

EMPLOYMENT & TRAVEL SURVEY
SUMMARY REPORT ON PANDEMIC IMPACTS

PREPARED FOR
OCTA



AUGUST 13, 2020



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INTRODUCTION

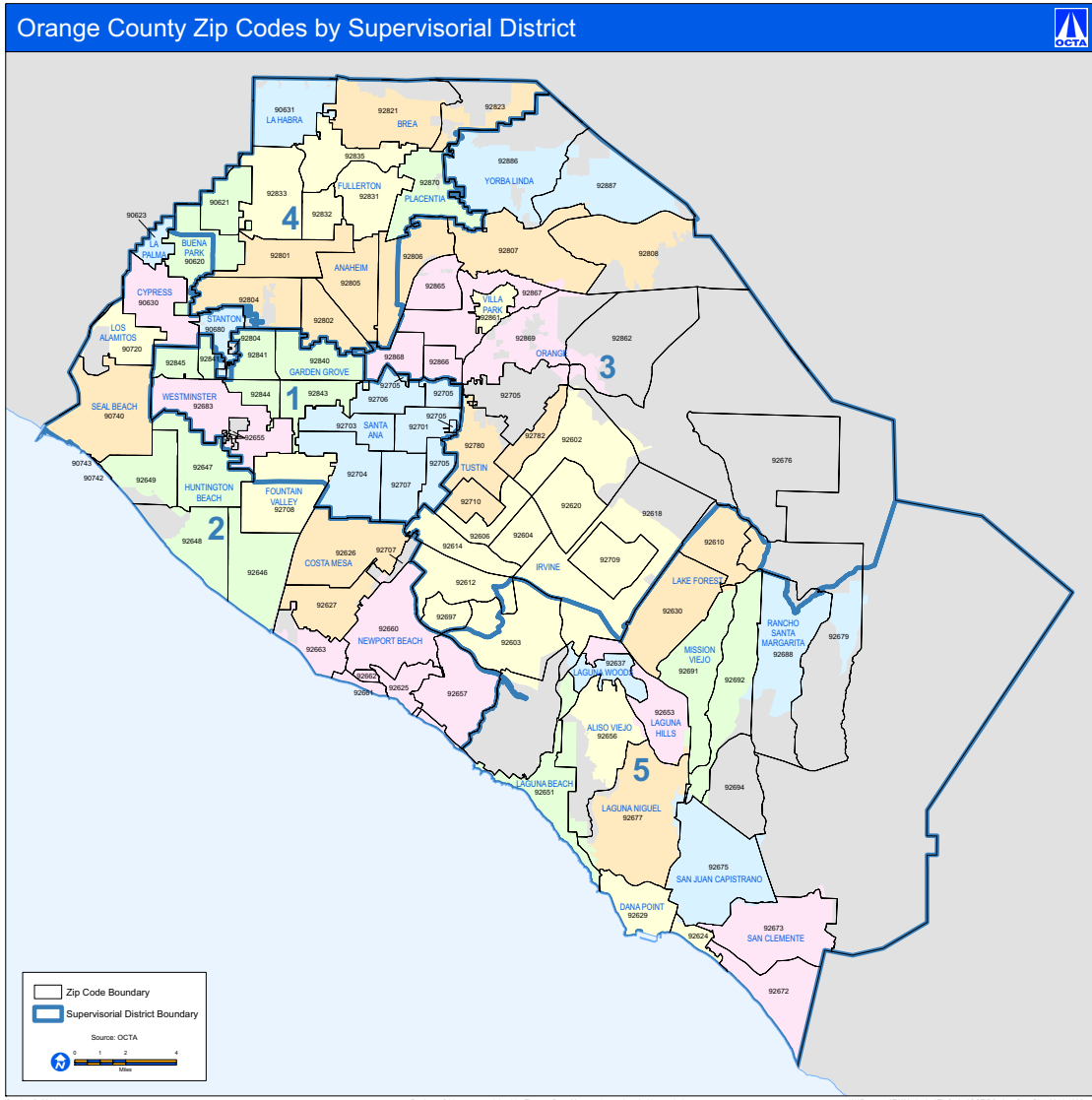
The arrival of coronavirus in California triggered a statewide shelter-in-place mandate in March 2020, effectively shuttering many sectors of the world's fifth largest economy for several months and sending ripple effects through most aspects of daily life. In addition to the direct economic impacts including job losses, salary cuts, and reduced spending, the threat of COVID-19 and the closure of non-essential businesses dramatically altered how and where people work, play, shop, and travel. Although the State has begun a phased reopening of the economy, the public health and economic impacts of the coronavirus are likely to be felt well into the future. What is less clear is how the experience of the last four months may also have lasting effects on public attitudes, working arrangements, and travel behaviors in ways that are relevant to OCTA's mission to develop an integrated and balanced transportation system that supports the diverse travel needs and reflects the character of Orange County.

MOTIVATION FOR RESEARCH The purpose of the baseline survey described in this report was to develop a statistically reliable understanding of how COVID-19 and the temporary closure of non-essential businesses in California has altered public attitudes, working arrangements, travel behaviors, and mode choice in the short-term. By taking a snapshot in July 2020, the survey also establishes baseline measures against which a future tracking survey can be employed to identify enduring, long-term impacts. Specifically, the survey was designed to:

- Identify the issues that residents view as the most important facing Orange County today
- Gauge residents' expectations for the coronavirus pandemic
- Profile their employment status, work schedule, frequency of remote work, and commute behavior in February 2020 (prior to the pandemic) and July 2020 (during the pandemic)
- Profile their use of rideshare, transit, and active transportation, as well as their shopping and dining habits, in February 2020 (prior to the pandemic) and July 2020 (during the pandemic)
- Identify their preferences with respect to remote working once the coronavirus outbreak is over

OVERVIEW OF METHODOLOGY A full description of the methodology used for this study is included later in this report (see *Methodology* on page 30). In brief, a total of 2,548 randomly selected Orange County adult residents participated in the survey between July 10 and July 22, 2020. The survey followed a mixed-method design that employed multiple recruiting methods (telephone and email) and multiple data collection methods (telephone and online). The interviews averaged 15 minutes in length and were conducted in English, Spanish, and Vietnamese. The results presented in this report are representative at the countywide level, as well as within the five Supervisorial Districts identified in Figure 1 on the next page.

FIGURE 1 MAP OF SUPERVISORIAL DISTRICTS AND ZIP CODES



ORGANIZATION OF REPORT This report is designed to meet the needs of readers who prefer a summary of the findings as well as those who are interested in the details of the results. For those who seek an overview of the findings, the section titled *Key Findings* is for you. It provides a summary of the most important factual findings of the survey and a discussion of their implications. For the interested reader, this section is followed by a more detailed question-by-question discussion of the results from the survey by topic area (see *Table of Contents*), as well as a description of the methodology employed for collecting and analyzing the data (see *Methodology* on page 30). And, for the truly ambitious reader, the questionnaire used for the interviews is contained at the back of this report (see *Questionnaire & Toplines* on page 33), and a complete set of crosstabulations for the survey results is contained in Appendix A, which is bound separately.

DISCLAIMER The statements and conclusions in this report are those of the authors (Dr. Timothy McLarney and Richard Sarles) at True North Research, Inc. and not necessarily those of OCTA. Any errors and omissions are the responsibility of the authors.

ABOUT TRUE NORTH True North is a full-service survey research firm that is dedicated to providing public agencies with a clear understanding of the values, perceptions, priorities, and concerns of their residents and customers. Through designing and implementing scientific surveys, focus groups, and one-on-one interviews, as well as expert interpretation of the findings, True North helps its clients to move with confidence when making strategic decisions in a variety of areas—such as planning, policy evaluation, performance management, organizational development, establishing fiscal priorities, and developing effective public information campaigns.

During their careers, Dr. McLarney (President) and Mr. Sarles (Principal Researcher) have designed and conducted over 1,000 survey research studies for public agencies, including more than 350 studies for California municipalities, special districts, and transportation planning agencies.



KEY FINDINGS

This study was designed to provide OCTA with a statistically reliable understanding of how COVID-19 and the temporary closure of non-essential businesses in California has altered Orange County residents' attitudes, working arrangements, travel behaviors, and mode choice in the short-term. By taking a snapshot in July 2020, the survey also establishes baseline measures against which a future tracking survey can be employed to identify enduring, long-term impacts.

Whereas subsequent sections of this report are devoted to conveying the detailed results of the survey, in this section we attempt to 'see the forest through the trees' and note how the collective results of the survey answer some of the key questions that motivated the research.

Is the coronavirus pandemic top-of-mind for Orange County residents?

Yes. When asked in an open-ended manner to identify the *most* important issue facing Orange County today, the coronavirus pandemic/COVID-19 topped the list, being mentioned by more than one-third (34%) of respondents. The next nearest specific issues were homelessness (12%), housing availability/affordability (7%), traffic congestion (6%), and public safety/drugs/crime (5%). It is worth noting that with the exception of COVID-19 being new and topping the list, the rank order of the next three items (homelessness, housing, and traffic congestion) is the same as the top three items found in 2018.¹

Residents' concerns about the coronavirus were driven, in part, by what they see as the pandemic's trajectory in Orange County moving forward. Nearly two-thirds of respondents (63%) were pessimistic about the coronavirus outbreak in Orange County, anticipating that the worst is yet to come. Approximately 20% were optimistic, feeling that the worst is behind us. The remaining respondents were either uncertain (16%) or preferred to not share their opinion (1%). Although certain groups (e.g., those under 35, females, and Asians) were more pessimistic than others, it is striking that the dominant opinion in *every* identified subgroup was that the worst of the coronavirus pandemic lies ahead for Orange County.

It is also worth noting that Orange County residents' expectations for the pandemic in July 2020 were more pessimistic (and uncertain) than Californians' expectations in May 2020. According to a Public Policy Institute of California (PPIC) poll conducted in May 2020, Californians were fairly evenly split between those who anticipated that the worst of the pandemic is yet to come (48%) and those who felt the worst is behind us (46%), with just 6% expressing uncertainty.²

1. See OCTA's *2018 Attitudinal & Awareness Survey*, report prepared by True North Research, August 2018.
2. Source: Public Policy Institute of California Statewide Survey: *Californians & Their Government*, May 2020.

How has the pandemic impacted Orange County residents' employment?

Consistent with the sharp increase in unemployment recorded statewide during the months of April, May and June in response to the pandemic,³ the survey results reveal that Orange County residents experienced significant job losses between February and June, 2020. Full-time employment declined 9% during this period, with additional declines in part-time employment (-1%) and self-employment (-1.6%). Meanwhile, the percentage of individuals surveyed who were unemployed/looking for work, laid-off, or furloughed increased from 4% to 18% between February and June, 2020.

Although all subgroups in Orange County experienced an increase in unemployment between February and June 2020, certain subgroups (those from households earning less than \$50,000 annually, Latinos and African Americans, residents of Supervisorial District 4, and those aged 25 to 34) experienced a larger net loss of jobs due to the pandemic when compared to their counterparts.

In addition to the net loss of jobs noted above, there were other less obvious impacts that occurred between February and June 2020. Among those who remained employed, the number of days worked per week declined from 4.95 days on average in February 2020 to 4.73 days per week in June 2020. Approximately 4% of individuals who were employed in February *and* June were also compelled to switch employers in the interim, with young adults (18 to 24) and those in households earning less than \$25,000 annually being the most likely to have switched employers during this period.

How has the pandemic impacted where employees work?

Concerns about COVID-19 transmission in the work place and guidelines issued by the State of California and the Centers for Disease Control and Prevention (CDC) prompted many Orange County businesses to shift to a remote working model when the pandemic struck, with employees working from home rather than coming to a central work site. The survey results confirm there has been a dramatic shift in *where* business is being conducted in Orange County.

Prior to the pandemic in February 2020, less than one-quarter (23%) of employed Orange County residents indicated they worked from home at least one day per week, which translated to an overall average of 0.76 days per week working from home per employee. Four months later in June 2020, 61% of employed residents reported that they worked from home at least one day per week, and the average number of days working from home per employee had jumped to 2.52 per week.

3. According to the California Employment Development Department (EDD), the unemployment rate in California jumped from 4.2% in February to 15.5% in April 2020, reached 16.4% in May 2020, and tapered to 14.9% in June 2020.

The ability for an employee to work from home requires an employer who embraces (or at least accepts) the practice. Prior to the arrival of COVID-19, most employed Orange County residents (70%) indicated that their employer did *not* offer them the option to work from home at least one day per week. By June 2020, the pandemic had forced many employers to change their policies regarding remote work, as two-thirds of employed Orange County residents reported that their employer allowed them to telework from home at least one day per week in June.

Although all industries and occupational categories experienced an increase in remote working between February and June 2020, the magnitude of the shift varied greatly. When compared to the levels set in February 2020, Orange County residents employed in education, government/public administration, and financial services reported the greatest shift in their employers allowing remote work at least once per week, while those employed in retail reported little change. Employees in certain occupations were also more likely than their counterparts to be offered remote working opportunities in June 2020 that did not exist in February, especially teachers, IT specialists, and those in professional specialty occupations (not IT). At the other end of the spectrum, nurses reported little change in remote working options offered by their employer, while those performing protective services reported only modest change.

How has the pandemic impacted commute patterns?

The dramatic increase in remote working that occurred between February and June 2020 had a direct impact on commute patterns in Orange County. With far more employees reporting that they *only* worked from home in June (47%) when compared to February (12%), the percentage who commuted to a work site at least occasionally declined from 89% in February to 54% in June 2020. The net reduction in work commutes was felt in every mode category, with the percentage of employees reporting that they typically commute to work by driving alone declining from 77% to 48%, and use of public transit, active transportation, and carpool/van-pool for commuting was cut in half during the same period.

In what other ways has the pandemic impacted residents' activities?

In response to the pandemic, Orange County residents made significant changes in their travel, shopping, and dining habits. With respect to travel behavior, the percentage of days they **drove alone** in a vehicle declined from 65% in February to 43% in June, use of **on-demand ride-share** declined from 4.4% of days in February to 0.9% in June, **carpooling** with someone they don't live with declined from 4.3% of days in February to 1.5% in June, riding a **bus** declined from 3.3% of days on average in February to 0.9% in June, while riding **Metrolink** or **Amtrak** declined from 1.4% of days in February to 0.2% in June.

With respect to shopping and dining, a dramatic decline in the percentage of days respondents reported **eating a meal at a restaurant** (24% in February vs 5% in June) was only partially offset by an increase in the percentage of days they ordered food for **pick-up** (12% in February vs 17% in June) or **delivery** (6% in February vs 8% in June). When compared to the patterns in February, there was also a modest uptick in the percentage of days Orange County residents purchased **groceries online** (2% in February vs 5% in June) and **purchased other products online** (20% in February vs 25% in June).

Can we expect the shift to working from home to endure, even after the pandemic?

Although the shift to remote working has been dramatic (see above), the question remains as to whether (and to what degree) the practice will continue once the coronavirus outbreak is over. Will the large-scale experiment in working from home continue after it is no longer necessary for public health reasons, or will employers and employees shift back to pre-pandemic patterns?

A future tracking survey will provide a definitive answer to this question, as it will allow OCTA to measure the degree to which remote working patterns that evolved during the pandemic ultimately stick in its absence. In the meantime, however, the preferences of employees who worked from home at least one day per week in June 2020 provide some insight as to their intentions regarding working from home in the future. When asked whether—after the coronavirus outbreak is over—they would prefer to increase, decrease, or keep about the same the percentage of their work days that they primarily work from home, 51% preferred to maintain their current remote work patterns. Approximately 12% preferred to *increase* the percentage of their days that they work from home, whereas 35% would opt to *decrease* the percentage of days they work from home.

In other words, nearly two-thirds of employees who live in Orange County prefer to maintain their current (elevated) remote working situation after the pandemic recedes, or increase the practice. If employees' intentions are a driving factor in shaping the post-pandemic work environment, the increases in remote working that occurred during the pandemic will likely show some resilience in the future.

