ATTITUDINAL & AWARENESS SURVEY
SUMMARY REPORT

PREPARED FOR OCTA

OCTOBER 26, 2021

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INTRODUCTION

The Orange County Transportation Authority (OCTA) is the county transportation agency responsible for planning, funding, and delivering transportation improvements in Orange County—including freeway, street, and transit systems. As part of OCTA's commitment to enhancing customer satisfaction by understanding, connecting with, and serving its diverse communities and partners, the Authority periodically conducts an *Attitudinal & Awareness Survey* to gather data on Orange County residents' awareness, perceptions, and priorities with respect to OCTA as well as the projects, programs, and services it provides.

From the outset, the *Attitudinal & Awareness Survey* has been designed to track opinions on key questions and performance metrics over time, as well as provide an opportunity for OCTA to gather information on topics of particular interest to OCTA at the time of the survey. The 2021 survey followed this same approach, with certain question series tracked from prior studies, and others new to the 2021 survey to help inform OCTA's development of the 2022 Long Range Transportation Plan (LRTP).
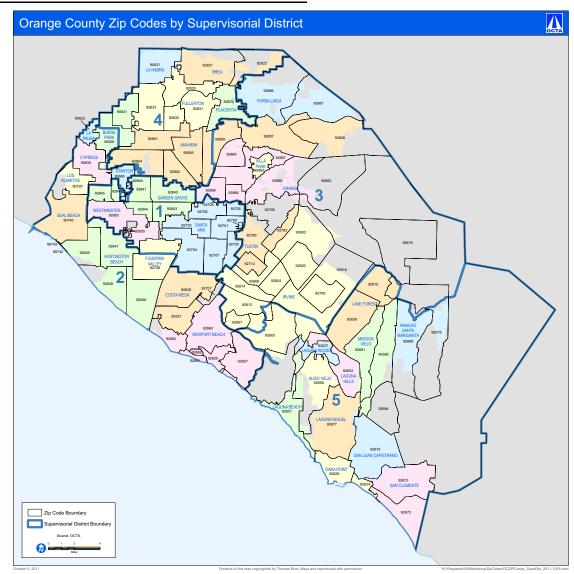
By collecting and analyzing current opinion data and comparing the results to prior related surveys where appropriate, this study provides OCTA with statistically reliable information that can be used to make sound, strategic decisions in a variety of areas—including establishing regional priorities, project and program development/evaluation, planning, and public communications.

GOALS OF STUDY   To assist in this effort, OCTA selected True North Research to design the research plan and conduct the study. Broadly defined, the 2021 survey was designed to:

·   Measure awareness and perceptions of OCTA.

·   Gather input on priorities for the 2021 Long Range Transportation Plan (LRTP), as well as strategies for reducing vehicle trips and congestion.

·   Profile residents' travel behavior and their use of the transportation system in Orange County.

·   Identify the sources residents primarily use for information about news and events in Orange County.

·   Measure public awareness of OC Go.

·   Gather relevant demographic and background information.

OVERVIEW OF METHODOLOGY   A full description of the methodology used for this study is included later in this report (see *Methodology* on page 41). In brief, a total of 2,564 randomly selected Orange County adult residents participated in the survey between June 3 and June 27, 2021. 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 18 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

STATISTICAL SIGNIFICANCE Many of the figures and tables in this report present the results of questions asked in 2021 alongside the results found in prior OCTA surveys for identical questions. In such cases, True North conducted the appropriate tests of statistical significance to identify changes that likely reflect actual changes in public opinion between the study periods—as opposed to being due to chance associated with selecting two samples independently and at random. Differences between the 2018 and 2021 studies are identified as *statistically significant* if we can be 95% confident that the differences reflect an actual change in public opinion or behavior between the two studies. Statistically significant differences within response categories over time are denoted by the † symbol which appears in the figure next to the appropriate response value for 2021.

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 sections titled *Just the Facts* and *Conclusions* are for you. They provide a summary of the most important factual findings of the survey in bullet-point format 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 41). 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 44) 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 at True North Research (Dr. Timothy McLarney and Richard Sarles) 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 400 studies for California municipalities, special districts, and transportation planning agencies.

JUST THE FACTS

The following is an outline of the main factual findings from the survey. For the reader's convenience, we have organized the findings according to the section titles used in the body of this report. Thus, if you would like to learn more about a particular finding, simply turn to the appropriate report section.

QUALITY OF LIFE & LOCAL ISSUES

· Nearly 8-in-10 respondents in 2021 shared favorable opinions of the quality of life in Orange County, with 26% reporting it is excellent and 53% stating it is good. Approximately 18% of respondents indicated the quality of life in the County is fair, whereas just 3% used poor or very poor to describe quality of life in Orange County.

· When asked in an open-ended manner to identify the most important issue facing Orange County, the most frequent response was homelessness (25%), followed by a response of not sure/cannot think of anything (16%), real estate/housing issues (16%), and traffic congestion (12%). Other topics that were mentioned by at least 4% of respondents included public safety (8%), cost of living (7%), public transportation (4%), population/overcrowding (4%), and racism/diversity concerns (4%).

AWARENESS & OPINIONS OF OCTA

· Nearly nine-in-ten respondents (87%) had heard of OCTA prior to participating in the survey.

· When asked if they have an opinion of OCTA, approximately one-quarter (26%) offered that they do not have an opinion of the agency or preferred not to answer the question. Among the remaining respondents, however, opinions of OCTA were decidedly positive. Fifty-three percent (53%) stated that they have a favorable opinion of the agency, whereas 21% offered an unfavorable opinion of OCTA.

LONG RANGE TRANSPORTATION PLAN

· Among strategies OCTA could pursue to reduce driving trips, VMT, and congestion, Orange County residents expressed the strongest support for encouraging businesses to allow employees to work from home at least one day per week, where possible (88% strongly + somewhat support), creating safe routes to school to encourage more kids to walk and bike to school (86%), and encouraging more walking by improving sidewalks, crosswalks, pedestrian safety, signs, and infrastructure (84%).

· Approximately eight-in-ten respondents also supported improving and expanding commuter rail services including Metrolink and Amtrak (81%), modifying streets so they can safely accommodate all forms of transportation including cars, transit, pedestrians and bicyclists (80%), making it easier for transit riders to get to their final destination by offering shuttles, e-bikes, e-scooters, and rideshare services at transit stations (79%), improving and expanding bus services (79%), and increasing programs that encourage carpooling, vanpooling, and ridesharing (79%).

· More than two-thirds of respondents also supported offering a guaranteed ride home for those who use transit, carpool, vanpool or bike and find themselves in need of an emergency ride home (75%), encouraging more bicycling by expanding the network of dedicated bike lanes and shared lanes (73%), and creating a network of light rail streetcars, similar to the San Diego trolley system (68%).

- When presented with *pricing* and *policy* strategies OCTA could pursue to reduce vehicle trips and congestion in the future, creating programs and incentives that encourage employees to work remotely at home (83% support) and that encourage businesses and employees to make greater use of transit, carpooling, and bicycling for their commutes (82%) were the most popular, along with reducing the cost of transit passes and tickets to encourage more transit use (81%).

- Three-quarters of respondents were also supportive of focusing future transit improvements in areas that have a high percentage of multifamily housing (80%) and creating dedicated lanes for transit so that it is faster and avoids traffic (74%).

- Whether described as the conversion of a single carpool lane to an express lane (49%) or as converting carpool lanes on freeways throughout the County to create a network of connected express lanes (51%), approximately half of respondents supported this strategy that would require three people per vehicle to use an express lane, but also allowing vehicles with fewer occupants to use the lane for a toll.

- Just one-third of respondents supported charging for parking in areas that receive a lot of traffic (34%) or requiring at least three people in a vehicle to qualify for the carpool lane (33%) as strategies for reducing traffic congestion in Orange County.

- When presented with a series of capacity and infrastructure improvements, fixing potholes and repairing roadways received the highest percentage of individuals stating it should be a high or medium priority for inclusion in the LRTP (93%), followed by making more efficient use of existing freeways, lanes, roads, and infrastructure (88%), and synchronizing traffic signals on major roadways (86%). Approximately three-quarters of respondents also rated widening freeways where possible (75%) and improving and repairing the network of sidewalks (75%) as a high or medium priority for inclusion in the LRTP.

- When compared to the other items tested, enhancing infrastructure to accommodate autonomous, driverless vehicles had far fewer respondents rate the item as a high or medium priority (40%).

TRAVEL BEHAVIOR

- When asked about their *primary* means of transportation in Orange County, the majority (60%) of residents surveyed indicated that they primarily drive alone, whereas three-in-ten typically drive with one (22%) or two or more passengers (8%). Overall, 3% stated that they primarily travel by local bus and 7% primarily travel by alternative modes including walking/running, biking, Metrolink, express bus, vanpooling, or motorcycle.

- As for their use of toll roads and transit, Orange County residents reported the highest frequency of use for the 91 Express Lanes Toll Road (39% use; 5% weekly), followed by Metrolink commuter rail (16% use; 2.1% weekly), regular bus service (15% use; 4.5% weekly), express bus service (9% use; 1.5% weekly), and ACCESS paratransit service (6% use; 1.6% weekly).

- Overall, 51% of respondents indicated that they commute to work at least three times per week, 6% do so for school, whereas 20% reported that they currently work or attend school at home. Approximately 21% stated that they do *not* commute to work or school at least three times per week (nor work or attend school from home), whereas 2% preferred to not answer the question.

COMMUNICATIONS

- When asked to identify their *primary* source of information for news and events in Orange County, the most common source was the Internet (40%), followed by social media (22%) and television (17%). The remaining sources—newspapers and radio—were identified as primary information sources for news and events in Orange County by 9% and 4% of respondents, respectively.

- Approximately 18% of Orange County residents reported that they had heard of OC Go prior to taking the 2021 survey, 72% had not heard of OC Go, and 10% were unsure.

CONCLUSIONS

As noted in the *Introduction*, this study was designed to gather data on Orange County residents' awareness, perceptions, and priorities with respect to OCTA as well as the projects, programs, and services it provides. By collecting and analyzing current opinion data and comparing the results to prior related surveys where appropriate, this study provides OCTA with statistically reliable information that can be used to enhance customer satisfaction, improve OCTA-resident engagement, inform the 2022 Long Range Transportation Plan, and ultimately improve the way OCTA serves its diverse communities and partners.

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.

What types of vehicle trip, VMT, and congestion reducing strategies do Orange County residents support including in the 2022 LRTP?

Over the next 20 years, Orange County's population is expected to increase by 9% and the number of people employed in the County is expected to increase by 12%. These changes will naturally lead to greater traffic congestion unless improvements are made to the County's transportation system *and* we find ways to reduce the number of trips people make by driving in a typical day. Although capacity improvements are an important strategy for improving mobility, it's also the case that Orange County can't simply build its way out of congestion. Keeping Orange County moving will require that we make more *efficient* use of the existing transportation system, reduce the need for vehicle trips, and make it easier for residents to get where they want to go using alternative modes.

To help inform the 2022 LRTP, the survey explored Orange County residents' opinions regarding a variety of strategies to reduce driving trips, vehicle miles traveled (VMT), and traffic congestion. The results were striking, as *every* strategy tested was supported by at least two-thirds of respondents.

Overall, respondent's expressed the strongest support for encouraging businesses to allow employees to work from home at least one day per week, where possible (88% strongly + somewhat support), creating safe routes to school to encourage more kids to walk and bike to school (86%), and encouraging more walking by improving sidewalks, crosswalks, pedestrian safety, signs, and infrastructure (84%). Approximately eight-in-ten respondents also supported improving and expanding commuter rail services including Metrolink and Amtrak (81%), modifying streets so they can safely accommodate all forms of transportation including cars, transit, pedestrians and bicyclists (80%), making it easier for transit riders to get to their final destination by offering shuttles, e-bikes, e-scooters, and rideshare services at transit stations (79%), improving and expanding bus services (79%), and increasing programs that encourage carpooling, vanpooling, and ridesharing (79%).

More than two-thirds of respondents also supported offering a guaranteed ride home for those who use transit, carpool, vanpool or bike and find themselves in need of an emergency ride home (75%), encouraging more bicycling by expanding the network of dedicated bike lanes and shared lanes (73%), and creating a network of light rail streetcars, similar to the San Diego trolley system (68%). For more on this topic, see *Trip, VMT & Congestion Reducing strategies* on page 20.

Are Orange County residents receptive to pricing and policy strategies to encourage use of alternative modes and less driving?

In addition to encouraging people to drive less by making improvements to the active transportation and transit systems in Orange County, OCTA is also exploring the option to use *pricing* or *policy* strategies to incentivize residents to drive less, rideshare, and/or use alternative modes. Respondents' reactions to pricing and policy strategies tested in the survey ranged from strongly supportive to largely opposed, depending on the strategy.

