USC Dornsife
Center for Economic and Social Research

LABarometer

Top 5 Takeaways
from
The Sustainability and Resilience Report

Release Date:
September 24, 2020

EXECUTIVE SUMMARY

Sustainability and resilience have several dimensions, both at the individual and the community level, which we have explored in this survey. We elicited individuals' opinions about climate change. The vast majority of Angelenos believe that climate change is a threat to the well-being of people living in L.A. County, and agree with the statements that climate change is mostly due to human activity and individual actions can make a difference in fighting it. Ownership of energy-saving devices is somewhat common, but there is considerable scope for improvement. For instance, less than 10% report having solar panels or a tankless water heater. Opinions about climate change are reflected in the adoption of environmentally friendly behaviors, like recycling, limiting food waste, and limiting car use. However, less than half of survey participants are aware of government incentives for installing solar panels, buying an electric car, or improving home energy efficiency.

Pollution is a pernicious problem that has plagued L.A. County residents for many decades. The majority of Angelenos rate the quality of the air they breathe or the water they drink as safe. But, there exists a strong socio-economic gradient: people with a higher income are much more likely to rate the quality of the water they drink and the air they breathe as safe. Wildfires are another aspect of life which most L.A. County residents are familiar with and attuned to. About 40% report avoiding going outside when air quality is bad due to wildfires.

Resilience can operate at the individual and the community level. At the individual level, the vast majority of households seem to be utterly unprepared for natural disasters. Less than one third of Angelenos have developed an emergency response plan. When asked about resilience at the community level, respondents in neighborhoods with average incomes above the L.A. Metro Area median report higher levels of resilience.

One of the most important dimensions of sustainability is the type of transportation residents of L.A. County choose. Currently, about 10% of Angelenos own an electric or hybrid car. Asked about their plans for the future, between 30% and 40% state they are at least somewhat likely to buy or lease an electric or hybrid car in the future. The main reasons for not wanting an electric or hybrid car include purchasing price, "range anxiety," limited access to charging stations, and expectation of high maintenance cost.

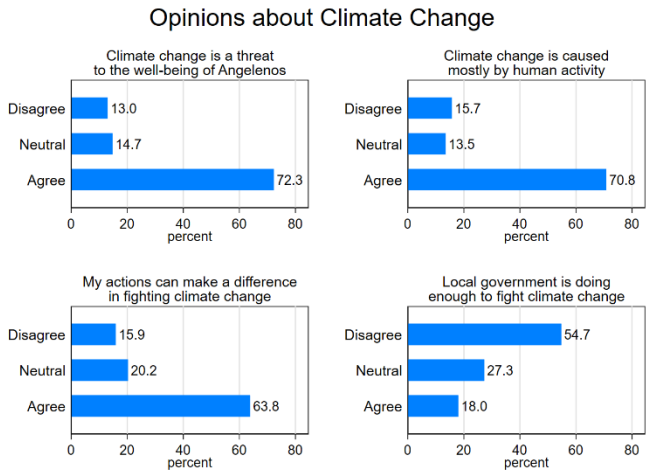
The COVID-19 pandemic has severely affected people's transportation preferences, in contrast with fall 2019 from our Mobility report (https://cesr.usc.edu/labarometer/reports_releases). People work from home much more than they used to do before the pandemic struck and expect to do so in the moths ahead. Reduced mobility due to the pandemic has decreased frequency of usage across all transportation modes and significantly shifted people away from public transportation and ride-hailing.

On the next page, you will find the top five takeaways from our Sustainability and Resilience survey. For the full set of our results, please find our final report online at https://cesr.usc.edu/labarometer/reports_releases.

TOP 5 TAKEAWAYS

1a. Concerns about climate change are widespread among Anegelenos and influence how people behave toward the environment

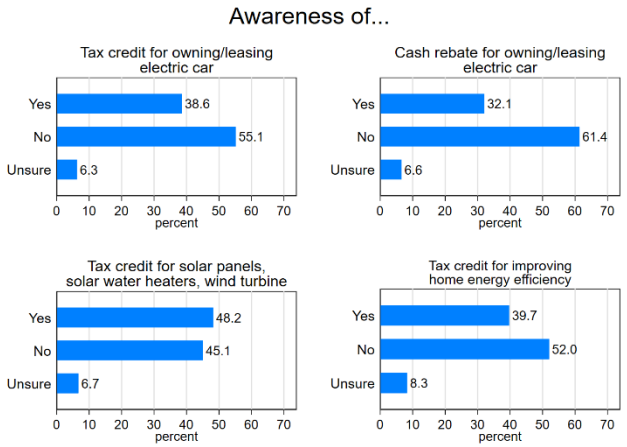
Most Angelenos agree that climate change is a threat caused by human activities, and that individual actions can make a difference. There is considerable disagreement on whether local government is doing enough to fight climate change.