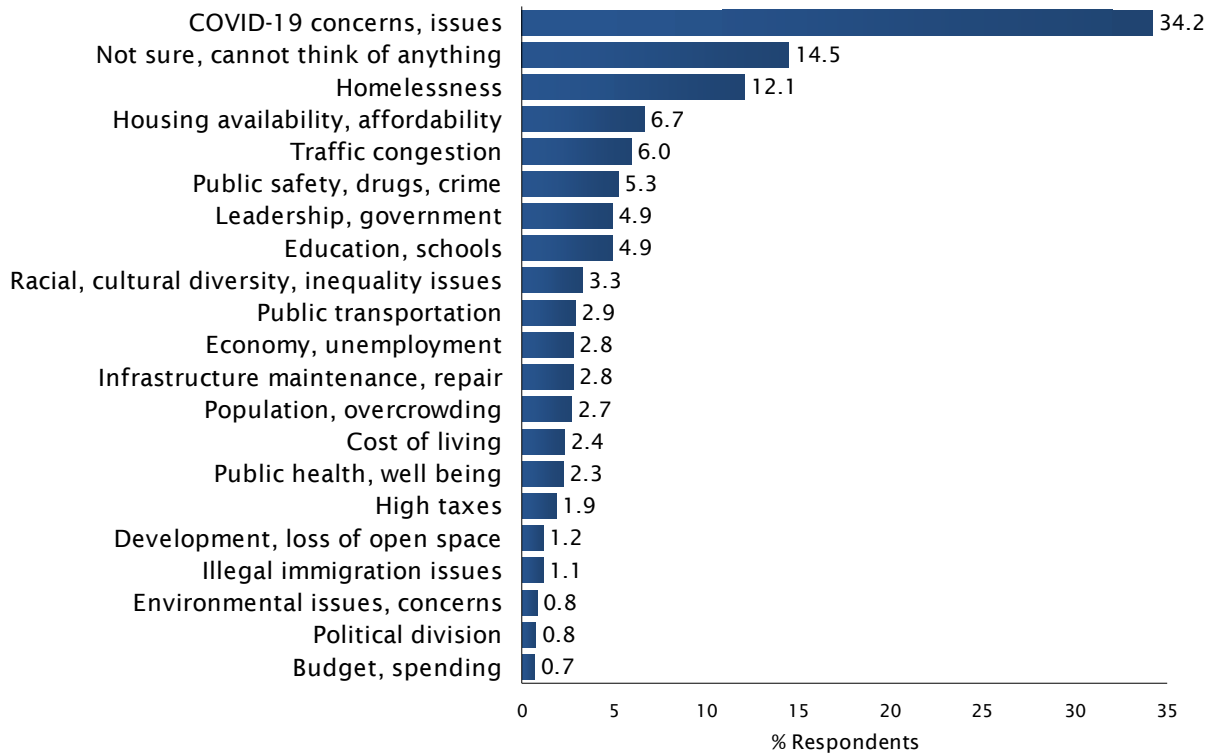
LOCAL ISSUES & COVID-19

At the outset of the interview, respondents were asked to identify the most important issues facing Orange County today, as well as their expectations for the coronavirus pandemic in the County.

MOST IMPORTANT ISSUES The opening question in this series ask respondents to identify the most important issue facing Orange County today. Question 2 was presented in an open-ended manner, which allowed respondents to mention any issue that came to mind without being prompted by—or restricted to—a particular list of issues. True North later reviewed the verbatim responses and grouped them into the categories shown in Figure 2.

Question 2 *Thinking about Orange County as a whole, what would you say is the most important issue facing Orange County today?*

FIGURE 2 MOST IMPORTANT ISSUE FACING COUNTY



The coronavirus pandemic/COVID-19 was top-of-mind for many respondents, with one-third (34%) identifying it as the most important issue facing Orange County today. Other specific issues mentioned in response to Question 2 included homelessness (12%), housing availability/affordability (7%), traffic congestion (6%), and public safety/drugs/crime (5%). It is also worth noting that nearly 15% of respondents could not identify an issue they felt was the most important facing Orange County as a whole. Table 1 on the next page shows how responses to Question 2 varied by Supervisorial District. Although the rank order varied slightly, COVID-19 was the top-rated issue in all five districts, with homelessness also being among the top three issues in three of five districts.

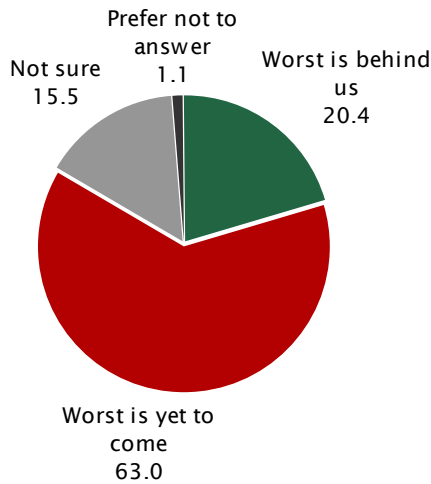
TABLE 1 TOP ISSUES FACING COUNTY BY SUPERVISORIAL DISTRICT

Supervisorial District				
One	Two	Three	Four	Five
COVID-19 concerns, issues	COVID-19 concerns, issues	COVID-19 concerns, issues	COVID-19 concerns, issues	COVID-19 concerns, issues
Homelessness	Not sure, cannot think of anything	Not sure, cannot think of anything	Homelessness	Not sure, cannot think of anything
Not sure, cannot think of anything	Homelessness	Traffic congestion	Not sure, cannot think of anything	Housing availability, affordability
Housing availability, affordability	Leadership, government	Homelessness	Traffic congestion	Education, schools
Public safety, drugs, crime	Education, schools	Education, schools	Public safety, drugs, crime	Homelessness
Traffic congestion	Housing availability, affordability	Housing availability, affordability	Housing availability, affordability	Traffic congestion
Leadership, government	Traffic congestion	Racial, cultural diversity, inequality issues	Leadership, government	Leadership, government
Education, schools	Public safety, drugs, crime	Leadership, government	Public transportation	Public safety, drugs, crime
Public transportation	Public transportation	Public safety, drugs, crime	Infrastructure maintenance, repair	Racial, cultural diversity, inequality issues
Public health, well being	Racial, cultural diversity, inequality issues	Public health, well being	Economy, unemployment	Population, overcrowding

EXPECTATIONS FOR CORONAVIRUS PANDEMIC Anticipating that many respondents would identify the coronavirus/COVID-19 as the most important issue facing Orange County today, the survey explored respondents’ views regarding the trajectory of the pandemic. When it comes to the coronavirus outbreak in Orange County, do they think the worst is behind us—or is the worst yet to come? As shown in Figure 3 on the next page, nearly two-thirds of respondents (63%) were pessimistic about the coronavirus outbreak in Orange County, anticipating that the worst is yet to come. Approximately 20% were optimistic, feeling that the worst is behind us. The remaining respondents were either uncertain (16%) or preferred to not share their opinion (1%).

Question 3 Which comes closer to your view about where Orange County stands in the coronavirus outbreak: the worst is behind us OR the worst is yet to come?

FIGURE 3 OPINION OF COVID-19 STATUS



Figures 4-6 show how expectations for the coronavirus pandemic in Orange County varied by age, employment status in February and June, gender, length of residence in Orange County, Supervisorial District, ethnicity, and household income. Although certain groups (e.g., those under 35, females, and Asians) were more pessimistic than others, it is striking that the dominant opinion in *every* identified subgroup was that the worst of the coronavirus pandemic lies ahead for Orange County.

FIGURE 4 OPINION OF COVID-19 STATUS BY AGE, EMPLOYMENT STATUS FEB VS JUN & GENDER

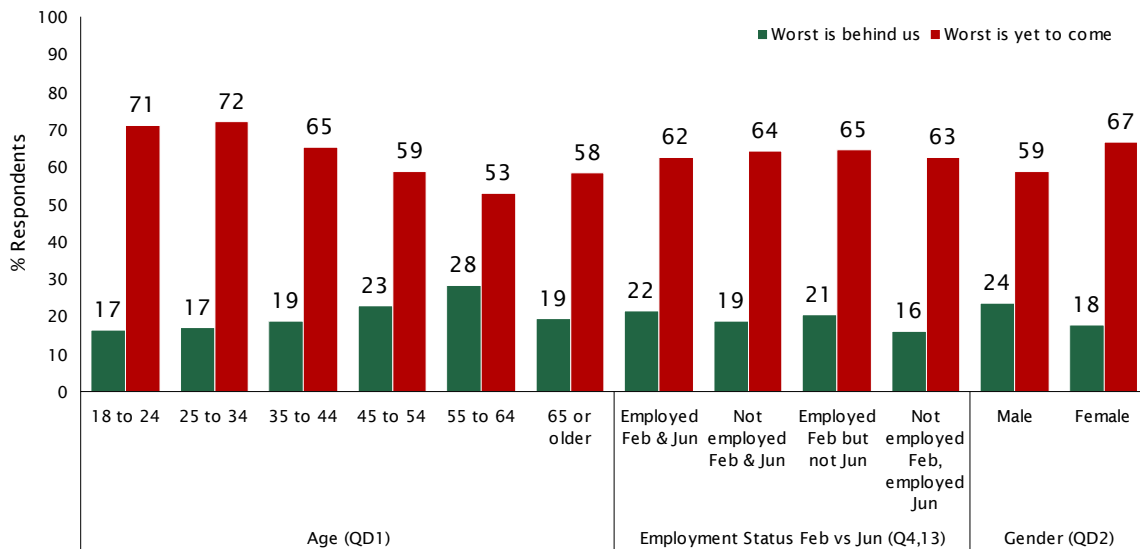


FIGURE 5 OPINION OF COVID-19 STATUS BY YEARS IN ORANGE COUNTY & SUPERVISORIAL DISTRICT

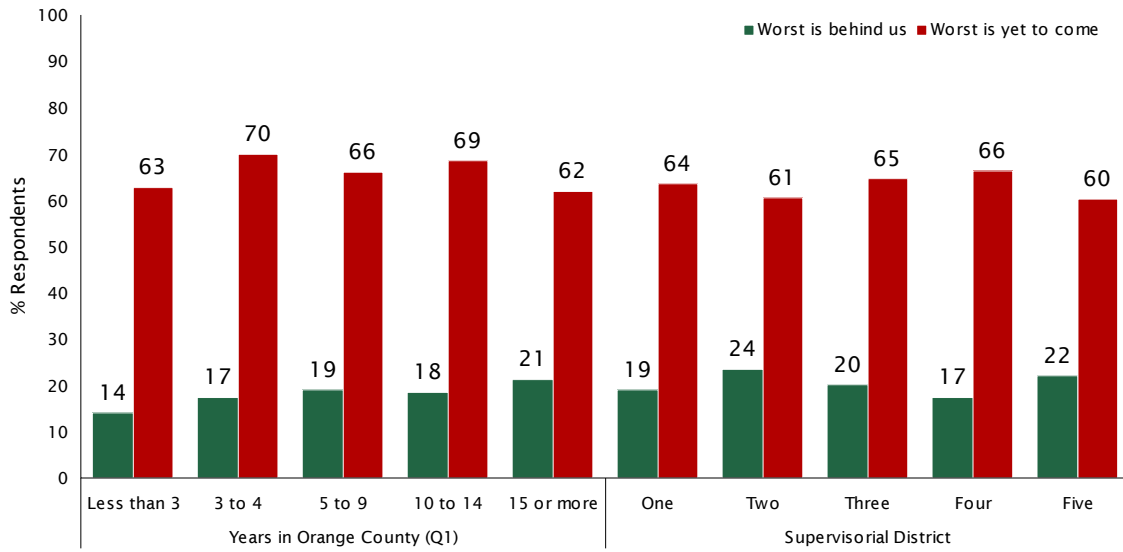
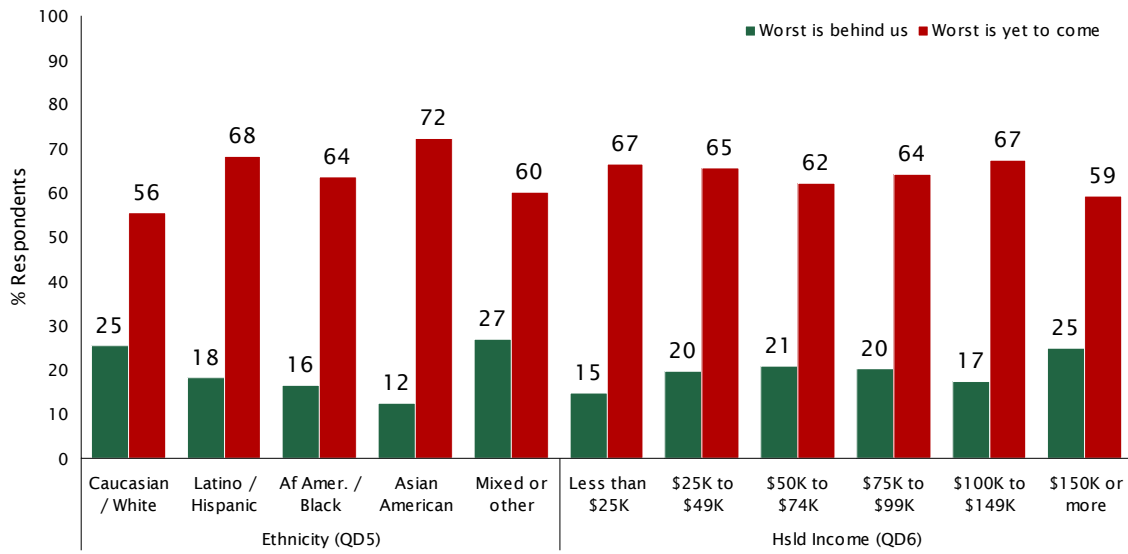


FIGURE 6 OPINION OF COVID-19 STATUS BY ETHNICITY & HSLD INCOME



EMPLOYMENT & COMMUTE

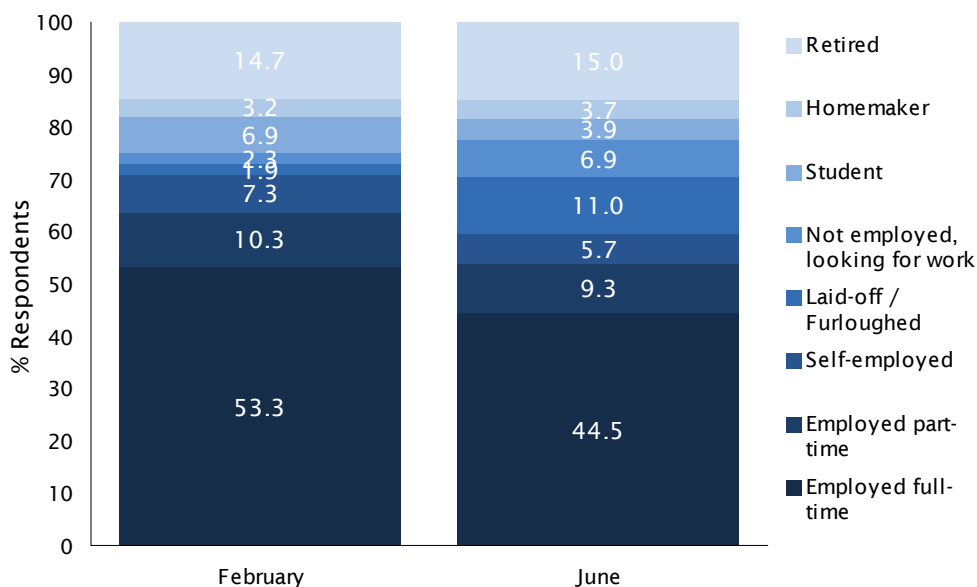
As noted in the *Introduction*, the primary purpose of the survey described in this report was to develop a statistically reliable understanding of how COVID-19 and the temporary closure of non-essential businesses in California has altered working arrangements, travel behaviors, and mode choice in the short-term. To identify the changes that have occurred, the survey asked a series of questions that profiled respondents' employment status, working arrangements, and commute behavior in February 2020 (before the pandemic) and in June 2020 (during the pandemic). The results from both periods are combined in the graphics presented in this section to allow for easy comparisons.

EMPLOYMENT STATUS Consistent with the sharp increase in unemployment recorded statewide during the months of April, May and June in response to the pandemic,⁴ the survey results reveal that Orange County residents experienced significant job losses between February and June, 2020. Full-time employment declined 9% during this period, with additional declines in part-time employment (-1%) and self-employment (-1.6%). Meanwhile, the percentage of individuals surveyed who were unemployed/looking for work, laid-off, or furloughed increased from 4% to 18% between February and June, 2020 (Figure 7).

Question 4 *In February of this year, which best describes your employment status? Were you employed full-time, employed part-time, self-employed, laid-off or furloughed, not employed but looking for work, a student, a homemaker, or retired?*

Question 13 *In June of this year, which best describes your employment status? Were you employed full-time, employed part-time, self-employed, laid-off or furloughed, not employed but looking for work, a student, a homemaker, or retired?*

FIGURE 7 EMPLOYMENT STATUS: FEBRUARY & JUNE



4. According to the California Employment Development Department (EDD), the unemployment rate in California jumped from 4.2% in February to 15.5% in April 2020, reached 16.4% in May 2020, and tapered to 14.9% in June 2020.

Figures 8 and 9 highlight patterns of employment between February and June 2020 among key subgroups of Orange County residents. The top two layers of the bar focus on those whose employment status *changed* between February and June, 2020. Among all subgroups, the percentage that were employed in February but not in June is larger than the opposite (employed in June, but not in February). That said, certain subgroups (those earning less than \$50,000 annually, Latinos and African Americans, residents of Supervisorial District 4, those aged 25 to 34) experienced a larger net loss of jobs due to the pandemic when compared to their counterparts.

