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Executive Summary

The climate change debate is over in Orange County.

Nearly three-quarters (73%) of those surveyed in the 2020 Orange County Annual Survey said climate change is a serious problem (51% “very serious”). Respondents do not support President Donald Trump’s dismissal of climate change as a great hoax. For example, there is overwhelming support for the United States rejoining the Paris climate accords, which the president exited. Instead, residents believe California should be a leader in fighting climate change and largely support the state’s aggressive efforts to fight it.

No longer considered unusual or exotic, solar panels are the top choice for alternative energy. Residents also support the increased use of electric vehicles.

Although not a majority, a substantial portion of citizens—45 percent (45%)—believe in banning the use of internal combustible engines, a noteworthy finding given that Southern California relies so heavily on cars for transportation.

Support for fighting climate change is particularly strong among Democrats and those age 40 and younger.

Orange County, California (also referred to in this report as OC), in years past was a conservative outlier on social and political issues among coastal California counties, and it is usually at odds with the state on myriad public policy decisions. But ideologically, the area is much more balanced than in previous decades. Donald Trump has a low approval rating (43%), as does Congress (24%). When asked for whom residents would vote if congressional elections were held today, results are nearly split (49% Republican candidate, 51% Democratic candidate). Results are similar when we asked if they would support the Republican or Democratic candidate for president (48% Republican candidate, 52% Democratic candidate). Therefore, it is possible that Orange County will see some competitive congressional races this year and a competitive presidential race. There is a fair amount of skepticism about the national government and the direction California is headed.

Residents favor gun control. Sixty-four percent (64%) say there are not enough restrictions on access to guns. They are also nearly split as to whether government should take action to reduce income differences between the rich and poor. Sixty-nine percent (69%) believe that immigrants contribute more to the economy than they take.

County residents like living in Orange County. Eighty percent (80%) rate the county as either an excellent or good place to live, and only three percent (3%) rate it as poor. County voters in 2002 decided that they wanted a public park, not an international airport, at the site of the former Marine Corps Air Station El Toro. Nearly 18 years later, voters still prefer what is now the Great Park instead of an airport. A vast majority (79%) believe that OC’s increasing ethnic diversity is a source of great strength for the region. Housing affordability and homelessness are overwhelmingly the biggest problems facing OC in residents’ minds today.
Introduction

Chapman University’s Wilkinson College of Arts, Humanities, and Social Sciences is pleased to present the 2020 Orange County Annual Survey Report. The purpose of this study is to help provide residents’ insights to policymakers and to spark informed debate among the public. This year marks the third consecutive year (and fourth year overall dating to 2010) that we have conducted a survey of OC residents’ views on various economic, social, and political topics. We release these results each year in conjunction with Wilkinson’s annual public policy conference. A good portion of the survey questions remain the same from year to year, but the remainder change annually depending on the conference topic. The 2018 survey focused questions on housing and homelessness, last year’s survey dedicated questions to transportation, and this year’s survey (coinciding with the 50th anniversary of Earth Day) focuses on fighting climate change. The 2020 conference was scheduled to take place April 1, 2020, but the event was postponed to October 7, 2020, as a result of the closing of Chapman’s campus because of the coronavirus pandemic. You can learn more about the upcoming October conference, and read the speakers’ white papers we received to date here: https://www.chapman.edu/wilkinson/political-science/public-policy-conference.aspx

Data Collection

We commissioned Reconnaissance Market Research (ReconMR) to conduct telephone surveys of Orange County adult residents (age 18 and older). The survey was in the field from February 3, 2020, to February 25, 2020. Note that the State of California instituted its stay-at-home order, closed educational facilities, and closed nonessential services March 19, 2020. Thus, the data collected reflect views on social and economic topics before the 2020 coronavirus pandemic drastically affected California residents’ lives. ReconMR administered 753 surveys, 179 (23%) of which took place via landline telephone connections and 574 (76%) of which occurred via wireless phone connections. ReconMR conducted the surveys in both English and Spanish, and the length of the average survey interview was 23 minutes. The study’s margin of error is +/- 4.0 percent (4.0%). See Appendix A for details on the sample design, fielding, sampling, and quality/data verification. The complete survey questions and results are located in Appendix B.

Orange County Profile

Orange County is a thriving metropolitan coastal area that shares borders with Los Angeles County to the north, San Diego County to the south, San Bernardino County to the northeast, and Riverside County to the east. According to the U.S. Census Bureau, OC’s population estimate as of July 1, 2019, is nearly 3.2 million people. This is similar to the population of Utah and greater than the population of 20 U.S. states. The county is home to 34 cities, and although it is relatively small geographically (799 square miles), OC has eight percent (8%) of California’s population, according to the Orange County Business Journal’s (OCBJ) 2019-20 Community Indicators Report. The OCBJ 2020 Orange County Workforce Indicators

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1 This survey was sponsored by Fieldstead and Company and Chapman University’s Office of Research. We are also grateful to the Office of the Dean of Wilkinson College for its financial assistance. This report’s analyses and conclusions are those of the authors and they do not necessarily reflect the views of the sponsors.
Report states that Millennials comprise the largest percentage of county residents (26%), followed by Generation Z (23%), Generation X (21%), and Baby Boomers (20%).

The same report states that OC’s 5.3 percent (5.3%) high school dropout rate is lower than California’s (9.6%), and the county’s 89 percent (89%) high school graduation rate is higher than the state’s 83 percent (83%) average. The most recent U.S. Census data state that 39.9 percent (39.9%) of OC residents age 25 and older have a bachelor’s degree (higher than the national average). The most recent Census estimates state that 40.1 percent (40.1%) of residents are “White alone, not Hispanic or Latino,” 34.2 percent (34.2%) are “Hispanic or Latino,” 21.4 percent (21.4%) are “Asian alone,” 3.5 percent (3.5%) are “Two or More Races,” and 2.1 percent (2.1%) are “Black or African American alone.”

According to the Orange County Registrar of Voters, as of April 1, 2020, 36.2 percent (36.2%) of active voters are registered Democrats, 34.2 percent (34.2%) are Republicans, and 24.8 percent (24.8%) have no party preference.

**Attitudes Toward Climate Change**

Until fairly recently, county residents tended to trend center-right on many major political issues. When we conducted our first countywide survey in 2010, public opinion was split about the seriousness and causes of climate change. That year, slightly more than half the sample (54%) believed climate change was real. The jury was still out for the rest (46%). Ten years later, this is no longer the case. Strong majorities of those surveyed believe climate change is real, that it is man-made, and that it poses a serious threat to their quality of life. Nearly three-quarters (73%) said climate change is a serious problem (51% said “very serious”). Sixty-six percent (66%) said they are worried about climate change—and more than half of those (37%) said “very worried.” Sixty-three percent (63%) attribute climate change to human activities, as opposed to 35 percent (35%) to natural climate cycles. Seventy-three percent (73%) said future generations would bear the brunt of a warming planet.

![Percent agreeing climate change is real](chart.png)
Lack of Support For Trump’s Climate Change Stance

President Donald Trump insists that climate change is a hoax perpetrated by the “fake news media” and has brushed aside the legion of scientific reports that urge policy makers to take immediate and drastic action to combat climate change. The president also questions whether there is a consensus in the scientific community regarding climate change.

Most respondents do not agree with the president on climate change. Sixty percent (60%) said media coverage is accurate or is even underestimating the threat, and 73 percent (73%) said that most scientists believe climate change is occurring.

