ATTITUDINAL & AWARENESS SURVEY
SUMMARY RESEARCH REPORT

PREPARED FOR THE
ORANGE COUNTY TRANSPORTATION AUTHORITY

NOVEMBER 9, 2015

TRUE NORTH
RESEARCH

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INTRODUCTION

The Orange County Transportation Authority (OCTA) is the county transportation commission 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 our diverse communities and partners* as outlined in its Strategic Plan, the Authority periodically conducts a *Countywide Attitudinal & Awareness Research* 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. 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 2015 survey was designed to:

· Measure awareness and perceptions of OCTA.

· Identify residents' opinions of Orange County's transportation system, as well as the types of improvements they feel should be priorities for the future.

· Measure public awareness of Measure M and support for key elements of the Measure M investment plan.

· 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 their exposure to advertisements and news stories relating to OCTA, as well as their satisfaction with OCTA's communication efforts.

· 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 54). In brief, a total of 2000 randomly selected Orange County adult residents participated in the survey between June 3 and July 14, 2015. Individuals were selected at random from land line and geo-targeted mobile phone numbers that service Orange County, with additional screening questions to confirm eligibility. The survey was conducted using a mixed-method approach which allowed respondents the option to participate in the survey by telephone or online through a secure, password-protected, web-based application designed and hosted by True North Research. The telephone interviews averaged 20 minutes in length and were conducted in English, Spanish, and Vietnamese during weekday evenings (5:30PM to 9PM) and on weekends (10AM to 5PM).

To accommodate OCTA's interest in obtaining reliable parameter estimates for the county as a whole, as well as within the five Supervisorial Districts identified in Figure 1 on the next page, the study employed a strategic oversample by Supervisorial District to balance the statistical margins of error associated with estimates at the District level. To adjust for the oversampling, the raw data were then weighted according to the most recent detailed adult population estimates (Census 2010) prior to analyses and presentation. The results presented in this report are

the weighted results, which are representative at the countywide level, as well as within the five Supervisorial Districts.

FIGURE 1 MAP OF SUPERVISORIAL DISTRICTS AND ZIP CODES

ORGANIZATION OF REPORT   This report is designed to meet the needs of readers who prefer a summary of the findings as well as those who are interested in the details of the results. For those who seek an overview of the findings, the 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 54). 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 58), and a complete set of crosstabulations for the survey results is contained in Appendix A, which is bound separately.

STATISTICAL SIGNIFICANCE   Many of the figures and tables in this report present the results of questions asked in 2015 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 studies are identified as *statistically significant* if we can be 95% confident that the differences reflect an actual change in public opinion 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 2015.

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

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

During their careers, Dr. McLarney (President) and Mr. Sarles (Principal Researcher) have designed and conducted over 900 survey research studies for public agencies, including more than 300 studies for California municipalities, special districts, and transportation planning agencies.

J U S T   T H E   F A C T S

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

· The overwhelming majority of respondents shared favorable opinions of the quality of life in Orange County, with 35% reporting it is excellent and 48% stating it is good. Approximately 14% 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 to identify the most important issue facing Orange County, by far the most frequently mentioned issue was the drought/water issues (19%), followed by a response of not sure/cannot think of anything (15%). Other topics that were mentioned by at least 5% of respondents included traffic (10%), economy/unemployment (9%), real estate/housing issues (9%), cost of living (8%), public safety (7%), population/overcrowding (6%), and education/schools (5%).

· Given the purpose of this study, it is instructive that traffic and transportation issues collectively accounted for approximately 12% of all responses, which is similar to the 2011 study findings.

AWARENESS & OPINIONS OF OCTA

· The vast majority (84%) of respondents indicated that they had heard of OCTA prior to the interview.

· Approximately 39% of respondents indicated that they do not have an opinion of OCTA or preferred not to answer the question. Among the remaining respondents, however, opinions of OCTA were decidedly positive. Forty-seven percent (47%) stated that they have a favorable opinion, whereas 15% offered an unfavorable opinion of OCTA.

· Overall, a majority of respondents agreed that *OCTA helps our local and regional economies function by improving our transportation system* (64%), *is a public agency I trust* (60%), *has made many improvements to Orange County's transportation system in the past five years* (55%), and *is actively seeking solutions to our transportation issues* (50%). Most of the remaining respondents did not have an opinion, rather than disagreeing with the statements.

· Although still positive, the levels of agreement were somewhat lower (due to the higher percentage of those with no opinion: 44%+) that OCTA *listens to the general public* (38%) and *makes good use of public funds* (35%).

OCTA PROGRAMS & SERVICES

· Among those with an opinion, Orange County residents assigned the highest quality ratings to Freeway Service Patrol tow trucks (73% excellent or good), followed by ACCESS paratransit service (72%), Metrolink commuter rail service (64%), rideshare and carpool matching programs (63%), the overall quality and condition of freeways (63%), bus service (62%), overall quality and condition of the 91 Express Lanes toll road (59%), and vanpool programs (58%).

- Although still generally positive, residents' provided lower quality ratings for the overall quality and condition of city streets (54%), the overall transportation system in Orange County (54%), bikeway planning (54%), and road and freeway planning (53%).

TRANSPORTATION PRIORITIES & MEASURE M

- Among 19 potential improvements that could be funded by Measure M and/or OCTA, respondents assigned the highest priority to fixing potholes and repairing roadways (94% high or medium priority), followed by coordinating traffic signals on major roadways to improve traffic flow (92%), providing transit services to seniors and the disabled at discounted rates (92%), closing gaps, improving intersections, and reducing traffic congestion on major roads throughout the County (90%), cleaning up polluted runoff from roads to reduce water pollution and protect local beaches (89%), and improving ACCESS paratransit service for people with disabilities (85%).

- At least three-quarters of Orange County residents also assigned a high or medium priority to adding local bus and shuttle services in communities that aren't well served by regional transit services (81%), optimizing the existing transportation system (81%), widening freeways (80%), improving safety and security at transit stops and stations (80%), and preserving and restoring open space land to offset the impacts of freeway improvement projects (75%).

- More than two-thirds of respondents ranked expanding bus services (73%), constructing roads over or under rail tracks where needed to improve traffic flow (73%), providing free assistance and tow truck service to motorists who break down on freeways (72%), improving access to METROLINK stations using shuttles, light rail, and other transit services (70%), and expanding METROLINK rail service (68%) as a high or medium priority.