Questions about ownership of energy-saving devices point to the highest rate for LED/CFL bulbs (approximately 75%); 58% have a ceiling fan and energy-efficient appliances. About 44% have well-insulated windows/doors, and 40% have a programmable thermostat. Less than 10% report having solar panels or a tankless water heater. Most adopted environmentally friendly behaviors include recycling (75%), limiting food waste (56%), electricity (46%), and water (42%) usage. About a third of the sample also limit car usage and use of plastic.

Men, Blacks, and high-income individuals exhibit less environmentally friendly behavior, while singles, older individuals, and college graduates show more environmentally friendly behaviors. Being concerned about climate change and agreement with the statement "individual actions can make a difference for climate change" are important drivers of environmentally friendly behavior adoption.

1b. Knowledge of government-sponsored financial incentive programs to fight climate change is limited and uneven

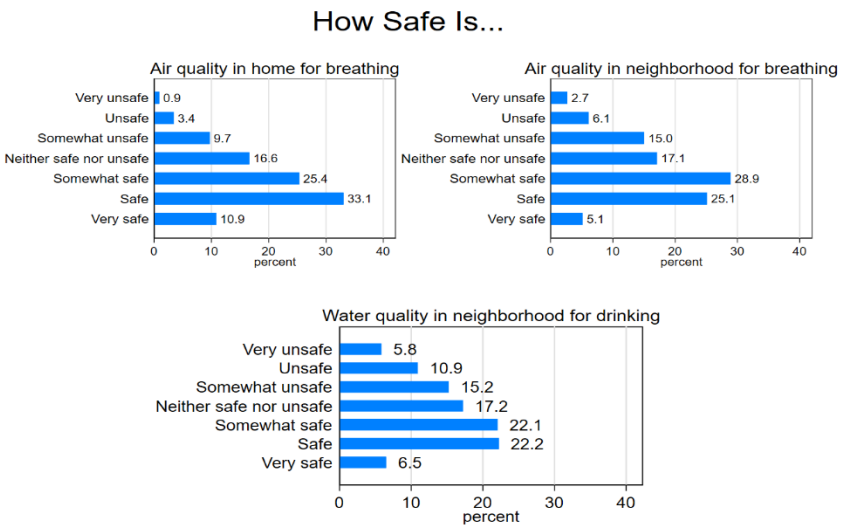


We asked about four government-sponsored programs providing financial incentives to reduce environmental burden. Tax credits for solar panels and the like are the best known (48%), but more than half of the sample is unaware of them. Further analysis shows that men, and older, better-educated, and more affluent individuals are more likely to know about tax credits/incentives. Minorities and LA City residents are less likely to be familiar with these government programs.

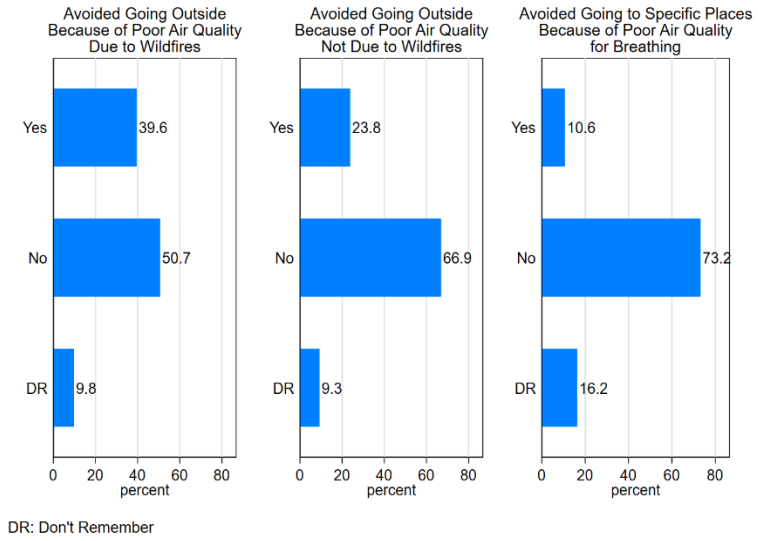
For more information about this and related findings, see pages 9-13 of our full report.