The most popular strategies tended to be 'carrots', meaning they provided positive incentives to encourage people to drive less. Creating programs and incentives that encourage employees to work remotely at home (83% strongly + somewhat support) and that encourage businesses and employees to make greater use of transit, carpooling, and bicycling for their commutes (82%) were the most popular, along with reducing the cost of transit passes and tickets to encourage more transit use (81%). Three-quarters of respondents were also supportive of focusing future transit improvements in areas that have a high percentage of multifamily housing (80%) and creating dedicated lanes for transit so that it is faster and avoids traffic (74%).

Respondents were evenly divided on the concept of converting a carpool lane to an express lane where vehicles with three or more people can use the lane for free and those with fewer than three people have the option to pay a toll to use the lane. Whether described as the conversion of a single carpool lane (49%) or as converting carpool lanes on freeways throughout the County to create a network of connected express lanes (51%), approximately half of respondents supported this strategy for reducing traffic congestion in the future.

At the other end of the spectrum, just one-third of respondents supported charging for parking in areas that receive a lot of traffic (34%) or requiring at least three people in a vehicle to qualify for the carpool lane (33%) as strategies for reducing traffic congestion in Orange County. For more on this topic, see *Pricing and Policy Strategies* on page 24.

Have residents' priorities for capacity and infrastructure improvements changed in recent years?

Projects that repair, improve, and/or enhance the capacity of Orange County's transportation system have traditionally been among the most popular projects with Orange County residents. The 2021 survey affirmed that this is still generally the case. When presented with a short

list of projects in this category, most were identified as high or medium priority for inclusion in the 2022 LRTP by at least 75% of respondents. That said, there were significant changes in how specific types of projects were rated when compared to prior surveys.

Among the items tested, fixing potholes and repairing roadways received the highest percentage of high priority or medium priority ratings in the 2021 survey (93%), followed by making more efficient use of existing freeways, lanes, roads, and infrastructure (88%), and synchronizing traffic signals on major roadways (86%). Approximately three-quarters of respondents also rated widening freeways where possible (75%) and improving and repairing the network of sidewalks (75%) as a high or medium priority for inclusion in the LRTP. When compared to the other items tested, enhancing infrastructure to accommodate autonomous, driverless vehicles had far fewer respondents rate the item as a high or medium priority (40%).

The 2021 survey witnessed statistically significant *increases* in the percentage who rated three of the items a high priority—improving and repairing the network of sidewalks (+8%), fixing potholes and repairing roadways (+6%), and enhancing infrastructure to accommodate autonomous, driverless vehicles (+5%). Meanwhile, there were significantly fewer respondents in 2021 who rated widening freeways, where possible, as a high priority for inclusion in the LRTP (-8%). For more on this topic, see *Capacity & Infrastructure* on page 26.

Are residents aware of OCTA and what are their impressions of the agency?

Transportation commissions often operate in relative obscurity from the public's perspective. Although virtually all residents can identify their city and—to a lesser extent—their local school district, special districts are often not on the average resident's radar. Considering the above, the level of public awareness of the Orange County Transportation Authority continues to be quite high. Nearly 9-in-10 respondents (87%) had heard of OCTA prior to participating in the 2021 survey, which is similar to the figure found in the 2018 survey, but significantly higher than the levels of awareness recorded in 2015 (84%) and 2011 (83%). Awareness of OCTA was also widespread, with more than 70% of respondents in all but one subgroup (those who had lived in Orange County less than five years) having heard of OCTA prior to participating in the survey.

Although awareness of the agency has increased, the percentage who have an *opinion* of OCTA has shown the most steady change over time. A decade ago (2011), 45% of respondents were not familiar enough with OCTA to have an opinion of the agency—good or bad. Through its outreach and engagement efforts, OCTA has managed to significantly improve public awareness and understanding of the agency, such that in 2021 just one-quarter of respondents lacked an opinion of the agency. Moreover, among the remaining respondents, opinions of OCTA were

decidedly positive with 53% stating that they had a favorable opinion of the agency compared to 21% offering an unfavorable opinion. The percentage of respondents with a *favorable* opinion of OCTA also increased significantly in the past three years. For more on this topic, see *Awareness & Opinions of OCTA* on page 15.

What are Orange County residents' primary information sources?

Developing effective communications strategies requires the ability to hit a moving target, as media consumption habits are continually changing. The 2021 survey witnessed the continuation of several dramatic trends with respect to information sources that have stretched over the past six to ten years, as well as what could be the beginning of a new trend.

As for *long-term* trends, the publics' reliance on newspapers and television for Orange County news and information continued its downward spiral. Ten years ago (2011), more than half of all respondents indicated they relied on a newspaper (26%) or television (27%) as their *primary* source for Orange County news and information. In 2021, just one-quarter of respondents cited television (17%) or newspapers (10%) as their primary information source, with the latter exhibiting a statistically significant decline each of the past four survey cycles. Radio also fell by a statistically significant margin during the past three years, from 8% (2018) to 4% (2021).

As reliance on newspapers and television ebbed over the past decade, the social media tide filled-in. The percentage of Orange County residents citing social media as their primary information source has risen from 6% in 2011 to 22% in 2021. It is worth noting, however, that after the dramatic growth of social media as an information source between 2011 and 2018, the rate of growth flattened between 2018 and 2021—increasing by just 2%. This change could reflect the increased scrutiny and criticism that Facebook and other social media platforms have received in recent years on multiple fronts—from spreading misinformation, to censoring certain perspectives, to questionable business practices. What is clear is that the growth sector has shifted from social media to the Internet in general, with the percentage of respondents indicating they primarily rely on the Internet for Orange County news and information increasing from 34% in 2018 to 40% in 2021.

QUALITY OF LIFE & LOCAL ISSUES

The opening series of questions in the 2021 survey was designed to assess residents' top of mind perceptions about the quality of life in Orange County, as well as the most important issues facing Orange County today.

QUALITY OF LIFE   At the outset of the interview, respondents were asked to rate the quality of life in the County using a five-point scale of excellent, good, fair, poor, or very poor. As shown in Figure 2 below, nearly 8-in-10 respondents in 2021 shared favorable opinions of the quality of life in Orange County, with 26% reporting it is excellent and 53% stating it is good. Approximately 18% of respondents indicated the quality of life in the County is fair, whereas just 3% used poor or very poor to describe quality of life in Orange County. Despite the pandemic and the many ways it has impacted how Orange County residents live, work, and play during the past 18 months, ratings of the quality of life in Orange County in 2021 were strikingly similar to those in 2018 (prior to the pandemic)—there were no statistically significant changes.

Question 2   *How would you rate the overall quality of life in Orange County? Would you say it is excellent, good, fair, poor or very poor?*
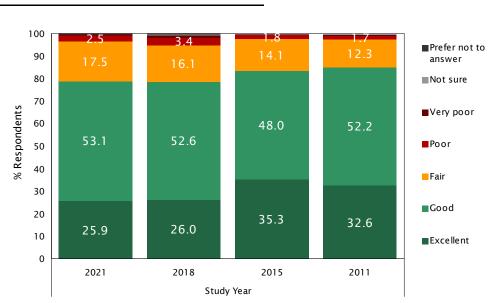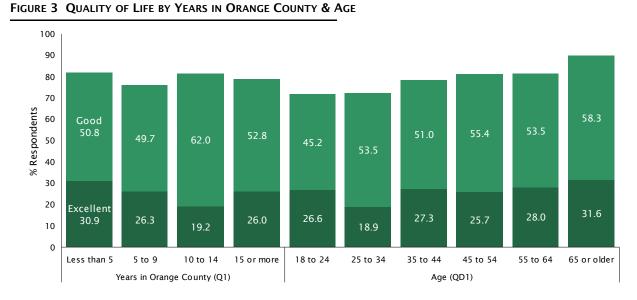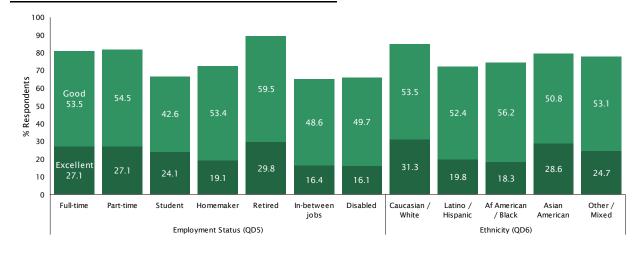
FIGURE 2 QUALITY OF LIFE BY STUDY YEAR

On the next page, Figures 3-5 show how residents' perceptions of the quality of life in Orange County varied by key characteristics, including length of residence, age, employment status, ethnicity, household income, and Supervisorial District. Although the general pattern is one of a consistently positive assessment of the quality of life in Orange County across resident subgroups, it is worth noting that household income continues to be a significant factor in shaping perceptions of the quality of life in Orange County.[1] In general, the higher an individual's household income, the more likely they were to rate the quality of life in the County as excellent. Similarly, ratings of the quality of life in the County tended to improve with respondent age.

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1. A similar pattern was found in the 2011, 2015, and 2018 surveys.

FIGURE 3 QUALITY OF LIFE BY YEARS IN ORANGE COUNTY & AGE

FIGURE 4 QUALITY OF LIFE BY EMPLOYMENT STATUS & ETHNICITY
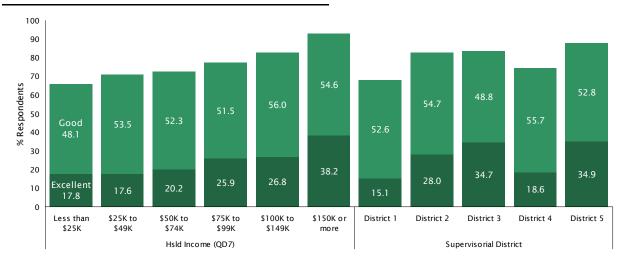
## FIGURE 5 QUALITY OF LIFE BY HSLD INCOME & SUPERVISORIAL DISTRICT

MOST IMPORTANT ISSUES   Respondents were next asked to identify the most important issue facing Orange County today. Question 3 was posed 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 options. True North later reviewed the verbatim responses and grouped them into the categories shown in Figure 6. Categories that received less than 1.2% of responses are not shown.

Question 3   *Thinking about Orange County as a whole, what would you say is the most important issue facing Orange County today?*
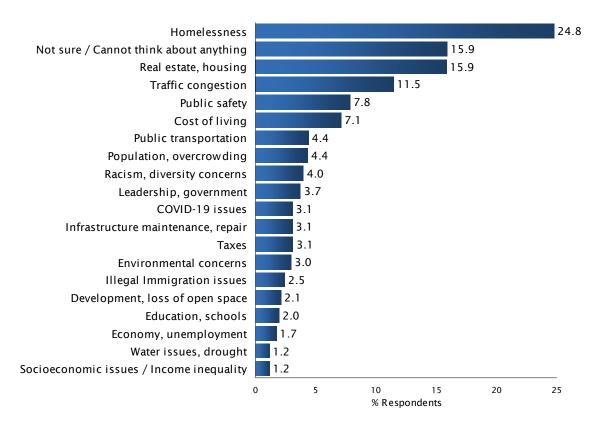
FIGURE 6 MOST IMPORTANT ISSUE FACING ORANGE COUNTY

The most frequently mentioned issue in 2021 was homelessness (25%), followed by a response of not sure/cannot think of anything (16%), real estate/housing issues (16%), and traffic congestion (12%). Other topics that were mentioned by at least 4% of respondents included public safety (8%), cost of living (7%), public transportation (4%), population/overcrowding (4%), and racism/diversity concerns (4%). Given the purpose of this study, it is instructive that traffic congestion and transportation issues collectively accounted for approximately 16% of all responses, which is slightly higher than the proportions found in the 2018 study.

Table 1 on the next page compares the top 10 responses to Question 3 over time. There has been a lot of change in the issues that are top-of-mind for Orange County residents over time, which is reflected in the movement of issues in Table 1. Homelessness shot up the ranking in 2018 (from the tenth most important issue facing Orange County in 2015 to the top slot in 2018) and remains at the top of the list in 2021. Real estate/housing issues are similarly more

salient today than six years ago, moving from fifth place (2015) to third place (2021). In the past three years (2018-2021), the topics of public safety, racism/diversity concerns, and leadership/ government all rose in the list, while population/overcrowding, illegal immigration, and infra-structure maintenance/repair fell.

TABLE 1 TOP MOST IMPORTANT ISSUES FACING ORANGE COUNTY BY STUDY YEAR

| Study Year			
2021	2018	2015	2011
Homelessness	Homelessness	Water issues, drought	Economy, unemployment
Not sure / Can't think of anything	Real estate, housing	Not sure / Can't think of anything	Not sure / Can't think of anything
Real estate, housing	Not sure / Can't think of anything	Traffic	Education, schools
Traffic congestion	Traffic congestion	Economy, unemployment	Traffic
Public safety	Cost of living	Real estate, housing	Public safety / Crime
Cost of living	Population, overcrowding	Cost of living	Budget, spending
Public transportation	Illegal immigration issues	Public safety	Real estate, housing
Population, overcrowding	Public transportation	Population, overcrowding	Transportation infrastructure
Racism, diversity concerns	Public safety	Education, schools	Population, overcrowding
Leadership, government	Infrastructure maintenance, repair	Homelessness	Cost of living

AWARENESS & OPINIONS OF OCTA

One of the goals of this study was to gauge public awareness and perceptions of the Orange County Transportation Authority. Put simply, are residents aware of OCTA? And do they have a favorable or unfavorable opinion of the Authority?

