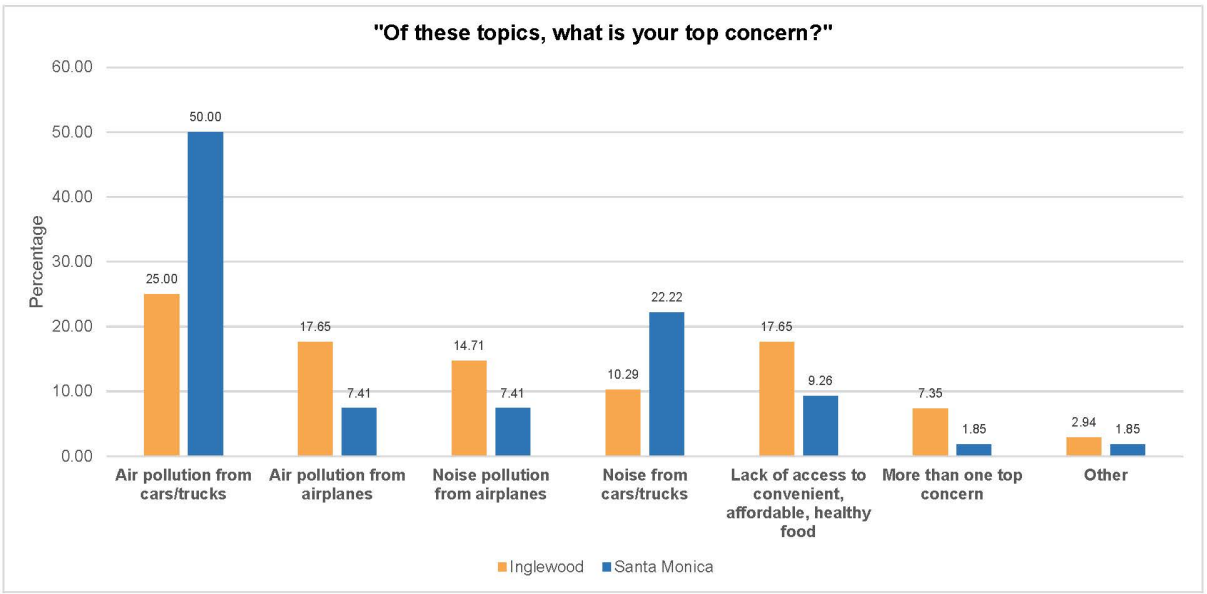

"Of these topics, what is your top concern?"
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Percentage
25.00
50.00
17.65
7.41
14.71
7.41
10.29
22.22
17.65
9.26
7.35
1.85
2.94
1.85
Air pollution from cars/trucks
Air pollution from airplanes
Noise pollution from airplanes
Noise from cars/trucks
Lack of access to convenient, affordable, healthy food
More than one top concern
Other
Inglewood
Santa Monica

Figure 29:

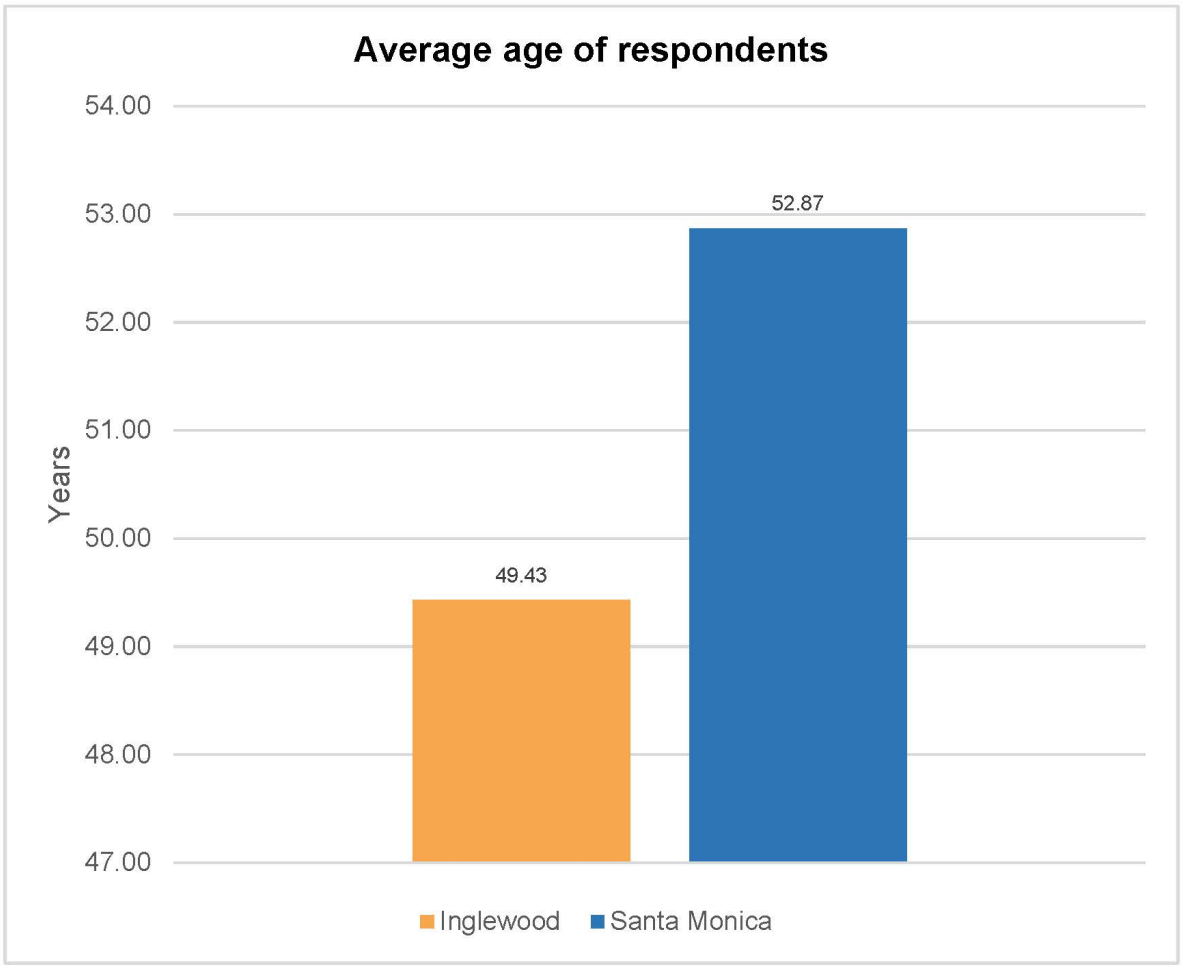

Average age of respondents
54.00
53.00
52.00
51.00
50.00
49.00
48.00
47.00
Years
52.87
49.43
Inglewood
Santa Monica

Figure 30:

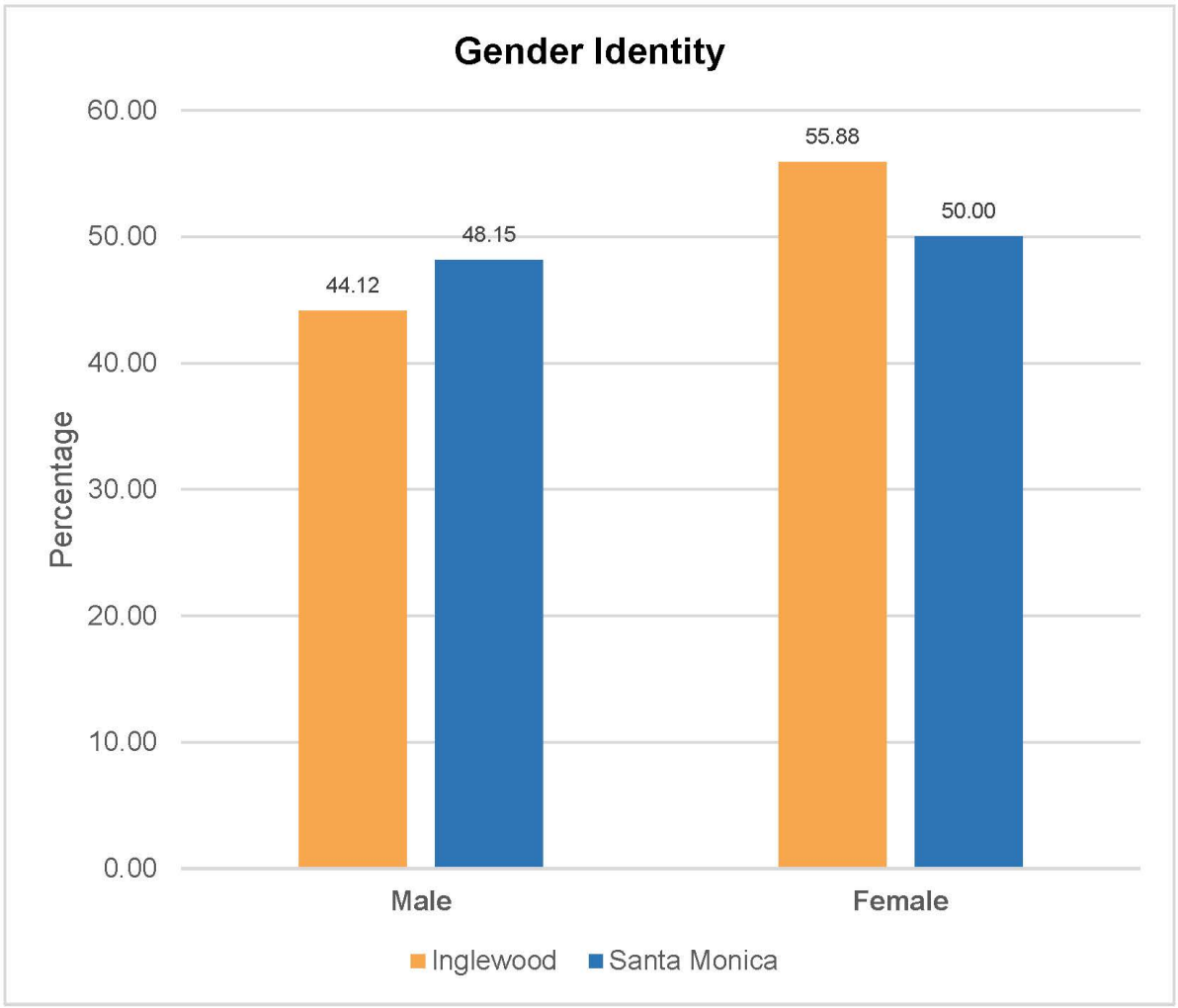

Gender Identity
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Percentage
44.12
48.15
55.88
50.00
Male
Female
Inglewood
Santa Monica

Figure 31:

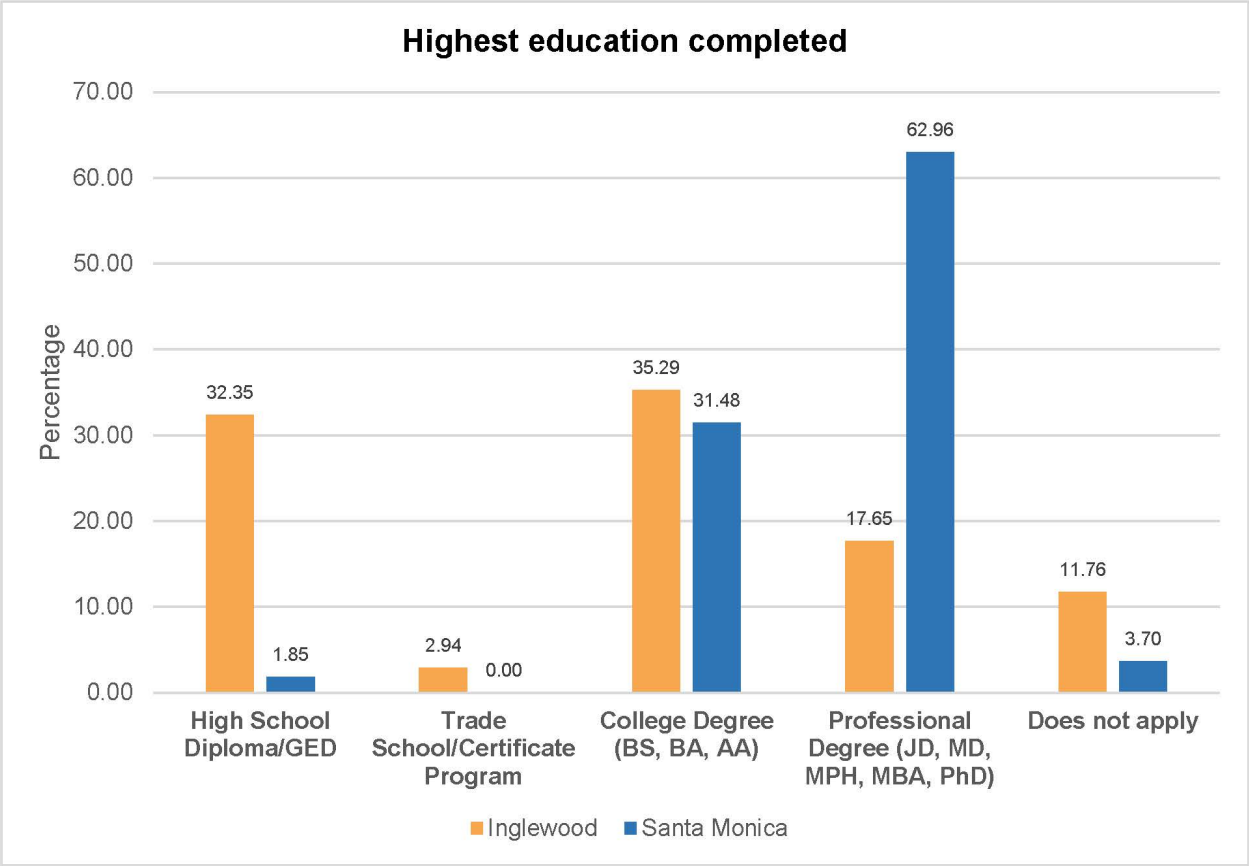

Highest education completed
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Percentage
32.35
1.85
2.94
0.00
35.29
31.48
17.65
62.96
11.76
3.70
High School Diploma/GED
Trade School/Certificate Program
College Degree (BS, BA, AA)
Professional Degree (JD, MD, MPH, MBA, PhD)
Does not apply
Inglewood
Santa Monica

Figure 32:

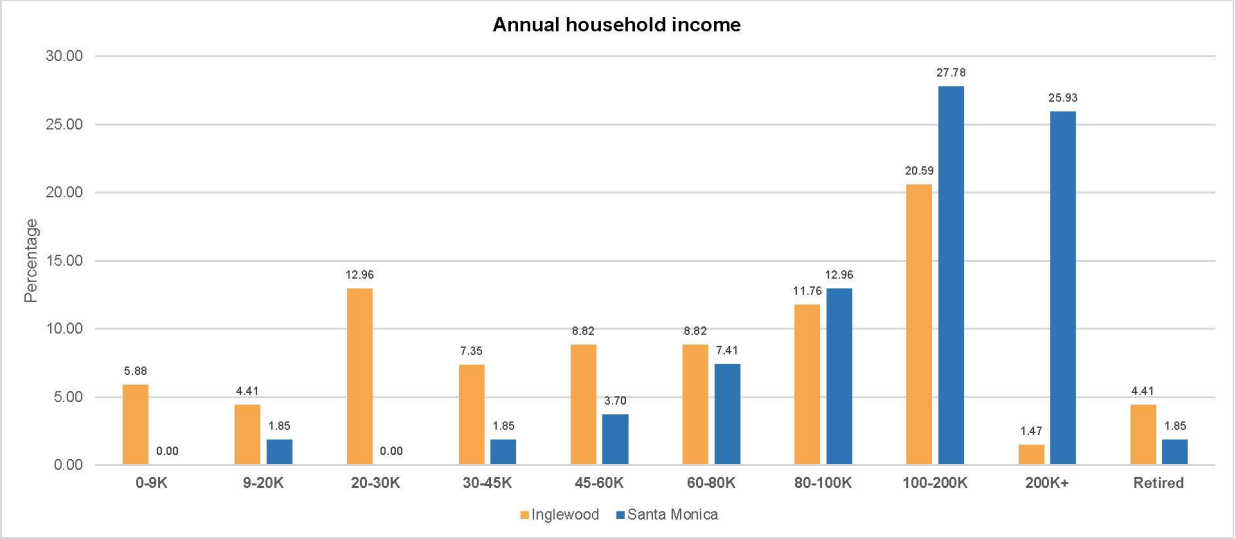


Figure 33:

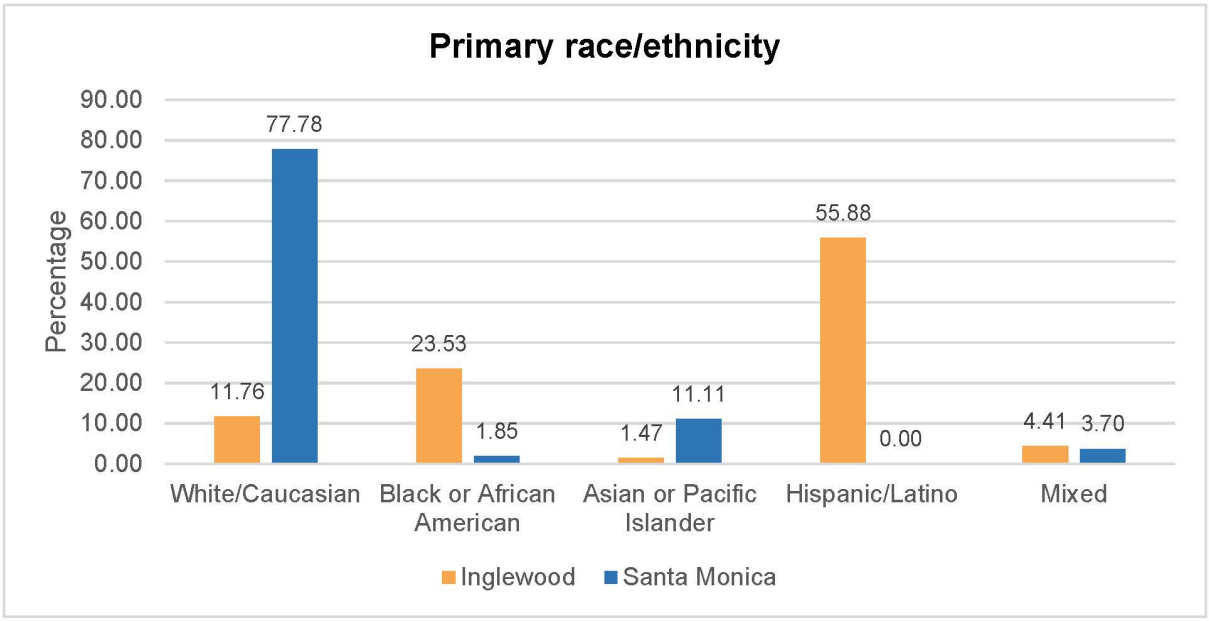
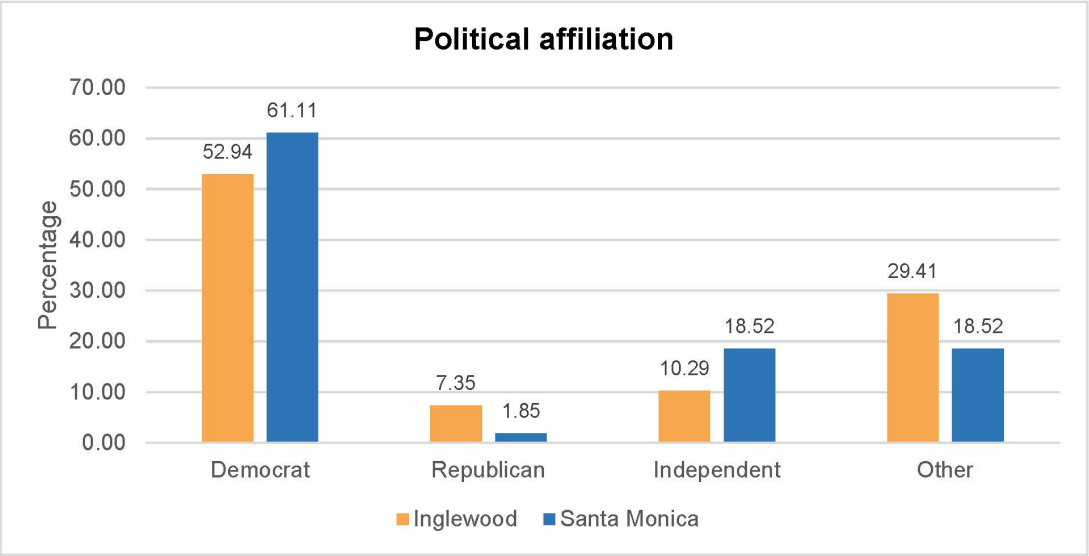