In 2015, the United States reached an international agreement in Paris with 196 other countries to limit the pollution that causes climate change. In 2017, President Trump announced that the U.S. will exit the agreement because he felt it would hurt the U.S. economy. In a further rebuke, a sizable majority (63%) of OC residents said the U.S. should re-enter the Paris climate change accord.

Support For the State’s Climate Change Efforts

Sacramento is a world leader on combating climate change, and governors of both parties have been at the forefront of the fight. The legislature has passed aggressive legislation that mandates huge cuts in greenhouse gases.

Orange County tends to part company with Sacramento on most—especially fiscal—issues. However, the county supports Sacramento’s aggressive efforts to fight climate change. A majority (57%) said they favor SB 100, the state law that requires 100 percent (100%) of the state’s electricity to come from renewable energy by 2045, even though it may mean higher electricity costs, and 67 percent (67%) support a plan to dramatically increase the number of zero-emission vehicles on California’s roads. The majority (54%) also feel that California should be able to make its own rules. This is opposed to following the weaker rules called for by the Trump administration, by, for example, requiring cars to get higher gas mileage requirements and run cleaner. Sixty-seven percent (67%) support the plan to increase dramatically the number of zero-emission vehicles on California’s roads called for by Sacramento.

Sixty-eight percent (68%) said California should be a leader for the world on combating climate change. Nevertheless, the residents are split on the question of whether the state’s efforts to combat climate change are coming at the expense of other important issues. About half (53%) feel that efforts to fight against climate change are not coming at the expense of other needs, such as the need for affordable housing.

2 In 2010 we asked, “From what you know about global climate change which of the following four statements comes closest to your views: 1) Global climate change has been established as a serious problem (23%); 2) There is enough evidence that climate change is taking place (31%); 3) We do not know enough about climate change and more research is necessary before we take any actions (28%); 4) Concern about climate change is unwarranted (18%).” We added responses “1” and “2” to arrive at the 54% figure. In 2020 we asked, “How serious a threat is climate change? Would you say it is (1) very serious (51%); (2) somewhat serious (22%); (3) not very serious (15%); or (4) not a problem (12%)?” We added responses “1” and “2” to arrive at the 73% figure.
Also, the survey asked whether stricter environmental laws and regulations cost too many jobs or are worth the cost. When we first asked this question in 2010, 50 percent (50%) said that the stricter environmental laws and regulations were worth the cost. In 2020, that number rose 13 points to 63 percent (63%).

**Do stricter environmental laws and regulations cost jobs and hurt the economy or are they worth the cost?**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost Jobs</th>
<th>Worth the Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>43</td>
<td>50</td>
</tr>
<tr>
<td>2020</td>
<td>37</td>
<td>63</td>
</tr>
</tbody>
</table>

**Banning the Internal Combustion Engine**

The Internal Combustion Engine (ICE) is one of the main sources of CO₂, a major cause of climate change. Several countries such as Norway, the Netherlands, France, and the United Kingdom have legislated bans on the future sales of cars and trucks that burn gas or diesel. Others, such as China and India, are expected to adopt similar bans soon.

Cars that run on gas are the main mode of transportation in Southern California. So we are not surprised that the majority of respondents (55%) are opposed to banning ICE-based cars and trucks 25 years from now (2045). We are surprised to find that a substantial minority (45%) of those in “car crazy” Southern California support such a ban. Doing so would mean all new cars would be powered by electricity or an alternative fuel.

**Personal Actions to Fight Climate Change**

The top four things respondents said they would do to fight climate change are buying a higher-mileage car (86%), installing solar panels on their home (81%), cutting electricity use (81%), and purchasing a more energy-efficient house (73%). The most unpopular choices are saying yes to developing higher density housing (42%), allowing a nuclear power plant to be built 25 miles from their home (40%), and paying more for gas (36%).
The Great Park, San Onofre Nuclear Generating Station (SONGS), and Managed Retreat

The survey also asked residents about two long-lasting political fights that touch on climate change and a current strategy for addressing rising sea levels. The Orange County Great Park is a large public space in the City of Irvine consisting of housing and land dedicated to sports, the arts, and agriculture. During the 20th century, this land comprised the Marine Corps Air Station El Toro. In the late 1990s and early 2000s, after the government decommissioned the base, a contentious public debate took place in Orange County as to whether the land should be used for an international airport or for a Great Park. Voters opted for the more environmentally friendly Great Park in 2002. Eighteen years later, county residents do not regret this decision, as 74 percent (74%) believe that a park and housing development should have been built at the site versus 26 percent (26%) who believe an airport should have been built there. Support for the park and housing development is consistent across all political affiliations.

Nuclear power does not produce greenhouse gas emissions. SONGS was shut down in 2013 and is currently being decommissioned. The plant provided nearly 20 percent (20%) of the electricity used by residences in Orange County. A state law prohibits construction of new nuclear power plants in California until a means of disposal of nuclear waste is approved. We asked whether we need to revisit nuclear energy. Fifty-seven percent (57%) said we should revisit the use of nuclear power—but not near their own home—whereas 43 percent (43%) said we should not.

How, then, should we power Orange County in the era of climate change and an increasing demand for electricity? The overwhelming majority said we should put greater emphasis on clean sources of energy—solar (76%) and wind (64%).

The warming planet is causing sea levels to rise, and this has been a problem for beach communities. Policymakers in those communities have responded by either building sea walls or by allowing the ocean to take over certain portions of the coast and relocating or removing structures. The latter is called managed retreat. We asked residents which strategy they prefer—building rising sea walls or managed retreat. Ten percent (10%) said we should build sea walls, and 13 percent (13%) said we should relocate existing structures. By far, most people said we should use both strategies (76%) to deal with rising sea levels.

Party Differences

While the county as a whole is greener than it was in 2010, we found a significant partisan divide. Democrats and independents are far more likely to say climate change poses a serious threat. Virtually all climate change doubters and deniers are Republicans.

Most Americans tend to view climate change through a partisan lens. Republicans tend to favor limited government, support the status quo, and are deeply distrustful of the press and policy experts. Democrats tend to support government action to solve social problems, are more supportive of government regulation of business, and are less distrustful of the media.
Our data are consistent with this interpretation. Ninety-five percent (95%) of Democrats said they are worried about climate change (“very worried” 64%). The comparable figure for Republicans is 35 percent (35%). Independents are closer to Democrats on this and all other climate change questions. Seventy-seven percent (77%) of Democrats said they think climate change will harm them personally. Only 24 percent (24%) of Republicans do.

Democrats and Republicans also have different timelines. Forty-three percent (43%) of Democrats say they will experience the adverse effects of climate change in their lifetimes. Fifty-six percent (56%) of Democrats said the brunt of climate change will be borne by future generations. Only one percent (1%) of Democrats said they do not believe climate change is occurring, and only 15 percent (15%) of Republicans said they will experience climate change in their lifetime. The bulk of Republicans (68%) say climate change will affect future generations. Almost a fifth (17%) are climate change deniers.

Similarly, when asked how serious a problem they thought climate change is, the Republicans are split. Forty-seven percent (47%) said it is a serious problem (16% very serious) and 52 percent (52%) said “not very serious.” To the extent the earth is warming, 66 percent (66%) of the Republicans in our sample said this is a result of “normal climate cycles.” Only 31 percent (31%) said it is a result of “human activities.” Ninety-four percent of Democrats (94%) said warming is a result of “human activities.” Finally, 73 percent (73%) of Republicans, but only seven percent (7%) of Democrats see media coverage of climate change as exaggerated. Seventy-two percent (72%) of Republicans feel the U.S. should not rejoin the Paris climate agreement, whereas 93 percent (93%) of Democrats say we should participate in the agreement.