- Although still rated as a high or medium priority by a majority of respondents, improving the network of bike lanes (64%), expanding vanpool programs (53%), and building additional toll lanes to help relieve traffic congestion (53%) were ranked as the lowest priority items among those tested.

- Approximately one-quarter (26%) of those surveyed indicated that they had heard of Measure M prior to participating in the interview, whereas 72% had not heard of Measure M and 2% were unsure.

- Twenty-eight percent (28%) of those who had heard of Measure M indicated that they did not have an opinion of OCTA's performance in delivering projects and improvements funded by Measure M. Among the remaining respondents with an opinion, 9% rated it excellent and 28% good. An additional 22% rated OCTA's performance as fair, whereas 13% used poor or very poor to describe OCTA's performance in delivering Measure M projects and improvements.

TRAVEL BEHAVIOR & USE OF SYSTEM

- The majority (58%) of residents surveyed indicated that they primarily drive alone when traveling in Orange County, whereas nearly one-third typically drive with one (16%) or two passengers (14%). Overall, 5% stated that they primarily travel by local bus and less than 8% primarily travel by other alternative modes including biking, walking, Metrolink, or vanpooling.

- When asked about their use of several transit, freeway and toll road options, residents reported the highest frequency of use for the 91 Freeway (83% use; 29% weekly), followed by the 91 Express Lanes Toll Road (30% use; 5% weekly), regular bus service (23% use; 7% weekly), Metrolink commuter rail (19% use; 1.3% weekly), express bus service (6% use; 2.1% weekly), and ACCESS paratransit service (4% use; 1.5% weekly).

- Overall, 60% of survey respondents indicated that they commute to work at least three times per week, 11% do so for school, and 6% reported that they work or attend school at home. Approximately 23% stated that they do not commute to work or school at least three times per week, whereas 1% preferred to not answer the question.

- When asked how satisfied or dissatisfied they were with their experiences when using the 91 Freeway, more than half (57%) indicated they were generally satisfied, 37% offered that they were dissatisfied, whereas 6% were unsure or preferred to not answer the question.

- Most residents (55%) supported creating additional entrance/exit points for the 91 Express Lanes in Orange County, whereas 25% opposed creating more access points and 20% were unsure or preferred not to share their opinion.

COMMUNICATIONS

- Over half (54%) of respondents indicated they were satisfied with OCTA's efforts to communicate with residents through E-newsletters, advertisements, the Internet, news media, and other means, with 22% indicating that they were *very* satisfied. The remaining respondents were either dissatisfied with the OCTA's communication efforts (23%) or unsure of their opinion (23%).

- Thirty-five percent (35%) of respondents indicated that they recalled encountering OCTA advertising during the six months prior to participating in the survey.

- Twenty-eight percent (28%) of respondents recalled encountering news stories about OCTA during the six months prior to participating in the survey.

- When asked to identify their primary information source for news and events in Orange County, just under one-third (29%) indicated that they primarily rely on the Internet, followed closely by television (28%). The remaining sources—newspapers, social media, and radio—were identified as primary information sources for news and events in Orange County by 18%, 13% and 8% of respondents, respectively.

C O N C L U S I O N S

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, 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.

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. More than eight out of 10 respondents (84%) had heard of OCTA prior to participating in the 2015 survey, which is similar to the awareness levels recorded in 2011 (83%) and just slightly lower than the awareness levels recorded in 2006 (88%) leading up to the highly publicized renewal of OCTA's Measure M.

As in the past, however, awareness of OCTA does not necessarily translate into having an opinion of the Authority. More than one-third (39%) of residents indicated that they did not have an opinion of OCTA or preferred not to answer the question. Among those with an opinion of OCTA, however, their views were generally positive. Those with favorable opinions of OCTA in 2015 (47%) outnumbered those with unfavorable opinions (15%) by more than 3 to 1. The ratio of favorable to unfavorable opinions of OCTA remained about the same between 2011 and 2015.

Consistent with the above findings, a sizeable minority of residents (ranging from 21% to 47%) did not hold more nuanced opinions about OCTA on more specific performance issues such as making good use of public funds, being trustworthy, or delivering improvements to the transportation system. Once again, however, among those with an opinion favorable assessments outnumbered negative assessments. For example, the percentage who agreed with the statements *OCTA helps our local and regional economies function by improving our transportation system*, *is a public agency I trust*, and *has made many improvements to Orange County's transportation system in the past five years* was at least three times larger than the percentage who disagreed with the statements.

What are residents' opinions of OCTA-provided transportation programs and services?

In addition to measuring residents' perceptions of OCTA as an agency, the survey also profiled residents' opinions of various transportation services offered by OCTA. Although familiarity with certain targeted services was low (e.g, ACCESS paratransit and vanpool programs), residents generally provided positive quality assessments for each of the dozen services tested.

Among those with an opinion, Orange County residents assigned the highest quality ratings to Freeway Service Patrol tow trucks (73% excellent or good), followed by ACCESS paratransit service (72%), Metrolink commuter rail service (64%), rideshare and carpool matching programs (63%), the overall quality and condition of freeways (63%), bus service (62%), overall quality and condition of the 91 Express Lanes toll road (59%), and vanpool programs (58%).

Although still generally positive, residents provided lower quality ratings for the overall quality and condition of city streets (54%), the overall transportation system in Orange County (54%), bikeway planning (54%), and road and freeway planning (53%).

Does there continue to be public support for projects funded or to be funded by Measure M?

In 1990, Orange County voters approved establishing a local half-cent sales tax (Measure M) dedicated to transportation improvements and traffic relief projects, including expanding and improving freeways, upgrading intersections, adding capacity and improved maintenance of city streets, and improving transit services. Renewed by voters for an additional 30 year term in 2011 (M2), it is estimated that the combined Measure M plans will deliver more than $20 billion in transportation improvements to Orange County by the year 2041.

Recognizing that any long-term investment plan must be revisited periodically and adjusted, as needed, to reflect updated policy, financial and external conditions, OCTA recently embarked upon the Measure M2 Ten Year Review. In addition to generating updated financial projections and assessing the impact of policy changes, an important goal of the review is to gauge public and stakeholder support for key components of the plan, as well as projects that could receive discretionary funding in the future.