Accurately measuring awareness and attitudes about OCTA is a sensitive exercise, so these questions were strategically placed at the beginning of the survey so as to preclude potential measurement error associated with a position-order bias. In other words, because many of the questions in the survey addressed topics that could shape a respondents' attitudes about OCTA as an agency, these questions were purposely located early in the survey to avoid this potential source of bias.

AIDED AWARENESS   The first question in this series simply asked respondents whether—prior to taking the survey—they had heard of the Orange County Transportation Authority, also known as OCTA. As shown in Figure 7 below, the vast majority (87%) of respondents in 2021 affirmed that they had heard of OCTA prior to the interview, which is similar to the figure found in the 2018 study (88%). Following a statistically significant *increase* in awareness of OCTA between 2015 and 2018, there were no statistically significant changes in awareness in the past three years.
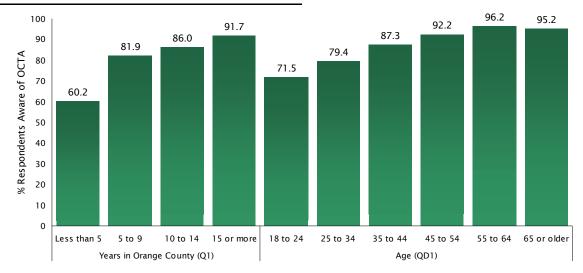
Question 4   *Prior to taking this survey, had you heard of the Orange County Transportation Authority, also known as O.C.T.A.?*

FIGURE 7 HEARD OF OCTA BY STUDY YEAR
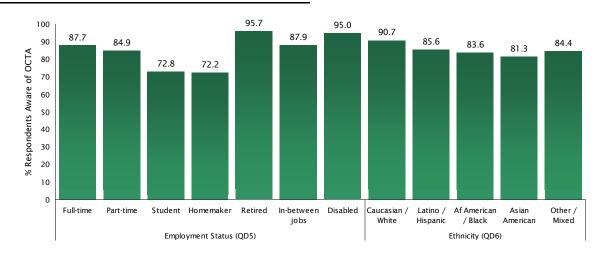
Figures 8-10 display how awareness of OCTA varied substantially across resident subgroups. When compared to their respective counterparts, those who had resided in the County 15 years or longer, residents 45 years and older, retired and disabled individuals, Caucasians, individuals in households earning at least $75,000 annually, and residents in Supervisorial District 5 were the most likely to report being aware of OCTA prior to taking the survey.

FIGURE 8 HEARD OF OCTA BY YEARS IN ORANGE COUNTY & AGE

FIGURE 9 HEARD OF OCTA BY EMPLOYMENT STATUS & ETHNICITY
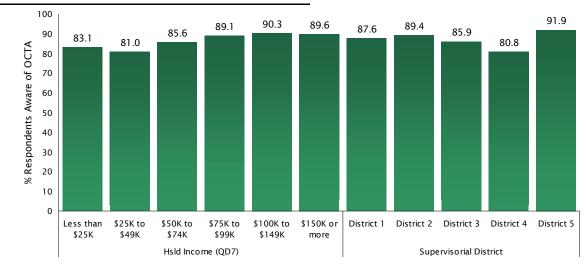
FIGURE 10 HEARD OF OCTA BY HSLD INCOME & SUPERVISORIAL DISTRICT

**OPINION OF OCTA**   After clarifying for respondents that OCTA is the public agency responsible for planning, funding, managing, and developing Orange County's transportation system, Question 5 asked respondents whether they generally have a favorable or unfavorable opinion of OCTA—or if they have no opinion either way. Approximately 26% of respondents in 2021 indicated that they do not have an opinion of OCTA or preferred not to answer the question (Figure 11). Among the remaining respondents, however, opinions of OCTA were decidedly positive. Fifty-three percent (53%) stated that they have a favorable opinion of the agency, whereas 21% offered an unfavorable opinion of OCTA.

Question 5   *To clarify, the Orange County Transportation Authority or O.C.T.A. is a public agency responsible for planning, funding, managing and developing Orange County's transportation system, including freeways, streets and roads, bus and transit services, and the 91 Express Lanes. OCTA does NOT manage the 73, 133, 241 or 261 toll roads. In general, would you say you have a favorable or unfavorable opinion of the Orange County Transportation Authority - or do you have no opinion either way?*
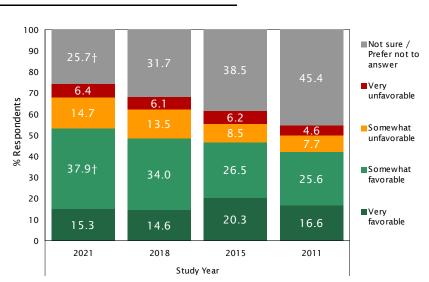
FIGURE 11 OPINION OF OCTA BY STUDY YEAR

† Statistically significant change (p < 0.05) between the 2018 and 2021 studies.

When compared to the 2018 study findings, the percentage who did not have an opinion of OCTA or preferred not to answer the question decreased significantly in 2021, whereas the percentage who had a somewhat favorable opinion increased significantly. Over the past decade, the percentage of respondents with no opinion of OCTA has declined from 45% (2011) to 26% (2021).

The following figures recalculate the results of Question 5 to be among just those who held an opinion of OCTA (favorable or unfavorable) and display how favorable opinions of OCTA in 2021 differed among resident subgroups, ranging from a low of 67% to a high of 84%. *Very* favorable ratings were highest among residents who primarily travel by public transit, those who use a regular bus at least once per month, those who use the 91 Express Lanes toll road at least once per week, young adults (under 25), individuals who commute to school at least three times per week, and residents of Supervisorial District 1 (figures 12-15).
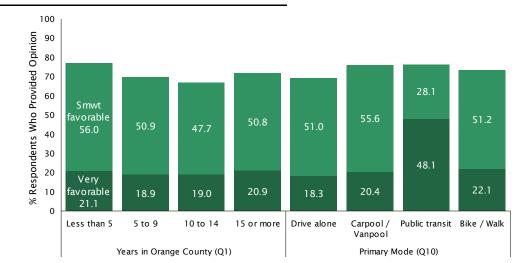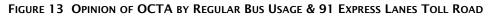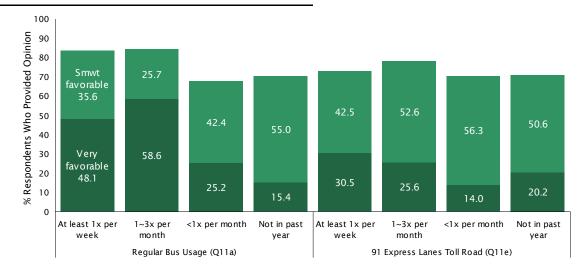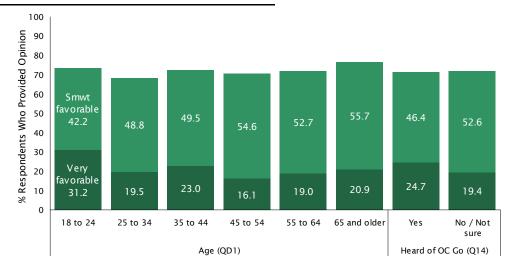
FIGURE 12 OPINION OF OCTA BY YEARS IN ORANGE COUNTY & PRIMARY MODE

FIGURE 13 OPINION OF OCTA BY REGULAR BUS USAGE & 91 EXPRESS LANES TOLL ROAD

**FIGURE 14 OPINION OF OCTA BY AGE & HEARD OF OC GO**
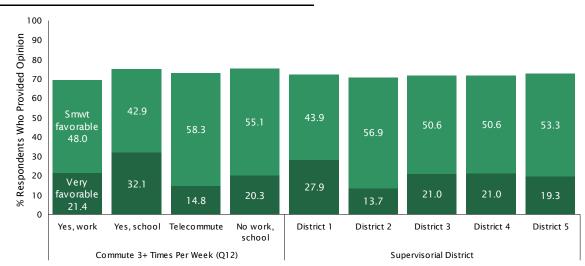
FIGURE 15 OPINION OF OCTA BY COMMUTE 3+ TIMES PER WEEK & SUPERVISORIAL DISTRICT

LONG RANGE TRANSPORTATION PLAN

Over the next 20 years, Orange County's population is expected to increase by 9% and the number of people employed in the County is expected to increase by 12%. These changes will naturally lead to greater traffic congestion unless improvements are made to the County's transportation system *and* we find ways to reduce the number of trips people make by driving in a typical day. To help ensure that Orange County's transportation system is prepared for these changes, OCTA is in the process of updating the Long Range Transportation Plan (LRTP). The general goals of the 2022 LRTP are to assess the performance of the transportation system over a 20+ year horizon and identify the projects that best address the needs of the system based on expected population, housing, and employment growth while taking forecast financial assumptions into account at the same time. In other words, the LRTP will identify priority projects, improvements, and mobility strategies to improve the transportation system, keep people moving, and relieve traffic congestion while also keeping a realistic view of financial constraints.

TRIP, VMT & CONGESTION REDUCING STRATEGIES   As part of the 2022 LRTP, OCTA is exploring a variety of strategies to reduce driving trips, vehicle miles traveled (VMT), and traffic congestion by making it easier to get places without a car, easier to share rides with others, and easier to work from home. For each of the strategies shown in Figure 16, respondents were simply asked the degree to which they supported or opposed OCTA pursuing the strategy to help reduce congestion in the future.

Question 6   *As part of its Long Range Transportation Plan, OCTA is exploring a variety of strategies to reduce driving trips by making it easier to get places without a car, easier to share rides with others, and through various pricing and incentive programs. As I read the following list of strategies that could be used to help reduce traffic congestion in the future, please indicate whether you would support or oppose each item.*

FIGURE 16 SUPPORT FOR STRATEGIES

All of the strategies tested in Question 6 were supported by more than two-thirds of respondents. Overall, Orange County residents expressed the strongest support for encouraging businesses to allow employees to work from home at least one day per week, where possible (88% strongly + somewhat support), creating safe routes to school to encourage more kids to walk and bike to school (86%), and encouraging more walking by improving sidewalks, crosswalks, pedestrian safety, signs, and infrastructure (84%). Approximately eight-in-ten respondents also supported improving and expanding commuter rail services including Metrolink and Amtrak (81%), modifying streets so they can safely accommodate all forms of transportation including cars, transit, pedestrians and bicyclists (80%), making it easier for transit riders to get to their final destination by offering shuttles, e-bikes, e-scooters, and rideshare services at transit stations (79%), improving and expanding bus services (79%), and increasing programs that encourage carpooling, vanpooling, and ridesharing (79%).

More than two-thirds of respondents also supported offering a guaranteed ride home for those who use transit, carpool, vanpool or bike and find themselves in need of an emergency ride home (75%), encouraging more bicycling by expanding the network of dedicated bike lanes and shared lanes (73%), and creating a network of light rail streetcars, similar to the San Diego trolley system (68%).

For the interested reader, tables 2-5 show how support for each strategy tested in Question 6 varied across subgroups of Orange County residents. Although support for each strategy varied across subgroups (e.g., those who had used Metrolink in the past year were more likely than their counterparts to support improving commuter rail services), the most striking pattern in the tables is the *consistency* of support for each strategy. Indeed, the level of support for each strategy tended to be similar (ranging within a 10% band) regardless of respondents' primary mode, Supervisorial District, use of 91 Express Lanes, use of transit services, and commute status.