FIGURE 8 EMPLOYMENT STATUS: FEBRUARY VS JUNE BY OVERALL, SUPERVISORIAL DISTRICT & AGE

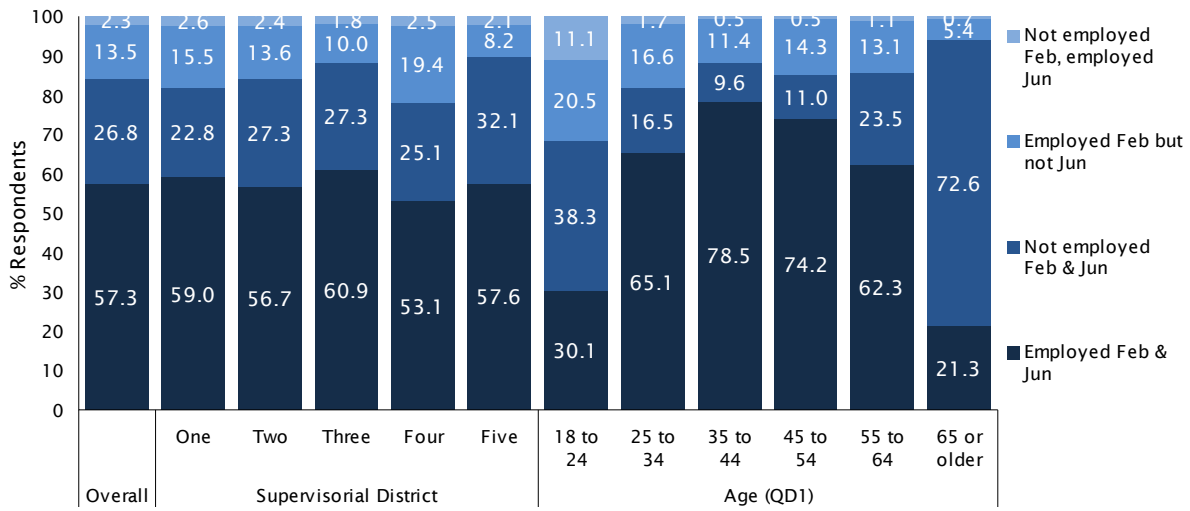
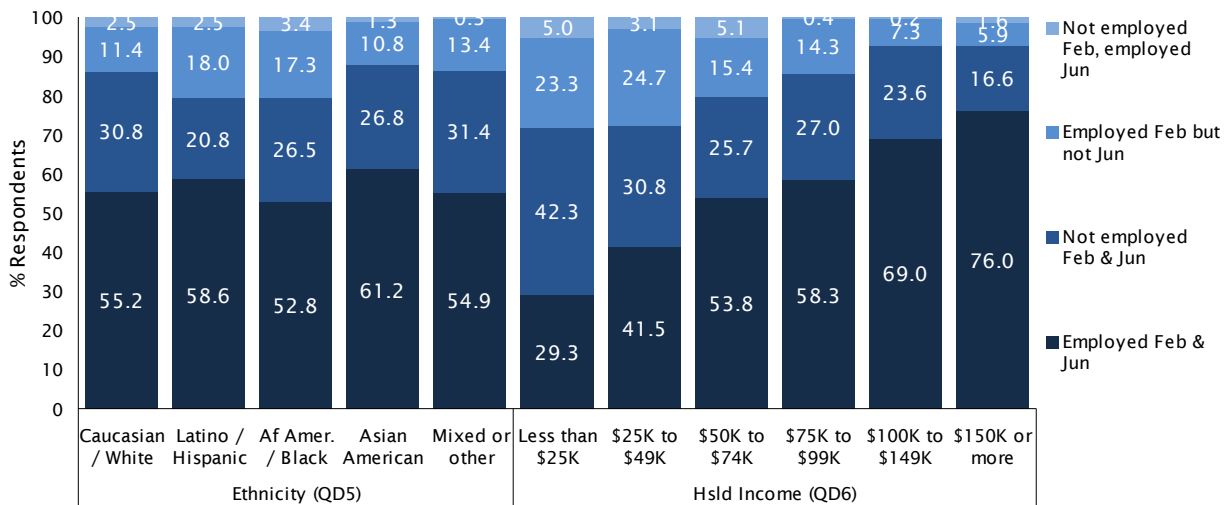


FIGURE 9 EMPLOYMENT STATUS: FEBRUARY VS JUNE BY ETHNICITY & HSLD INCOME



CHANGE IN EMPLOYERS Despite their magnitude, the changes in employment status shown in Figures 7-9 actually underestimate the amount of change that occurred in the labor market in Orange County between February 2020 and June 2020 for the simple reason that a portion of those employed in both months were compelled to switch jobs during this period. Isolating individuals who were employed in February and/or June (see Figure 10), approximately 4%

of individuals who were employed in February *and* June 2020 had switched employers in the interim. In addition to being the most likely to have become unemployed between February and June 2020, young adults (18 to 24) and those in households earning less than \$25,000 annually were also the most likely to have switched employers during this period (see Figures 11 & 12).

Question 18 *Were you working for the same employer in June as you were in February?*

FIGURE 10 EMPLOYMENT STATUS AMONG THOSE EMPLOYED IN FEBRUARY AND/OR JUNE BY OVERALL & SUPERVISORIAL DISTRICT

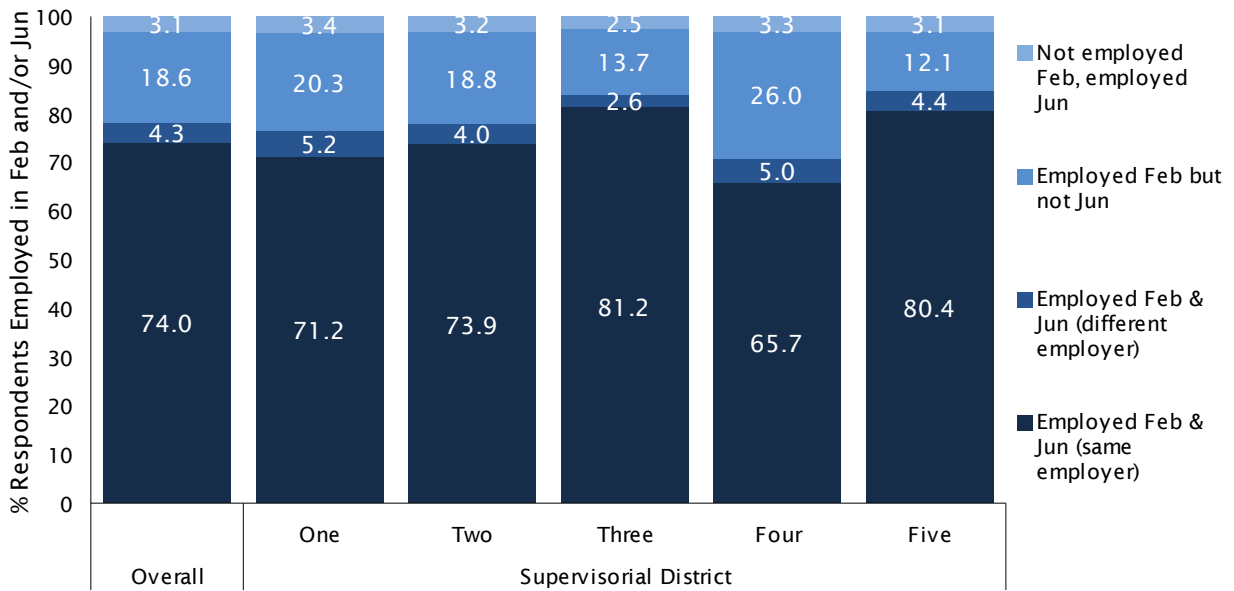


FIGURE 11 EMPLOYMENT STATUS AMONG THOSE EMPLOYED IN FEBRUARY AND/OR JUNE BY AGE

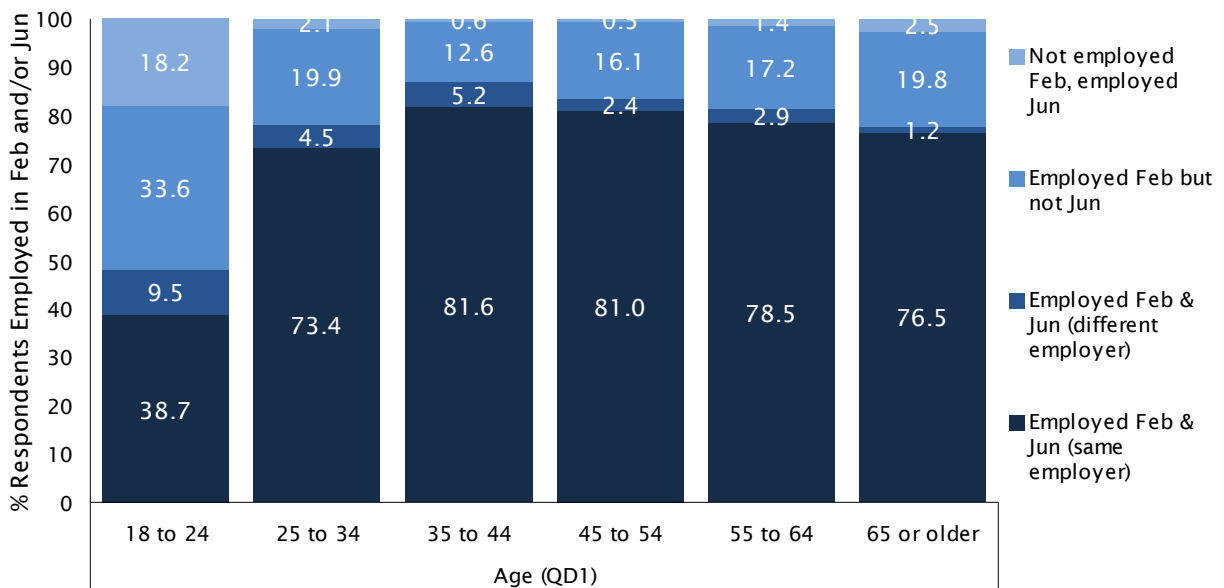
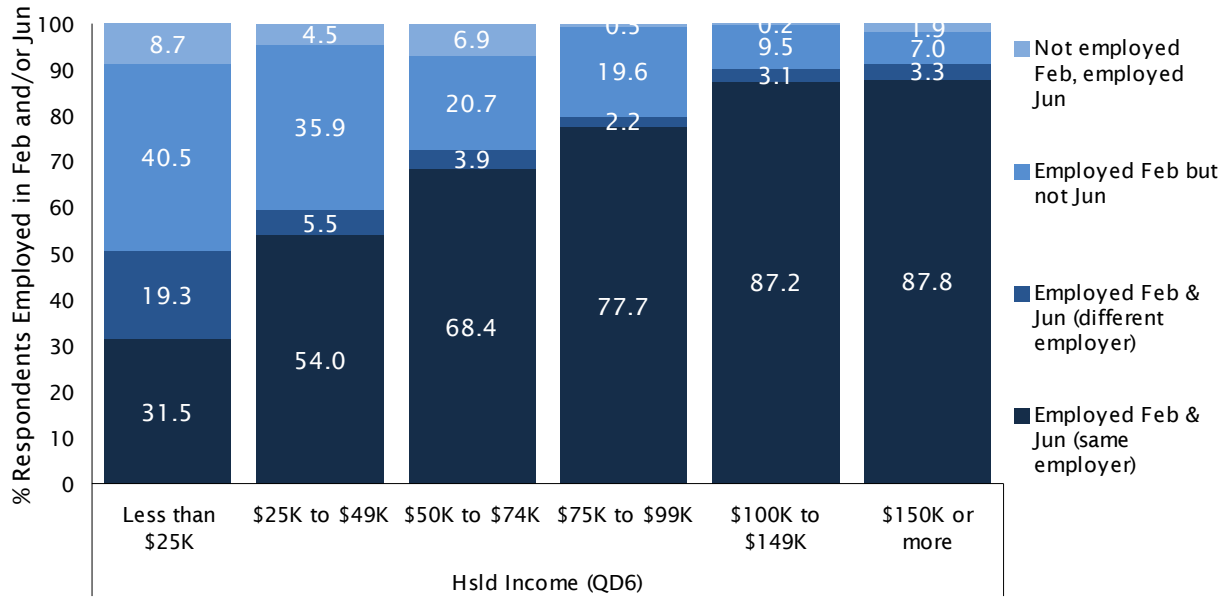


FIGURE 12 EMPLOYMENT STATUS AMONG THOSE EMPLOYED IN FEBRUARY AND/OR JUNE BY HSLD INCOME

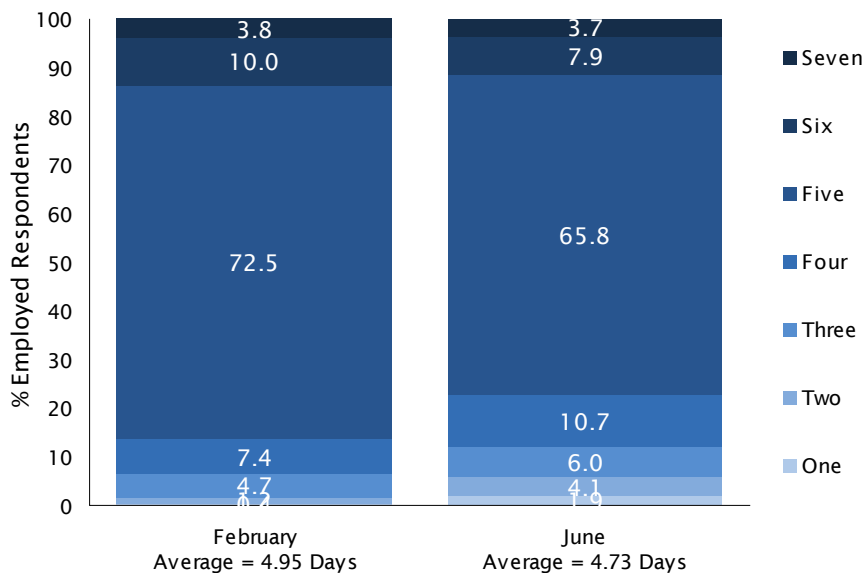


DAYS WORKING PER WEEK In addition to a change in employment status, some workers experienced a reduction in the number of days they worked per week as the pandemic tightened its grip on Orange County. As shown in Figure 13, 86% of employees reported that they worked at least five days per week in February 2020, with the average number of days worked among all employed individuals being 4.95. By June 2020, those figures had declined to 77% working at least five days per week, and 4.73 days worked per week, on average.

Question 5 *In February of this year, how many days per week did you typically work?*

Question 14 *In June of this year, how many days per week did you typically work?*

FIGURE 13 WORK DAYS PER WEEK: FEBRUARY & JUNE



Figures 14-16 broaden the work days analysis to include *all* respondents (regardless of their employment status in February in June) to provide a wider perspective on the impacts among Orange County adults overall. As shown in the figures, certain subgroups had a disproportionately high percentage of individuals who were working fewer days in June when compared to February—namely residents of Supervisorial District 4, those from households earning less than \$50,000 annually, and those who were working part-time in February.