Figure 34:


Political affiliation
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Percentage
52.94
61.11
7.35
1.85
10.29
18.52
29.41
18.52
Democrat
Republican
Independent
Other
Inglewood
Santa Monica

Inglewood Health Assessment Pilot Survey

1. For your neighbors, family and local community, what do you worry about as the biggest health problems in your daily life?
   - For example, are there any specific times you've felt concerned about your health?

2. Is there anything about the environment or pollution in your neighborhood that worries you as a health risk? **[If the respondent does not provide specifics, as for specifics about the environmental issues or pollutants that worry them.]**

3. In your opinion, do you think the city and state government is doing enough to protect the environment—especially the environmental problems in your local community?

(Follow Up: Do you have any specific examples you can think of as specific times when you've noticed actions being taken in your community?)

4. Are there any times when you feel sick or somehow not well that you think might be due to pollution and the environment? And what are the symptoms? **[If the respondent does not provide specifics, as for specifics about the what pollutants or environmental issues they think the symptoms are due to.]**

UCLA Community Health Survey

Hello my name is _____ and this is _____. We are students at UCLA and are doing a senior research project to understand the environmental health concerns of community members like you. Would you mind if we ask you some questions (survey time: 5-10 minutes if they ask)? If you would like to follow along, it will make the survey go by a lot faster.

1. How long have you lived at this address? _____ years. (If less than 1 year, how many months? _____months).

2. Do you rent or own (circle one)?

   □ Rent

   □ Own

I am first going to ask you a few questions about air pollution in your neighborhood. For some of the questions that have more than a few options for you to select, we also have a sheet so you can read the options.

3. What do you think are the two biggest sources of air pollution in your neighborhood (circle top two)?

   □ Construction

   □ Highway traffic

   □ Neighborhood traffic

   □ Airplane traffic

   □ Nearby businesses that emit air pollution

   □ Local oil drilling

   □ Other_____.

   □ I do not think there is air pollution in my neighborhood.

I am going to read a few statements and ask for your opinion based on the following scale: Completely true, somewhat true, somewhat untrue, or completely untrue.

	Completely true	Somewhat true	Somewhat untrue	Completely untrue
4. Traffic related air pollution from cars and trucks is a problem in my neighborhood.				
5. If I compare this year to last year, traffic pollution from cars and trucks has gotten worse.				
6. Traffic related air pollution from airplanes is a problem in my neighborhood.				
7. If I compare this year to last year, airplane traffic over my neighborhood has gotten worse.				
8. Pollution from construction is a problem in my neighborhood.				

9. If I compare this year to last year, construction pollution in my neighborhood has gotten worse.				

10. What do you think are the two most effective solutions to reduce air pollution from cars and trucks in your neighborhood (circle top two)?