TABLE 2 SUPPORT FOR STRATEGIES BY OVERALL & PRIMARY MODE (SHOWING % STRONGLY & SMWT SUPPORT)

	Overall	Primary Mode (Q10)			
		Drive alone	Carpool / Vanpool	Public transit	Bike / Walk
Encouraging businesses to allow employees to work from home at least one day per week, where possible	88.4	89.9	88.8	76.9	87.2
Creating safe routes to school to encourage more kids to walk, bike to school	86.3	85.3	89.4	82.8	85.2
Encouraging more walking by improving sidewalks, crosswalks, pedestrian safety, signs, infrastructure	84.4	83.6	86.0	87.8	85.0
Improving and expanding commuter rail services including Metrolink, Amtrak	80.6	80.2	82.8	86.1	79.2
Modifying streets so they can safely accommodate all forms of transportation including cars, transit, pedestrians, bicyclists	79.5	77.9	84.3	80.6	79.0
Making it easier for transit riders to get to their final destination by offering shuttles, e-bikes, e-scooters, rideshare services at transit stations	79.0	77.8	82.7	77.7	79.7
Improving and expanding bus services	78.9	77.5	82.4	88.6	73.8
Increasing programs that encourage carpooling, vanpooling, ridesharing	78.8	78.1	81.4	83.5	77.2
Offering a guaranteed ride home for those who use transit, carpool, vanpool or bike, find themselves needing an emergency ride home	75.2	73.1	79.7	80.3	75.8
Encouraging more bicycling by expanding the network of dedicated bike lanes and shared lanes	72.6	71.2	75.0	80.6	79.9
Creating a network of light rail streetcars, similar to the San Diego trolley system	68.4	67.5	70.4	74.7	73.8

TABLE 3 SUPPORT FOR STRATEGIES BY SUPERVISORIAL DISTRICT (SHOWING % STRONGLY & SMWT SUPPORT)

	Supervisorial District				
	District 1	District 2	District 3	District 4	District 5
Encouraging businesses to allow employees to work from home at least one day per week, where possible	87.7	89.2	89.1	87.5	88.5
Creating safe routes to school to encourage more kids to walk, bike to school	86.9	87.1	85.0	85.8	86.5
Encouraging more walking by improving sidewalks, crosswalks, pedestrian safety, signs, infrastructure	83.0	83.5	84.5	87.1	83.7
Improving and expanding commuter rail services including Metrolink, Amtrak	83.6	76.8	84.4	81.2	77.6
Modifying streets so they can safely accommodate all forms of transportation including cars, transit, pedestrians, bicyclists	86.1	78.6	76.5	81.9	73.6
Making it easier for transit riders to get to their final destination by offering shuttles, e-bikes, e-scooters, rideshare services at transit stations	80.9	77.7	77.3	82.4	76.4
Improving and expanding bus services	86.2	74.6	77.8	81.8	73.5
Increasing programs that encourage carpooling, vanpooling, ridesharing	81.1	77.2	78.6	81.3	75.7
Offering a guaranteed ride home for those who use transit, carpool, vanpool or bike, find themselves needing an emergency ride home	80.7	72.6	74.7	78.9	68.7
Encouraging more bicycling by expanding the network of dedicated bike lanes and shared lanes	75.0	74.2	74.1	71.1	68.5
Creating a network of light rail streetcars, similar to the San Diego trolley system	69.3	69.0	65.3	72.5	65.2

TABLE 4 SUPPORT FOR STRATEGIES BY USAGE IN PAST 12 MONTHS (SHOWING % STRONGLY & SMWT SUPPORT)

|	Usage in Past 12 Months (Q11)					
	91 Express Lanes	Regular bus	Metrolink	Express Bus	ACCESS Paratransit	None
Encouraging businesses to allow employees to work from home at least one day per week, where possible	86.9	80.1	81.9	78.5	71.5	91.3
Creating safe routes to school to encourage more kids to walk, bike to school	85.3	84.8	86.2	80.1	79.1	86.9
Encouraging more walking by improving sidewalks, crosswalks, pedestrian safety, signs, infrastructure	82.6	83.8	83.8	82.0	81.2	85.2
Improving and expanding commuter rail services including Metrolink, Amtrak	82.3	81.4	86.4	81.6	77.8	79.6
Modifying streets so they can safely accommodate all forms of transportation including cars, transit, pedestrians, bicyclists	77.7	83.7	79.8	79.3	78.1	79.2
Making it easier for transit riders to get to their final destination by offering shuttles, e-bikes, e-scooters, rideshare services at transit stations	77.3	81.8	82.0	82.8	78.2	79.4
Improving and expanding bus services	77.6	86.2	81.9	81.7	78.8	78.0
Increasing programs that encourage carpooling, vanpooling, ridesharing	78.1	80.4	76.5	78.5	78.1	79.5
Offering a guaranteed ride home for those who use transit, carpool, vanpool or bike, find themselves needing an emergency ride home	73.4	81.4	77.1	80.2	75.7	75.3
Encouraging more bicycling by expanding the network of dedicated bike lanes and shared lanes	73.7	79.5	75.6	76.2	71.4	70.3
Creating a network of light rail streetcars, similar to the San Diego trolley system	67.9	70.7	75.8	69.1	73.5	67.4

TABLE 5 SUPPORT FOR STRATEGIES BY COMMUTE 3+ TIMES PER WEEK (SHOWING % STRONGLY & SMWT SUPPORT)
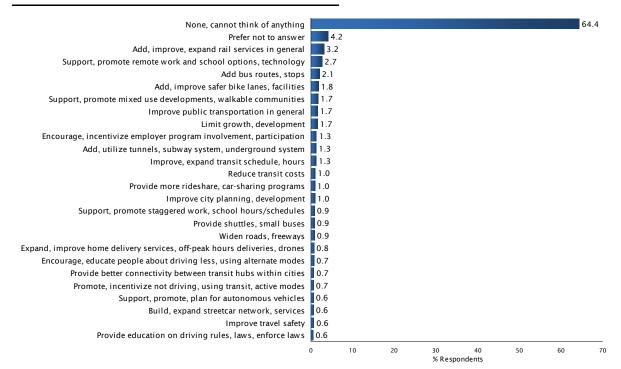
	Commute 3+ Times Per Week (Q12)			
	Yes, work	Yes, school	Tele-commute	No work, school
Encouraging businesses to allow employees to work from home at least one day per week, where possible	87.6	80.2	94.1	89.7
Creating safe routes to school to encourage more kids to walk, bike to school	86.7	89.9	86.6	85.6
Encouraging more walking by improving sidewalks, crosswalks, pedestrian safety, signs, infrastructure	83.8	86.3	86.0	85.5
Improving and expanding commuter rail services including Metrolink, Amtrak	79.8	80.3	82.7	83.7
Modifying streets so they can safely accommodate all forms of transportation including cars, transit, pedestrians, bicyclists	79.5	92.1	77.9	79.2
Making it easier for transit riders to get to their final destination by offering shuttles, e-bikes, e-scooters, rideshare services at transit stations	78.2	87.5	83.2	77.1
Improving and expanding bus services	79.1	82.0	77.2	81.2
Increasing programs that encourage carpooling, vanpooling, ridesharing	77.5	77.7	79.8	83.7
Offering a guaranteed ride home for those who use transit, carpool, vanpool or bike, find themselves needing an emergency ride home	75.6	79.0	73.3	77.6
Encouraging more bicycling by expanding the network of dedicated bike lanes and shared lanes	71.2	80.5	76.6	72.5
Creating a network of light rail streetcars, similar to the San Diego trolley system	69.6	62.3	68.5	69.0

ADDITIONAL STRATEGIES?   Recognizing that the list of projects and strategies tested in Question 6 was not exhaustive, Question 7 asked respondents to identify any strategies *not* previously mentioned that they think would be very effective at reducing the amount of driving trips people make in the future.

Question 7   *Is there a strategy I didn't mention that you think would be very effective at reducing the amount of driving trips people make in the future? If yes, ask: Please provide a brief description.*

FIGURE 17 ADDITIONAL HIGH PRIORITY STRATEGIES

Question 7 was posed in an open-ended manner, which allowed respondents to mention any potential project or strategy that came to mind without being prompted by—or restricted to—a particular list of options. True North later reviewed the verbatim responses and grouped them into the categories shown in Figure 17 on the previous page.

More than two-thirds of residents indicated there were no additional strategies for reducing traffic congestion that came to mind (64%) or that they preferred to not answer the question (4%). It is also noteworthy that the top specific responses to Question 7 simply repeated categories that had in fact been addressed in Question 6 including adding/improving rail services (3%), supporting remote work and remote schooling (3%), improving bus services (2%), and adding/improving bike lanes and bike facilities (2%).

PRICING AND POLICY STRATEGIES   In addition to encouraging people to drive less by making improvements to the active transportation and transit systems in Orange County, OCTA is also exploring the option to use *pricing* or *policy* strategies to incentivize residents to drive less, rideshare, and/or use alternative modes. In Question 8, respondents were presented with each of the pricing and policy strategies shown on the left of Figure 18 and simply asked whether they would support or oppose using the strategy to help reduce traffic congestion in the future.

Question 8   *One way to encourage people to drive less or use alternative forms of transportation is through pricing or policies. As I read a short list of pricing or policy strategies that could be used to help reduce traffic congestion in the future, please indicate whether you would support or oppose each item.*
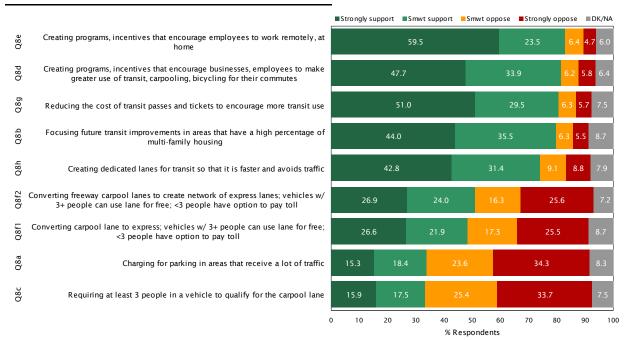
FIGURE 18 SUPPORT FOR PRICING & POLICY STRATEGIES

Respondents' reactions to the pricing and policy strategies ranged from strongly supportive to largely opposed, depending on the strategy. The most popular strategies tended to be 'carrots',

meaning they provided positive incentives to encourage people to drive less. Creating programs and incentives that encourage employees to work remotely at home (83%) and that encourage businesses and employees to make greater use of transit, carpooling, and bicycling for their commutes (82%) were the most popular, along with reducing the cost of transit passes and tickets to encourage more transit use (81%). Three-quarters of respondents were also supportive of focusing future transit improvements in areas that have a high percentage of multifamily housing (80%) and creating dedicated lanes for transit so that it is faster and avoids traffic (74%).

Respondents were evenly divided on the concept of converting a carpool lane to an express lane where vehicles with three or more people can use the lane for free and those with fewer than three people have the option to pay a toll to use the lane. Whether described as the conversion of a single carpool lane (49%) or as converting carpool lanes on freeways throughout the County to create a network of connected express lanes (51%), approximately half of respondents supported this strategy for reducing traffic congestion in the future.

At the other end of the spectrum, just one-third of respondents supported charging for parking in areas that receive a lot of traffic (34%) or requiring at least three people in a vehicle to qualify for the carpool lane (33%) as strategies for reducing traffic congestion in Orange County. Tables 6-8 show how support for the pricing and policy strategies varied across subgroups of Orange County residents based on their Supervisorial District, primary mode of travel, and use of the 91 Express Lanes and transit in the 12 months preceding the interview.

TABLE 6 SUPPORT FOR PRICING & POLICY STRATEGIES BY SUPERVISORIAL DISTRICT (SHOWING % SUPPORT)

	Supervisorial District				
	District 1	District 2	District 3	District 4	District 5
Creating programs, incentives that encourage employees to work remotely, at home	79.9	82.4	84.1	85.4	83.2
Creating programs, incentives that encourage businesses, employees to make greater use of transit, carpooling, bicycling for their commutes	84.0	80.1	80.1	84.7	78.5
Reducing the cost of transit passes and tickets to encourage more transit use	86.2	76.7	78.9	81.6	79.0
Focusing future transit improvements in areas that have a high percentage of multi-family housing	85.5	79.8	75.8	84.0	71.4
Creating dedicated lanes for transit so that it is faster and avoids traffic	80.8	71.0	71.6	78.2	68.4
Converting freeway carpool lanes to create network of express lanes; vehicles w/ 3+ people can use lane for free; <3 people have option to pay toll	50.6	48.8	51.6	55.0	48.6
Converting carpool lane to express; vehicles w/ 3+ people can use lane for free; <3 people have option to pay toll	56.4	47.2	51.8	43.9	43.0
Charging for parking in areas that receive a lot of traffic	34.9	34.6	37.6	31.9	30.1
Requiring at least 3 people in a vehicle to qualify for the carpool lane	38.4	31.8	36.0	30.8	30.3

TABLE 7 SUPPORT FOR PRICING & POLICY STRATEGIES BY PRIMARY MODE (SHOWING % SUPPORT)

	Primary Mode (Q10)			
	Drive alone	Carpool / Vanpool	Public transit	Bike / Walk
Creating programs, incentives that encourage employees to work remotely, at home	84.3	82.2	79.8	82.9
Creating programs, incentives that encourage businesses, employees to make greater use of transit, carpooling, bicycling for their commutes	79.8	85.7	90.4	81.2
Reducing the cost of transit passes and tickets to encourage more transit use	77.9	85.8	90.3	76.7
Focusing future transit improvements in areas that have a high percentage of multi-family housing	78.5	82.3	84.2	75.2
Creating dedicated lanes for transit so that it is faster and avoids traffic	72.4	79.8	83.3	65.9
Converting freeway carpool lanes to create network of express lanes; vehicles w/ 3+ people can use lane for free; <3 people have option to pay toll	53.6	46.1	37.9	53.7
Converting carpool lane to express; vehicles w/ 3+ people can use lane for free; <3 people have option to pay toll	48.4	48.8	64.3	49.3
Charging for parking in areas that receive a lot of traffic	32.4	34.2	33.5	43.2
Requiring at least 3 people in a vehicle to qualify for the carpool lane	32.2	32.7	45.4	39.1