**Age Differences**

We also found significant differences in attitudes toward climate change among those older than 40, and those 40 and younger. Those age 40 or younger are most alarmed by climate change than those older than 40, who are more doubtful.

We chose 40 as our dividing line because respondents 40 or younger were born in 1980 or later. Someone born in 1980 was 26 when former Vice President Al Gore’s documentary *An Inconvenient Truth* (2006) was released. This film made the public aware of the threat posed by climate change.

Sixty-nine percent (69%) of those older than 40 think climate change is a serious problem. The comparable figure for those 40 or younger is 83 percent (83%). Only 25 percent (25%) of those older than 40 said climate change will harm them personally, whereas 38 percent (38%) of those 40 and younger feel climate change will personally affect them. Younger people are also more likely to believe climate change is a result of human activities (77%). Nearly twice as many people older than 40 attribute the warming planet to normal climate cycles (39%) than those 40 and younger (21%).
Younger people are also far more likely to support SB 100, the state law that mandates that 100 percent (100%) of the state’s electricity come from renewable sources by 2045. Sixty-nine percent (69%) of those 40 or younger support the law. Support among those older than 40 is more tepid (53%). Seventy-eight percent (78%) of the 40 and younger group feel the U.S. should rejoin the Paris climate agreement, whereas 58 percent (58%) of those older than 40 said we should participate in this international agreement.

Discussion

Why has Orange County apparently become more accepting of climate change? We see several possible reasons.

The first is that older, more conservative residents are exiting the county population and are being replaced by younger, more moderate-to-liberal residents. The result is that the county has become more balanced politically, and the issue of fighting climate change tends to align itself in the U.S. more with those on the left.

The second is that the county is known for its beautiful weather, coastline, and rolling hills. Residents see firsthand the effects of sea-level rise in Newport Beach, Dana Point, and Capistrano Beach. Fire season is also year-round now. OC residents see these events firsthand and are perhaps more environmentally conscious as a result. In previous reports, we referred to environmentally conscious conservatives as eco-Republicans. Individuals who fall under this classification may be fiscally conservative in that they dislike regulation of businesses and large government agencies, but they enjoy Orange County’s beauty and quality of life. The eco-Republican is therefore more prone (compared to other Republicans) to favor taking action on climate change. These were the citizens, after all, who voted against having an international airport at El Toro because they did not want jet traffic spoiling their beautiful ocean vistas.

There is also accumulating scientific evidence—such as the Intergovernmental Panel on Climate Change reports—that sway public opinion. Respondents said that scientific reports were the biggest influence on their thinking about climate change.

Separately, the topic has bipartisan support in Sacramento. Unlike conflicting views between the White House and Congress, and between the national Republican and Democratic parties, a unified coalition of both parties and the state’s executive and legislative branches agree on the importance of tackling the issue.

Finally, there is a proliferation of solar installations on schools and government buildings, and those age 40 and younger are graduates of high schools and colleges that reiterate continually the need to save the environment. For example, on September 20, 2019, many Southern California youth participated in a climate strike because they felt older generations were not doing enough to protect the planet.³ All of these factors likely lead to the changes in public opinion.

How worried are you about climate change?

- Worried: 66%
- Not Worried: 33%

Is climate change something that is affecting you personally right now, do you believe that it will affect you primarily later in your life, or do you believe it will primarily affect future generations?

- Right Now: 15%
- In Your Life: 14%
- Affect Future Generations: 63%
- Don't Believe in CC: 8%
State and County Issues

A majority of county residents (56%) believe California is headed in the wrong direction, but the results are drastically different according to party affiliation. Eighty-eight percent (88%) of Republicans and 64 percent (64%) of independents—perhaps disappointed with higher taxes and regulations on businesses—believe the state is headed in the wrong direction. Seventy-eight percent (78%) of Democrats—perhaps happy with a progressive state government and unhappy with the president—believe that the state is headed in the right direction.

Top Three Problems

We asked residents what they feel the biggest problems facing the county are. Their top three responses are in the table below alongside data from 2000 (when the University of California, Irvine School of Social Ecology conducted a countywide survey) and 2010 (when we conducted our first countywide study):

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime, gangs</td>
<td>Jobs, economy</td>
<td>Housing affordability, homelessness</td>
<td></td>
</tr>
<tr>
<td>Schools, education</td>
<td>Schools, education</td>
<td>Traffic, transportation</td>
<td></td>
</tr>
<tr>
<td>El Toro Airport</td>
<td>Immigration</td>
<td>Poverty</td>
<td></td>
</tr>
</tbody>
</table>
Overwhelmingly, housing affordability and homelessness are the most important problems according to OC residents. Housing costs have skyrocketed in the county during the past decade, and significant media coverage shed light on large homeless encampments along the Santa Ana Riverbed and at the Civic Center in the late 2010s.

Despite concerns about housing affordability, people like living in the county. When asked how they would rate Orange County in general as a place to live, 80 percent (80%) responded with either “excellent” or “good.” When asked to look ahead 10 years from now, 44 percent (44%) believe the quality of living conditions in the Orange County area will be about the same, and 37 percent (37%) believe they will be worse.

In 2010, we asked respondents to look ahead 10 years to 2020. Forty-three percent (43%) expected no change, 34 percent (34%) believed the county would be a better place to live, and 24 percent (24%) believed OC would be a worse place to live.

Orange County is a diverse area with thriving communities encompassing Latinx, Vietnamese-American, Korean-American, and many other cultural groups. County residents see the county’s ethnic diversity as a source of great strength (79%). A significant majority across all party lines agree with this sentiment.

**National Issues**

OC residents are skeptical about the country’s direction. Fifty-three percent (53%) believed the country is headed in the wrong direction.

There are major partisan differences. Eighty-one percent (81%) of Republicans said the country is headed in the right direction, while 86 percent (86%) of Democrats say the country is headed in the wrong direction.

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**Is the U.S. headed in the right or wrong direction?**

![Chart showing 46% believe the country is headed in the right direction, and 53% believe it is headed in the wrong direction.](chart.png)
This skepticism toward the national government is also apparent when we asked respondents how much of the time they can trust the government in Washington to do what is right. The vast majority (71%) responded “only some of the time.” Republicans, Democrats, and those with no party preference all selected this option overwhelmingly.

County residents also have some negative views toward the media. When asked how much trust and confidence they have in the media when it comes to reporting the news fully, accurately, and fairly, 38 percent (38%) responded with “not very much,” 33 percent (33%) “a fair amount,” 23 percent (23%) “none at all,” and six percent (6%) “a great deal.”

Sixty-four percent (64%) of residents believe that there are not enough restrictions on access to guns, but this is another issue with partisan division. Sixty-three percent (63%) of Republicans believe that there are too many restrictions on the rights of citizens to own guns compared to 11 percent (11%) of Democrats and 38 percent (38%) of those with no party preference.

When we asked if immigrants take more from the American economy than they contribute or contribute more than they take, 69 percent (69%) believe that immigrants contribute more than they take. These questions drew differing reactions according to party affiliation, with 55 percent (55%) of Republicans believing that they take more than they contribute versus 11 percent (11%) of Democrats and 31 percent (31%) of those with no party preference.

We asked respondents whether they agree or disagree that the government should take action to reduce income differences between the rich and poor, and the results are nearly split. A combined total of 52 percent (52%) either strongly agree or slightly agree, while the remaining 48 percent (48%) either slightly disagree or strongly disagree. The partisan divide is dramatic, with 25 percent (25%) of Republicans and 80 percent (80%) of Democrats either strongly agreeing or slightly agreeing.