2. Money buys cleaner air and water

The majority of respondents (60% to 70%) rate the air quality in their homes and in their neighborhood as somewhat safe, safe, or very safe. Half of respondents say the same about the quality of drinking water in their neighborhood. However, there exists great variation driven by individuals' background characteristics. Hispanics, middle-aged respondents, singles, and LA City residents are more likely to report poor air quality at home and in their neighborhoods. Respondents with higher incomes report better air quality in general. Local concentration of PM 2.5 is associated with greater likelihood of reporting poor air quality at home and in the neighborhood. Regarding water quality, minorities are much more likely to report poor water quality. In contrast, seniors and more affluent individuals are significantly less likely to report poor water quality.



Wildfires are one of the constants of life in Los Angeles County. Apart from the risk of losing one's residence, some fires lead to very bad air quality, sometimes for extended periods. Many L.A. County residents are attuned to that. About 40% report avoiding going outside because of poor air quality due to wildfire, 24% because of poor air quality due to reasons other than wildfires, and 11% state that they avoid going to specific places in LA because of concerns about poor air quality. More affluent respondents are less likely to be concerned with poor air quality due to reasons other than wildfire. As one would expect, the higher the local PM 2.5 concentration, the higher the likelihood that respondents report avoiding going outside due to air quality concerns. We also find that LA City residents and those who live in areas with high PM 2.5 concentration report they are more likely to avoid specific places due to poor air quality for breathing.

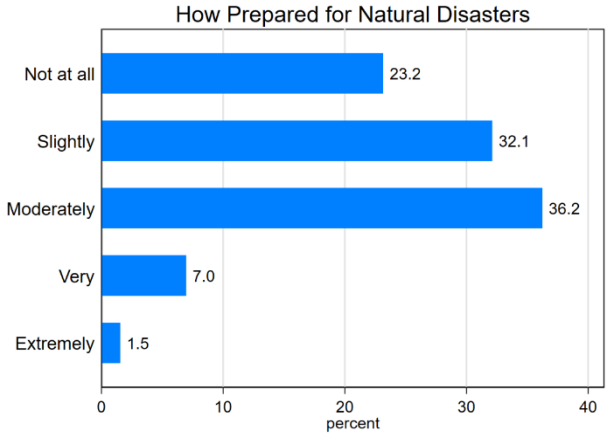


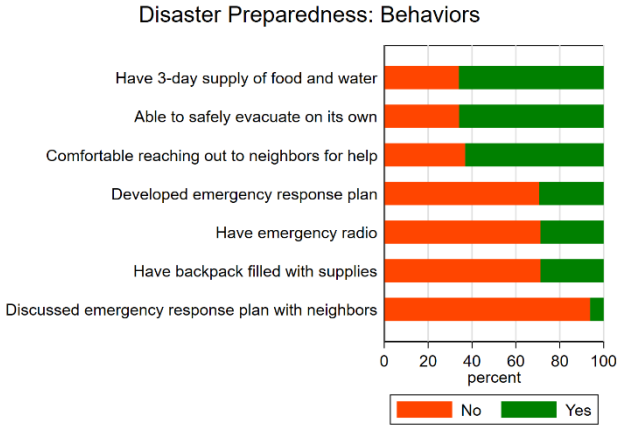
For more information about this and related findings, see pages 13-15 of our full report.