TABLE 8 SUPPORT FOR PRICING & POLICY STRATEGIES BY USAGE IN PAST 12 MONTHS (SHOWING % SUPPORT)

	Usage in Past 12 Months (Q11)					
	91 Express Lanes	Regular bus	Metrolink	Express Bus	ACCESS Paratransit	None
Creating programs, incentives that encourage employees to work remotely, at home	81.8	77.7	78.8	77.6	71.7	85.1
Creating programs, incentives that encourage businesses, employees to make greater use of transit, carpooling, bicycling for their commutes	80.7	85.1	82.1	85.6	77.9	81.9
Reducing the cost of transit passes and tickets to encourage more transit use	79.2	87.6	82.2	82.9	79.8	79.8
Focusing future transit improvements in areas that have a high percentage of multi-family housing	78.3	81.5	76.5	76.4	74.3	79.8
Creating dedicated lanes for transit so that it is faster and avoids traffic	74.8	79.5	74.5	82.0	76.3	72.8
Converting freeway carpool lanes to create network of express lanes; vehicles w/ 3+ people can use lane for free; <3 people have option to pay toll	58.5	52.4	50.4	56.7	59.8	48.3
Converting carpool lane to express; vehicles w/ 3+ people can use lane for free; <3 people have option to pay toll	52.6	54.1	52.5	59.2	68.7	45.4
Charging for parking in areas that receive a lot of traffic	35.6	44.1	45.8	52.1	61.4	30.5
Requiring at least 3 people in a vehicle to qualify for the carpool lane	32.8	46.4	39.3	52.3	54.9	32.6

CAPACITY & INFRASTRUCTURE   The final question in this series presented respondents with the list of capacity and infrastructure improvements shown on the left of Figure 19 and asked whether each should be a high, medium, or low priority for OCTA's Long Range Transportation Plan—or if it should not be included in the plan. To encourage a sense of competition, respondents were instructed that due to limited funding, not all items can be a high priority.

Among the items tested, fixing potholes and repairing roadways received the highest percentage of high priority or medium priority ratings (93%), followed by making more efficient use of existing freeways, lanes, roads, and infrastructure (88%), and synchronizing traffic signals on major roadways (86%). Approximately three-quarters of respondents also rated widening freeways where possible (75%) and improving and repairing the network of sidewalks (75%) as a high or medium priority for inclusion in the LRTP. When compared to the other items tested, enhancing infrastructure to accommodate autonomous, driverless vehicles had far fewer respondents rate the item as a high or medium priority (40%).

Question 9 *As I read the following list of projects and strategies that could be part of the Long Range Transportation Plan, please indicate whether you think it should be a high priority, a medium priority, or a low priority. If you think that a project or strategy should not be part of the Plan, please say so. Please keep in mind that due to limited funds, not all of the items can be high priorities.*
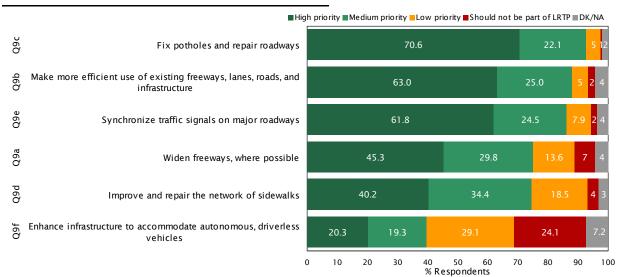
FIGURE 19 TRANSPORTATION PRIORITIES

With the exception of making more efficient use of existing freeways, lanes, roads and infrastructure, each of the items tested in Question 9 were also tested in 2018. Table 9 presents the percentage who rated each item a high priority in 2018 and in 2021, as well as the difference. As shown in the table, 2021 witnessed statistically significant increases in the percentage who rated three of the items a high priority—improving and repairing the network of sidewalks (+8%), fixing potholes and repairing roadways (+6%), and enhancing infrastructure to accommodate autonomous, driverless vehicles (+5%). Meanwhile, there were significantly fewer respondents in 2021 who rated widening freeways, where possible, as a high priority for inclusion in the LRTP (-8%).

TABLE 9 TRANSPORTATION PRIORITIES BY STUDY YEAR

	Study Year		Change in High Priority
	2021	2018	2018 to 2021
Improve and repair the network of sidewalks	40.2	32.3	+7.9†
Fix potholes and repair roadways	70.6	64.3	+6.3†
Enhance infrastructure to accommodate autonomous, driverless vehicles	20.3	14.8	+5.5†
Synchronize traffic signals on major roadways	61.8	61.1	+0.7
Widen freeways, where possible	45.3	53.6	-8.3†
Make more efficient use of existing freeways, lanes, roads, infrastructure	63.0	N/A	N/A

† Statistically significant change (p < 0.05) between the 2018 and 2021 studies.

Tables 10-13 on the next page show how the percentage assigning a high priority to each item's inclusion in the LRTP varied by primary mode of travel, Supervisorial District, commute status, and use of the 91 Express Lanes and transit services during the 12 months preceding the interview. When compared to their counterparts, those who primarily drive alone and those who had used the 91 Express Lanes during the 12 months preceding the interview expressed the stron-

gest interest in fixing potholes, making more efficient use of existing freeways, roads and infra-structure, synchronizing traffic signals, and widening freeways, where possible.

TABLE 10 TRANSPORTATION PRIORITIES BY OVERALL & PRIMARY MODE (SHOWING % HIGH PRIORITY)

	Overall	Primary Mode (Q10)			
		Drive alone	Carpool / Vanpool	Public transit	Bike / Walk
Fix potholes and repair roadways	70.6	72.9	67.5	58.4	62.1
Make more efficient use of existing freeways, lanes, roads, infrastructure	63.0	65.4	62.5	50.4	51.5
Synchronize traffic signals on major roadways	61.8	65.1	58.2	53.4	54.2
Widen freeways, where possible	45.3	47.4	42.3	42.4	39.6
Improve and repair the network of sidewalks	40.2	38.8	39.0	56.7	56.0
Enhance infrastructure to accommodate autonomous, driverless vehicles	20.3	20.1	19.2	30.3	20.2

TABLE 11 TRANSPORTATION PRIORITIES BY SUPERVISORIAL DISTRICT (SHOWING % HIGH PRIORITY)

	Supervisorial District				
	District 1	District 2	District 3	District 4	District 5
Fix potholes and repair roadways	74.5	72.1	64.1	73.1	67.7
Make more efficient use of existing freeways, lanes, roads, infrastructure	65.1	64.8	61.6	58.1	65.5
Synchronize traffic signals on major roadways	60.5	64.3	60.8	59.6	63.8
Widen freeways, where possible	46.9	45.4	43.7	45.9	44.3
Improve and repair the network of sidewalks	44.3	41.6	37.4	40.9	36.0
Enhance infrastructure to accommodate autonomous, driverless vehicles	20.7	24.8	19.1	20.1	16.3

TABLE 12 TRANSPORTATION PRIORITIES BY COMMUTE 3+ TIMES PER WEEK (SHOWING % HIGH PRIORITY)

	Commute 3+ Times Per Week (Q12)			
	Yes, work	Yes, school	Telecommute	No work, school
Fix potholes and repair roadways	71.7	60.1	65.2	75.5
Make more efficient use of existing freeways, lanes, roads, infrastructure	64.6	57.1	62.0	62.7
Synchronize traffic signals on major roadways	61.6	50.4	62.6	66.2
Widen freeways, where possible	49.7	40.1	39.0	42.2
Improve and repair the network of sidewalks	40.9	42.4	37.8	40.1
Enhance infrastructure to accommodate autonomous, driverless vehicles	22.0	20.9	21.3	14.2

TABLE 13 TRANSPORTATION PRIORITIES BY USAGE IN PAST 12 MONTHS (SHOWING % HIGH PRIORITY)

	Usage in Past 12 Months (Q11)					
	91 Express Lanes	Regular bus	Metrolink	Express Bus	ACCESS Paratransit	None
Fix potholes and repair roadways	68.7	63.7	61.8	58.0	54.0	72.3
Make more efficient use of existing freeways, lanes, roads, infrastructure	64.5	56.4	56.2	51.5	48.4	63.7
Synchronize traffic signals on major roadways	63.6	50.1	56.2	51.8	46.9	63.1
Widen freeways, where possible	49.8	40.0	40.6	40.4	42.1	43.5
Improve and repair the network of sidewalks	41.7	53.9	41.1	53.8	51.9	38.1
Enhance infrastructure to accommodate autonomous, driverless vehicles	21.6	27.5	22.6	29.5	32.3	18.7

TRAVEL BEHAVIOR

Naturally, an individual's opinions about transportation priorities and policies can be shaped by the type of transportation they primarily use, whether they commute to work or school, and other aspects of their travel behavior. Accordingly, the survey included a number of questions designed to profile respondents' travel behavior, the results of which are presented in this section.

PRIMARY MODE OF TRANSPORTATION   The first question in this series (Question 10) was designed to identify respondents' *primary* mode of transportation when they travel in Orange County. As shown in Figure 20, the majority (60%) of residents surveyed indicated that they primarily drive alone, whereas three-in-ten typically drive with one (22%) or two or more passengers (8%). Overall, 3% stated that they primarily travel by local bus and 7% primarily travel by alternative modes including walking/running, biking, Metrolink, express bus, vanpooling, or motorcycle. With the pandemic and related public health concerns/regulations, it is not surprising that—when compared to 2018—the 2021 survey found increases in the percentage of respondents driving alone, carpooling, or using active transportation as their primary mode and corresponding decreases in the use of a bus, Metrolink, on-demand rideshare, and vanpool as a primary mode.

Question 10   *Next, I'd like to know about the types of transportation you use when traveling in Orange County. What form of transportation do you use most often when traveling in Orange County?*
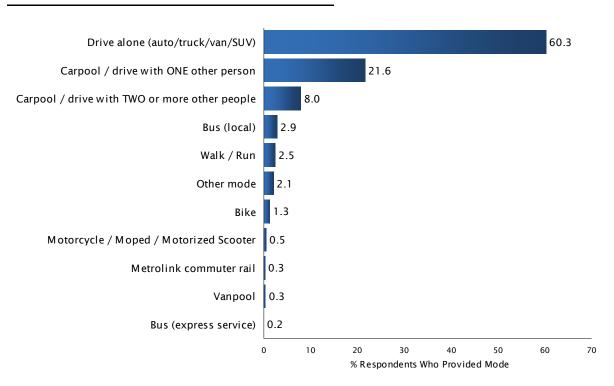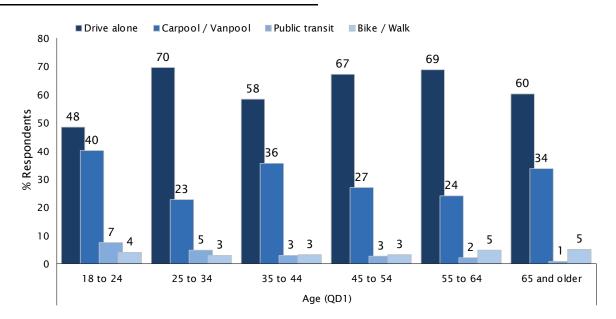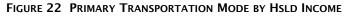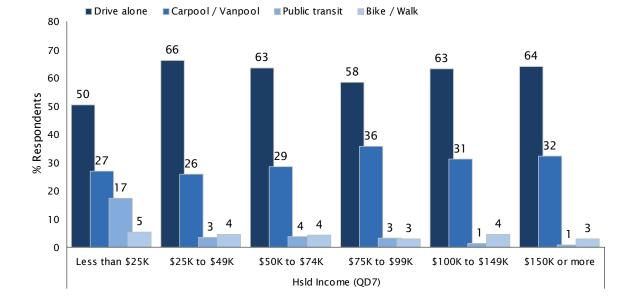
FIGURE 20 PRIMARY TRANSPORTATION MODE

Figures 21-24 show how primary mode of travel in 2021 varied by resident age, household income, Supervisorial District, and ethnicity. Although driving alone was the most common primary mode in all subgroups, it was most dominant among those between 25 and 34 years of age, individuals from households earning $25,000 to $49,999 annually, residents of Supervisorial District 4, and those who identify as Caucasian or other/mixed ethnicities. By comparison, use of public transit as a primary mode was highest among residents 18 to 24 years of age and low-income residents (less than $25K per year).