FIGURE 14 WORK DAYS PER WEEK: FEBRUARY VS JUNE BY OVERALL, SUPERVISORIAL DISTRICT & AGE

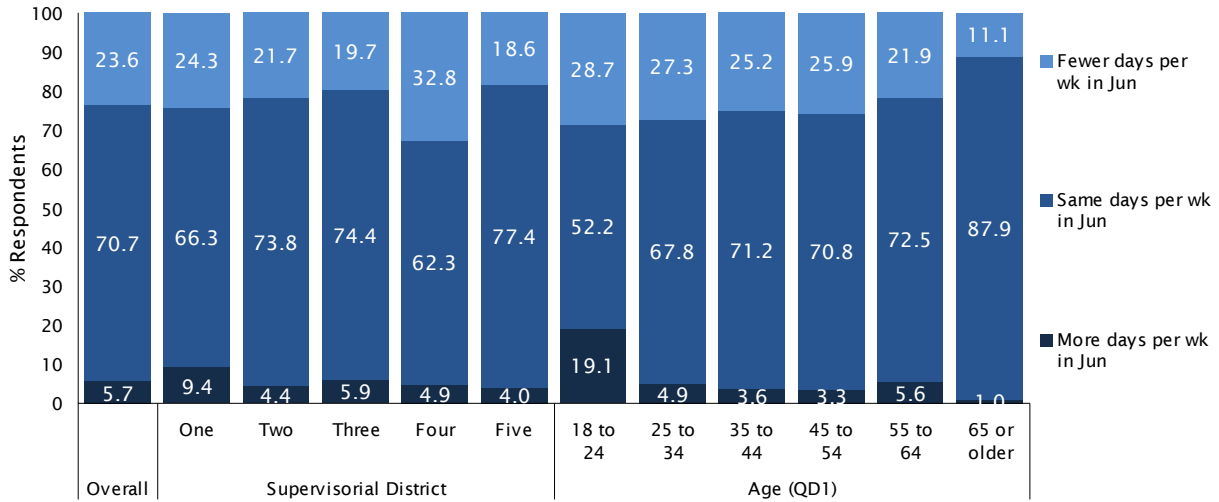


FIGURE 15 WORK DAYS PER WEEK: FEBRUARY VS JUNE BY ETHNICITY & HSLD INCOME

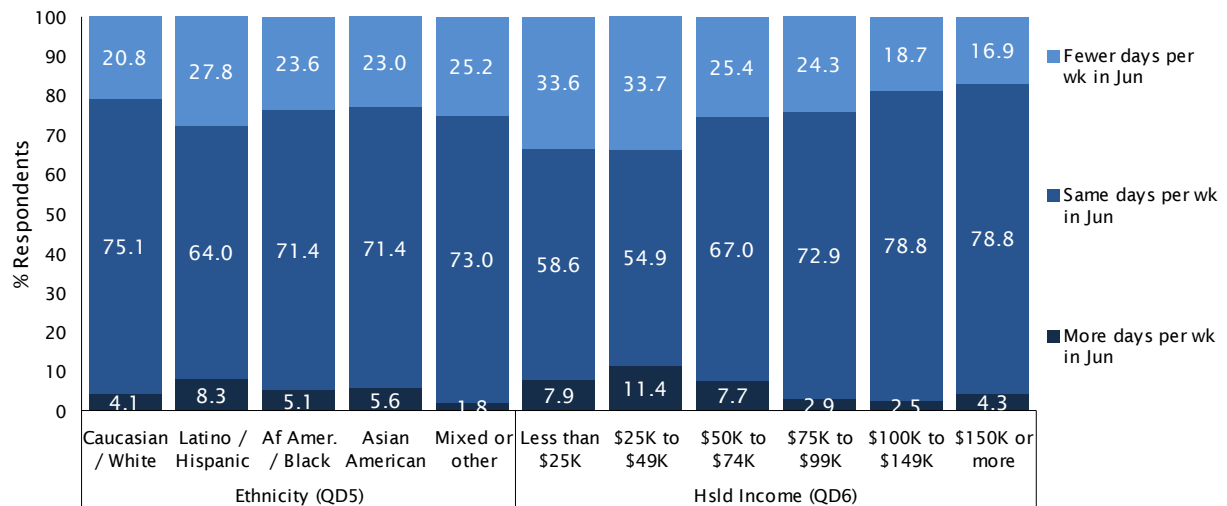
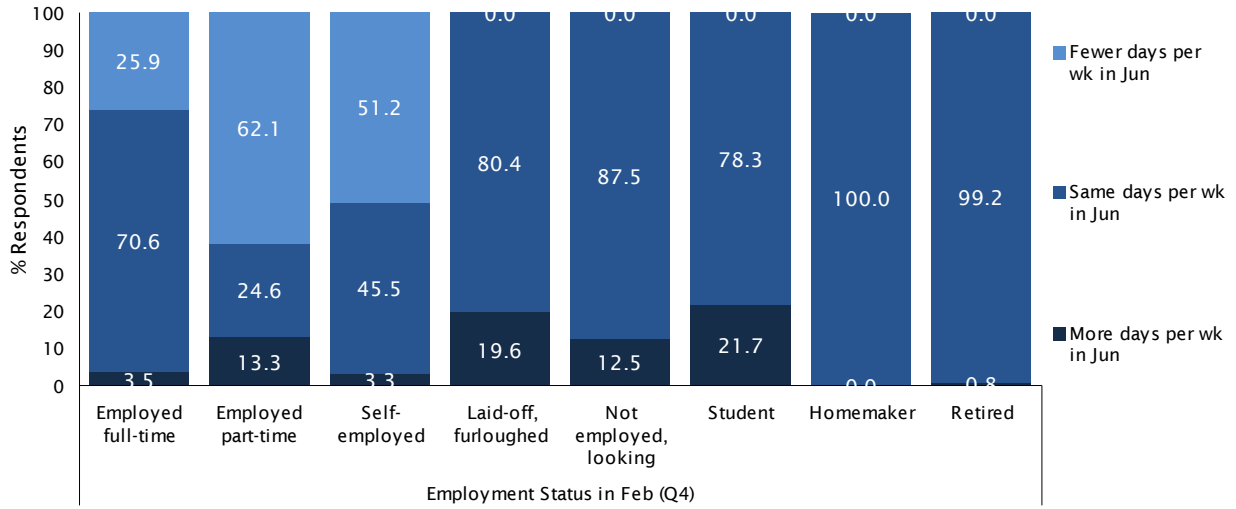


FIGURE 16 WORK DAYS PER WEEK: FEBRUARY VS JUNE BY EMPLOYMENT STATUS IN FEBRUARY

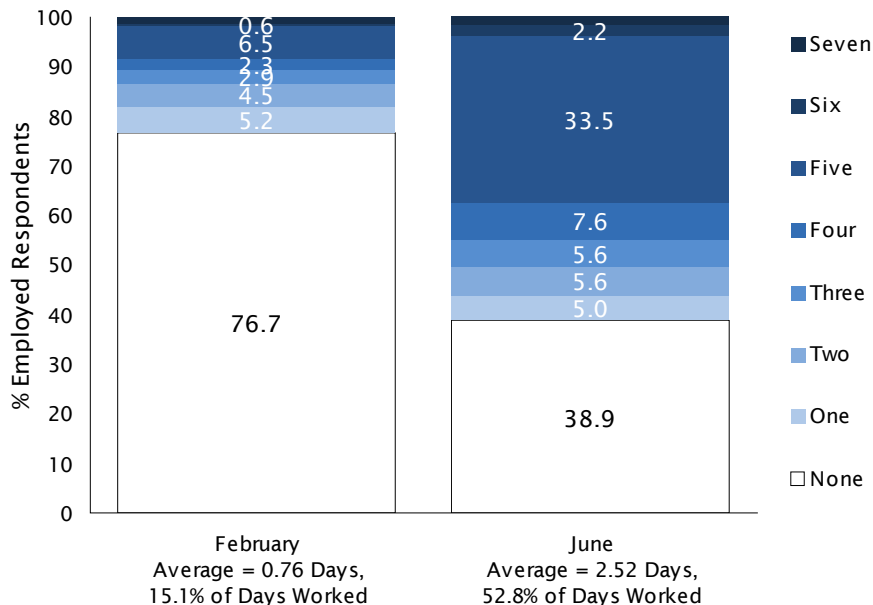


WORKING FROM HOME Concerns about COVID-19 transmission in the work place and guidelines issued by California and the Centers for Disease Control and Prevention (CDC) prompted many Orange County businesses to shift to a remote working model when the pandemic struck, with employees working from home rather than coming to a central work site. As shown in Figure 17, the pandemic created a dramatic shift in *where* business is being conducted in Orange County.

Question 6 *Of the <insert from Q5> work days per week you typically worked in February, how many of these days did you primarily work from home?*

Question 15 *Of the <insert from Q14> work days per week you typically worked in June, how many of these days did you primarily work from home?*

FIGURE 17 TELEWORK DAYS PER WEEK: FEBRUARY & JUNE



Prior to the pandemic in February 2020, less than one-quarter (23%) of employed Orange County residents indicated they worked from home at least one day per week, which translated to an overall average of 0.76 days per week working from home per employee. Four months later in June 2020, 61% of employed residents reported that they worked from home at least one day per week, and the average number of days working from home per employee had jumped to 2.52 per week (Figure 17).

In a manner similar to that described above for the work days analysis, Figures 18-20 broaden the teleworking analysis to put remote working patterns in the context of *all* respondents. As shown in the figures, nearly all subgroups reported a substantial increase in the percentage of their work days they were working remotely in June when compared to February. This was especially true for those 35 to 44 years of age, employees from high income households (\$150,000 or more), and individuals who were employed full-time in February 2020.

FIGURE 18 TELEWORK DAYS PER WEEK: FEBRUARY VS JUNE BY OVERALL, SUPERVISORIAL DISTRICT & AGE

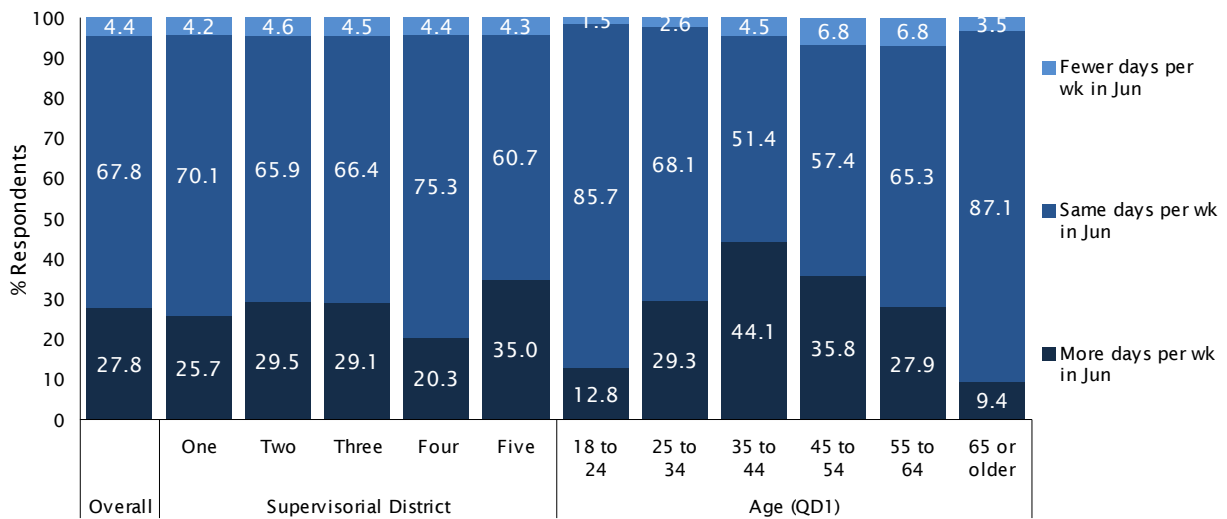


FIGURE 19 TELEWORK DAYS PER WEEK: FEBRUARY VS JUNE BY ETHNICITY & HSLD INCOME

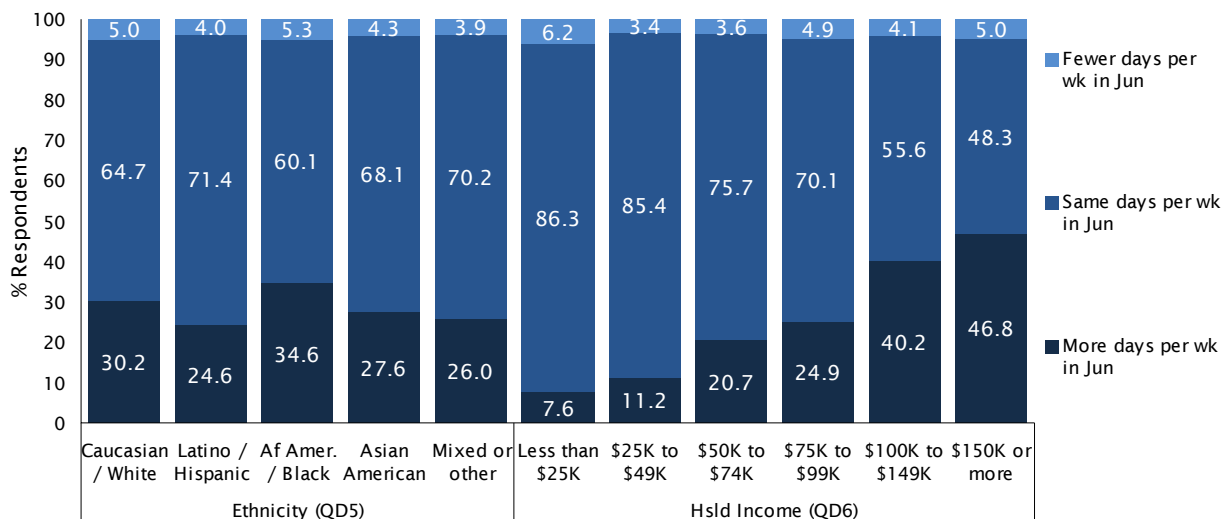
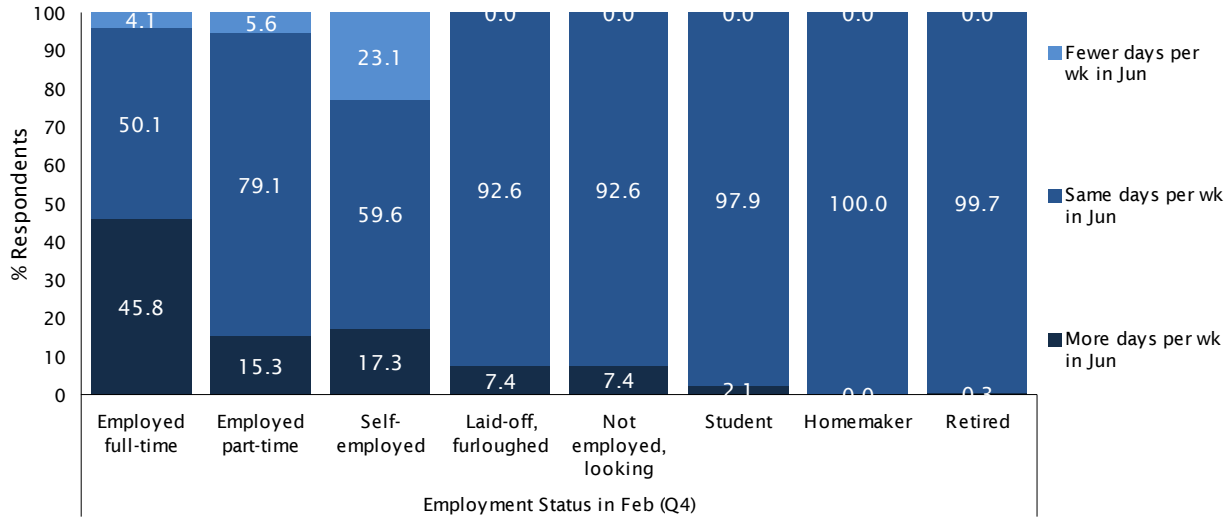


FIGURE 20 TELEWORK DAYS PER WEEK: FEBRUARY VS JUNE BY EMPLOYMENT STATUS IN FEB



COMMUTE MODE The dramatic increase in remote working that occurred between February and June 2020 had a direct impact on commute patterns in Orange County. With far more employees reporting that they *only* worked from home in June (47%) when compared to February (12%), the percentage who commuted to a work site at least occasionally declined from 89% in February to 54% in June 2020 (Figure 21). The net reduction in work commutes was felt in every mode category, with the percentage of employees reporting that they typically commute to work by driving alone declining from 77% to 48%, and use of public transit, active transportation, and carpool/vanpool for commuting was cut in half during the same period.

Question 7 When you commuted to a work destination outside of your home in February of this year, how did you typically commute to work?

Question 16 When you commuted to a work destination outside of your home in June of this year, how did you typically commute to work?