There is also a major divide among age groups. Forty-six percent (46%) of those older than age 40 agree with the idea compared to 68 percent (68%) of those 40 and younger.
For the third consecutive year, President Donald Trump has a low approval rating in Orange County, though it has risen since last year. Forty-three percent (43%) of county residents approve of the job the president is doing and 57 percent (57%) disapprove. The president had a 37 percent (37%) approval rating in OC in 2018 and a 39 percent (39%) approval rating last year.

There is a sharp divide according to party registration, as 90 percent (90%) of Republicans approve of Trump’s job performance compared to only five percent (5%) of Democrats and 30 percent (30%) who are not affiliated with either party. There is also a noteworthy divide according to age groups. Forty-seven percent (47%) of those older than 40 approve of the job the president is doing compared to 33 percent (33%) of those 40 and younger.

The disapproval of the national government is once again apparent in congressional approval ratings. Only 24 percent (24%) approve of the job Congress is doing. This disapproval is consistent among Republicans (22%), Democrats (29%), and those affiliated with neither party (15%).

National studies often demonstrate that Americans dislike Congress despite that incumbents are often re-elected. Voters flipped four OC House seats in 2018, but time will tell if disapproval of Congress will result in partisan reversals (“back flips”) in the 2020 general election.

Fall Federal Elections

Residents are nearly split when asked if they would vote for the Democratic candidate or Republican candidate if the congressional elections were held today. Fifty-one percent (51%) would vote for the Democratic candidate and 49 percent (49%) would vote for the Republican. These data suggest that some congressional races in the county may be competitive this year.

Results according to age groups yield different results, as 52 percent (52%) of those older than 40 would vote for the Republican and 66 percent (66%) of those 40 and younger would vote for the Democrat.
Results are similar when we asked residents if they would vote for the Democratic or Republican presidential candidate if the election were held today. Fifty-two percent (52%) would vote for the Democrat and 48 percent (48%) would vote for the Republican.

These findings are consistent with county voter registration data, and they are a marked ideological change from a heavily Republican county during previous decades.

**Conclusion**

Orange County today is much different from the county of the 1980s, 1990s, and even 2000s. The data presented here support our previous conclusion that Orange County is becoming increasingly politically moderate.4 (We are no longer “Red” and are certainly not “Blue.” Instead we are a mixture of the two—“Purple County”). This is especially true when it comes to environmental issues and climate change.

Some may argue that the coronavirus’ devastating impact on the economy and government budgets will cause many residents to retreat from their concern for climate change and support for green initiatives expressed here. Others may argue that the coronavirus may strengthen the public’s faith in the scientific community and quicken its resolve to heed the clarion call for policies that combat climate change.

**Researcher Biographies**

Fred Smoller is an associate professor of political science at Chapman University, where he has been on the faculty since 1983. He received his Ph.D. from Indiana University. His major areas of interest are American politics, with an emphasis on media and politics; local government; and public administration. Smoller directs Chapman’s annual local government conference and is the author of the 2018 book *From Kleptocracy to Democracy: How Citizens Can Take Back Local Government*. Contact Smoller at smoller@chapman.edu.

Michael A. (Mike) Moodian teaches for Chapman University’s leadership studies program and is an associate professor of social science at Chapman-affiliated Brandman University. Moodian is one of Gov. Jerry Brown’s appointees to the California Commission on Judicial Performance. He is the editor of the textbook *Contemporary Leadership and Intercultural Competence* (Sage, 2008). Moodian is the former chairman of the World Affairs Council of Orange County. His website is www.moodian.com, and you can contact him at drmike@moodian.com.

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4 Refer to our 2018 and 2019 Orange County Annual Survey reports.
Appendix A: Methodology

Contributed by ReconMR

Introduction

Reconnaissance Market Research (ReconMR) was contracted by Chapman University to conduct telephone surveys among Orange County residents. Surveys averaged 22.94 minutes utilizing a questionnaire provided by staff at Chapman University. Respondents were screened in order to interview an adult, 18 or older, who resided in Orange County. The last three days of fielding respondents were screened based on party affiliation to increase representation of Democratic voters. Those who identified as Republican or independent were screened out of the survey. Oversampling was introduced to target Hispanic and Asian respondents as well as independent and Democratic voters in Orange County.

Overview

The fielding period of this study was from February 3 through 25, 2020. A total of 753 surveys were administered by ReconMR. 179 surveys were conducted among landline telephone records and 574 surveys were conducted among wireless telephone records. Both an English and Spanish language version of the questionnaire were made available. Spanish speaking households encountered by an English only interviewer were called back by a bilingual interviewer in an attempt to complete the interview in Spanish. 19 total Spanish surveys were conducted.

Telephone numbers were purchased by ReconMR through Dynata (Survey Sampling International) and Aristotle, Inc. 7 unique sampling frames of Orange County residents were employed, outlined in Table 1 below.

Table 1. Sample Frames

<table>
<thead>
<tr>
<th>Frame</th>
<th>Sample Vendor</th>
<th>Universe</th>
<th>Loaded</th>
<th>Dialed</th>
<th>Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDD Wireless</td>
<td>Dynata</td>
<td>6,293,000</td>
<td>9,995</td>
<td>4,852</td>
<td>14</td>
</tr>
<tr>
<td>Listed Landline, general population</td>
<td>Dynata</td>
<td>193,278</td>
<td>19,977</td>
<td>15,787</td>
<td>179</td>
</tr>
<tr>
<td>Listed wireless, targeting Asian surnames</td>
<td>Dynata</td>
<td>43,694</td>
<td>3,000</td>
<td>3,000</td>
<td>9</td>
</tr>
<tr>
<td>Listed wireless, targeting Hispanic surnames</td>
<td>Dynata</td>
<td>63,973</td>
<td>5,000</td>
<td>5,000</td>
<td>44</td>
</tr>
<tr>
<td>Listed wireless, general population</td>
<td>Dynata</td>
<td>205,391</td>
<td>20,000</td>
<td>20,000</td>
<td>372</td>
</tr>
<tr>
<td>Wireless voter sample, targeting independent voters</td>
<td>Dynata</td>
<td>10,214</td>
<td>4,953</td>
<td>4,953</td>
<td>88</td>
</tr>
<tr>
<td>Wireless voter sample, targeting Democratic voters</td>
<td>Dynata</td>
<td>108,112</td>
<td>15,000</td>
<td>5,206</td>
<td>47</td>
</tr>
</tbody>
</table>
Sample Design

Dynata’s RDD wireless sample uses Telcordia’s master file of NPA-NXX and Block-ID records for the North American Number Plan. Dynata compares this file against their list-assisted RDD database. 100-blocks with no listed numbers are retained in the wireless frame and 100-blocks containing listed numbers on the RDD frame are removed. The file of 100-blocks is sorted to provide a stratification that will yield a representative sample geographically and between carriers. From a random start within the first sampling interval, a systematic nth selection of 100-blocks is performed and a 2-digit random number between 00 and 99 is appended to each selected 100-block stem.

Dynata’s Directory-listed Household (referred to as listed landline) sample uses residential telephone numbers compiled and updated by InfoUSA from telephone directories and a variety of secondary sources. Dynata uses multiple data sources to validate and clean these listings to construct their database.

Dynata’s Smart Cell (referred to as listed wireless) sample starts with the same generation method as their RDD wireless sample. After 100-blocks with no listed numbers are retained in the wireless frame and 100-blocks containing listed numbers on the RDD frame are removed, the file is then appended with billing address. This is then used to overlay household demographic information.