FIGURE 21 PRIMARY TRANSPORTATION MODE BY AGE

FIGURE 22 PRIMARY TRANSPORTATION MODE BY HSLD INCOME
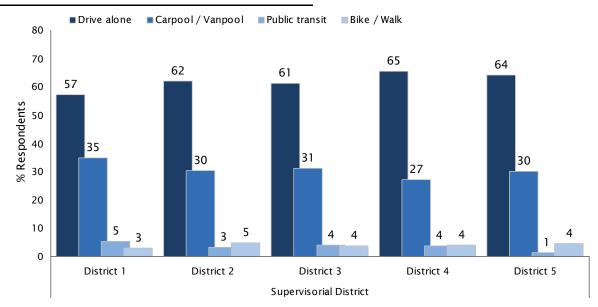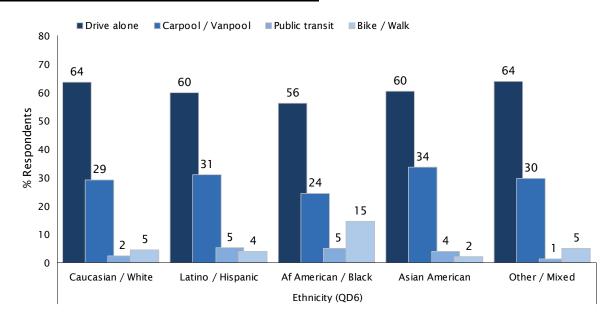
FIGURE 23 PRIMARY TRANSPORTATION MODE BY SUPERVISORIAL DISTRICT

FIGURE 24 PRIMARY TRANSPORTATION MODE BY ETHNICITY

USE OF TRANSIT & 91 EXPRESS LANES   Having identified respondents' primary mode of travel, the survey next asked respondents how frequently they had used each of the transit and toll road options listed in Figure 25 in the 12 months prior to the interview. Overall, residents reported the highest frequency of use for the 91 Express Lanes Toll Road (39% use; 5% weekly), followed by Metrolink commuter rail (16% use; 2.1% weekly), regular bus service (15% use; 4.5% weekly), express bus service (9% use; 1.5% weekly), and ACCESS paratransit service (6% use; 1.6% weekly).

Question 11 *In the past 12 months, have you used: _____ when traveling in Orange County? If no, record answer. If yes, ask: Have you used the service at least once per week, 2 to 3 times per month, once per month, once every two or three months, or less frequently than once every three months?*
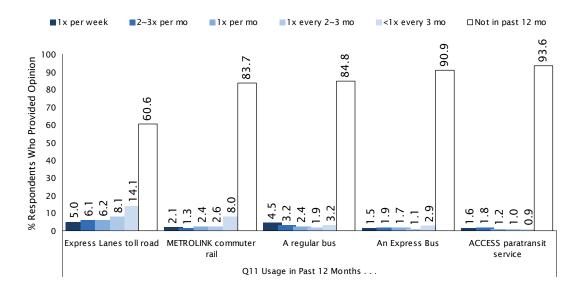
FIGURE 25 TRANSPORTATION SERVICE USAGE IN PAST 12 MONTHS

When compared to the 2018 survey, the percentage who indicated they had used Metrolink commuter rail (-9%) and a regular bus (-8%) decreased significantly, a pattern not unexpected given that the 12 months preceding the 2021 interview coincided with the COVID-19 pandemic and associated regulations and desire for social distancing (Table 14).

TABLE 14 TRANSPORTATION SERVICE USAGE IN PAST 12 MONTHS BY STUDY YEAR

	Study Year				Change in Usage
	2021	2018	2015	2011	2018 to 2021
ACCESS paratransit service	6.4	5.1	3.7	4.5	+1.4
The 91 Express Lanes toll road	39.4	39.7	30.4	37.6	-0.3
An Express Bus	9.1	10.7	6.0	5.6	-1.6
A regular bus	15.2	22.7	22.6	23.1	-7.5†
METROLINK commuter rail	16.3	25.6	18.7	17.7	-9.2†

† Statistically significant change (p < 0.05) between the 2018 and 2021 studies.

Starting on the next page, figures 26-29 show how the frequency of using each transit and toll road option in 2021 varied by age, household income, Supervisorial District, Metrolink service in home zip code, and ethnicity. Use of the 91 Express Lanes was strongly related to household income and most commonly reported by those 35 to 44 years in age, Caucasians, those of other/mixed ethnicities, and residents of Supervisorial Districts 5 and 2. Overall use of transit (Metrolink, regular bus, express bus, and ACCESS paratransit) was most commonly reported by young residents (under 25), those from households earning less than $25,000 annually, residents of Supervisorial District 1, and African Americans.
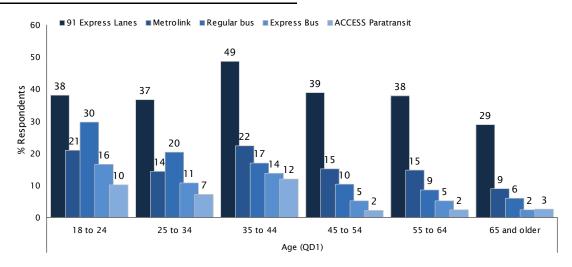
FIGURE 26 TRANSPORTATION SERVICE USAGE IN PAST 12 MONTHS BY AGE

FIGURE 27 TRANSPORTATION SERVICE USAGE IN PAST 12 MONTHS BY HSLD INCOME
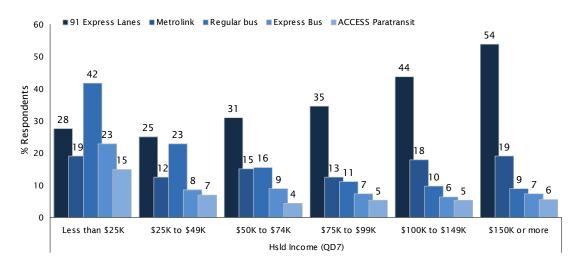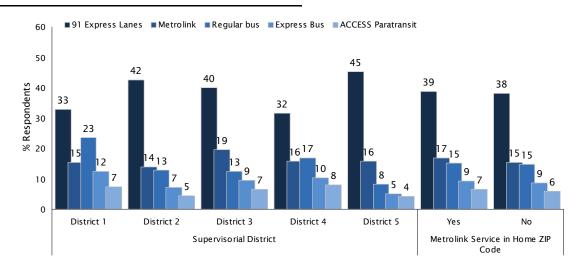
FIGURE 28 TRANSPORTATION SERVICE USAGE IN PAST 12 MONTHS BY SUPERVISORIAL DISTRICT & METROLINK SERVICE IN HOME ZIP CODE
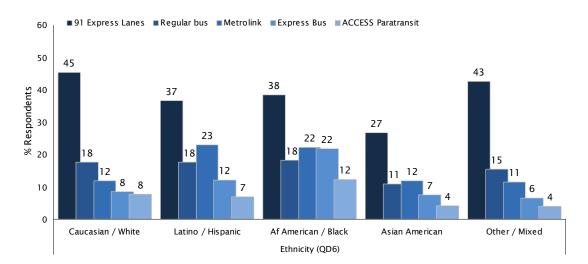
FIGURE 29 TRANSPORTATION SERVICE USAGE IN PAST 12 MONTHS BY ETHNICITY

COMMUTE TO WORK OR SCHOOL?   The next question (Question 12) sought to catego-rize respondents according to their commute status. Overall, 51% indicated that they commute to work at least three times per week, 6% do so for school, and 20% reported that they work or attend school at home. Approximately 21% stated that they do not commute to work or school at least three times per week, whereas 2% preferred to not answer the question. When compared to the 2018 survey, there were significant changes in commute status in 2021 that can be attrib-uted to the pandemic. Although pandemic-related restrictions on businesses were lifted prior to the 2021 survey, the percentage of Orange County residents who reported they were working from home in the 2021 survey (20%) remained significantly higher than in 2018, whereas the percentage commuting to work or school were both significantly lower.

Question 12   *Do you commute to work or school at least three times per week? If says both work and school, ask which is the longer commute and record.*
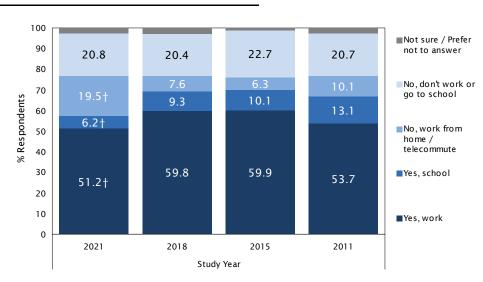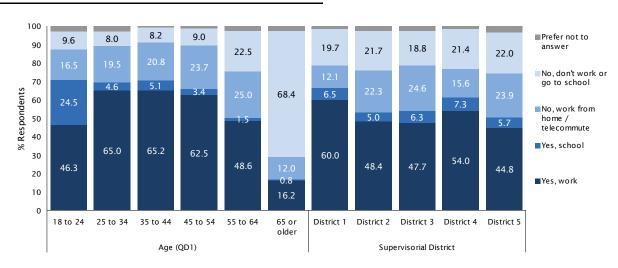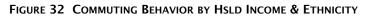
FIGURE 30 COMMUTING BEHAVIOR BY STUDY YEAR
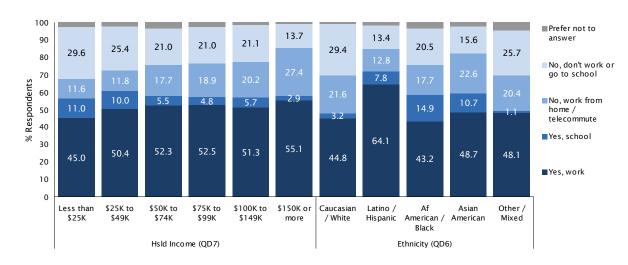
Figures 31 and 32 show how commute status among Orange County residents surveyed for this study varied by age, Supervisorial District, household income, and ethnicity. Those most likely to report commuting to work at least three days per week were between 25-54 years of age, residents of Supervisorial District 1, and Latinos, whereas those most likely to report that they work from home (telecommute) were 55 to 64 years of age, residents of Supervisorial Districts 3 and 5, individuals from high-income households ($150,000+), Asians, and Caucasians.

FIGURE 31 COMMUTING BEHAVIOR BY AGE & SUPERVISORIAL DISTRICT

FIGURE 32 COMMUTING BEHAVIOR BY HSLD INCOME & ETHNICITY

COMMUNICATIONS

The final substantive section of the 2021 survey focused on communications—including the sources residents rely on for news and events in Orange County, and their awareness of OC Go (also know as Measure M).

PRIMARY INFORMATION SOURCE   The first question in this series (Question 13) asked respondents to identify which channel—newspapers, television, radio, Internet, or social media—is their *primary* source for information about news and events in Orange County. As shown in Figure 33, 40% indicated in 2021 that they rely on the Internet for most of their information about Orange County news and events, followed by social media (22%) and television (17%). The remaining sources—newspapers and radio—were identified as primary information sources for news and events in Orange County by 9% and 4% of respondents, respectively. Over the past three years, the percentage of Orange County residents who rely on newspapers and radio as their primary information source declined significantly, whereas the percentage who primarily turn to the Internet for their news increased significantly.

Question 13   *Now for a different topic...Which of the following would you say is your primary source for information about news and events in Orange County? Newspapers, television, radio, the Internet, or social media like Facebook and Twitter?*
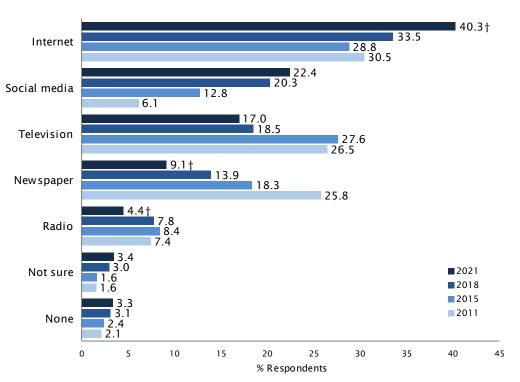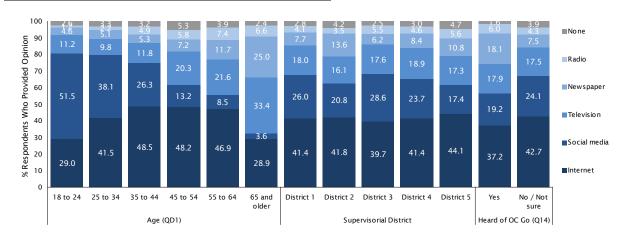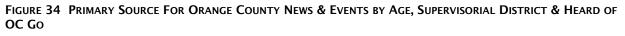
FIGURE 33 PRIMARY SOURCE FOR ORANGE COUNTY NEWS & EVENTS BY STUDY YEAR

† Statistically significant change (p < 0.05) between the 2018 and 2021 studies.