    □ Increase public transportation options

    □ Make public transportation less expensive

    □ Charge people to use freeways during peak traffic times

    □ Charge people for parking at every destination

    □ Put in speed bumps and stoplights to discourage freeway traffic from driving through the neighborhood

    □ Have tougher air pollution standards for cars and trucks

    □ Air pollution from cars and trucks does not effect me

    □ Other_____

11. What are the two main obstacles to implementing solutions to reduce car and truck air pollution in your neighborhood (circle top two)?

    □ Lack of public funding (government funding)

    □ Lack of private sector funding (business funding)

    □ It costs too much for private citizens like me to implement solutions

    □ Lack of political power

    □ Government does not care

    □ Special interests (such as businesses/industry) oppose solutions

    □ Lack of awareness

    □ Other _____

12. Who should be the two main parties responsible for decreasing air pollution related to traffic from cars and trucks in your neighborhood (circle top two)?

    □ Car owners

    □ Automobile industry

    □ Local government

- □ State Government
- □ National Government

13. What health problems have you experienced that you think might be related to air pollution in your neighborhood (select all that apply)?

    - □ Asthma
    - □ Bronchitis
    - □ Emphysema
    - □ Allergies
    - □ Difficulty breathing or shortness of breath
    - □ Irritation of eyes, nose, and throat
    - □ Throat infection
    - □ Headache
    - □ Chest pain or tightness
    - □ High blood pressure
    - □ High cholesterol
    - □ Heart disease
    - □ Fatigue
    - □ Cancer If yes, what type? _____
    - □ Other _____
    - □ I have not experienced any of these health symptoms.

Next, I'd like to ask you some questions about noise pollution in your neighborhood.

14. What do you think are two main cause of noise pollution in your neighborhood (circle two)?

    - □ Construction

- □ Noise from neighbors
- □ Highway traffic
- □ Neighborhood traffic
- □ Airplane traffic
- □ Noise from public events
- □ Other_____
- □ I am not bothered by noise in my community. (If selected, skip next 2 questions).

15. How often are you bothered by noise in your neighborhood (circle one)?

- □ Daily
- □ Weekly
- □ Monthly
- □ Rarely

16. During which time of day does the noise in your neighborhood **most** bother you (circle one)?

- □ Day 7:00 AM to 7:00 PM
- □ Evening from 7:00 PM to 10:00 PM
- □ Night 10:00 PM – 7:00 AM

17. So far this year compared to last year, has the noise from airplanes gotten better, worse, or not changed?

- □ better
- □ worse
- □ not changed

18. For the airplane noise, what are the two things that most bother you (circle two)?

- □ Airplanes circling
- □ Flying over home
- □ Frequency of flights
- □ Hovering

- □ Late night/early morning flying
- □ Low flying
- □ Sustained noise (more than 5 minutes)
- □ Unusually loud
- □ Vibration/rumbling
- □ I am not bothered by airplane noise in my neighborhood
- □ Other _____

19. What do you think are the two best solutions to decrease airplane noise pollution (circle two)?

- □ Provide noise-canceling insulation
- □ Provide noise-canceling double-paned windows
- □ Provide noise-canceling doors
- □ Provide central AC/heat
- □ Require quietest-in-class airplanes for nearby airports
- □ Have planes use different flight paths above different neighborhoods to distribute noise pollution
- □ Airplane noise pollution doesn't impact me
- □ Other _____

20. Who should be the two main parties responsible for fixing the noise pollution in your neighborhood (circle two)?

- □ Homeowners
- □ Local government
- □ State Government
- □ Airlines and private airplane owners
- □ Federal Aviation Association (FAA)

□ Other_____

21. What do you think are the two primary obstacles to decreasing noise pollution (circle two)?

□ Lack of public funding (government funding)

□ Lack of private sector funding (business funding)

□ It costs too much for private citizens like me to implement solutions

□ Lack of political power

□ Government does not care

□ Special interests (such as businesses/industry) oppose solutions

□ Lack of awareness

□ Other _____

22. What health symptoms have you experienced that you think might be related to noise pollution? **Please select all that apply:**

□ Sleep disruption

□ Fatigue

□ Hearing loss

□ Stress

□ Difficulty concentrating on tasks

□ Lost productivity

□ Other _____

□ I have not experienced any of these health symptoms.