FIGURE 21 PRIMARY COMMUTE MODE: FEBRUARY & JUNE

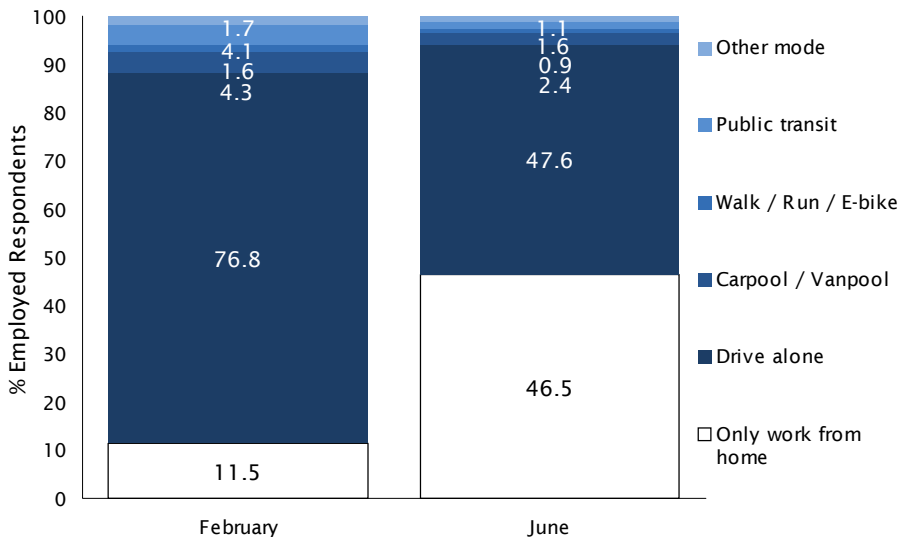
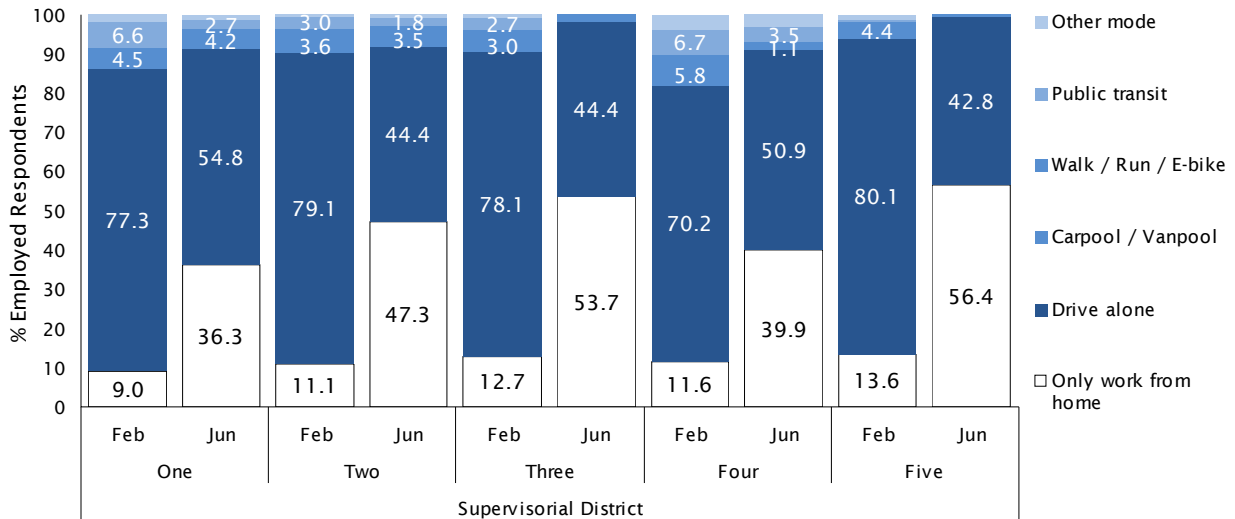


Figure 22 shows that although the aforementioned shifts in commute patterns and mode choice occurred in every Supervisorial District between February and June 2020, they were especially pronounced in Districts 3 and 5.

FIGURE 22 PRIMARY COMMUTE MODE: FEBRUARY & JUNE BY SUPERVISORIAL DISTRICT



COMMUTE DISTANCE Although the percentage of employees commuting to work declined dramatically between February and June 2020, the *average* commute distance among those still commuting to work remained similar (16.4 miles in February vs. 15.3 miles in June).

Question 8 *In miles, what is the approximate one-way commute distance between your home and your place of work in February?*

Question 21 *In miles, what is the approximate one-way commute distance between your home and your place of work in June?*

FIGURE 23 WORK COMMUTE DISTANCE: FEBRUARY VS JUNE

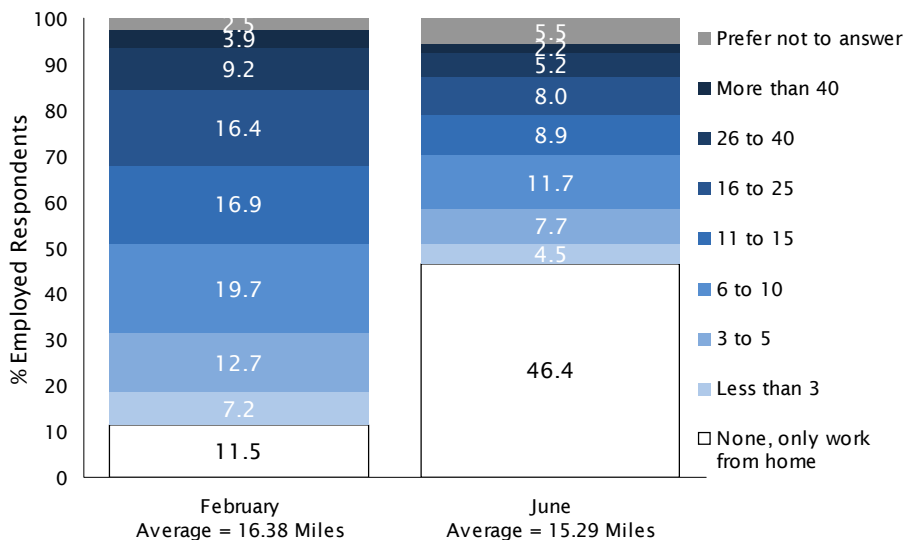
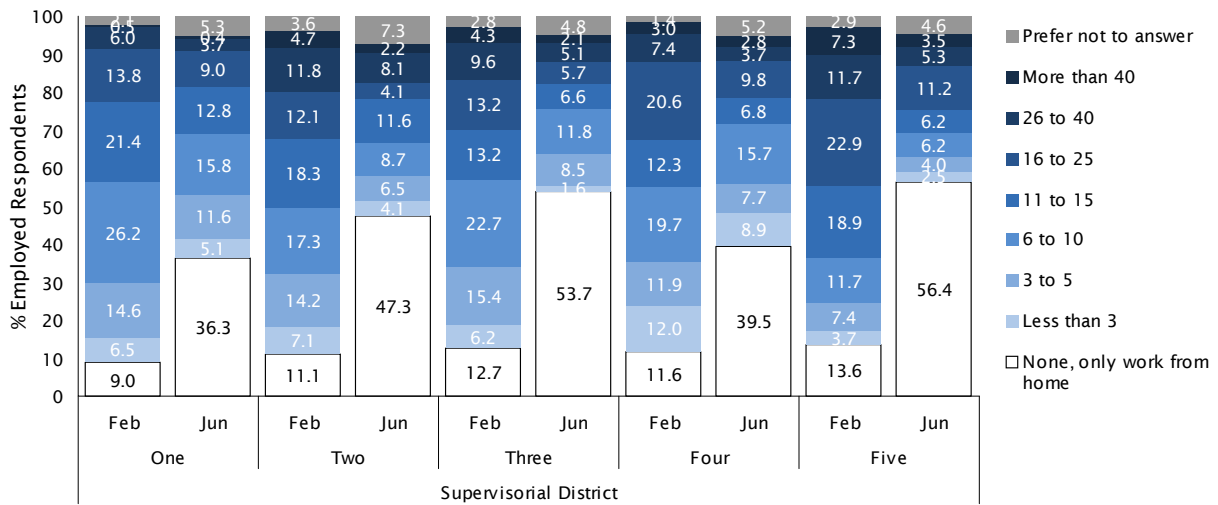


FIGURE 24 WORK COMMUTE DISTANCE: FEBRUARY & JUNE BY SUPERVISORIAL DISTRICT

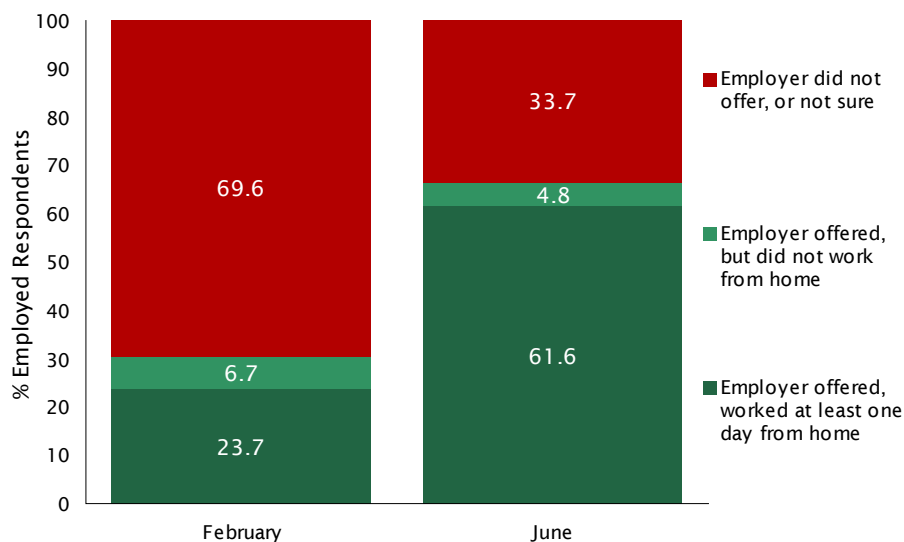


EMPLOYER’S POLICY ON WORKING FROM HOME The ability for an employee to work from home requires an employer who embraces (or at least accepts) the practice. Prior to the arrival of COVID-19, most employed Orange County residents (70%) indicated that their employer did not offer them the option to work from home at least one day per week. Approximately one-quarter of individuals (24%) worked for an employer who allowed remote working and took advantage of the opportunity by working from home at least one day, whereas an additional 7% were given the opportunity to work from home, but declined to do so (Figure 25)

Question 9 *In February of this year (prior to coronavirus restrictions), did your employer give you the option to work from home at least one day per week?*

Question 17 *In June of this year, did your employer give you the option to work from home at least one day per week?*

FIGURE 25 TELEWORK OPTION: FEBRUARY & JUNE



By June 2020, the pandemic had forced many employers to change their policies regarding remote work. Whereas seven-in-ten employees reported in February their employer did not allow them to work from home at least one day per week, by June 2020 that figure had been cut in half to 34%. Two-thirds of employed Orange County residents in June reported that their employer allowed them to telework from home at least one day per week, with 62% reporting that they did so.

Although all industries and occupational categories experienced an increase in remote working between February and June 2020, the magnitude of the shift varied greatly. When compared to the levels set in February 2020, Orange County residents employed in education, government/public administration, and financial services reported the greatest shift in their employers allowing remote work at least once per week, while those employed in retail reported little change (Figure 26).

FIGURE 26 TELEWORK OPTION OFFERED: FEBRUARY & JUNE BY INDUSTRY

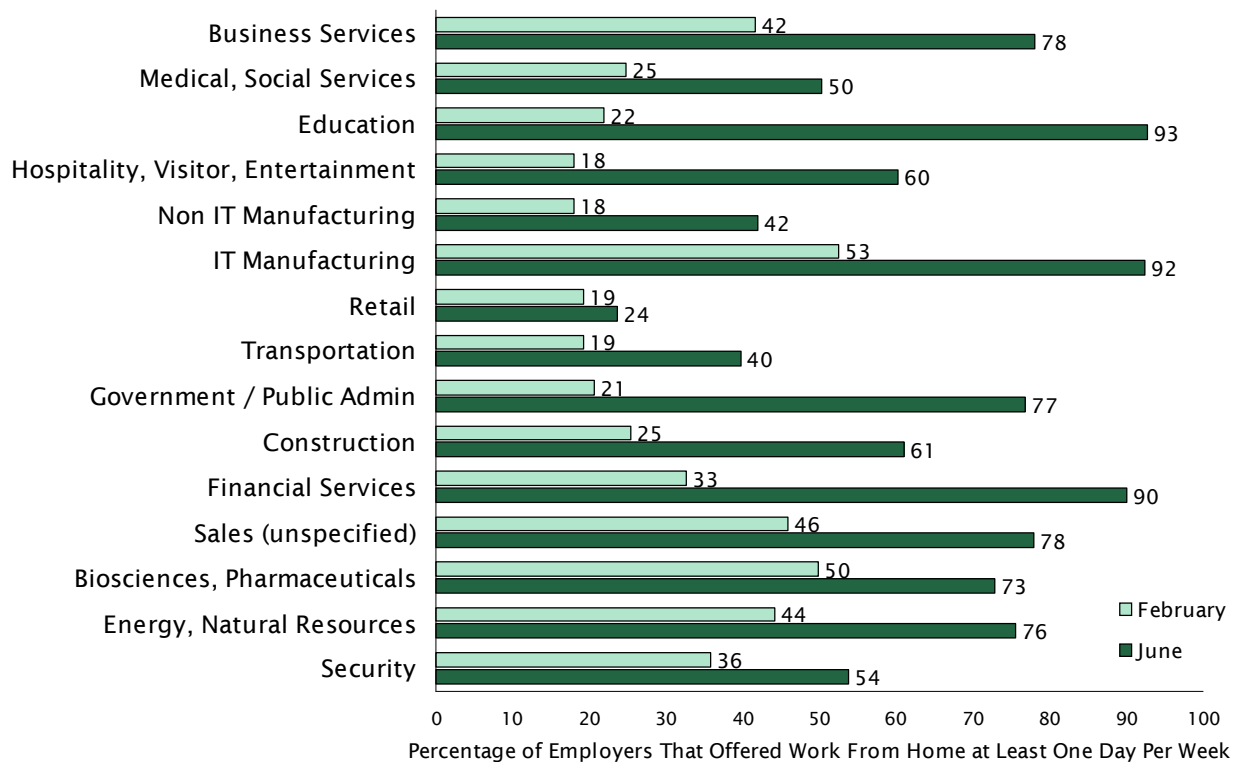
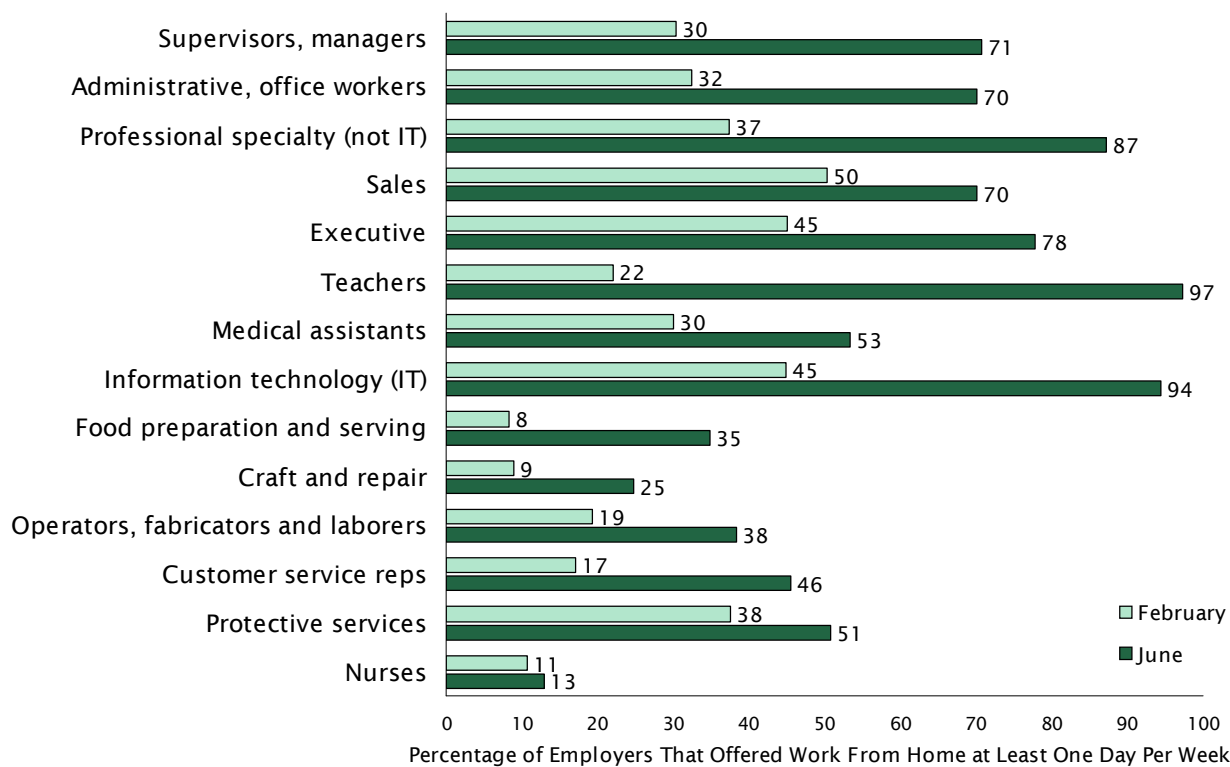


Figure 27 on the next page demonstrates that employees in certain occupations were also more likely than their counterparts to be offered remote working opportunities in June 2020 that did not exist in February, especially teachers, IT specialists, and those in professional specialty occupations (not IT). At the other end of the spectrum, nurses reported little change in remote working options offered by their employer, while those performing protective services reported only modest change.

FIGURE 27 TELEWORK OPTION OFFERED: FEBRUARY & JUNE BY OCCUPATION



POST-PANDEMIC REMOTE WORK PREFERENCES The coronavirus pandemic forced many employers to change their policies with respect to remote working, and compelled many employees to work from home even if the practice was not ideal or the most productive. Although the shift to remote working has been dramatic, the question remains as to whether (and to what degree) the practice will continue once the coronavirus outbreak is over. Will the large-scale experiment in working from home continue after it is no longer necessary for public health reasons, or will employers and employees shift back to pre-pandemic patterns?