To assist OCTA in this effort, the survey asked residents to prioritize a list of 19 transportation improvements. The survey results provide clear evidence that the public supports the types of projects funded by Measure M, as well as those that could receive funding in the future—as every project tested was viewed as a high or medium priority for future funding by a majority of Orange County residents. Nevertheless, some projects were prioritized over others, with the highest priority assigned to fixing potholes and repairing roadways (94% high or medium priority), followed by coordinating traffic signals on major roadways to improve

traffic flow (92%), providing transit services to seniors and the disabled at discounted rates (92%), closing gaps, improving intersections, and reducing traffic congestion on major roads throughout the County (90%), cleaning up polluted runoff from roads to reduce water pollution and protect local beaches (89%), and improving ACCESS paratransit service for people with disabilities (85%).

How are residents traveling in Orange County?

An individual's awareness and opinions of OCTA, as well as their opinions about transportation priorities and policies, can naturally be shaped by their typical mode of travel, whether they commute to work or school, and other aspects of their travel behavior. Accordingly, the survey included a series of questions designed to profile residents' travel behavior.

The most common way Orange County residents travel is by driving alone, which was mentioned as their primary mode choice by 58% of those surveyed in 2015. An additional 30% typically carpool with one or more passengers, whereas 5% reported that they primarily use a local bus. All other options tested—including Metrolink, vanpool, biking and walking—collectively were mentioned as the primary means of travel by 8% of Orange County residents.

Of course, travel patterns can (and do) vary by demographic characteristics. In general, the percentage of residents who primarily drive alone increases with household income and is highest among Caucasians and Asians. By comparison, use of public transit as a primary mode is highest among low-income residents, Latinos, and African Americans.

Although the percentage of respondents who relied on transit as their *primary* method of travel was low, many Orange County residents do occasionally use transit when traveling in the region. In the six months prior to the interview, nearly one-quarter (23%) of residents had used a local bus, 19% had ridden Metrolink, 6% had boarded an express bus, and 4% had used ACCESS paratransit service. These figures are nearly identical to those recorded in 2011.

How satisfied are residents with OCTA's efforts to communicate with them?

Based on surveys True North has conducted for various public agencies in Orange County as well as around the State, the public's preferences for communication are growing increasingly diverse. Whereas older residents continue to rely on television, newsletters and printed forms of communication, younger residents generally show great interest in digital forms of communication including Social Media, text, and smart phone apps. This pattern makes the challenge of communicating with residents more difficult than in the past, when the sources residents relied on for information were fewer and more consistent across subgroups.

Developing effective communications strategies also requires hitting a moving target, as media consumption habits are continually changing. Over the past four years, for example, the percentage of Orange County residents who rely on newspapers as their primary information source declined significantly (-8%), whereas the percentage who primarily turn to social media for their news increased significantly (+7%). Public expectations regarding content and timeliness of information also appear to be increasing.

The trends noted above likely underlie some of the changes in resident satisfaction with OCTA's communication efforts over the past four years. In 2011, 61% indicated that they were generally satisfied with OCTA's efforts to communicate with them through E-newsletters, advertisements, the Internet, news media, and other means. The corresponding figure in the 2015 survey was 54%—a statistically significant decline of nearly 7%. OCTA is not alone in this area, as most other public agencies True North has conducted tracking surveys for have displayed similar trends in satisfaction with communication in recent years. Based on these trends, OCTA—like other public agencies—may want to conduct a careful review of its current communications strategies and budget to ensure that both are evolving to meet this growing challenge.

The aforementioned communications challenges notwithstanding, it is important to note that recalled exposure to OCTA advertisements in the six months prior to the interview did increase significantly over the past four years, from 29% in 2011 to 35% in 2015.

QUALITY OF LIFE & LOCAL ISSUES

The opening series of questions in the 2015 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, the overwhelming majority of respondents in 2015 shared favorable opinions of the quality of life in Orange County, with 35% reporting it is excellent and 48% stating it is good. Approximately 14% 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 compared to 2011, the combined percentage of respondents that rated the quality of life in Orange County as excellent or good was similar, although there was a statistically significant decline in the percentage who used 'good' and a similar increase (though not statistically significant) in the percentage who used 'excellent' to describe the quality of life in Orange County.

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

† Statistically significant change (p < 0.05) between the 2011 and 2015 studies.

Beginning 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] The higher an individual's household income, the more likely they were to rate the quality of life in the County as excellent.

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1. A similar patterns was found in the 2011 survey.

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 & 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 on the next page. Categories that received less than 0.6% of responses are not shown.

By far the most frequently mentioned issue was the drought/water issues (19%), followed by a response of not sure/cannot think of anything (15%). Other topics that were mentioned by at least 5% of respondents included traffic (10%), economy/unemployment (9%), real estate/housing issues (9%), cost of living (8%), public safety (7%), population/overcrowding (6%), and education/schools (5%). Given the purpose of this study, it is instructive that traffic and transportation issues collectively accounted for approximately 12% of all responses, which is similar to the 2011 study findings.

Table 1 compares the top 10 responses to Question 3 in 2015 and 2011. Over the past four years, the drought/water issues, traffic, real estate/housing, and cost of living issues rose in the ranking of most important issues facing the Orange County, whereas the economy/unemployment, education, budgeting/government spending, transportation infrastructure, and public safety fell in the rankings.

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

Issue	% Respondents
Water issues, drought	19.2
Not sure / Cannot think of anything	14.6
Traffic	9.8
Economy, unemployment	9.1
Real estate, housing	8.7
Cost of living	7.9
Public safety	7.2
Population, overcrowding	5.6
Education, schools	5.2
Homelessness	3.8
Socioeconomic issues	2.8
Illegal immigration issues	2.7
Development, loss of open space	2.3
Taxes	1.9
Leadership, government	1.9
Public transportation	1.8
Environment	1.7
Infrastructure maintenance, repair	1.5
Improve police department	1.2
Budget, spending	1.0
No issues / Everything is okay	0.8
Graffiti	0.6
Healthcare	0.6

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

Study Year	
2015	2011
Water issues, drought	Economy, unemployment
Not sure / Cannot think of anything	Not sure / Cannot think of anything
Traffic	Education, schools
Economy, unemployment	Traffic
Real estate, housing	Public safety
Cost of living	Budget, spending
Public safety	Real estate, housing
Population, overcrowding	Transportation infrastructure
Education, schools	Population, overcrowding
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? Do they have a favorable or unfavorable opinion of the Authority? And how do they view OCTA on issues of fiscal responsibility, trust, and performance in delivering transportation improvements to the region?