3. Angelenos are mostly unprepared for natural disasters, but more affluent communities are more resilient

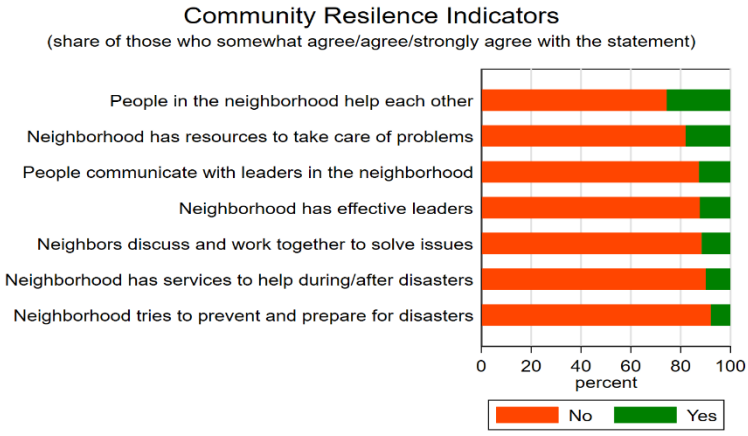
The vast majority of individuals feel they are not prepared for a natural disaster; only 8.5% feel they are very or extremely prepared. Confidence about disaster preparedness is higher among men, older individuals, and higher socio-economic status. It is lower among Asians and Hispanics.

Less than a third of the sample have developed an emergency response plan. Approximately 30% report having a backpack with supplies ready to take in case of emergency, while 66% report having a 3-day food and water supply in the house (this may partly reflect hoarding behavior during the COVID-19 pandemic). About 66% report that household members would be able to evacuate without assistance, and 63% would feel comfortable reaching out to neighbors for help. Those who are more confident they are prepared have taken the most actions to be prepared. We find that preparedness increases with age, education, and income. It is lower among Asians and Hispanics.





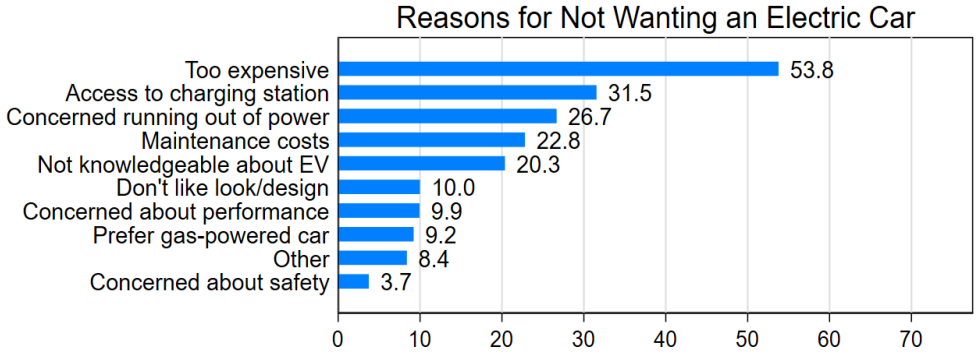
We ask survey participants to what extent they agree or disagree with various statements about their community's coherence and resilience. In general, not many respondents endorse statements about community coherence and resilience. We relate indicators of community coherence and resilience to both individual characteristics and neighborhood income. The latter is measured as the percent of families in the neighborhood with incomes above the median for the Los Angeles Metro Area. Overall, individual characteristics do not affect agreement with the statements much. The most striking finding is that for each community coherence/resilience indicator, the fraction of individuals who agree with the statement is significantly higher in neighborhoods where more families have incomes above the median family income in the Los Angeles Metro Area.



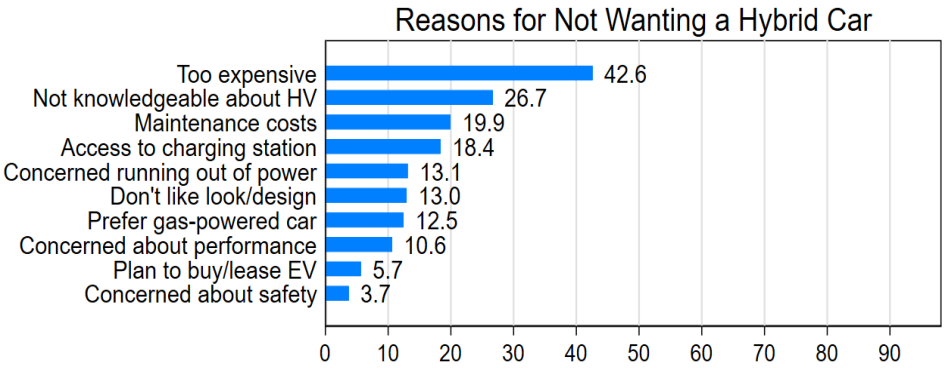
For more information about this and related findings, see pages 15-18 of our full report.