Dynata’s wireless voter sample is pulled together from more than 4,000 election boards, county clerks, and voter registrars. The universe allows for multiple mobile phone numbers per household.

Aristotle’s wireless voter sample is pulled from a state database of registered voters. The universe allows for only one mobile phone number per household (two people with the same last name living at the same address constitutes a household). The sample pulled was a pure random selection of the available universe of registered Democratic voters in Orange County.

The sample went through a deduplication process to eliminate any duplicate cases between sample frames, in follow-up sample orders, and across sample vendors.

Facilities

ReconMR fields all studies from its outbound call centers located in San Marcos, TX at 135 S Guadalupe Street; Bryan, TX at 2504 Kent Street; Houston, TX at 9700 Bissonette Street, Suite 1900; and San Antonio, TX at 4318 Woodcock Drive, Suite 100. Within the respondent’s time zone, interviewers dialed from 11:00 AM to 9:00 PM weeknights, 10:00 AM to 6:00 PM on Saturdays, and 1:00 PM to 9:00 PM on Sundays.
Fielding

Interviews were conducted using Voxco’s computer-assisted telephone interviewing (CATI) software, which ensured all questions were asked correctly and all logic and skip patterns were implemented properly. The telephone sample was also managed by the CATI system, allowing dialing rules and disposition management to be streamlined. The CATI system allowed for a maximum of 6 attempts to be made on each number.

To ensure the highest response rate, numbers were called at various times of the day and days in the week and respondents could request a callback at a more convenient time and date as needed. These appointments were called at the appointed time or rescheduled if the respondent was not available at the initially requested time. Sample and interviewer productivity were closely monitored by the project team so adjustments could be made when needed.

Sampling

A total of 15,787 unique landline telephone numbers and 43011 unique wireless telephone numbers were required to complete the study. The final call outcome result to each telephone number is indicated in the table below.
Table 2. Final calling results

The following sample statistics have been calculated based upon AAPOR’s Standard Definitions:

<table>
<thead>
<tr>
<th>Call Outcome</th>
<th>Landline Records</th>
<th>Cell Records</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Percent</td>
</tr>
<tr>
<td>No Answer</td>
<td>3993</td>
<td>25.29%</td>
</tr>
<tr>
<td>Answering Machine</td>
<td>5792</td>
<td>36.69%</td>
</tr>
<tr>
<td>Phone Busy</td>
<td>337</td>
<td>2.13%</td>
</tr>
<tr>
<td>Respondent Not Available</td>
<td>433</td>
<td>2.74%</td>
</tr>
<tr>
<td>Route to Spanish Speaker</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Schedule Callback</td>
<td>27</td>
<td>0.17%</td>
</tr>
<tr>
<td>Disconnected</td>
<td>3705</td>
<td>23.47%</td>
</tr>
<tr>
<td>Business/Government</td>
<td>35</td>
<td>0.22%</td>
</tr>
<tr>
<td>Language Barrier</td>
<td>26</td>
<td>0.16%</td>
</tr>
<tr>
<td>Refusal</td>
<td>834</td>
<td>5.28%</td>
</tr>
<tr>
<td>Blocked Call</td>
<td>11</td>
<td>0.07%</td>
</tr>
<tr>
<td>Cell Phone Complaint</td>
<td>2</td>
<td>0.01%</td>
</tr>
<tr>
<td>Computer Tone</td>
<td>270</td>
<td>1.71%</td>
</tr>
<tr>
<td>Terminate- No one 18+</td>
<td>47</td>
<td>0.30%</td>
</tr>
<tr>
<td>Terminate- Not an Orange County Resident</td>
<td>28</td>
<td>0.18%</td>
</tr>
<tr>
<td>Child’s Phone Line</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Mid Interview Terminate</td>
<td>34</td>
<td>0.22%</td>
</tr>
<tr>
<td>Quota Full</td>
<td>15</td>
<td>0.10%</td>
</tr>
<tr>
<td>Technical Phone Issue</td>
<td>19</td>
<td>0.12%</td>
</tr>
<tr>
<td>Completes</td>
<td>179</td>
<td>1.13%</td>
</tr>
<tr>
<td>TOTAL RECORDS DIALED</td>
<td>15787</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Incidence of eligibility among contacted households \( \text{eligible}/(\text{eligibility + ineligible}) \) = 70.30% on Landline, 45.61% on Cell.
Table 3. Sampling Statistics

The following sample statistics have been calculated based upon AAPOR’s Standard Definitions:

<table>
<thead>
<tr>
<th></th>
<th>Landline</th>
<th>Cell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sample used</td>
<td>15,787</td>
<td>43,011</td>
</tr>
<tr>
<td>I=Complete Interviews (1.1)</td>
<td>179</td>
<td>574</td>
</tr>
<tr>
<td>P=Partial Interviews (1.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R=Refusal and break off (2.1)</td>
<td>34</td>
<td>76</td>
</tr>
<tr>
<td>NC=Non-Contact (2.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O=Other (2.0, 2.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculating e:</td>
<td>0.049</td>
<td>0.147</td>
</tr>
<tr>
<td>UH=Unknown Household (3.1)</td>
<td>10,152</td>
<td>33,216</td>
</tr>
<tr>
<td>UO=Unknown other (3.2-3.9)</td>
<td>1,296</td>
<td>5,384</td>
</tr>
<tr>
<td>Response Rate 1</td>
<td>1.54%</td>
<td>1.46%</td>
</tr>
<tr>
<td>Response Rate 2</td>
<td>1.54%</td>
<td>1.46%</td>
</tr>
<tr>
<td>Response Rate 3</td>
<td>23.10%</td>
<td>9.06%</td>
</tr>
<tr>
<td>Response Rate 4</td>
<td>23.10%</td>
<td>9.06%</td>
</tr>
<tr>
<td>Cooperation Rate 1</td>
<td>84.04%</td>
<td>88.31%</td>
</tr>
<tr>
<td>Cooperation Rate 2</td>
<td>84.04%</td>
<td>88.31%</td>
</tr>
<tr>
<td>Cooperation Rate 3</td>
<td>84.04%</td>
<td>88.31%</td>
</tr>
<tr>
<td>Cooperation Rate 4</td>
<td>84.04%</td>
<td>88.31%</td>
</tr>
<tr>
<td>Refusal Rate 1</td>
<td>( \frac{R}{((I+P)+(R+NC+O) + UH + UO)} )</td>
<td>0.29%</td>
</tr>
<tr>
<td>Refusal Rate 2</td>
<td>( \frac{R}{((I+P)+(R+NC+O) + e(UH + UO))} )</td>
<td>4.39%</td>
</tr>
<tr>
<td>Refusal Rate 3</td>
<td>( \frac{R}{(I+P)+(R+NC+O)} )</td>
<td>15.96%</td>
</tr>
</tbody>
</table>

| Contact Rate 1 | \( \frac{(I+P)+R+O}{(I+P)+R+O+NC + (UH + UO)} \) | 1.83% | 1.66% |
| Contact Rate 2 | \( \frac{(I+P)+R+O}{(I+P)+R+O+NC + e(UH+UO)} \) | 27.48% | 10.26% |
| Contact Rate 3 | \( \frac{(I+P)+R+O}{(I+P)+R+O+NC} \) | 100.00% | 100.00% |

**Response Rate 4:** 23.10% for landline, 9.06% for cell

Response rate 4 is the standard rate used when evaluating response in a study. This rate divides completed interviews and partial interviews (partial surveys were not counted in this study) by eligible refusals, eligible noncontacts, and a portion of cases of unknown eligibility that are estimated to actually be eligible. The formula for this is provided in the table above.