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 so as to avoid this potential source of bias.

AIDED AWARENESS   The first question 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 (84%) of respondents in 2015 affirmed that they had heard of OCTA prior to the interview. Over the past four years, awareness of OCTA has remained stable with no statistically significant changes.

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 8-11 display how awareness of OCTA varied substantially across resident subgroups. When compared to their respective counterparts, those who have resided in the County 15 years or longer, residents aged 55 to 64, full-time employees and retired individuals, Caucasians and African Americans, individuals in high-income households, and high frequency voters 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
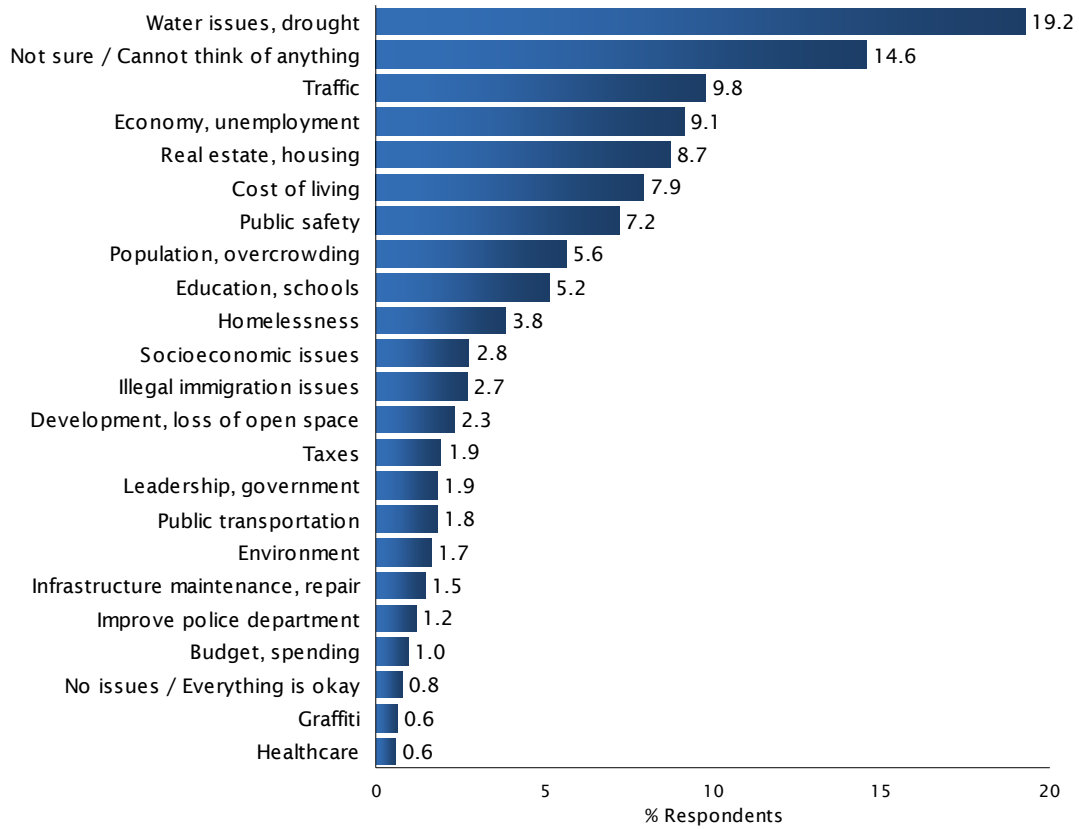
FIGURE 10 HEARD OF OCTA BY HSLD INCOME & DISTRICT

FIGURE 11 HEARD OF OCTA BY FREQUENCY OF VOTING

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 39% of respondents in 2015 indicated that they do not have an opinion of OCTA or preferred not to answer the question. Among the remaining respondents, however, opinions of OCTA were decidedly positive. Forty-seven percent (47%) stated that they have a favorable opinion, whereas 15% offered an unfavorable opinion of OCTA.

When compared to the 2011 study findings, the percentage who did not have an opinion of OCTA or preferred to not answer the question decreased significantly, whereas the percentage who had a very favorable opinion increased significantly, as did the percentage who had a very unfavorable opinion. Overall, the balance of favorable to unfavorable opinions of OCTA remained about the same, with positive opinions outnumbering negative opinions by more than three-to-one.

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 Not sure either way?*

FIGURE 12 OPINION OF OCTA BY STUDY YEAR

† Statistically significant change (p < 0.05) between the 2011 and 2015 studies.

The following figures recalculate the results of Question 5 to be among just those who held an opinion of OCTA, favorable or unfavorable. Figure 13 illustrates that although more than three-quarters (76%) of respondents with an opinion held favorable views of OCTA in 2015 and this is similar to the 2011 findings, the percentage was slightly higher in 2006 (83%) and 2004 (82%). Figures 14-18 display how opinions of OCTA in 2015 differed across a variety of resident subgroups. Although there was some variation in opinion (e.g., those who primarily travel by transit were more likely than their counterparts to hold a *very* favorable opinion of OCTA) the most striking pattern in these figures is the relative consistency of opinion. At least two-thirds of respondents with an opinion within each subgroup held a *favorable* opinion of OCTA.

FIGURE 13 FAVORABLE OPINION OF OCTA BY STUDY YEAR

FIGURE 14 OPINION OF OCTA BY YEARS IN ORANGE COUNTY & PRIMARY MODE

FIGURE 15 OPINION OF OCTA BY REGULAR BUS USAGE, 91 EXPRESS LANES USAGE & ENCOUNTERED OCTA NEWS STORIES

FIGURE 16 OPINION OF OCTA BY AGE & HEARD OF MEASURE M

FIGURE 17 OPINION OF OCTA BY COMMUTE 3+ TIMES PER WEEK & DISTRICT

FIGURE 18 OPINION OF OCTA BY FREQUENCY OF VOTING

CHARACTERIZING OCTA   The final question in this series was designed to profile how residents perceive OCTA on a variety of dimensions. Specifically, Question 6 provided a list of six statements about OCTA and asked respondents whether they agree or disagree with the statement—or have not opinion. Figure 19 presents the statements tested in truncated form,[2] as well as respondents' characterizations of OCTA.