4. Although current ownership of hybrid or electric cars is modest, there is considerable room for growth

Ownership of hybrid or electric cars is about 10%. About one-third of the sample is considering buying or leasing a hybrid or electric car in the future. Since hybrid and electric cars tend to be more expensive than purely gasoline-powered cars, it is not surprising the ownership of these cars is more prevalent among higher-income respondents. There is weak evidence that respondents who think that individual actions matter to fight climate change are more likely to own a hybrid or electric car.



The four main reasons for not wanting an electric car are purchasing costs, lack of access to charging stations, worry of running out of power, and maintenance costs. These concerns can be addressed by lowering prices as a result of mass production, by installing more charging stations, and by better information about maintenance, which is thought to be substantially cheaper than for gasoline-powered cars. The four main reasons for wanting an electric car are good gas mileage, low emissions, energy efficiency, and government subsidies.



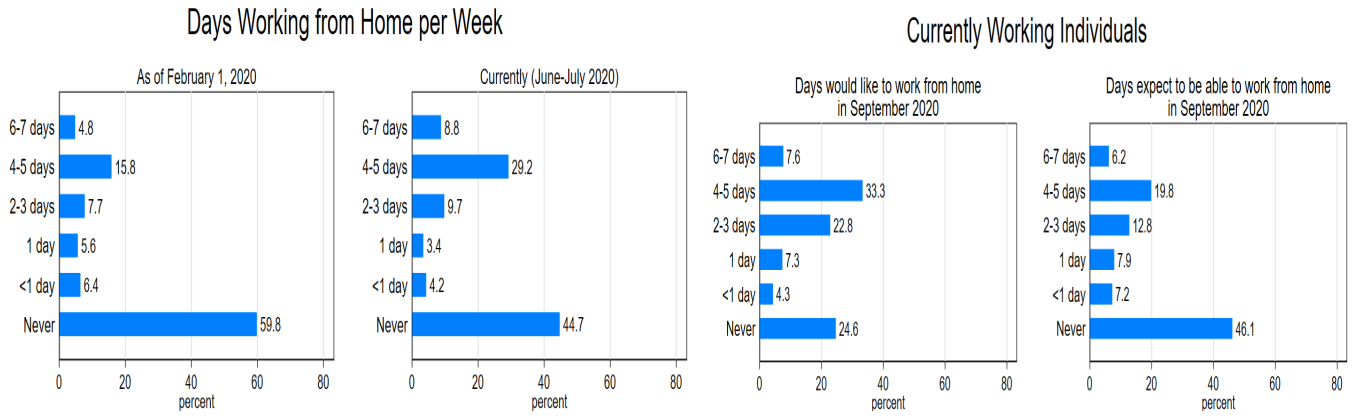
The main reasons for not wanting a hybrid car are related to purchasing costs, lack of knowledge, maintenance costs, and access to charging stations. The main reasons for wanting a hybrid car are good gas mileage, energy efficiency, low emissions, and government subsidies.

The likelihood of buying/leasing an electric or hybrid car in the future is significantly lower among Blacks and Hispanics, as well as separated/divorced individuals, while it is significantly higher among highly educated and high-income individuals. There are very strong associations between the likelihood of wanting an electric or hybrid car and both the belief that individual actions matter to fight climate change and the adoption of other environmentally friendly behaviors. There is no significant link with the concentration of PM 2.5 in the neighborhood.

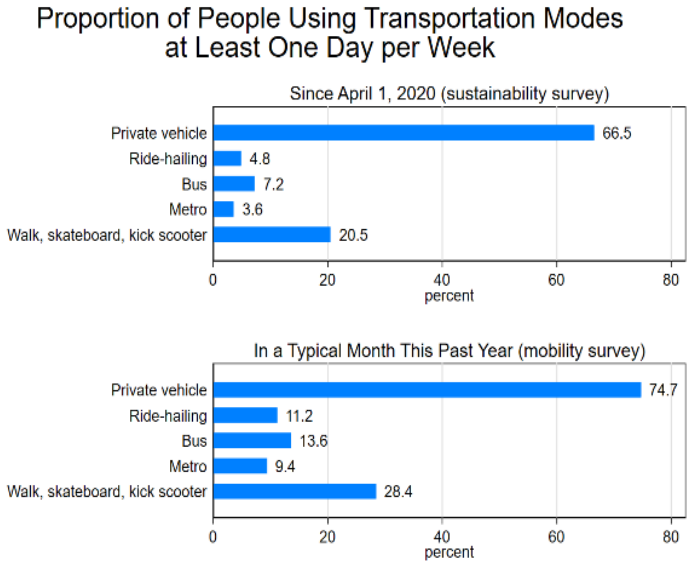
For more information about this and related findings, see pages 18-22 of our full report.