Response rate 1 does not estimate a portion of unknown cases, instead adding all unknown cases to the divisor.

Response rate 2 is the same as 1 but includes partial completes as respondents.

Response rate 3 is the same as 4 but does not include partial completes as respondents (this means rate 3 and 4 are the same for this study).

**Quality/Data Verification**

Project supervisors validated 10% of each interviewer’s completed surveys by calling back the respondent and verifying specific responses. Additionally, supervisors continually monitored live calls through ReconMR’s call monitoring system in order to ensure proper interviewing procedures were maintained.

We also verified item nonresponse for the year of birth for the 105 total respondents who refused to provide the response upon initial interviewing. We were able to obtain 42 responses, bringing the overall item nonresponse down to 8% instead of 14% originally. A support staff person called back these respondents and let them know the importance of their response to the analysis, as well as to ensure confidentiality with the survey results being combined in aggregate, group statistics.
Appendix B: Complete 2020 Orange County Annual Survey Results

INTRO1  Hello, my name is ***, and I’m calling on behalf of Chapman University. We’re calling to conduct a scientific study of public opinion about some issues that affect Orange County. We are not trying to sell you anything.

Are you 18-34, or 35 or older? (IF UNDER 18) May I speak to someone 18 or older?

AGE  Are you 18 years of age or older?

1. YES
2. NO     SKIPTO FINITO
7. DK/NR SKIPTO FINITO
9. REFUSED SKIPTO FINITO

RESIDENT  Also, do you live in Orange County?

1. YES
2. NO     SKIPTO FINITO
7. DK/NR SKIPTO FINITO
9. REFUSED SKIPTO FINITO

INTRO2  Again, we are calling to conduct a scientific study of public opinion for Chapman University. The results of the study will be published in the Orange County Register. You can choose not to answer any of the questions or to end the survey at any time. Your answers will be strictly confidential. Would it be alright for me to ask the questions now? The survey will take about 15 minutes.

1. YES
2. NO     [SKIP TO APPT]

LANG  Would you be more comfortable conducting this survey in English or Spanish?

1. ENGLISH
2. SPANISH [SKIP TO}

I. OVERALL MOOD

PREZAPP  First, overall, do you approve or disapprove of the way that Donald Trump is handling his job as President?

1. APPROVE  43%
2. DISAPPROVE  57%
APCONG  What about Congress? Do approve or disapprove of the way that Congress is handling its job?

1. APPROVE 24%
2. DISAPPROVE 76%

CONGRESS2  If the elections for Congress were held today, would you vote for the Republican candidate or for the Democratic candidate?

1. REPUBLICAN 49%
2. DEMOCRAT 51%

PRESIDENT  If the election for the President were held today, would you vote for the Republican candidate or for the Democratic candidate?

1. REPUBLICAN 48%
2. DEMOCRAT 52%

DIRECTION  Do you think the United States is headed in the right direction or the wrong direction?

1. RIGHT DIRECTION 47%
2. WRONG DIRECTION 53%

TRUSTGOV  How much of the time do you think you can trust the government in Washington to do what is right? Just about always, most of the time, or only some of the time?

1. JUST ABOUT ALWAYS 3%
2. MOST OF THE TIME 16%
3. ONLY SOME OF THE TIME 71%
4. NEVER 10%

TRUSTMOV  In general, how much trust and confidence do you have in the mass media—such as newspapers, TV, and radio—when it comes to reporting the news fully, accurately and fairly—a great deal, a fair amount, not very much, or none at all?

1. A GREAT DEAL 6%
2. A FAIR AMOUNT 33%
3. NOT VERY MUCH 38%
4. NONE AT ALL 23%

CADIRECT  Do you think the State of California is headed in the right direction or the wrong direction?

1. RIGHT DIRECTION 44%
2. WRONG DIRECTION 56%
II. POLITICAL PROFILE

13. TRANS1  Now I’d like to ask you about some of major issues affecting the country. Please tell me if the first statement or the second statement comes closer to your views—even if neither is exactly right....

14. GUNS1  (A) There are too many restrictions the rights of citizens to own guns  (B) there are not enough restrictions on access to guns.

1. TOO MANY  35%
2. NOT ENOUGH  65%

15. ENVLAW  (A) Stricter environmental laws and regulations cost too many jobs and hurt the economy  (B) stricter environmental laws and regulations are worth the cost.

1. COST JOBS  37%
2. WORTH THE COST  63%

16. LESSDIFF14  Do you agree or disagree that the government should take action to reduce income differences between the rich and poor in America? Do you strongly agree, slightly agree, slightly disagree, or strongly disagree?

1. STRONGLY AGREE  29%
2. SLIGHTLY AGREE  23%
3. SLIGHTLY DISAGREE  15%
4. STRONGLY DISAGREE  33%

OC ISSUES

III. TRANS2  Now I’d like to turn to some issues that affect Orange County.

17. BIGPROB  What would you say is the biggest problem facing people in the Orange County area today? OPEN ENDED

[INTERVIEWER: DO NOT READ RESPONSE OPTIONS. CODE NUMBERED RESPONSE. OR JUST HAVE PERSON BRIEFLY SAY THE RESPONSE TO QUESTION]

1. CRIME, GANGS  2%
2. SCHOOLS, EDUCATION  2%
3. TRAFFIC AND TRANSPORTATION  5%
4. GROWTH, POPULATION, DEVELOPMENT  2%
5. IMMIGRATION  4%
6. DRUGS, DRUG ABUSE  1%
7. ENVIRONMENT, POLLUTION  2%
8. JOBS, THE ECONOMY  2%
9. MORALITY, VALUES  0%
10. HOUSING AFFORDABILITY, HOMELESS  47%
11. POVERTY, THE POOR  5%
12. LOCAL GOVERNMENT  1%
13. SCHOOLS, EDUCATION  0%
14. HIGH TAXES  4%
15. OTHER  12%

ORANGECE  How would you rate the Orange County area in general as a place to live? Would you say: excellent, good, fair, or poor?

1. EXCELLENT  37%
2. GOOD  43%
3. FAIR  16%
4. POOR  3%

FUTUREOC  As you look ahead 5 to 6 years from now, do you think the quality of living conditions in the Orange County area in the year 2025 will be better, worse, or about the same?

1. GETTING BETTER  18%
2. GETTING WORSE  37%
3. STAYED ABOUT THE SAME  44%

IMMIGRATION

ETHSOK  Do you think that increasing ethnic diversity in Orange County is [ROTATE]: a source of great strength for the region /or: a growing problem for the region?

1. SOURCE OF STRENGTH  79%
2. GROWING PROBLEM  21%

IMMIGBAD  Do immigrants to the U.S. generally (A) take more from the American economy than they contribute / or: (do they) (B) contribute more than they take?

1. TAKE MORE  31%
2. CONTRIBUTE MORE  69%

AIRPORT  In 2002, OC voters decided that they did not want the military base at El Toro to be an international airport. That land has become the Orange County Great Park in Irvine, which encompasses an active park and housing. In hindsight, should the former military base been made into an international airport or a large park and housing development?