Question 6   *Next, I'm going to read a series of statements. For each that I read, please tell me whether you agree or disagree with the statement. If you don't have an opinion, just say so.*

FIGURE 19 AGREEMENT WITH STATEMENTS ABOUT OCTA

Overall, respondents generally characterized OCTA in a positive manner, although the percentage who had no opinion ranged from 21% to 47%, depending on the dimension. Overall, a majority of respondents agreed that *OCTA helps our local and regional economies function by improving our transportation system* (64%), *is a public agency I trust* (60%), *has made many improvements to Orange County's transportation system in the past five years* (55%), and *is actively seeking solutions to our transportation issues* (50%). Although still positive, the levels of agreement were somewhat lower (due to the higher percentage of those with no opinion) that OCTA *listens to the general public* (38%) and *makes good use of public funds* (35%).

When compared to the 2011 findings, perceptions of OCTA improved on all dimensions tested, with a statistically significant increase in the percentage who agreed that OCTA is actively seeking solutions to transportation issues (see Table 2).

TABLE 2 AGREEMENT WITH STATEMENT ABOUT OCTA BY STUDY YEAR (AMONG THOSE WHO PROVIDED OPINION)

	Study Year		Change in Agreement
	2015	2011	
Is actively seeking solutions to our transportation issues	78.4	74.7	+3.7†
Listens to the general public	68.3	65.0	+3.2
Is a public agency I trust	81.6	79.3	+2.3
Helps our local, regional economies by improving transportation system	80.9	79.0	+1.9
Has made many transportation improvements in past 5 yrs	76.1	75.1	+1.0
Makes good use of public funds	66.1	65.8	+0.3

† Statistically significant change (p < 0.05) between the 2011 and 2015 studies.

2. For the exact wording of each statement, see Question 6 in *Questionnaire & Toplines* on page 58.

For the interested reader, Table 3 shows how the level of agreement with each statement about OCTA varied by Supervisorial District among those with an opinion.

TABLE 3 AGREEMENT WITH STATEMENT ABOUT OCTA BY DISTRICT (AMONG THOSE WHO PROVIDED OPINION)

	Overall	District				
		One	Two	Three	Four	Five
Is a public agency I trust	81.6	82.4	80.7	81.7	82.6	78.7
Helps local, regional economies function by improving transportation system	80.9	85.0	79.1	78.8	80.8	79.2
Is actively seeking solutions to our transportation issues	78.4	83.8	78.7	74.8	75.7	78.9
Has made many transportation improvements in past 5 yrs	76.1	83.7	73.2	74.1	76.5	70.5
Listens to the general public	68.3	71.2	63.7	68.9	70.2	64.6
Makes good use of public funds	66.1	74.5	63.9	67.0	62.4	59.2

O C T A P R O G R A M S & S E R V I C E S

Having measured residents' general awareness and opinions of OCTA as an agency, the survey transitioned to measuring their opinions of the transportation system and services provided by OCTA.

RATING OF TRANSPORTATION SYSTEM & SERVICES   The first question in this series asked respondents to rate various aspects of Orange County's transportation system and the services provided by OCTA using the now familiar five-point scale of excellent, good, fair, poor, or very poor. The order of the items was randomized for each respondent to avoid a systematic position bias.

Figure 20 presents the items ranked according to the proportion of residents who rated an item as excellent or good. To allow for an apples-to-apples comparison of the ratings, only respondents who held an opinion were included in Figure 20. Those who did not have an opinion were removed from this analysis. The percentage who held an opinion for each item is shown to the right of the label in parentheses. Thus, for example, among the 67% of respondents who expressed an opinion about Freeway Service Patrol, 23% rated the service as excellent and 50% provided a rating of good.

Question 7   *How would you rate: _____ in Orange County? Would you say it is excellent, good, fair, poor, or very poor - or do you have no opinion?*

FIGURE 20 RATING OF TRANSPORTATION SERVICES IN ORANGE COUNTY

Overall, Orange County residents assigned the highest quality ratings to Freeway Service Patrol tow trucks (73% excellent or good), followed by ACCESS paratransit service (72%), Metrolink commuter rail service (64%), rideshare and carpool matching programs (63%), the overall quality and condition of freeways (63%), bus service (62%), overall quality and condition of the 91 Express Lanes toll road (59%), and vanpool programs (58%). Although still generally positive, residents provided lower quality ratings for the overall quality and condition of city streets (54%), the overall transportation system in Orange County (54%), bikeway planning (54%), and road and freeway planning (53%).

When compared to the 2011 study findings, there were two statistically significant changes in 2015 for Question 7. The percentage who rated the overall transportation system in Orange County as excellent or good increased 5%, whereas the percentage who rated the overall quality and condition of the 91 Express Lanes as excellent or good decreased 5% (see Table 4).

TABLE 4 RATING OF TRANSPORTATION SERVICES IN ORANGE COUNTY BY STUDY YEAR (SHOWING % EXCELLENT + GOOD)

	Study Year		Change in Excellent +
	2015	2011	Good
Overall transportation system	54.0	48.9	+5.2†
Rideshare and carpool matching programs	63.0	59.7	+3.3
Freeway Service Patrol tow trucks	73.3	70.3	+3.0
Bus service	61.5	59.5	+2.1
The overall quality and condition of freeways	62.7	61.4	+1.2
Overall quality, condition of city streets	54.3	54.0	+0.3
Road and freeway planning	52.8	53.4	-0.6
ACCESS Paratransit services for the disabled	71.6	73.7	-2.2
Metrolink commuter rail service	63.9	66.1	-2.2
Vanpool programs	58.1	60.5	-2.4
Bikeway planning	53.6	57.6	-4.0
Overall quality, condition of 91 Express Lanes	58.6	63.4	-4.8†

† Statistically significant change (p < 0.05) between the 2011 and 2015 studies.

Figures 21-24 display how the quality ratings for select transit services provided by OCTA varied according to respondents' use of the services. As shown in the figures, residents who frequently used a transit service generally held higher opinions of the quality of the service when compared to those who had used the service less frequently or not at all.