5. The COVID-19 pandemic has significantly modified individuals' habits and preferences for commuting, as well as use of transportation modes

The COVID-19 pandemic has fundamentally altered work and commuting patterns. The number of remote work-days has increased dramatically, with the percentages of people working from home 6-7 days and 4-5 days per week passing from 5% and 21% in February 2020 to 9% and 38% in June 2020, respectively. We also asked how many days respondents would like to work from home and how many days they expect to be able to do so in September 2020. Angelenos would like to work from home substantially more than they expect will be possible in September 2020.



With reduced mobility due to the pandemic, the frequency of using transportation modes has substantially changed since the beginning of the year. The sustainability survey asked respondents about the frequency with which they used different modes of transportation since April 1, 2020. The mobility survey (collected between December 2019 and January 2020) asked respondents to report the frequency with which they used different modes of transportation in a typical month during the past year. While differences in the reference periods hinder valid comparisons between the reports of the two surveys, it is apparent that the pandemic has reduced frequency of usage across the board and shifted people away from public transportation and ride-hailing. Private vehicles remain the most common means of transportation in L.A. County, but the fraction of people using their private vehicle at least one day per week has decreased from 75% to 66%. The proportion of Angelenos relying on ride-hailing at least one day per week has more than halved. The fractions of L.A. County residents using bus and metro at least one day per week have passed from 14% and 9% to 7% and 4%, respectively. Survey participants do not expect their use of transportation modes to change from June/July to September 2020.



For more information about this and related findings, see pages 22-27 of our full report.

ABOUT US

USC Dornsife LABarometer

LABarometer is a quarterly, internet-based survey of approximately 1,800 randomly selected Los Angeles County residents, designed and administered by the Center for Economic and Social Research (CESR) at the USC Dornsife College of Letters, Arts and Sciences. The survey monitors social conditions in Los Angeles, with a focus on four key issues: livability, mobility, sustainability/resiliency, and affordability and prosperity. By following the same residents over time, LABarometer aims to capture trends and shifts in residents' attitudes and circumstances, allowing decision-makers in the public and private sectors to better understand the evolving lives and needs of L.A. residents. LABarometer is made possible by the financial support of Union Bank.

About the Sustainability and Resilience Survey

The LABarometer Sustainability and Resilience survey assesses how residents cope with heat and cold, and with air and water quality; how they perceive climate change risks and the extent to which they are adapting their behavior to aid in mitigating the effects of human behavior on global warming. We have asked respondents about disaster preparedness and community resilience. To gauge the effect of the COVID-19 pandemic, we have repeated a module from our mobility survey to see how mobility patterns have changed. Finally, we have repeated questions that serve to construct a consumer sentiment index.

Data and Methods

A total of 1,421 LA County residents participated in the Sustainability and Resilience Survey from June 3, 2020 through July 13, 2020. Participants were recruited from LABarometer's survey panel of 1,896 adults living in randomly selected households throughout LA County, described in greater detail in the Appendix. The participation rate for the survey was 75%. The overall margin of sampling error[†] is 2.6 percentage points.

The survey was conducted in respondents' choice of English or Spanish. To participate in a survey, respondents could use any computer, cell phone, or tablet with Internet access. Internet-connected tablets were provided to respondents without internet access.

[†]Sampling error is calculated at the 95% confidence level, using a sample proportion of 0.5 to generate an upper bound of uncertainty. Please note that factors other than sampling error, including question wording, question order, sample type, survey method, and population coverage, may affect the results of any survey.

For More Information

For a complete description of our data, methods, and findings, please find our full Sustainability and Resilience Report online at https://cesr.usc.edu/labarometer/reports_releases. For more information, contact us at labarometer-l@usc.edu.