1. AIRPORT  26%
2. PARK  74%
### IV. CLIMATE CHANGE  SCOPE OF PROBLEM

**PERSON**  How important is the issue of climate change to you personally?

<table>
<thead>
<tr>
<th>Importance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EXTREMELY IMPORTANT</td>
<td>31%</td>
</tr>
<tr>
<td>2. VERY IMPORTANT</td>
<td>24%</td>
</tr>
<tr>
<td>3. SOMEWHAT IMPORTANT</td>
<td>25%</td>
</tr>
<tr>
<td>4. NOT TOO IMPORTANT</td>
<td>9%</td>
</tr>
<tr>
<td>5. NOT AT ALL IMPORTANT BECAUSE IT IS NOT HAPPENING</td>
<td>11%</td>
</tr>
</tbody>
</table>

**WORRIED**  How worried are you about climate change?

<table>
<thead>
<tr>
<th>Worried Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. VERY WORRIED</td>
<td>37%</td>
</tr>
<tr>
<td>2. SOMEWHAT WORRIED</td>
<td>29%</td>
</tr>
<tr>
<td>3. NOT VERY WORRIED</td>
<td>15%</td>
</tr>
<tr>
<td>5. NOT AT ALL WORRIED</td>
<td>18%</td>
</tr>
</tbody>
</table>

**THINK**  How much do you think climate change will harm you personally?

<table>
<thead>
<tr>
<th>Harm Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A GREAT DEAL</td>
<td>21%</td>
</tr>
<tr>
<td>2. A MODERATE AMOUNT</td>
<td>30%</td>
</tr>
<tr>
<td>3. ONLY A LITTLE</td>
<td>24%</td>
</tr>
<tr>
<td>5. NOT AT ALL</td>
<td>25%</td>
</tr>
</tbody>
</table>

**FUTUREGEN**  How much do you think climate change will harm future generations of people?

<table>
<thead>
<tr>
<th>Harm Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A GREAT DEAL</td>
<td>55%</td>
</tr>
<tr>
<td>2. A MODERATE AMOUNT</td>
<td>18%</td>
</tr>
<tr>
<td>3. ONLY A LITTLE</td>
<td>14%</td>
</tr>
<tr>
<td>5. NOT AT ALL</td>
<td>13%</td>
</tr>
</tbody>
</table>

**CLIMATE**  How serious a problem would you say is the threat of climate change? Would you say: very serious, somewhat serious, not very serious, or not a problem at all?

<table>
<thead>
<tr>
<th>Severity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. VERY SERIOUS</td>
<td>51%</td>
</tr>
<tr>
<td>2. SOMEWHAT SERIOUS</td>
<td>22%</td>
</tr>
<tr>
<td>3. NOT VERY SERIOUS</td>
<td>15%</td>
</tr>
<tr>
<td>4. NOT A PROBLEM</td>
<td>12%</td>
</tr>
</tbody>
</table>

**IMPACT**  Is climate change something that is affecting you personally right now, do you believe that it will affect you primarily later in your life, or do you believe it will primarily affect future generations?

<table>
<thead>
<tr>
<th>Impact Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. RIGHT NOW</td>
<td>15%</td>
</tr>
<tr>
<td>2. IN YOUR LIFE</td>
<td>14%</td>
</tr>
<tr>
<td>3. AFFECT FUTURE GENERATIONS</td>
<td>63%</td>
</tr>
<tr>
<td>7. DK/NR</td>
<td>8%</td>
</tr>
</tbody>
</table>
WHYWARM

What do you believe is the primary cause of climate change? Is it mainly caused by human activities or mainly caused by normal climate cycles?

1. HUMAN ACTIVITIES 63%
2. NORMAL CLIMATE CYCLES 35%
7. DK/NR 2%

MEDIA1

Thinking about what is said in the news, in your view is the seriousness of climate change — [ROTATED: generally exaggerated, generally correct, or is it generally underestimated]?

1. GENERALLY EXAGGERATED 41%
2. GENERALLY CORRECT 28%
3. GENERALLY UNDERESTIMATED 32%

SCIENCE

Just your impression, which one of the following statements do you think is most accurate — most scientists believe that climate change IS occurring, most scientists believe that climate change is NOT occurring, or most scientists are UNSURE about whether climate change is occurring or not?

1. MOST SCIENTISTS BELIEVE THAT climate change IS OCCURRING 73%
2. MOST SCIENTISTS BELIEVE THAT climate change IS NOT OCCURRING 6%
3. OR MOST SCIENTISTS ARE UNSURE ABOUT WHETHER GLOBAL WARMING IS OCCURRING OR NOT? 20%

INFLUENCE

What source of information has been the biggest influence on your thinking about climate change?

1. MEDIA REPORTS ABOUT SEVERE WEATHER (like drought, wildfires, and rising sea levels) 24%
2. SCIENTIFIC REPORTS 33%
3. EDUCATORS 7%
4. ELECTED LEADERS 1%
5. PERSONAL EXPERIENCE (with wildfires, drought, rising seas) 9%
6. BUSINESS LEADERS 1%
7. RELIGIOUS LEADERS 1%
8. YOUR OWN INTUITION 8%
9. SOMETHING ELSE (OPN) 9%
V. GOVERNMENT’S ROLE

GOVLEV Which level of U.S. government should be primarily responsible for fighting climate change—Federal, State, County or your local city, or all of the above?

1. FEDERAL 12%
2. STATE 4%
3. COUNTY 1%
5. YOUR LOCAL CITY 2%
6. ALL LEVELS 72%
7. NONE 10%

FEDERAL

PARIS In 2015, the United States reached an international agreement in Paris with 196 other countries to limit the pollution that causes climate change. In 2017 President Trump announced that the U.S. will exit the agreement because he felt it would hurt the U.S. economy.

Do you think the U.S. should participate in this agreement, or not participate?

1. PARTICIPATE 63%
2. NOT PARTICIPATE 37%

CALIFORNIA

PRIORITIES Is the fight against climate change coming at the expense of other needs, such as California’s need for lower-cost housing?

1. YES 47%
2. NO 53%

RULES Do you think California should follow the federal government’s rules on greenhouse gases, or do you think California should be allowed to make its own rules on greenhouse gases?

1. FOLLOW FEDERAL GOVERNMENT’S RULES 46%
2. EACH STATE SHOULD BE ABLE TO MAKE ITS OWN RULES 54%

CALEADER When it comes to efforts to fight climate change, how important is it to you that California acts as a leader around the world?

1. VERY IMPORTANT 46%
2. SOMewhat IMPORTANT 21%
3. NOT TOO IMPORTANT 10%
4. NOT IMPORTANT AT ALL 23%
SB100  Do you favor or oppose the state law that requires 100% of the state’s electricity to come from renewable energy sources by 2045 even if this costs you more for electricity?

1. FAVOR  57%
2. OPPOSE  43%

CABANICE  Should California ban the sale of new vehicles that run on gas or diesel by the year 2045, 25 years from now?

1. YES  45%
2. NO   55%

ZEROCAR  The official target for all-electric vehicle sales in the state is now 5 million electric cars on California’s roads by 2030. This will mean that 40 percent of all new car sales in the state will be zero-emission. Also, the number of Electric Vehicle (EV) charging stations in the state will jump from 14,000 today to 250,000. The state will also beef up its incentives and rebate programs for people who buy zero-emissions cars. [IF R ASKS: Some of the cost of expanding the charging infrastructure will be paid for money Volkswagen has agreed to pay to settle claims connected to its diesel cheating scandal. Proceeds from California’s cap & trade carbon emissions will also pay part of the cost.]

Do you support the plan to dramatically increase the number of zero-emission cars in California?

1. YES  67%
2. NO   33%

SEARISE  When it comes to rising sea levels, do you prefer that communities build sea walls to protect existing structures, or do you prefer a strategy in which the ocean takes over portions of the coast as the sea rises and existing structures are relocated or removed?