FIGURE 21 RATING OF ACCESS OF PARATRANSIT BY ACCESS PARATRANSIT USAGE

FIGURE 22 RATING OF METROLINK BY METROLINK USAGE

FIGURE 23 RATING OF 91 EXPRESS LANES BY 91 EXPRESS LANES USAGE

FIGURE 24 RATING OF BUS SERVICE BY REGULAR BUS USAGE

TRANSPORTATION PRIORITIES & MEASURE M

In 1990, Orange County voters approved establishing a local half-cent sales tax (Measure M) dedicated to transportation improvements and traffic relief projects, including expanding and improving freeways, upgrading intersections, adding capacity and improved maintenance of city streets, and enhancing rail transit services. Renewed by voters for an additional 30 year term in 2011 (M2), it is estimated that the combined Measure M plans will deliver approximately $20 billion in transportation improvements to Orange County by the year 2041.

Recognizing that any long-term investment plan must be revisited periodically and adjusted, as needed, to reflect updated policy, financial and external conditions, OCTA recently embarked upon the Measure M2 Ten Year Comprehensive Review. In addition to generating updated financial projections and assessing the impact of policy changes, an important goal of the review is to gauge public and stakeholder support for key components of the plan, as well as projects that could receive discretionary funding in the future.

PRIORITIES   To assist OCTA in this effort, the survey asked residents to prioritize among a list of 19 transportation improvements shown in Figure 25 on the next page. The format of Question 8 was straightforward: after informing respondents that there are a variety of improvements that *could* be made to Orange County's transportation system, respondents were asked whether each project shown in Figure 25 should be a high, medium, or low priority—or should no money be spent on the project? To encourage respondents to prioritize, they were reminded that not all of the projects can be high priorities.

The survey results provide clear evidence that the public supports the types of projects funded by Measure M, as well as those that could receive funding in the future—as every project tested was viewed as a high or medium priority for future funding by a majority of Orange County residents. Nevertheless, some projects were prioritized over others, with the highest priority to fixing potholes and repairing roadways (94% high or medium priority), followed by coordinating traffic signals on major roadways to improve traffic flow (92%), providing transit services to seniors and the disabled at discounted rates (92%), closing gaps, improving intersections, and reducing traffic congestion on major roads throughout the County (90%), cleaning up polluted runoff from roads to reduce water pollution and protect local beaches (89%), and improving ACCESS paratransit service for people with disabilities (85%).

At least three-quarters of Orange County residents also assigned a high or medium priority to adding local bus and shuttle services in communities that aren't well served by regional transit services (81%), optimizing the existing transportation system (81%), widening freeways (80%), improving safety and security at transit stops and stations (80%), and preserving and restoring open space land to offset the impacts of freeway improvement projects (75%).

More than two-thirds of respondents ranked expanding bus services (73%), constructing roads over or under rail tracks where needed to improve traffic flow (73%), providing free assistance and tow truck service to motorists who break down on freeways (72%), improving access to METROLINK stations using shuttles, light rail, and other transit services (70%), and expanding METROLINK rail service (68%) as a high or medium priority.

Although still rated as a high or medium priority by a majority of respondents, improving the network of bike lanes (64%), expanding vanpool programs (53%), and building additional toll lanes to help relieve traffic congestion (53%) were ranked as the lowest priority items among those tested.

Question 8 *There are a variety of improvements that could be made to Orange County's transportation system. As I read the following list of improvements, please indicate whether you think it should be a high priority, a medium priority, or a low priority. If you think no money should be spent on this project, please say so. Please keep in mind that not all of the improvements can be high priorities.*

FIGURE 25   TRANSPORTATION PRIORITIES

Table 5 shows how the percentage of respondents who rated each potential improvement as a *high* priority varied by Supervisorial District, whereas Table 6 calculates the change in the percentage who rated each project a high priority between the 2011 and 2015 surveys. When compared to the 2011 study, the priority assigned to improving ACCESS paratransit services for people with disabilities[3] and improving the network of bike lanes increased significantly, whereas the priority assigned to building additional lanes to relieve traffic congestion decreased significantly.

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3. The large increase in the percentage who identified improving ACCESS paratransit services as a high priority is likely a reflection of clarifying in the 2015 study that ACCESS services are for people with disabilities. The 2011 survey mentioned paratransit service, but did not include the wording 'for people with disabilities'.

TABLE 5 TRANSPORTATION PRIORITIES BY DISTRICT (SHOWING % HIGH PRIORITY)

	District				
	One	Two	Three	Four	Five
Fix potholes and repair roadways	79.6	72.6	72.6	72.6	64.0
Coordinate traffic signals on major roadways to improve traffic flow	63.2	65.9	65.9	65.9	65.4
Provide transit services to seniors and the disabled at a discounted rate	62.6	61.0	61.0	61.0	57.3
Close gaps, improve intersections, reduce traffic congestion on major roads	65.4	59.9	59.9	59.9	61.7
Clean up runoff from roads to reduce water pollution, protect beaches	69.0	62.8	62.8	62.8	62.4
Improve ACCESS paratransit service for people with disabilities	59.2	51.4	51.4	51.4	39.7
Add bus, shuttle services in communities that aren't well served by transit services	39.0	38.6	38.6	38.6	35.7
Optimize the existing transportation system	39.9	42.7	42.7	42.7	43.8
Widen the freeways	52.1	45.3	45.3	45.3	46.3
Improve safety and security at transit stops and stations	54.4	44.6	44.6	44.6	35.0
Preserve, restore open space to offset impacts of freeway improvement projects	36.0	37.7	37.7	37.7	42.8
Expand bus services	37.2	29.7	29.7	29.7	29.1
Construct roads over or under rail tracks where needed to improve traffic flow	34.8	33.0	33.0	33.0	35.5
Provide free towing, assitance to motorists who break down on freeways	51.0	35.7	35.7	35.7	28.1
Improve access to Metrolink stations using shuttles, light rail, other services	28.5	29.6	29.6	29.6	30.1
Expand the Metrolink rail service	27.6	32.2	32.2	32.2	33.1
Improve the network of bike lanes	33.3	29.8	29.8	29.8	18.4
Expand vanpool programs	23.9	17.1	17.1	17.1	14.7
Build additional toll lanes to help relieve traffic congestion	28.8	22.7	22.7	22.7	27.5

TABLE 6 TRANSPORTATION PRIORITIES BY STUDY YEAR (SHOWING % HIGH PRIORITY)