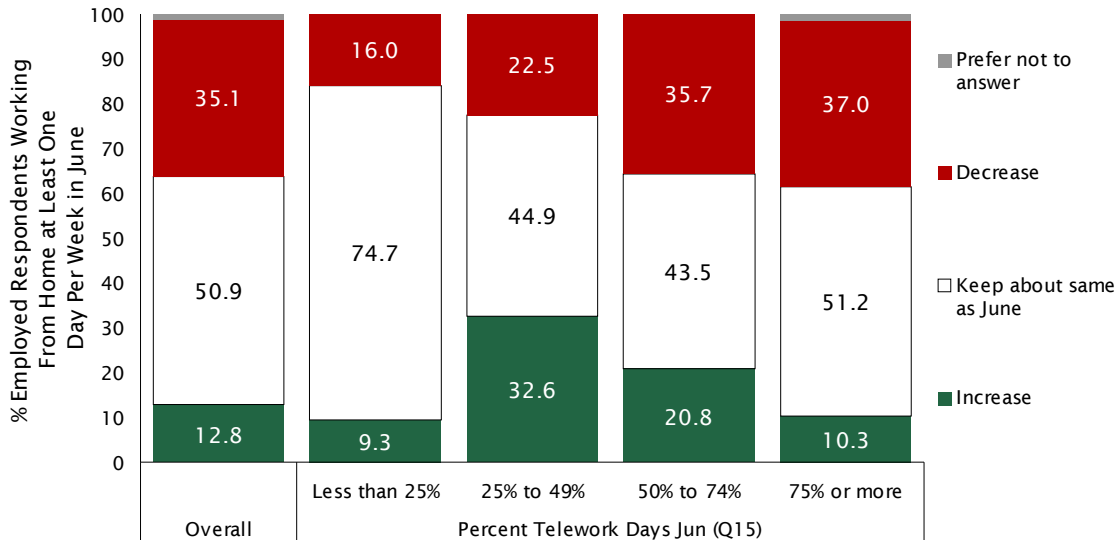
A future tracking survey will provide a definitive answer to this question, as it will allow OCTA to measure the degree to which remote working patterns that evolved during the pandemic ultimately stick in its absence. In the meantime, however, the preferences of employees who worked from home at least one day per week in June 2020 provide some insight as to their intentions regarding working from home in the future. When asked whether—after the coronavirus outbreak is over—they would prefer to increase, decrease, or keep about the same the percentage of their work days that they primarily work from home, 51% preferred to maintain their current remote work patterns. Approximately 12% preferred to *increase* the percentage of their days that they work from home, whereas 35% would opt to *decrease* the percentage of days they work from home (see Figure 28).

Digging deeper into the data, however, reveals that preferences with respect to working from home in the future were conditioned by how often an individual currently works from home (see Figure 28). Those who currently work from home less than 25% of their days were the most interested in keeping the percentage of days they work from home the *same* after the pandemic

(75%). Employees who worked from home 25% to 49% of their work days in June were the most interested in *increasing* their remote work patterns, while those who worked from home at least 50% of their days in June were generally less interested in increasing the percentage of days they work from home. The above notwithstanding, the responses to Question 22 indicate that at least 60% of employees in every category would prefer to keep the percentage of days they worked from home in June the same after the pandemic recedes, or increase the percentage. If employees' intentions are a driving factor, the increases in remote working that occurred during the pandemic will likely show some resilience in the future.

Question 22 *You mentioned you worked <insert from Q14> days per week in June, of which <insert from Q15> days you primarily worked from home. In other words, you primarily worked from home <insert percentage Q15/Q14> of your work days in June. Looking ahead to when the coronavirus outbreak is over, would you prefer to increase the percentage of days you primarily work from home, decrease the percentage, or keep it about the same as in June?*

FIGURE 28 POST-PANDEMIC TELEWORK DAYS PREFERENCE BY OVERALL & PERCENT TELEWORK DAYS IN JUNE



For the interested reader, Figures 29 and 30 show how the responses to Question 22 varied by Supervisorial District and household income. It is worth noting that household income bore a strong, positive relationship to working a higher percentage of days from home in June when compared to February (see Figure 19), but respondents from higher-income households also exhibited a somewhat stronger preference for reducing the percentage of days they work from home once the coronavirus outbreak is over (see Figure 30).

FIGURE 29 POST-PANDEMIC TELEWORK DAYS PREFERENCE BY SUPERVISORIAL DISTRICT

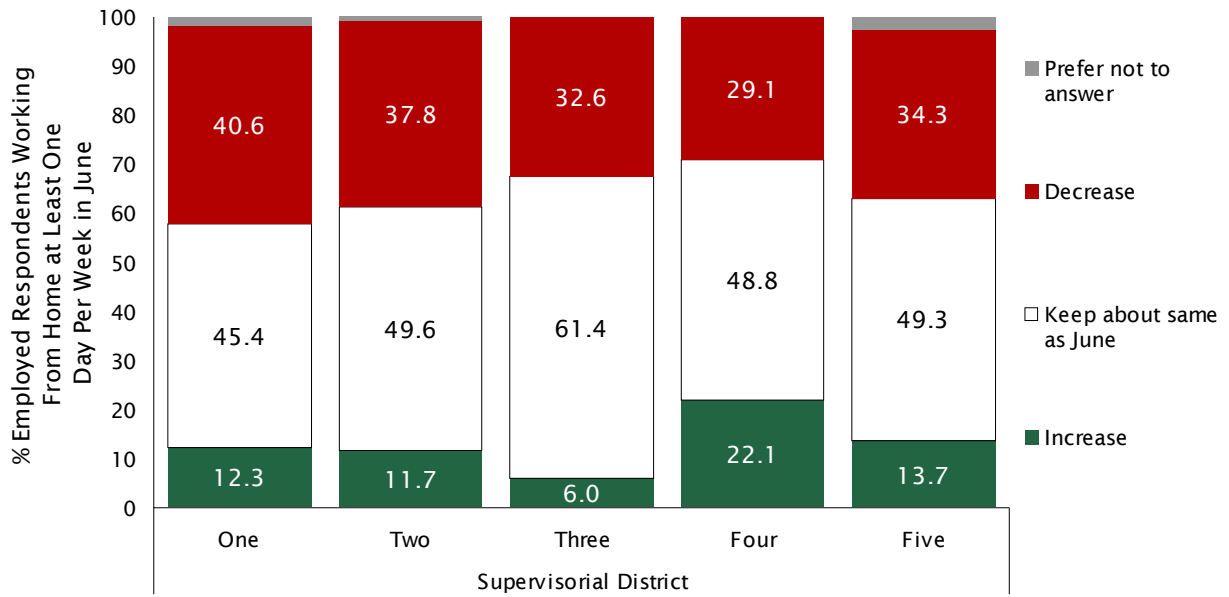
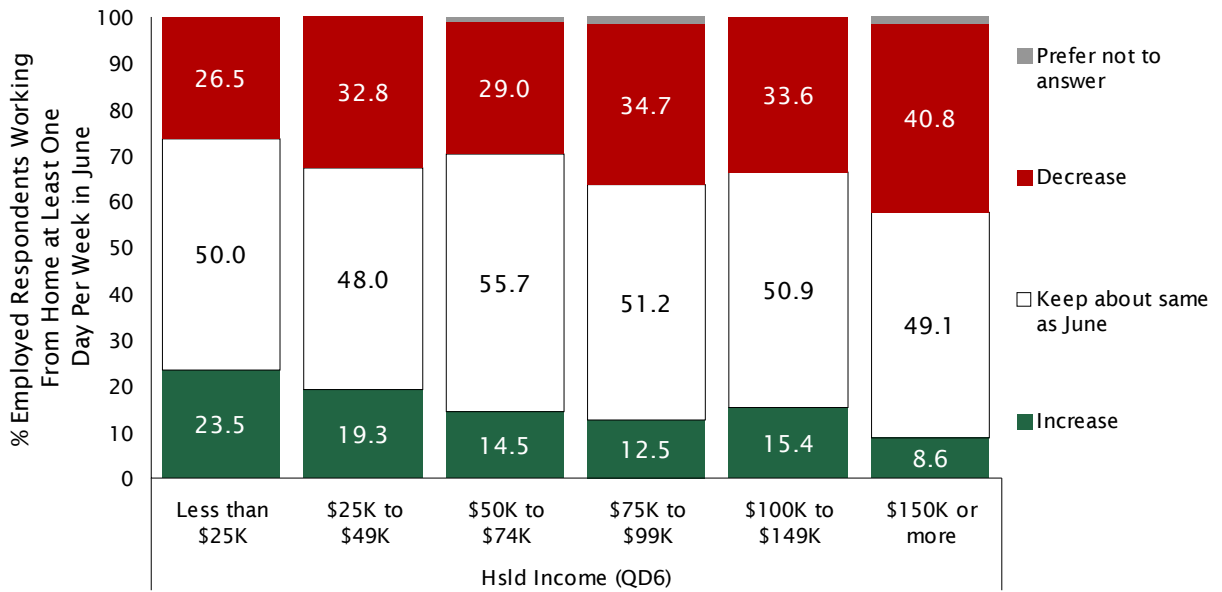


FIGURE 30 POST-PANDEMIC TELEWORK DAYS PREFERENCE BY HSLD INCOME



PERSONAL ACTIVITIES: FEB & JUN

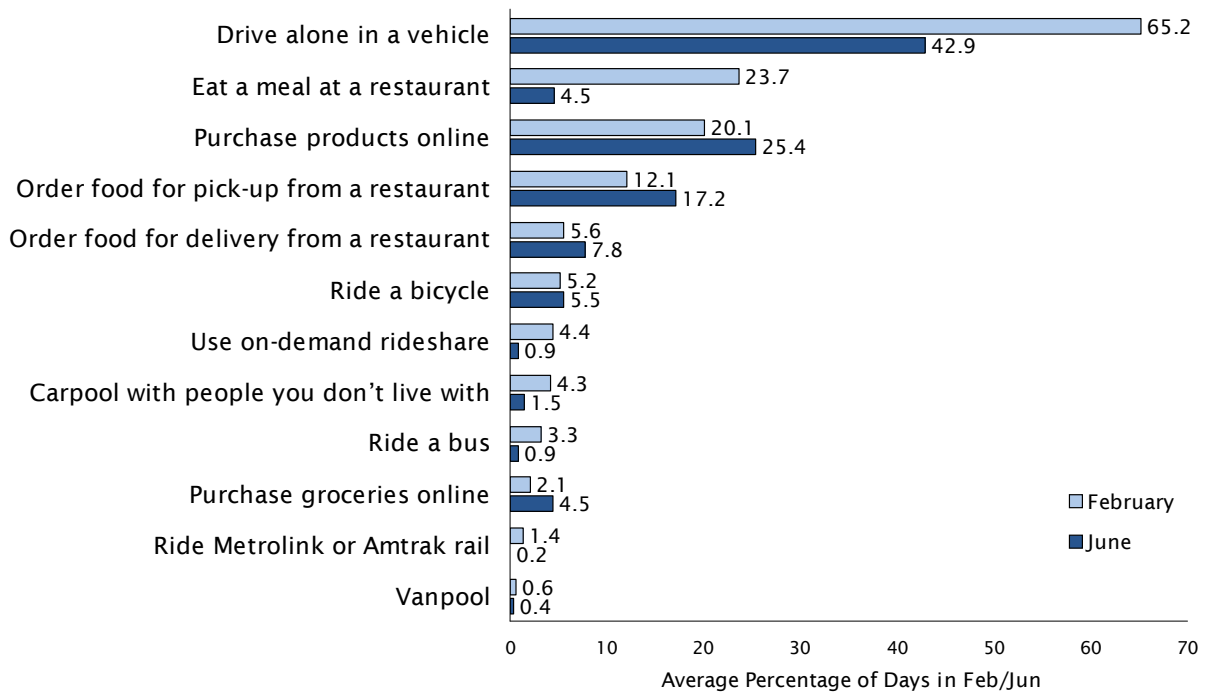
Having profiled respondents' employment status, working arrangements, and commute behavior in February and June 2020, the survey transitioned to identifying how other aspects of their travel behavior and related activities may have changed in response to the pandemic.

PERSONAL ACTIVITIES IN FEBRUARY AND JUNE 2020 For each of the activities shown in Figure 31, respondents were asked to report how many days they engaged in the activity during February 2020 (prior to the pandemic) and June 2020 (during the pandemic). Because the number of days in February and June are not equal, Figure 31 reports the average *percentage* of days in each month that respondents reported engaging in the activity.

Question 12 *In February of this year (prior to coronavirus restrictions), approximately how many days during the month did you: _____?*

Question 23 *In June of this year, approximately how many days during the month did you: _____?*

FIGURE 31 PERCENTAGE OF DAYS PER MONTH PERFORMING PERSONAL ACTIVITIES: FEBRUARY & JUNE

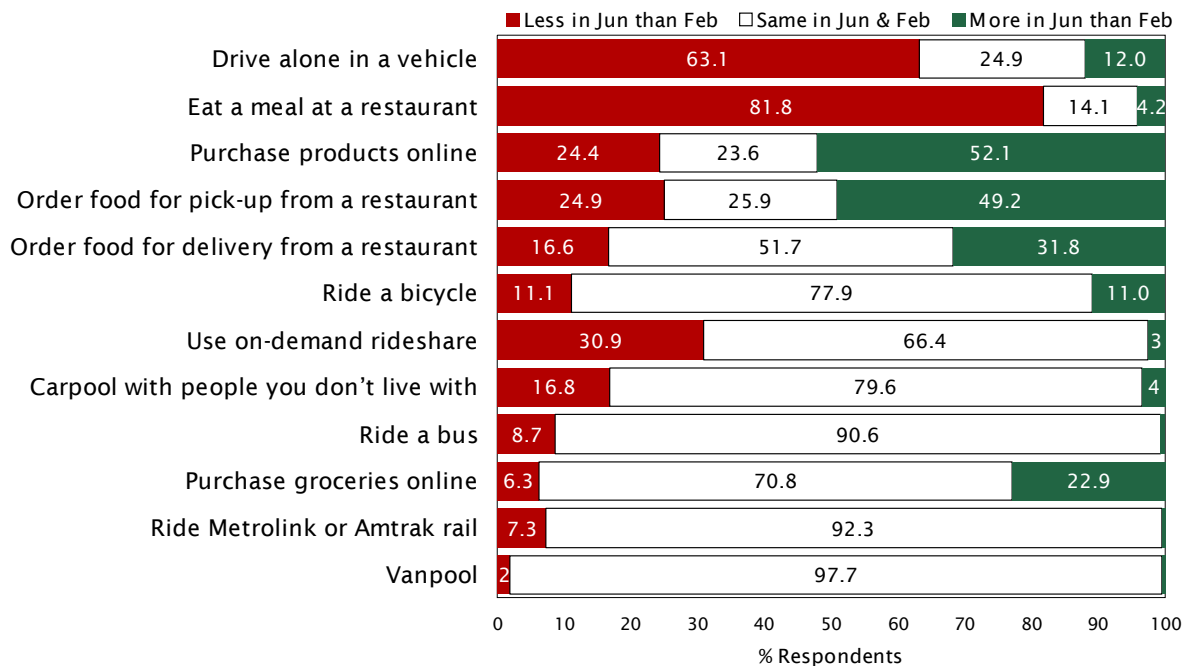


In response to the pandemic, Orange County residents made significant changes in their travel, shopping, and dining habits. With respect to travel behavior, the percentage of days they **drove alone** in a vehicle declined from 65% in February to 43% in June, use of **on-demand rideshare** declined from 4.4% of days in February to 0.9% in June, **carpooling** with someone they don't live with declined from 4.3% of days in February to 1.5% in June, riding a **bus** declined from 3.3% of days on average in February to 0.9% in June, while riding **Metrolink** or **Amtrak** declined from 1.4% of days in February to 0.2% in June.