Figure 34 shows how the reliance on particular information sources in 2021 varied according to respondent age, Supervisorial District, and whether they had heard of OC Go prior to participating in the survey. The most consistent patterns occur with respect to age. Reliance on social media decreases dramatically with age, whereas reliance on television and newspapers tends to increase with age. Meanwhile, individuals who primarily rely on the Internet were most commonly found among those 35 to 64 years of age.

FIGURE 34 PRIMARY SOURCE FOR ORANGE COUNTY NEWS & EVENTS BY AGE, SUPERVISORIAL DISTRICT & HEARD OF OC GO

OC GO   Since the renewal of Measure M by voters in 2006, Orange County's 1/2 cent sales tax for transportation has provided billions of dollars to expand and improve freeways, repair local streets and roads, fund transit improvements, and protect the local environment. Despite the importance of Measure M to Orange County's transportation system, the strength of the local economy, and the quality of life in the region, a survey in 2015 revealed that just one-in-three Orange County residents indicated they had heard of Measure M. Moreover, many of those who had heard of Measure M either had an incorrect understanding of what it is, or had no idea. In terms of brand recognition and equity, Measure M was falling well short of its potential.

Complicating this matter was the fact that Measure M was not a brand unique to OCTA. In every major election year, Orange County voters are presented with alternative measures carrying the Measure M label, and there is even the potential for cross-county confusion when other neighboring counties have a high profile Measure M on their ballot—such as the 2016 sales tax measure to fund transportation improvements in Los Angeles County.

Recognizing that Measure M is a brand that OCTA couldn't effectively shape and control, in 2017 OCTA rebranded the Measure M program as OC Go. Overall, approximately 18% of Orange County residents reported that they had heard of OC Go prior to taking the 2021 survey, 72% had not heard of OC Go, and 10% were unsure (see Figure 35). Awareness of OC Go has remained steady over the past three years—there were no statistically significant changes.

Question 14 *Prior to taking this survey, had you heard of OC Go Orange County's voter-approved half cent transportation sale tax?*
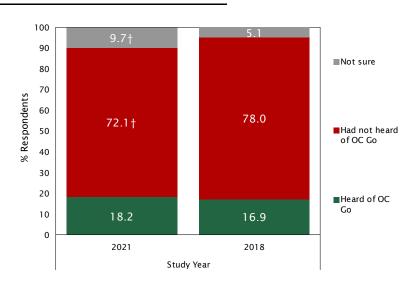
FIGURE 35 HEARD OF OC GO BY STUDY YEAR

Figures 36-39 display OC Go awareness by years in Orange County, Supervisorial District, primary Orange County information source, whether they had heard of OCTA prior to participating in the survey, household income, opinion of OCTA, and age. Awareness of OC Go varied substantially across subgroups, being higher among residents who had lived in Orange County at least 10 years, those in Supervisorial District 2, residents who primarily rely on the newspaper for Orange County information, those who had heard of OCTA prior to participating in the survey, higher income households ($100,000+ annually), those with an opinion of OCTA (favorable or unfavorable), and seniors.
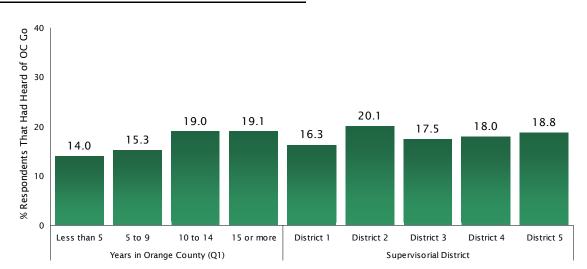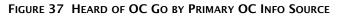
FIGURE 36 HEARD OF OC GO BY YEARS IN ORANGE COUNTY & SUPERVISORIAL DISTRICT

FIGURE 36 HEARD OF OC GO BY YEARS IN ORANGE COUNTY & SUPERVISORIAL DISTRICT

FIGURE 37 HEARD OF OC GO BY PRIMARY OC INFO SOURCE
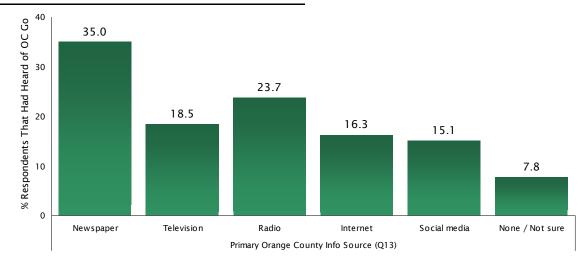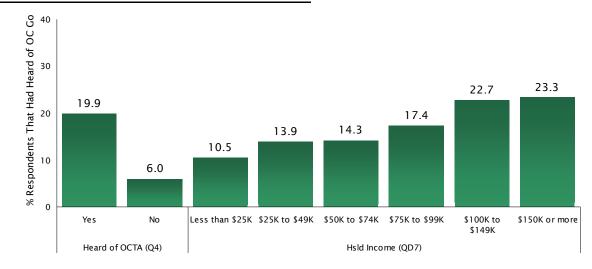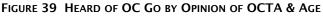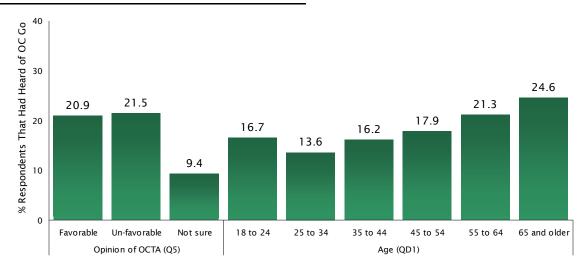
FIGURE 38 HEARD OF OC GO BY HEARD OF OCTA & HSLD INCOME

FIGURE 39 HEARD OF OC GO BY OPINION OF OCTA & AGE

BACKGROUND & DEMOGRAPHICS

TABLE 15 DEMOGRAPHIC OF SAMPLE BY STUDY YEAR

	Study Year			
	2021	2018	2015	2011
Total Respondents	*2,564*	*2,525*	*2,000*	*2,010*
Supervisorial District				
One	20.7	22.4	20.8	21.3
Two	21.3	21.2	22.7	23.8
Three	17.7	18.5	17.7	18.6
Four	21.0	20.8	23.6	23.1
Five	19.2	17.1	18.3	18.4
Years in Orange County (Q1)				
Less than 5	9.7	11.8	6.0	9.8
5 to 9	9.9	7.6	6.8	8.7
10 to 14	7.8	8.6	9.7	12.3
15 or more	72.2	71.7	77.3	68.9
Prefer not to answer	0.4	0.4	0.1	0.3
Age (QD1)				
18 to 24	13.7	16.2	14.2	14.2
25 to 34	18.1	16.5	18.8	18.1
35 to 44	18.1	17.9	19.3	17.3
45 to 54	18.7	17.1	18.3	17.0
55 to 64	13.3	13.2	13.3	11.7
65 or older	13.6	17.2	13.9	13.7
Prefer not to answer	4.6	2.0	2.3	7.9
Employment Status (QD5)				
Employed full time	54.2	49.9	52.2	47.3
Employed part time	10.7	13.7	13.4	11.0
Student	7.5	7.5	6.7	9.6
Homemaker	2.9	3.1	6.8	5.7
Retired	14.9	16.7	13.4	13.5
Between jobs	5.1	3.6	3.6	5.5
Disabled	1.1	1.6	2.6	1.6
Prefer not to answer	3.8	3.8	1.4	5.9
Ethnicity (QD6)				
Caucasian / White	36.3	37.6	40.0	39.8
Latino / Hispanic	31.1	30.6	31.7	29.0
Af Amer / Black	1.5	2.5	5.1	1.4
Asian American	19.2	14.7	14.1	15.4
Other / Mixed	3.3	8.0	7.3	2.8
Prefer not to answer	8.5	6.6	1.9	11.6
Hsld Income (QD7)				
Less than $25K	8.6	11.1	15.9	10.5
$25K to $49K	11.8	17.4	19.3	15.3
$50K to $74K	17.9	15.2	16.5	13.6
$75K to $99K	16.7	16.9	13.5	13.0
$100K to $149K	20.0	13.8	12.5	11.3
$150K or more	21.9	18.5	12.0	10.3
Prefer not to answer	3.1	7.1	10.3	25.9
Gender				
Male	48.7	49.3	50.6	51.8
Female	48.4	47.3	49.4	48.2
Prefer not to answer	2.9	3.4	0.0	0.0

Table 15 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.

M ETHODOLOGY

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.

The questionnaire included with this report (see *Questionnaire & Toplines* on page 44) identifies each question asked during the interview, as well as their sequencing. To allow OCTA to track how opinions and behaviors may change over time, many of the questions asked in the 2021 survey were purposely tracked from prior surveys conducted for OCTA in 2018, 2015, 2011, 2006, and 2004.

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.
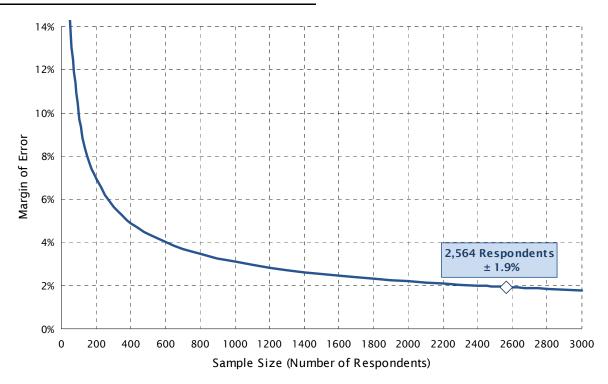
SAMPLE, RECRUITING & DATA COLLECTION   A comprehensive database of households within Orange County was utilized for this study, ensuring that all households had the opportunity to participate in the survey. From this master database, True North developed a stratified, random sample of residents to recruit 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.[2] 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 individual 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 lane and/or cell phone).

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

Telephone interviews averaged 18 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 2,564 surveys were completed between June 3 and June 27, 2021.

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 2,564 respondents for a particular question and what would have been found if all of the estimated 2,486,567 adult residents[3] had been interviewed.

Figure 40 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 ± 1.9% for questions answered by all 2,564 respondents countywide.

FIGURE 40   MAXIMUM MARGIN OF ERROR DUE TO SAMPLING

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3. Source: U.S. Census Bureau, July 2019 estimate based on American Community Survey.

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 40 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. For example, within individual Supervisorial Districts, the maximum margin of error is between ± 4.2% and ± 4.6%.

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. Where applicable, tests of statistical significance were conducted to evaluate whether a change in responses between 2018 and 2021 was due to an actual change in opinion or was likely an artifact of independently drawn cross-sectional samples.

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.

T RUE N ORTH
R E S E A R C H

OCTA
Attitudinal & Awareness Survey
Final Toplines (n = 2,564)
Spring 2021

Section 1: Introduction to Study

Standard Intro: Hi, may I please speak to: _____. Hi, my name is _____ and I'm calling from TNR, an independent public opinion research company. 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, an independent public opinion research company. 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.

If the person asks who is sponsoring the survey, explain: For statistical purposes, I can't reveal the sponsor of the survey at the beginning of this interview, but I will tell you at the end. *If the person says they are an elected official or is somehow associated with the survey, politely explain that this survey is designed to the measure the opinions of those not closely associated with the study, thank them for their time, and terminate the interview.*

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: Quality of Life & Local Issues

I'd like to begin by asking you a few questions about life in Orange County.