	Study Year		Change in
	2015	2011	High Priority
Improve ACCESS paratransit service for people with disabilities	49.6	24.9	+24.7†
Improve the network of bike lanes	27.4	22.3	+5.1†
Fix potholes and repair roadways	70.6	67.4	+3.2
Construct roads over or under rail tracks where needed to improve traffic flow	36.8	35.6	+1.2
Widen the freeways	50.4	49.2	+1.2
Coordinate traffic signals on major roadways to improve traffic flow	65.1	65.1	+0.1
Expand vanpool programs	18.2	18.7	-0.5
Expand the Metrolink rail service	31.9	33.0	-1.1
Optimize the existing transportation system	41.1	43.2	-2.1
Expand bus services	34.3	37.2	-2.8
Build additional toll lanes to help relieve traffic congestion	25.5	31.3	-5.8†
Improve safety and security at transit stops and stations	46.2	N/A	N/A
Provide transit services to seniors and the disabled at a discounted rate	60.3	N/A	N/A
Provide free towing, assitance to motorists who break down on freeways	38.8	N/A	N/A
Clean up runoff from roads to reduce water pollution, protect beaches	64.8	N/A	N/A
Close gaps, improve intersections, reduce traffic congestion on major roads	61.8	N/A	N/A
Improve access to Metrolink stations using shuttles, light rail, other services	30.3	N/A	N/A
Add bus, shuttle services in communities that aren't well served by transit	39.0	N/A	N/A
Preserve, restore open space to offset impacts of freeway projects	38.4	N/A	N/A

† Statistically significant change (p < 0.05) between the 2011 and 2015 studies.

AWARENESS OF MEASURE M   The survey next addressed respondents' awareness and opinions of Measure M—Orange County's voter-approved half cent transportation sales tax. When asked if they had heard of Measure M prior to taking the survey, approximately one-quarter (26%) indicated that they had heard of the measure, whereas 72% had not heard of Measure M and 2% were unsure. When compared to the 2011 survey, public awareness of Measure M declined approximately 5% over the past four years, which is statistically significant (see Figure 26). Awareness of Measure M also varied substantially across voter subgroups, being much higher among longtime Orange County residents, those with an unfavorable opinion of OCTA, and high frequency voters (see Figures 27-28).

Question 9 *Prior to taking this survey, had you heard of Measure M - Orange County's voter-approved half cent transportation sale tax?*

FIGURE 26 HEARD OF MEASURE M BY STUDY YEAR

† Statistically significant change (p < 0.05) between the 2011 and 2015 studies.

FIGURE 27 HEARD OF MEASURE M BY YEARS IN ORANGE COUNTY & OPINION OF OCTA

FIGURE 28 HEARD OF MEASURE M BY DISTRICT & FREQUENCY OF VOTING

OPINION OF OCTA'S MEASURE M PERFORMANCE   Residents who had heard of Measure M prior to taking the survey were next asked to rate OCTA's performance in delivering the transportation projects and improvements funded by Measure M on a scale of excellent, good, fair, poor or very poor. Less than one-third (28%) of those who had heard of Measure M indicated that they did not have an opinion of OCTA's performance in delivering projects and improvements. Among the remaining respondents with an opinion, 9% rated it excellent and 28% good. An additional 22% rated OCTA's performance as fair, whereas 13% used poor or very poor to describe OCTA's performance in delivering Measure M projects and improvements. The results in 2015 were similar to those recorded in 2011—there were no statistically significant changes (see Figure 29). Respondents who generally had a favorable opinion of OCTA, as well as those who had encountered OCTA advertisements and news stories, expressed the most positive opinions of OCTA's performance in delivering Measure M transportation improvements (Figure 30).

Question 10   *In your opinion, is OCTA doing an excellent, good, fair, poor or very poor job of delivering the transportation projects and improvements funded by Measure M - or do you have Not sure?*

FIGURE 29 OPINION OF MEASURE M MANAGEMENT BY STUDY YEAR

FIGURE 30 OPINION OF MEASURE M MANAGEMENT BY OPINION OF OCTA, ENCOUNTERED OCTA ADS, ENCOUNTERED OCTA NEWS & FREQUENCY OF VOTING

TRAVEL BEHAVIOR & USE OF SYSTEM

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 11) was designed to identify respondents' *primary* mode of transportation when they travel in Orange County. As shown in Figure 31, the majority (58%) of residents surveyed indicated that they primarily drive alone, whereas nearly one-third typically drive with one (16%) or two passengers (14%). Overall, 5% stated that they primarily travel by local bus and less than 8% primarily travel by alternative modes including biking, walking, Metrolink, or vanpooling.

Question 11   *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 31 PRIMARY TRANSPORTATION MODE

Figures 32-35 show how primary mode of travel varied by resident age, household income, Supervisorial District, and ethnicity. In general, the percentage of residents who primarily drive alone increased with household income, and was highest among Caucasians and Asians. By comparison, use of public transit as a primary mode was highest among low-income residents, Latinos, and African Americans.

FIGURE 32 PRIMARY TRANSPORTATION MODE BY AGE

FIGURE 33 PRIMARY TRANSPORTATION MODE BY HSLD INCOME

FIGURE 34 PRIMARY TRANSPORTATION MODE BY DISTRICT

FIGURE 35 PRIMARY TRANSPORTATION MODE BY ETHNICITY

USE OF TRANSIT & 91 FREEWAY/EXPRESS LANES Having identified respondents' primary mode of travel, the survey next asked respondents how frequently they had used each of the transit, freeway, and toll road options listed in Figure 36 in the 12 months prior to the interview. Overall, residents reported the highest frequency of use for the 91 Freeway (83% use; 29% weekly), followed by the 91 Express Lanes Toll Road (30% use; 5% weekly), regular bus service (23% use; 7% weekly), Metrolink commuter rail (19% use; 1.3% weekly), express bus service (6% use; 2.1% weekly), and ACCESS paratransit service (4% use; 1.5% weekly).

For the interested reader, Figures 37-40 show how the frequency of using each transit, freeway, and toll road option varied by age, household income, Supervisorial District, and ethnicity. When compared to the 2011 survey, the percentage who indicated they had used the 91 Express Lanes decreased significantly, although that could be a function of some 2011 respondents confusing the Express Lanes with the 91 Freeway as the Freeway was not an option tested in the 2011 survey (see Table 7).