1. SEA WALLS  10%
2. RELOCATE EXISTING STRUCTURES AS SEA RISES  13%
3. BOTH  76%
VI. FIGHTING CLIMATE CHANGE

ENERGEMP  Do you think that California should put more emphasis, less emphasis, or about the same emphasis as it does now on producing domestic energy from each of the following sources [RANDOM]

SOLAR  Solar Power:

1. MORE EMPHASIS  76%
2. LESS EMPHASIS  6%
3. SAME EMPHASIS  18%

WIND  Wind:

1. MORE EMPHASIS  64%
2. LESS EMPHASIS  13%
3. SAME EMPHASIS  23%

NATGAS  Natural Gas:

1. MORE EMPHASIS  43%
2. LESS EMPHASIS  21%
3. SAME EMPHASIS  36%

OIL  Oil:

1. MORE EMPHASIS  18%
2. LESS EMPHASIS  54%
3. SAME EMPHASIS  28%

NUKE  Nuclear Power

1. MORE EMPHASIS  33%
2. LESS EMPHASIS  43%
3. SAME EMPHASIS  24%

COAL  Coal:

1. MORE EMPHASIS  14%
2. LESS EMPHASIS  65%
3. SAME EMPHASIS  22%
SONGS
The San Onofre nuclear power plant is near San Clemente on the Pacific Coast. It was shut down in 2013 and is currently being decommissioned. The plant provided 20 percent of the electricity used by residences in Orange County. A state law prohibits construction of new nuclear power plants in California until a means of disposal of nuclear waste is approved.

There are two people, SMITH and JONES.

SMITH believes nuclear power is unsafe and commercially nonviable.

JONES says that we need to revisit nuclear energy because it does not produce greenhouse gas emissions and has other benefits.

Who do you agree with more, SMITH or JONES?

1. SMITH 43%
2. JONES 57%

PERSONAL
What are you willing to do personally to fight climate change?

ROTATE YES OR NO

P1 PURCHASE AN ELECTRIC CAR
1. YES 68%
2. NO 32%

P2 INSTALL SOLAR PANELS ON YOUR HOUSE
1. YES 81%
2. NO 19%

P3 BUY A CAR THAT GETS MUCH BETTER GAS MILEAGE
1. YES 86%
2. NO 14%

P4 CUT BACK ELECTRICITY USE
1. YES 81%
2. NO 19%

P5 PAY MORE FOR ELECTRICITY THAT IS GENERATED BY SOLAR AND WIND
1. YES 59%
2. NO 41%
P6  PAY MORE FOR GASOLINE
1. YES   36%
2. NO    64%

P7  PAY MORE FOR AN ENERGY-EFFICIENT HOME
1. YES   73%
2. NO    27%

P9  CHANGE MY DIET
1. YES   66%
2. NO    34%

P10 ALLOW A NUCLEAR POWER PLANT BUILT 25 MILES OR MORE FROM MY HOME.
1. YES   40%
2. NO    60%

P11 HAVING FEWER BIOLOGICAL CHILDREN
1. YES   50%
2. NO    50%

P12 SAYING YES TO DEVELOPING HIGHER DENSITY HOUSING IN YOUR COMMUNITY
1. YES   42%
2. NO    58%

P13 USE MASS TRANSIT MORE FREQUENTLY
1. YES   50%
2. NO    50%

P14 MOVE TO A TRANSIT ORIENTED DEVELOPMENT COMMUNITY, WHICH HAS SHORTER COMMUTES TO WORK, SCHOOLS, AND SHOPPING
1. YES   49%
2. NO    51%

P16 SOMETHING ELSE (OPN)
1. YES   21%
2. NO    79%
POLITICAL PROFILE

PARTY
Do you think of yourself as closer to the Republican Party or Democratic Party?

1. REPUBLICAN PARTY 42%
2. DEMOCRATIC PARTY 42%
3. NEITHER PARTY OR DECLINE TO STATE 16%

IDEOLOGY
Next, do you consider yourself to be politically… [READ LIST, ALTERNATE PRESENTATION ORDER TOP TO BOTTOM]

1. VERY LIBERAL 12%
2. SOMEWHAT LIBERAL 19%
3. MIDDLE-OF-THE-ROAD 31%
4. SOMEWHAT CONSERVATIVE 25%
5. VERY CONSERVATIVE 13%

DEMOGRAPHIC QUESTIONS

[IF RESPONDENT REFUSES ANY DEMO QUESTION, SAY: “WE UNDERSTAND AND RESPECT THAT THIS INFORMATION IS CONFIDENTIAL, WE ASK ONLY FOR RESEARCH PURPOSES AND WILL KEEP ALL OF THIS INFORMATION ABSOLUTELY ANONYMOUS.”]

YEARBORN.
Finally, we have a few demographic questions. In what year were you born?

1. SPECIFY (E.G. 1972) [OPEN]
7. DK/NR
9. REFUSED

PARENT
Are you a parent, stepparent, or legal guardian of any children 18 or younger?

1. YES 31%
2. NO 69%

EDUC.
What was the last grade of school that you completed?
[IF NECESSARY: READ LIST]

1. LESS THAN HIGH SCHOOL DIPLOMA/GED 3%
2. HIGH SCHOOL DIPLOMA/GED 12%
3. SOME COLLEGE, NO DEGREE 19%
4. ASSOCIATE’S DEGREE 12%
5. BACHELOR’S DEGREE 28%
6. GRADUATE OR PROFESSIONAL DEGREE (E.G. TEACHING CREDENTIAL, MASTERS, PH.D., JD) 25%
RACE
How would you describe your race and ethnicity?

[READ LIST; ACCEPT UP TO TWO ANSWERS] [INTERVIEWER: IF RESPONDENT SAYS "INDIAN" PROBE: is that American Indian or Asian Indian?]  

1. ASIAN 7%  
2. HISPANIC OR LATINO 20%  
3. NON-HISPANIC CAUCASIAN OR WHITE 59%  
4. BLACK OR AFRICAN AMERICAN 2%  
5. AMERICAN INDIAN OR ALASKA NATIVE 1%  
6. NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER  
5. OTHER [SPECIFY] 3%  
6. MIXED RACE 3%  
9. DK/REFUSED 5%

ZIPCODE.
For sampling purposes only, may I have your correct zip code?  

ZIP>  
77777. DON’T KNOW/ NO RESPONSE  
99999. REFUSED

INCOME
Finally, which of the following categories best describes your total annual household income before taxes, from all sources in 2019 [PROBE: your best estimate is fine AND/OR REREAD LIST BEFORE ACCEPTING DON’T KNOW OR REFUSED”] [IF RESPONDENT REFUSES, SAY: “We understand and respect that this information is confidential, we ask only for research purposes and will keep all of this information absolutely anonymous”]

Please stop me when I reach the income category that includes your total household income in 2019, that is, the income for all members of the household during the past year? [READ LIST]

1. LESS THAN $25,000 5%  
2. BETWEEN $25,000 to $49,000 13%  
4. BETWEEN $50,000 and $75,000 16%  
5. BETWEEN $75,000 and $100,000 17%  
6. BETWEEN $100,000 and $125,000 11%  
7. BETWEEN $125,000 and $150,000 11%  
8. MORE THAN $150,000 27%

ICLANG
INTERVIEWER: RECORD LANGUAGE IN WHICH INTERVIEW WAS CONDUCTED  

1. ENGLISH 98%  
2. SPANISH 2%
ICGENDER  INTERVIEWER RECORD GENDER BY OBSERVATION

1. MALE    54%
2. FEMALE   46%

FINITO  THANK YOU VERY MUCH FOR YOUR TIME, BUT WE ARE ONLY INTERVIEWING PERSONS 18 OR OLDER AND RESIDENTS OF ORANGE COUNTY.