Q1	How long have you lived in Orange County?	
1	Less than 1 year	2%
2	1 to 2 years	3%
3	3 to 4 years	5%
4	5 to 9 years	10%
5	10 to 14 years	8%
6	15 years or longer	72%
99	Prefer not to answer	0%

Q2	How would you rate the overall quality of life in Orange County? Would you say it is excellent, good, fair, poor or very poor?	
	1	Excellent	26%
	2	Good	53%
	3	Fair	18%
	4	Poor	2%
	5	Very Poor	1%
	98	Not sure	0%
	99	Prefer not to answer	0%
Q3	Thinking about Orange County as a whole, what would you say is the most important issue facing Orange County today? Verbatim responses recorded and later grouped into categories shown below. Categories mentioned by at least 2% of respondents shown here.	
	Homelessness	25%
	Real estate, housing	16%
	Not sure / Cannot think about anything	16%
	Traffic congestion	11%
	Public safety	8%
	Cost of living	7%
	Public transportation	4%
	Population, overcrowding	4%
	Leadership, government	4%
	Racism, diversity concerns	4%
	Taxes	3%
	Environmental concerns	3%
	Infrastructure maintenance, repair	3%
	COVID-19 issues	3%
	Economy, unemployment	2%
	Education, schools	2%
	Illegal Immigration issues	2%
	Development, loss of open space	2%

Questionnaire & Toplines

Section 4: Awareness & Opinions of OCTA			
Q4	Prior to taking this survey, had you heard of the Orange County Transportation Authority, also known as O.C.T.A (Oh-See-Tee-Ay)?		
	1	Yes	87%
	2	No	10%
	98	Not sure	3%
	99	Prefer not to answer	0%
Q5	To clarify, the Orange County Transportation Authority or O.C.T.A. (Oh-See-Tee-Ay) is a public agency responsible for planning, funding, managing and developing Orange County's transportation system, including freeways, streets and roads, bus and transit services, and the 91 Express Lanes. OCTA does NOT manage the 73, 133 (one-thirty-three), 241 (two-forty-one) or 261 (two-sixty-one) toll roads. In general, would you say you have a favorable or unfavorable opinion of the Orange County Transportation Authority – or do you have no opinion either way? *Get answer, if 'favorable' or 'unfavorable', ask:* Would that be very (favorable/unfavorable) or somewhat (favorable/unfavorable)?		
	1	Very favorable	15%
	2	Somewhat favorable	38%
	3	Somewhat unfavorable	15%
	4	Very unfavorable	6%
	98	Not sure	24%
	99	Prefer not to answer	2%

Section 5: Long Range Transportation Plan							
Over the next 20 years, Orange County's population is expected to increase by 9%, and the number of people employed in the County is expected to increase by 12%. These changes will naturally lead to greater traffic congestion in the future unless improvements are made to the County's transportation system *and* we find ways to reduce the number of trips people make by driving in a typical day. As part of its **Long Range Transportation Plan**, OCTA is exploring a variety of strategies to reduce driving trips by making it easier to get places without a car, easier to share rides with others, and through various pricing and incentive programs.							
Q6	As I read the following list of strategies that could be used to help reduce traffic congestion in the future, please indicate whether you would support or oppose each item. Here is the (first/next) one: _____. Would you support or oppose this strategy for reducing traffic congestion? *Get answer, then ask:* Would that be strongly (support/oppose) or somewhat (support/oppose)?						
	Randomize	Strongly support	Somewhat support	Somewhat oppose	Strongly oppose	Not Sure	Prefer not to answer
A	Increasing programs that encourage carpooling, vanpooling, and **ridesharing**	41%	38%	9%	5%	7%	1%

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B	Encouraging more **bicycling** by expanding the network of dedicated bike lanes and shared lanes	43%	30%	12%	9%	6%	1%
C	Encouraging more **walking** by improving sidewalks, crosswalks, pedestrian safety, signs, and infrastructure	55%	29%	6%	4%	5%	1%
D	**Modifying streets** so they can safely accommodate all forms of transportation including cars, transit, pedestrians and bicyclists	50%	30%	8%	7%	5%	0%
E	Creating **safe routes to school** to encourage more kids to walk and bike to school	61%	25%	5%	4%	5%	1%
F	Encouraging businesses to allow employees to **work from home** at least one day per week, where possible	69%	19%	4%	3%	4%	1%
G	Improving and expanding **commuter rail** services including Metrolink and Amtrak	51%	29%	6%	6%	6%	1%
H	Improving and expanding **bus** services	44%	35%	8%	6%	7%	1%
I	Making it easier for transit riders to get to their final destination by offering **shuttles, e-bikes, e-scooters,** and **rideshare** services at transit stations	48%	31%	7%	7%	7%	1%
J	Offering a **guaranteed ride home** for those who use transit, carpool, vanpool or bike and find themselves needing an emergency ride home	46%	30%	8%	7%	9%	1%
K	Creating a network of light rail **streetcars,** similar to the San Diego trolley system	43%	25%	11%	12%	8%	1%

Q7	Is there a strategy I *didn't* mention that you think would be very effective at reducing the amount of driving trips people make in the future? *If yes, ask:* Please provide a brief description. Verbatim responses recorded and later grouped into categories shown below.	
	None, cannot think of anything	64%
	Prefer not to answer	4%
	Add, improve, expand rail services in general	3%
	Support, promote remote work and school options, technology	3%
	Add bus routes, stops	2%
	Add, improve safer bike lanes, facilities	2%
	Support, promote mixed use developments, walkable communities	2%
	Improve public transportation in general	2%
	Limit growth, development	2%
	Encourage, incentivize employer program involvement, participation	1%
	Add, utilize tunnels, subway system, underground system	1%
	Improve, expand transit schedule, hours	1%
	Reduce transit costs	1%

	Provide more rideshare, car-sharing programs	1%
	Improve city planning, development	1%
	Support, promote staggered work, school hours/schedules	1%
	Provide shuttles, small buses	1%
	Widen roads, freeways	1%
	Expand, improve home delivery services, off-peak hours deliveries, drones	1%
	Encourage, educate people about driving less, using alternate modes	1%
	Provide better connectivity between transit hubs within cities	1%
	Promote, incentivize not driving, using transit, active modes	1%
	Support, promote, plan for autonomous vehicles	1%
	Build, expand streetcar network, services	1%
	Improve travel safety	1%
	Provide education on driving rules, laws, enforce laws	1%

Q8	One way to encourage people to drive less or use alternative forms of transportation is through **pricing** or **policies**. As I read a short list of pricing or policy strategies that could be used to help reduce traffic congestion in the future, please indicate whether you would support or oppose each item. Here is the (first/next) one: _____. Would you support or oppose this strategy for reducing traffic congestion? *Get answer, then ask:* Would that be strongly (support/oppose) or somewhat (support/oppose)?

	Randomize. Split Sample F1/F2.	Strongly support	Somewhat support	Somewhat oppose	Strongly oppose	Not Sure	Prefer not to answer
A	Charging for parking in areas that receive a lot of traffic	15%	18%	24%	34%	7%	1%
B	Focusing future transit improvements in areas that have a high percentage of multi-family housing	44%	36%	6%	6%	8%	1%
C	Requiring at least 3 people in a vehicle to qualify for the carpool lane	16%	18%	25%	34%	6%	1%
D	Creating programs and incentives that encourage businesses and employees to make greater use of transit, carpooling, and bicycling for their commutes	48%	34%	6%	6%	6%	1%
E	Creating programs and incentives that encourage employees to work remotely, at home	59%	23%	6%	5%	5%	1%

F1	Converting a carpool lane to an express lane. Vehicles with 3 or more people can use the lane for free. Those with fewer than 3 people have the option to pay a toll to use the lane	27%	22%	17%	25%	8%	1%
F2	Converting carpool lanes on freeways throughout the County to create a network of connected express lanes. Vehicles with 3 or more people can use the lanes for free. Those with fewer than 3 people have the option to pay a toll to use the lanes	27%	24%	16%	26%	6%	1%
G	Reducing the cost of transit passes and tickets to encourage more transit use	51%	30%	6%	6%	7%	1%
H	Creating dedicated lanes for transit so that it is faster and avoids traffic	43%	31%	9%	9%	7%	1%
Q9	As I read the following list of projects and strategies that could be part of the Long Range Transportation Plan, please indicate whether you think it should be a high priority, a medium priority, or a low priority. If you think that a project or strategy should not be part of the Plan, please say so. Please keep in mind that due to limited funds, not all of the items can be high priorities. Here is the (first/next) one: _____. Should this be a high, medium or low priority for the Long Range Transportation Plan, or should it not be included?						

	Randomize	High Priority	Medium Priority	Low Priority	Should not be part of LRTP	Not sure	Prefer not to answer
A	Widen freeways, where possible	45%	30%	14%	7%	3%	1%
B	Make more efficient use of existing freeways, lanes, roads, and infrastructure	63%	25%	5%	2%	4%	1%
C	Fix potholes and repair roadways	71%	22%	5%	1%	1%	1%
D	Improve and repair the network of sidewalks	40%	34%	18%	4%	2%	1%
E	Synchronize traffic signals on major roadways	62%	25%	8%	2%	3%	1%
F	Enhance infrastructure to accommodate autonomous, driverless vehicles	20%	19%	29%	24%	6%	1%

Section 6: Travel Behavior			

Next, I'd like to know about the types of transportation you use when traveling in Orange County.

Q10	What form of transportation do you use <u>most often</u> when traveling in Orange County? *If they say **drive, car**, etc. ask:* Do you most often drive by yourself or with other people in the vehicle? *If with other people, ask:* When you ride with other people, do you typically ride with **one** other person, or with **at least two** other people? *If they say bus, ask:* Do you most often ride the local bus, or an express bus service?		
	1	Drive alone (auto/truck/van/SUV)	60%
	2	Carpool/drive with **ONE other person**	21%
	3	Carpool/drive with **TWO or more other people**	8%
	4	Vanpool	0%
	5	Bus (**local**)	3%
	6	Bus (**express** service)	0%
	7	Metrolink commuter rail	0%
	8	Motorcycle/Moped/Motorized Scooter	0%
	9	Bike	1%
	10	Walk/Run	2%
	11	Other mode	2%
	98	Not sure	0%
	99	Prefer not to answer	1%

Q11	In the past 12 months, have you used: _____ when traveling in Orange County? *If no, record answer. If yes, ask:* Have you used the service at least once per week, 2 to 3 times per month, once per month, once every two or three months, or less frequently than once every three months?

	Read in Order	Once per week	2 to 3 times per month	Once per month	Once every 2 to 3 months	Less often than once every 3 months	No, haven't used in past 12 months	Not Sure / Prefer not to answer
A	A regular bus	4%	3%	2%	2%	3%	83%	2%
B	An Express Bus	1%	2%	2%	1%	3%	89%	2%
C	METROLINK commuter rail	2%	1%	2%	2%	8%	82%	2%
D	ACCESS paratransit service	2%	2%	1%	1%	1%	90%	4%
E	The 91 Express Lanes toll road	5%	6%	6%	8%	14%	59%	3%

Q12	Do you commute to work or school at least three times per week? *If says both work and school, ask which is the longer commute and record.*	
	1	Yes, work	51%
	2	Yes, school	6%
	4	No, work from home/telecommute	19%
	5	No, don't work or go to school	21%
	99	Not sure / Prefer not to answer	2%

Section 7: Communications

Now for a different topic . . .

Q13	Which of the following would you say is your **primary** source for information about news and events in Orange County? Newspapers, television, radio, the Internet, or social media like Facebook, Instagram, and Twitter?	
	1	Newspapers	9%
	2	Television	17%
	3	Radio	4%
	4	Internet	40%
	5	Social media like Facebook, Instagram, and Twitter	22%
	6	None/Don't pay attention to news and events in Orange County	3%
	98	Not sure	2%
	99	Prefer not to answer	1%

Q14	Prior to taking this survey, had you heard of **OC Go** (Oh-See-Go), Orange County's voter-approved half cent transportation sale tax?	
	1	Yes	18%
	2	No	72%
	98	Not sure	9%
	99	Prefer not to answer	1%

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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 recoded into age categories shown below.	
1	18 to 24	14%
2	25 to 34	18%
3	35 to 44	18%
4	45 to 54	19%
5	55 to 64	13%
6	65 and over	14%
99	Prefer not to answer	5%

D2	What is your gender?	
1	Male	49%
2	Female	48%
99	Prefer not to answer	3%

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	87%
2	Sometimes	7%
3	Rarely	2%
4	Never	2%
99	Prefer not to answer	2%

D4	Which of the following best describes your current home?	
1	Single family detached home	59%
2	Apartment	21%
3	Condominium	13%
4	Mobile home	2%
99	Prefer not to answer	5%

D5	\multicolumn{3}{l}{Which of the following best describes your employment status? Would you say you are employed full-time, part-time, a student, a homemaker, retired, or are you in-between jobs right now? *If they work and go to school, ask them to choose the category that best describes them: worker or student.*}
	1	Employed full-time	54%
	2	Employed part-time	11%
	3	Student	8%
	4	Homemaker	3%
	5	Retired	15%
	6	In-between jobs	5%
	7	Disabled/unable to work	1%
	99	Prefer not to answer	4%
D6	\multicolumn{3}{l}{What ethnic group do you consider yourself a part of or feel closest to? *Read list if respondent hesitates*}
	1	Caucasian/White	36%
	2	Latino/Hispanic	31%
	3	African-American/Black	2%
	4	American Indian or Alaskan Native	<1%
	5	**Asian** -- Korean, Japanese, Chinese, Vietnamese, Filipino or other Asian	19%
	6	Pacific Islander	<1%
	7	Middle Eastern	1%
	8	Mixed Heritage	1%
	98	Other	1%
	99	Prefer not to answer	9%
D7	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	9%
	2	$25,000 to less than $50,000	12%
	3	$50,000 to less than $75,000	18%
	4	$75,000 to less than $100,000	17%
	5	$100,000 to less than $150,000	20%
	6	$150,000 to less than $200,000	11%
	7	$200,000 or more	11%
	98	Not sure	1%
	99	Prefer not to answer	3%

Those are all of the questions that I have for you! Thanks very much for participating.

Post Interview Items			
S1	Supervisorial District		
	1	One	21%
	2	Two	21%
	3	Three	18%
	4	Four	21%
	5	Five	19%

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