Next, I'm going to ask you about access to healthy food in your neighborhood. I will read you a few statements and ask you to answer them using the scale completely true, somewhat true, somewhat untrue, or completely untrue.

	Completely true	Somewhat true	Somewhat untrue	Completely untrue
23. Local grocery stores in my neighborhood have high quality fruits and vegetables.				
24. I think healthy food is more expensive.				
25. In general, I eat healthy food.				

26. **(Ask only if respondent selected 'somewhat untrue' or 'completely untrue' for Question 25 above).** What are the two main reasons you consider your diet to be unhealthy?

- □ Too much processed food
- □ Too much canned food
- □ Too much fried food
- □ Too many sugary foods
- □ Too much meat
- □ Too much fatty foods
- □ Too many carbohydrates
- □ Too many pesticides on my food
- □ Too few fruits and vegetables
- □ Other _____

27. **(Ask only if respondent selected 'somewhat untrue' or 'completely untrue' for Question 25 above).** What are the two main reasons why you eat unhealthy food?

- □ I'm not concerned about eating healthy foods
- □ I don't think that healthy food tastes good
- □ I don't have enough time to cook healthy food
- □ Healthy food is too expensive
- □ Can't afford organic food
- □ There aren't stores nearby that sell healthy food.
- □ Other_____

28. What do you think are the two best solutions to improve access to healthy food?

- □ Have fast-food outlets serve healthy food
- □ Have more grocery stores in the neighborhood that have affordable, healthy food
- □ Have more farmer's markets in the neighborhood
- □ Have better paying jobs so people can afford to buy healthy food
- □ More childcare options so families have the time to cook healthy food
- □ Provide better public transportation to grocery stores
- □ Have stricter regulations on pesticides so you don't have to buy organic
- □ Provide more government help for people in need
- □ I think my neighborhood has health food options
- □ Other_____

29. What health symptoms have you experienced that you think might be due to an unhealthy diet? **Please select all that apply.**
    - □ Poor nutrition
    - □ Dizziness
    - □ Tooth decay
    - □ Impaired brain function
    - □ Prediabetes or diabetes

- □ Fatigue
- □ Being overweight or obese
- □ High blood pressure
- □ High cholesterol
- □ Heart attack
- □ Stroke
- □ Cancer if yes, what type _____
- □ Other _____
- □ I have not experienced any of these health symptoms.

30. We've asked you about a number of different topics; of these topics, what is your top concern (choose one only)?

- □ Air pollution from cars/trucks
- □ Air pollution from airplanes
- □ Noise pollution from airplanes
- □ Noise from cars/trucks
- □ Lack of access to convenient, affordable healthy food
- □ Other _____

The next questions are about demographics. If you don't feel comfortable answering a question just let us know and we can skip it.

31. What is your age? (Please write in response)_____

32. What is your gender identity? (Please circle or write in response).

- □ Female
- □ Male
- □ Other_____

33. What is your highest level of education completed?

- □ High School Diploma/GED

□ Trade School/ Certificate Program

□ College Degree (AA, BA, BS)

□ Professional Degree (MS, MFA, JD, MD, MPH, MBA, PhD)

□ Does not apply

The incomes are in ranges so you do not need to be specific. You can just tell us a letter.

34. What is your annual household income?

A. 0-$9,000

B. $9,001-$20,000

C. $20,001-$30,000

D. $30,001-$45,000

E. $45,001-$60,000

F. $60,001-$80,000

G. $80,0001-$100,000

H. $100,001-$200,000

I. $201,000 and above

35. What is your primary race/ethnicity?

□ White or Caucasian

□ Black or African American

□ Asian or Pacific Islander

□ Hispanic, Latino, or Spanish

□ Native American

□ Other _____

36. In politics today, what do you consider yourself?

□ Independent

□ Republican

□ Democrat

□ Other_____