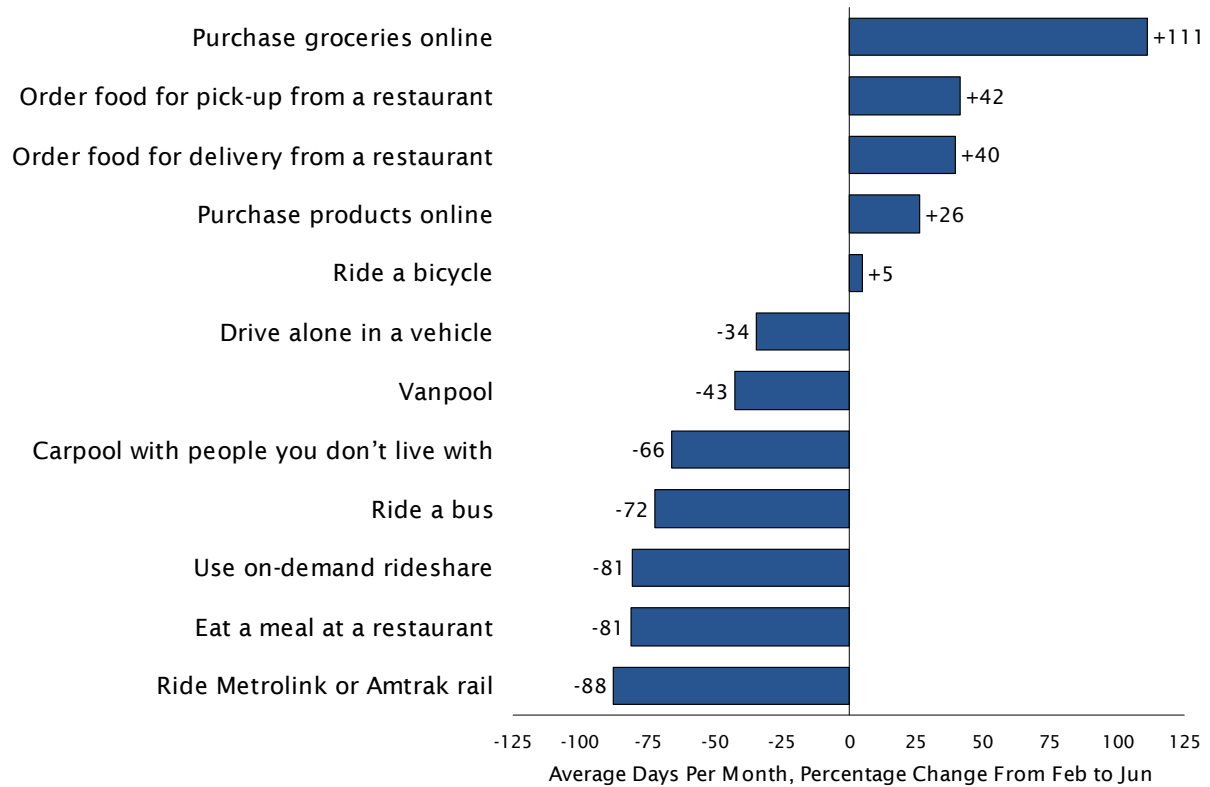
With respect to shopping and dining, the dramatic decline in the percentage of days respondents reported **eating a meal at a restaurant** (24% in February vs 5% in June) was only partially offset by an increase in the percentage of days they ordered food for **pick-up** (12% in February vs 17% in June) or **delivery** (6% in February vs 8% in June). When compared to the patterns in February, there was also a modest uptick in the percentage of days Orange County residents purchased **groceries online** (2% in February vs 5% in June) and **purchased other products online** (20% in February vs 25% in June).

Figure 32 presents the information gathered in Questions 12 and 23 in a different format, noting the percentage of respondents who reported less, the same, or more days engaging in each activity in June when compared to February 2020. More than eight-in-ten Orange County residents (82%) reported a reduction in the percentage of days they ate a meal at a restaurant during this period, while 63% reported fewer days driving along in a vehicle, and 31% reduced the number of days they used on-demand rideshare between February and June. During the same period, approximately half of respondents increased the percentage of days they purchased products online (52%) and ordered food for pick-up (49%), and one-third (32%) also increased the percentage of days they ordered food for delivery.

FIGURE 32 PERSONAL ACTIVITIES: FEBRUARY VS JUNE



Finally, Figure 33 on the next page normalizes the comparison by noting the percentage *change* in days spent engaged in each activity between February 2020 and June 2020. The largest *increases* occurred with respect to purchasing groceries online (+111%), ordering food from a restaurant for pick-up (+42%) or delivery (+40%), and purchasing products online (+26%). The largest *decreases* occurred with respect to riding Metrolink and Amtrak (-88%), eating a meal at a restaurant (-81%), using on-demand rideshare (-81%), riding a bus (-72%), and carpooling with someone who doesn't live in their household (-66%). Table 2 shows how the percentage change in days spent engaged in each activity between February and June varied by Supervisorial District.

FIGURE 33 PERCENTAGE CHANGE IN DAYS PER MONTH PERFORMING PERSONAL ACTIVITIES: FEBRUARY VS JUNE

TABLE 2 PERCENTAGE CHANGE IN DAYS PER MONTH PERFORMING PERSONAL ACTIVITIES: FEBRUARY VS JUNE BY OVERALL & SUPERVISORIAL DISTRICT

	Overall	Supervisorial District				
		One	Two	Three	Four	Five
Purchase groceries online	+111	+108	+84	+114	+105	+160
Order food for pick-up from a restaurant	+42	+47	+41	+56	+26	+41
Order food for delivery from a restaurant	+40	+35	+26	+57	+40	+48
Purchase products online	+26	+16	+21	+31	+29	+35
Ride a bicycle	+5	+8	+4	+3	-8	+17
Drive alone in a vehicle	-34	-28	-37	-36	-32	-38
Vanpool	-43	-62	-89	+70	-80	+15
Carpool with people you don't live with	-66	-62	-76	-41	-74	-68
Ride a bus	-72	-71	-82	-83	-66	-64
Use on-demand rideshare	-81	-76	-85	-85	-72	-89
Eat a meal at a restaurant	-81	-80	-82	-82	-81	-78
Ride Metrolink or Amtrak rail	-88	-77	-87	-99	-88	-93



BACKGROUND & DEMOGRAPHICS

TABLE 3 DEMOGRAPHICS OF SAMPLE

<i>Total Respondents</i>	2,548
Years in Orange County (Q1)	
Less than 3	3.9
3 to 4	5.2
5 to 9	9.7
10 to 14	7.2
15 or more	73.6
Prefer not to answer	0.4
Age (QD1)	
18 to 24	13.3
25 to 34	18.6
35 to 44	19.3
45 to 54	19.1
55 to 64	13.8
65 or older	14.5
Prefer not to answer	1.4
Gender (QD2)	
Male	48.7
Female	48.9
Prefer not to answer	2.4
Access to Personal Vehicle (QD3)	
Always	90.8
Sometimes	4.2
Rarely, never	3.5
Prefer not to answer	1.5
Home Ownership Status (QD4)	
Rent	40.6
Own	53.4
Prefer not to answer	6.0
Ethnicity (QD5)	
Caucasian / White	37.5
Latino / Hispanic	32.1
Af Amer. / Black	2.2
Asian American	19.5
Mixed or other	3.6
Prefer not to answer	5.0
Hsld Income (QD6)	
Less than \$25K	7.8
\$25K to \$49K	15.6
\$50K to \$74K	17.4
\$75K to \$99K	16.1
\$100K to \$149K	16.0
\$150K or more	20.5
Prefer not to answer	6.6
Supervisorial District	
One	20.7
Two	21.2
Three	17.4
Four	21.3
Five	19.4

Table 3 presents the key demographic and background information that was collected during the survey. Although the primary motivation for collecting the background and demographic information was to provide a better insight into how the results of the substantive questions of the survey vary by demographic characteristics (see crosstabulations in Appendix A for a full breakdown of each question), the information is also valuable for understanding the current profile of Orange County's adult population. The sample profile matches Orange County's adult population profile on age, ethnicity, and homeownership based on the most recent Census American Community Survey (ACS) estimates, and is also balanced across cities and Supervisorial Districts.



M E T H O D O L O G Y

The following sections outline the methodology used in the study, as well as the motivation for using certain techniques.

QUESTIONNAIRE DEVELOPMENT Dr. McLarney of True North Research worked closely with OCTA to develop a questionnaire that covered the topics of interest and avoided the many possible sources of systematic measurement error including position-order effects, wording effects, response-category effects, scaling effects, and priming. Several questions included multiple individual items. Because asking the items in a set order can lead to a systematic position bias, the items were asked in a random order for each respondent.

Some questions asked in this study were presented only to a subset of respondents. For example, only respondents who reported that they were employed in February 2020 (Question 4) were asked follow-up questions about their work schedule (Question 5) and working from home (Question 6) during that month. The questionnaire included with this report (see *Questionnaire & Toplines* on page 33) identifies the skip patterns that were used during the interview to ensure that each respondent received the appropriate questions.

PROGRAMMING, PRE-TEST & TRANSLATION Prior to fielding the survey, the questionnaire was CATI (Computer Assisted Telephone Interviewing) programmed to assist interviewers when conducting the telephone interviews. The CATI program automatically navigates the skip patterns, randomizes the appropriate question items, and alerts the interviewer to certain types of keypunching mistakes should they occur. The survey was also programmed into a passcode-protected online survey application to allow online participation for sampled residents. The integrity of the questionnaire was pre-tested internally by True North and by dialing into random homes in Orange County prior to formally beginning the survey. Once finalized, the survey was professionally translated into Spanish and Vietnamese to give respondents the option of participating in English, Spanish, or Vietnamese.

SAMPLE, RECRUITING & DATA COLLECTION A comprehensive database of households within Orange County was utilized for this study, ensuring that all households had the opportunity to participate in the survey. From this master database, True North developed a stratified, random sample of residents to recruit to participate in the survey. Once selected at random, additional contact information (telephone and/or email) was appended to the sample of households using publicly available and private sources. Residents were recruited to participate in the survey using a combination of emailed invitations and/or telephone calls.⁵ Individuals that received an email invitation were invited to participate in the survey online at a secure, passcode-protected website designed and hosted by True North. Each sample record was assigned a unique passcode to ensure that only residents who received an invitation could access the online survey site, and that the survey could be completed one time only. Individuals that did not respond to an emailed invitation or that only had telephone contact information were recruited to participate in the survey by telephone (land line and/or cell phone).

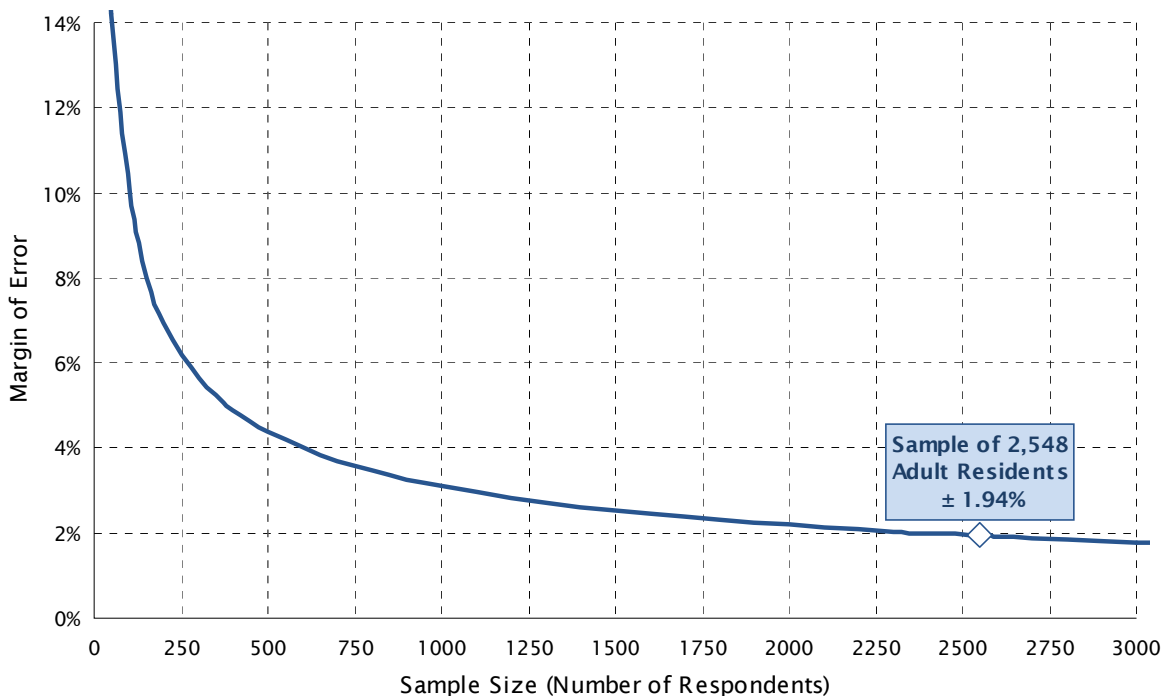
5. The recruiting method(s) selected for a respondent depended on the contact information that was available for that particular household.

Telephone interviews averaged 15 minutes in length and were conducted during weekday evenings (5:30PM to 9PM) and on weekends (10AM to 5PM). It is standard practice not to call during the day on weekdays because most working adults are unavailable and thus calling during those hours would likely bias the sample. A total of 2,548 surveys were completed between July 10 and July 22, 2020.

STATISTICAL MARGIN OF ERROR By using a probability-based sample and monitoring the sample characteristics as data collection proceeded, True North ensured that the sample was representative of adult residents in Orange County. The results of the survey can thus be used to estimate the opinions of *all* adult residents in the County. Because not all adult residents participated in the survey, however, the results have what is known as a statistical margin of error due to sampling. The margin of error refers to the difference between what was found in the survey of 2,548 respondents for a particular question and what would have been found if all of the estimated 2,501,162 adult residents⁶ in Orange County had been interviewed.

Figure 34 provides a plot of the *maximum* margin of error in this study. The maximum margin of error for a dichotomous percentage result occurs when the answers are evenly split such that 50% provide one response and 50% provide the alternative response. For this survey, the maximum margin of error is $\pm 1.94\%$ for questions answered by all 2,548 respondents countywide.

FIGURE 34 MAXIMUM MARGIN OF ERROR DUE TO SAMPLING



6. Source: adult population estimate derived from the California Department of Finance's 2020 estimate for Orange County's total population and U.S. Census Bureau age profile for Orange County for July 2019.

Within this report, figures and tables show how responses to certain questions varied by sub-groups such as years living in Orange County, age of the respondent, and Supervisorial District. Figure 34 above is thus useful for understanding how the maximum margin of error for a percentage estimate will grow as the number of individuals asked a question (or in a particular sub-group) shrinks. Because the margin of error grows exponentially as the sample size decreases, the reader should use caution when generalizing and interpreting the results for small sub-groups.

DATA PROCESSING Data processing consisted of checking the data for errors or inconsistencies, coding and recoding responses, categorizing open-ended responses, and preparing frequency analyses and crosstabulations. The final data were weighted to adjust for minor discrepancies in age and ethnicity within each of the five Supervisorial Districts.

ROUNDING Numbers that end in 0.5 or higher are rounded up to the nearest whole number, whereas numbers that end in 0.4 or lower are rounded down to the nearest whole number. These same rounding rules are also applied, when needed, to arrive at numbers that include a decimal place in constructing figures and charts. Occasionally, these rounding rules lead to small discrepancies in the first decimal place when comparing tables and pie charts for a given question.

QUESTIONNAIRE & TOPLINES



OCTA
Climate & Activity Survey
Final Toplines (n = 2,548)
July 28, 2020

Section 1: Introduction to Study

Standard Intro: Hi, may I please speak to: _____. Hi, my name is _____ and I'm calling from TNR on behalf of OCTA (Oh-See-Tee-Ay) – the Orange County Transportation Authority. We're conducting a survey about important issues in Orange County and I'd like to get your opinions.

If Land Line, no name on file: Hi, my name is _____ and I'm calling from TNR on behalf of OCTA (Oh-See-Tee-Ay) – the Orange County Transportation Authority. We're conducting a survey about important issues in Orange County and I'd like to get your opinions.

If needed: This is a survey about important issues in your community. I'm NOT trying to sell anything and I won't ask for a donation. Your responses will be confidential.

If needed: The survey should take about 12 minutes to complete.

If needed: If now is not a convenient time, can you let me know a better time so I can call back? You can also take the survey online if you prefer.

Section 2: Screener for Inclusion if Land Line & No Name

For statistical reasons, I would like to speak to the youngest adult male currently at home that is at least 18 years of age. *If there is no male currently at home that is at least 18 years of age, then ask:* Ok, then I'd like to speak to the youngest female currently at home that is at least 18 years of age.

If there is no adult currently available, then ask for a callback time.

NOTE: Adjust this screener as needed to match sample quotas on gender & age

If respondent asks why we want to speak to a particular demographic group, explain: Its important that the sample of people for the survey is representative of the adult population in Orange County for it to be statistically reliable. At this point, we need to balance our sample by asking for people who fit a particular demographic profile.

Section 3: Direction & Local Issues

Q1	To begin, how long have you lived in Orange County?	
1	Less than 1 year	1%
2	1 to 2 years	3%
3	3 to 4 years	5%
4	5 to 9 years	10%
5	10 to 14 years	7%
6	15 years or longer	74%
99	Prefer not to answer	0%

Q2	Thinking about Orange County as a whole, what would you say is the <u>most</u> important issue facing Orange County today? Verbatim responses recorded and later grouped into categories shown below.	
	COVID-19 concerns, issues	34%
	Not sure, cannot think of anything	14%
	Homelessness	12%
	Housing availability, affordability	7%
	Traffic congestion	6%
	Education, schools	5%
	Public safety, drugs, crime	5%
	Leadership, government	5%
	Economy, unemployment	3%
	Public transportation	3%
	Population, overcrowding	3%
	Racial, cultural diversity, inequality issues	3%
	Infrastructure maintenance, repair	3%
	Cost of living	2%
	High taxes	2%
	Public health, well being	2%
	Budget, spending	1%
	Illegal immigration issues	1%
	Environmental issues, concerns	1%
	Development, loss of open space	1%
	Political division	1%
Q3	Which comes closer to your view about where Orange County stands in the coronavirus outbreak: the worst is behind us OR the worst is yet to come?	
	1 Worst is behind us	20%
	2 Worst is yet to come	63%
	98 Not sure	15%
	99 Prefer not to answer	1%

Section 4: Pre-COVID Employment & Commute

We're interested in how your activities may have changed over the past few months in response to the coronavirus outbreak. First, let me ask about your activities in **February** of this year, before the coronavirus outbreak in California.

Q4	In February of this year, which best describes your employment status? Were you employed full-time, employed part-time, self-employed, laid-off or furloughed, not employed but looking for work, a student, a homemaker, or retired?			
	1	Employed full-time	53%	Ask Q5
	2	Employed part-time	10%	Ask Q5
	3	Self-employed	7%	Ask Q5
	4	Laid-off/furloughed	2%	Skip to Q12
	5	Not employed, but looking for work	2%	Skip to Q12
	6	Student	7%	Skip to Q12
	7	Homemaker	3%	Skip to Q12
	8	Retired	15%	Skip to Q12
	99	Prefer not to answer	1%	Skip to Q12
Q5	In February of this year, how many days per week did you typically work?			
	1	One	0%	
	2	Two	1%	
	3	Three	5%	
	4	Four	7%	
	5	Five	71%	
	6	Six	10%	
	7	Seven	4%	
	99	Prefer not to answer	1%	
Q6	Of the <insert from Q5> work days per week you typically worked in February , how many of these days did you primarily work from home ?			
	0	None	76%	
	1	One	5%	
	2	Two	4%	
	3	Three	3%	
	4	Four	2%	
	5	Five	6%	
	6	Six	1%	
	7	Seven	1%	
	99	Prefer not to answer	0%	

Ask Q7 and Q8 if number days reported in Q6 is less than Q5.

Q7	When you commuted to a work destination outside of your home in February of this year, how did you typically commute to work? <i>If they say they used multiple transportation methods, ask: Which did you use for the <u>longest</u> portion of your commute?</i>	
	<i>If they say drive, car, etc. ask: Did you most often drive by yourself or with other people in the vehicle?</i>	
	1	Drive alone (car, truck, SUV, or van) 87%
	2	Carpool (ride together 2 to 4 people) 5%
	3	Vanpool (ride together with 5 to 15 people) 0%
	4	Motorcycle/Moped 0%
	5	E-bike/electric scooter 0%
	6	On-demand rideshare service like Uber or Lyft 1%
	7	Taxi 0%
	Public Transit	
	8	Bus 4%
	9	Metrolink/Amtrak rail 1%
	10	Other public transit 0%
	11	Bicycle 1%
	12	Walk/jog/run 1%
	13	Other 1%
	99	Prefer not to answer 0%
Q8	In miles, what is the approximate one-way commute distance between your home and your place of work in February ? <i>If respondent not sure, ask them to estimate.</i>	
	<i>Average miles</i>	16.38
	Less than 3	8%
	3 to 5	14%
	6 to 10	22%
	11 to 15	19%
	16 to 25	19%
	26 to 40	10%
	More than 40	4%
	Prefer not to answer	3%
	<i>Ask Q9 if Q6 = 0. Otherwise skip to Q10.</i>	

Q9	In February of this year (prior to coronavirus restrictions), did your employer give you the option to work from home at least one day per week?		
	1	Yes	9%
	2	No	89%
	98	Not sure	1%
	99	Prefer not to answer	1%
Q10	In February , what industry did you work in? <i>If hesitates, ask: What did your company do? Verbatim responses recorded and later grouped into categories shown below.</i>		
	Business Services		17%
	Medical, Social Services		15%
	Education		10%
	IT Manufacturing		7%
	Non IT Manufacturing		7%
	Hospitality, Visitor, Entertainment		7%
	Retail		6%
	Prefer not to answer		5%
	Financial Services		4%
	Construction		4%
	Government / Public Admin		4%
	Transportation		4%
	Sales (unspecified)		3%
	Biosciences, Pharmaceuticals		2%
	Religious / Non-profit		2%
	Security		2%
	Energy, Natural Resources		2%
	Communications		1%
	Maintenance / Janitorial		1%
Q11	In February , what was your occupation ? <i>If hesitates, ask: What type of work did you do? Verbatim responses recorded and later grouped into categories shown below.</i>		
	Supervisors, managers		15%
	Administrative, office workers		12%
	Professional specialty (not IT)		11%
	Sales		8%
	Executive		7%
	Teachers		7%
	Prefer not to answer		7%

Medical assistants	6%
Information technology (IT)	5%
Operators, fabricators and laborers	4%
Craft and repair	4%
Food preparation and serving	4%
Customer service reps	3%
Protective services	2%
Physicians	2%
Nurses	2%
Precision production and precision assembly	1%
Janitorial	1%
Government	1%
Courier services, delivery, driver	1%
Contractor	1%

Section 5: Pre-COVID Activities

Q12 In February of this year (prior to coronavirus restrictions), approximately how many days during the month did you: _____?

	<i>Read in Order</i>	Average Days	None	1 to 3	4 to 8	9 to 16	More than 16
A	Ride Metrolink or Amtrak rail	0.32	92%	5%	1%	1%	1%
B	Ride a bus	0.63	90%	3%	2%	2%	2%
C	Use an on-demand rideshare service like Uber or Lyft	0.98	65%	23%	8%	2%	1%
D	Carpool with people you don't live with	0.86	80%	10%	6%	3%	2%
E	Vanpool	0.13	98%	1%	1%	0%	0%
F	Ride a bicycle	1.44	79%	8%	7%	4%	2%
G	Drive alone in a vehicle	17.68	9%	4%	9%	15%	63%
H	Purchase products online	5.58	11%	34%	31%	20%	4%
I	Purchase groceries online	0.61	85%	9%	5%	1%	0%
J	Eat a meal at a restaurant	6.67	10%	22%	39%	21%	7%
K	Order food for pick-up from a restaurant	2.94	33%	32%	24%	9%	2%
L	Order food for delivery from a restaurant	1.25	61%	25%	11%	3%	1%

Section 6: COVID Period Employment & Commute

The coronavirus outbreak in California and the restrictions put in place to slow the spread of COVID-19 affected a lot of businesses and changed many aspects of daily life over the past few months. We're interested in how your activities may have changed over the past few months in response to the coronavirus outbreak.

Q13 In **June** of this year, which best describes your employment status? Were you employed full-time, employed part-time, self-employed, laid-off or furloughed, not employed but looking for work, a student, a homemaker, or retired?

1	Employed full-time	44%	Ask Q14
2	Employed part-time	9%	Ask Q14
3	Self-employed	6%	Ask Q14
4	Laid-off/furloughed	11%	Skip to Q23
5	Not employed, but looking for work	7%	Skip to Q23
6	Student	4%	Skip to Q23
7	Homemaker	4%	Skip to Q23
8	Retired	15%	Skip to Q23
99	Prefer not to answer	2%	Skip to Q23

Summary of Employment Status, February & June (Q4 and Q13)

1	Employed Feb & Jun	56%
2	Not employed Feb & Jun	26%
3	Employed Feb but not Jun	13%
4	Not employed Feb but employed Jun	2%
5	Refused one or both questions	2%

Q14 In **June** of this year, how many days per week did you typically work?

1	One	2%
2	Two	4%
3	Three	6%
4	Four	11%
5	Five	65%
6	Six	8%
7	Seven	4%
99	Prefer not to answer	1%

<i>Summary of Days Worked per Week (February vs June, Q5 and Q14)</i>				
			<i>All Respondents</i>	<i>Respondents Employed in June</i>
	1	More days per week in Jun	6%	9%
	2	Same days per week in Jun	68%	72%
	3	Fewer days per week in Jun	23%	17%
	4	Refused one or both questions	3%	2%
Q15	Of the <insert from Q14> work days per week you typically worked in June , how many of these days did you primarily work from home ?			
	0	None		39%
	1	One		5%
	2	Two		6%
	3	Three		6%
	4	Four		8%
	5	Five		33%
	6	Six		2%
	7	Seven		2%
	99	Prefer not to answer		0%
<i>Summary of Days Worked From Home per Week (February vs June, Q6 and Q15)</i>				
			<i>All Respondents</i>	<i>Respondents Employed in June</i>
	1	More days per week in Jun	27%	46%
	2	Same days per week in Jun	66%	49%
	3	Fewer days per week in Jun	4%	4%
	4	Refused one or both questions	2%	0%
<i>Ask Q16 if number days reported in Q15 is less than Q14.</i>				
Q16	When you commuted to a work destination outside of your home in June of this year, how did you typically commute to work? <i>If they say they used multiple transportation methods, ask: Which did you use for the <u>longest</u> portion of your commute?</i>			
	<i>If they say drive, car, etc. ask: Did you most often drive by yourself or with other people in the vehicle?</i>			
	1	Drive alone (car, truck, SUV, or van)		89%
	2	Carpool (ride together 2 to 4 people)		4%
	3	Vanpool (ride together with 5 to 15 people)		0%
	4	Motorcycle/Moped		0%
	5	E-bike/electric scooter		0%

6	On-demand rideshare service like Uber or Lyft	1%
7	Taxi	0%
Public Transit		
8	Bus	3%
9	Metrolink/Amtrak rail	0%
10	Other public transit	0%
11	Bicycle	1%
12	Walk/jog/run	1%
13	Other	1%
99	Prefer not to answer	0%
<i>Ask Q17 if Q15 = 0.</i>		
Q17	In June of this year, did your employer give you the option to work from home at least one day per week?	
1	Yes	12%
2	No	85%
98	Not sure	1%
99	Prefer not to answer	2%
<i>Ask Q18 if Q4 = (1,2,3).</i>		
Q18	Were you working for the same employer in June as you were in February?	
1	Yes	94% <i>Skip to Q22</i>
2	No	5% <i>Go to Q19</i>
99	Prefer not to answer	0% <i>Skip to Q22</i>
<i>Ask Q19 and Q20 if [Q4 = (1,2,3) and Q18 = 2] or [Q4 = (4,5,6,7,8) and Q13 = (1,2,3)].</i>		
Q19	What industry did you work in with your new employer in June? <i>If hesitates, ask: What does your new company do? Verbatim responses recorded and later grouped into categories shown below.</i>	
	Medical, Social Services	22%
	Retail	17%
	Business Services	8%
	Financial Services	8%
	Prefer not to answer	7%
	Non IT Manufacturing	5%
	Education	4%
	Transportation	4%
	Energy, Natural Resources	4%
	IT Manufacturing	3%

	Hospitality, Visitor, Entertainment	3%
	Security	3%
	Self-employed (unspecified)	3%
	Other (unique responses)	3%
	Communications	2%
	Construction	2%
	Religious / Non-profit	2%
	Government / Public Administration	1%
Q20	With your new employer, what was your occupation in June ? <i>If hesitates, ask: What type of work did you do?</i> Verbatim responses recorded and later grouped into categories shown below.	
	Supervisors, managers	14%
	Medical Assistants	12%
	Prefer not to answer	12%
	Courier services, delivery, driver	8%
	Administrative, office workers	7%
	Food preparation and serving	6%
	Sales	6%
	Professional specialty (not IT)	6%
	Customer service reps	5%
	Craft and repair	4%
	Executive	4%
	Operators, fabricators and laborers	3%
	Physicians	3%
	Information technology (IT)	3%
	Janitorial	2%
	Nurses	1%
	Teachers	1%
	Self-employed, freelance	1%
	Other (unique responses)	1%

Ask Q21 if [Q4 = (1,2,3) and Q18 = 2] or [Q4 = (4,5,6,7,8) and Q13 = (1,2,3)] **AND** number days reported in Q15 is less than Q14.
5% of all respondents received this question.

Q21	In miles, what is the approximate one-way commute distance between your home and your place of work in June ? <i>If respondent not sure, ask them to estimate.</i>	
	Average miles	40.86
	Less than 3	30%
	3 to 5	9%
	6 to 10	15%
	11 to 15	17%
	16 to 25	16%
	26 to 40	4%
	More than 40	6%
	Prefer not to answer	2%

Ask Q22 if Q15>0.
35% of all respondents received this question.

Q22	You mentioned you worked <insert from Q14> days per week in June, of which <insert from Q15> days you primarily worked from home. In other words, you primarily worked from home <insert percentage Q15/Q14> of your work days in June. Looking ahead to when the coronavirus outbreak is over, would you prefer to increase the percentage of days you primarily work from home, decrease the percentage, or keep it about the same as in June?	
	1 Increase	13%
	2 Decrease	35%
	3 Keep about the same as in June	51%
	99 Prefer not to answer	1%

Section 7: COVID Period Activities

Q23	In June of this year, approximately how many days during the month did you: _____?									
	<i>Read in Order</i>	Average Days	None	1 to 3	4 to 8	9 to 16	More than 16	Less in Jun than Feb	Same amount, Feb & Jun	More in Jun than Feb
A	Ride Metrolink or Amtrak rail	0.05	99%	1%	0%	0%	0%	7%	92%	0%
B	Ride a bus	0.27	97%	1%	1%	0%	1%	9%	91%	1%
C	Use an on-demand rideshare service like Uber or Lyft	0.26	91%	7%	1%	0%	0%	31%	66%	3%
D	Carpool with people you don't live with	0.44	90%	7%	2%	1%	0%	17%	80%	4%

E	Vanpool	0.10	99%	0%	0%	0%	0%	2%	98%	1%
F	Ride a bicycle	1.64	79%	7%	6%	5%	2%	11%	78%	11%
G	Drive alone in a vehicle	12.86	12%	9%	23%	21%	34%	63%	25%	12%
H	Purchase products online	7.61	10%	20%	31%	29%	9%	24%	24%	52%
I	Purchase groceries online	1.33	71%	14%	11%	3%	1%	6%	71%	23%
J	Eat a meal at a restaurant	1.33	61%	27%	10%	2%	1%	82%	14%	4%
K	Order food for pick-up from a restaurant	5.14	19%	27%	34%	16%	4%	25%	26%	49%
L	Order food for delivery from a restaurant	2.33	52%	23%	17%	6%	2%	17%	52%	32%

Section 8: Background & Demographics

Thank you so much for your participation. I have just a few background questions for statistical purposes.

D1	In what year were you born? Year recorded and grouped into age categories shown below.	
	18 to 24	13%
	25 to 34	19%
	35 to 44	19%
	45 to 54	19%
	55 to 64	14%
	65 or older	15%
	Prefer not to answer	1%
D2	What is your gender?	
	1 Male	49%
	2 Female	49%
	3 Other	1%
	99 Prefer not to answer	2%
D3	How would you describe your access to a personal vehicle? Would you say you always have access, sometimes have access, rarely have access, or never have access to a personal vehicle?	
	1 Always	91%
	2 Sometimes	4%
	3 Rarely	1%
	4 Never	3%
	99 Prefer not to answer	1%

D4	Do you rent or own your home?		
	1	Rent	41%
	2	Own	53%
	99	Prefer not to answer	6%
D5	What ethnic group do you consider yourself a part of or feel closest to? <i>Read list if respondent hesitates</i>		
	1	Caucasian/White	38%
	2	Latino/Hispanic	32%
	3	African-American/Black	2%
	4	American Indian or Alaskan Native	<1%
	5	Asian -- Korean, Japanese, Chinese, Vietnamese, Filipino or other Asian	20%
	6	Pacific Islander	<1%
	7	Middle Eastern	1%
	8	Mixed Heritage	1%
	98	Other	1%
	99	Prefer not to answer	5%
D6	I have just one more question for you for statistical reasons. I am going to read some income categories. Please stop me when I reach the category that best describes your total household income.		
	1	Less than \$25,000	8%
	2	\$25,000 to less than \$50,000	16%
	3	\$50,000 to less than \$75,000	17%
	4	\$75,000 to less than \$100,000	16%
	5	\$100,000 to less than \$150,000	16%
	6	\$150,000 or more	20%
	98	Not sure	1%
	99	Prefer not to answer	6%
Those are all of the questions that I have for you! Thanks very much for participating.			

<i>Post Interview Items</i>			
S1	Supervisory District		
	1	One	21%
	2	Two	21%
	3	Three	17%
	4	Four	21%
	5	Five	19%