Question 12 *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 36 TRANSPORTATION SERVICES USAGE IN PAST 12 MONTHS

FIGURE 37 TRANSPORTATION SERVICES USAGE IN PAST 12 MONTHS BY AGE

FIGURE 38 TRANSPORTATION SERVICES USAGE IN PAST 12 MONTHS BY HSLD INCOME

FIGURE 39 TRANSPORTATION SERVICES USAGE IN PAST 12 MONTHS BY DISTRICT & METROLINK SERVICE IN HOME ZIP CODE

FIGURE 40 TRANSPORTATION SERVICES USAGE IN PAST 12 MONTHS BY ETHNICITY

TABLE 7 TRANSPORTATION SERVICES USAGE IN PAST 12 MONTHS BY STUDY YEAR

	Study Year		Change in Usage
	2015	2011	
Metrolink commuter rail	18.7	17.7	1.1
An Express Bus	6.0	5.6	0.4
A regular bus	22.6	23.1	-0.5
ACCESS paratransit service	3.7	4.5	-0.8
91 Express Lanes toll road	30.4	37.6	-7.2†
91 Freeway	83.4	N/A	N/A

† Statistically significant change (p < 0.05) between the 2011 and 2015 studies.

COMMUTE TO WORK OR SCHOOL?   The next question (Question 13) sought to categorize respondents according to their commute status. Overall, 60% indicated that they commute to work at least three times per week, 11% do so for school, and 6% reported that they work or attend school at home. Approximately 23% stated that they do not commute to work or school at least three times per week, whereas 1% preferred to not answer the question. When compared to the 2011 survey, the percentage that indicated they commute to work increased significantly, whereas the percentage that indicated they commute to school or telecommute declined significantly.

Question 13 *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 41 COMMUTING BEHAVIOR BY STUDY YEAR

† Statistically significant change (p < 0.05) between the 2011 and 2015 studies.

Figures 42 and 43 show how commute status among Orange County residents surveyed for this study varied by age, Supervisorial District, household income and ethnicity. As expected, age was the primary determinant of commute status, with those under the age of 25 and seniors being the least likely to report commuting to work at least three times per week.

FIGURE 42 COMMUTING BEHAVIOR BY AGE & DISTRICT

FIGURE 43 COMMUTING BEHAVIOR BY HSLD INCOME & ETHNICITY

91 FREEWAY   One of the new questions added to the 2015 study was targeted to individuals who had used the 91 Freeway in the 12 months prior to taking the survey. When asked how satisfied or dissatisfied they were with their experiences when using the 91 Freeway, more than half (57%) indicated they were generally satisfied, 37% offered that they were dissatisfied, whereas 6% were unsure or preferred to not answer the question (Figure 44). When compared to their respective counterparts, satisfaction was generally higher among residents who had lived in Orange County less than 10 years, younger individuals (under 25), Latinos, those who reside in households that earn less than $50,000 annually, and residents of Supervisorial District 4 (see Figures 45-47).

Question 14 *Overall, are you satisfied or dissatisfied with your experiences when using the 91 Freeway?*

FIGURE 44 OVERALL SATISFACTION WITH 91 FREEWAY

Not sure 5.4
Prefer not to answer 0.5
Very satisfied 16.5
Very dissatisfied 21.5
Somewhat dissatisfied 15.3
Somewhat satisfied 40.8

FIGURE 45 OVERALL SATISFACTION WITH 91 FREEWAY BY YEARS IN COUNTY & AGE

FIGURE 46 OVERALL SATISFACTION WITH 91 FREEWAY BY EMPLOYMENT STATUS & ETHNICITY

FIGURE 47 OVERALL SATISFACTION WITH 91 FREEWAY BY HSLD INCOME & DISTRICT

ADDITIONAL ACCESS POINTS FOR 91 EXPRESS LANES   The final question in this series asked respondents who use the 91 Freeway and/or 91 Express Lanes whether they generally support or oppose creating more access points at which you can get in/out of the 91 Express Lanes in Orange County. As shown in Figure 48, most respondents (55%) supported creating additional entrance/exit points for the 91 Express Lanes in Orange County, whereas 25% opposed creating more access points and 20% were unsure or preferred not to share their opinion. Figures 49-52 illustrate how support for additional access points in Orange County for the 91 Express Lanes varied by demographic characteristics and frequency of using the 91 Freeway and Express Lanes.

Question 15   *Do you support or oppose creating more points at which you can get in and out of the 91 Express Lanes toll road in Orange County?*

FIGURE 48 SUPPORT FOR ADDING ENTRANCE / EXIT POINTS ON 91 EXPRESS LANES TOLL ROAD

FIGURE 49 SUPPORT FOR ADDING ENTRANCE / EXIT POINTS ON 91 EXPRESS LANES TOLL ROAD BY YEARS IN ORANGE COUNTY & AGE

FIGURE 50 SUPPORT FOR ADDING ENTRANCE / EXIT POINTS ON 91 EXPRESS LANES TOLL ROAD BY EMPLOYMENT STATUS & ETHNICITY

FIGURE 51 SUPPORT FOR ADDING ENTRANCE / EXIT POINTS ON 91 EXPRESS LANES TOLL ROAD BY HSLD INCOME & DISTRICT

FIGURE 52 SUPPORT FOR ADDING ENTRANCE / EXIT POINTS ON 91 EXPRESS LANES TOLL ROAD BY 91 FREEWAY & 91 EXPRESS LANES USAGE

C OMMUNICATIONS

In this section of the report we present the results of questions that were designed to measure respondents' satisfaction with OCTA's efforts to communicate with residents, profile residents' exposure to OCTA-related advertisements and news stories in recent months, and understand the communication channels residents use most often.

OVERALL SATISFACTION   Question 16 of the survey asked residents to report their overall satisfaction with OCTA's efforts to communicate with residents through E-newsletters, advertisements, the Internet, news media, and other means. Overall, 54% of respondents indicated they were satisfied with the OCTA's efforts in this respect in 2015, with 22% indicating that they were *very* satisfied (Figure 53). The remaining respondents were either dissatisfied with the OCTA's communication efforts (23%) or unsure of their opinion (23%). When compared to 2011, there was a statistically significant decrease in satisfaction with OCTA's communication efforts.

Question 16   *Overall, are you satisfied or dissatisfied with OCTA's efforts to communicate with Orange County residents through E-newsletters, advertisements, the Internet, news media, and other means?*

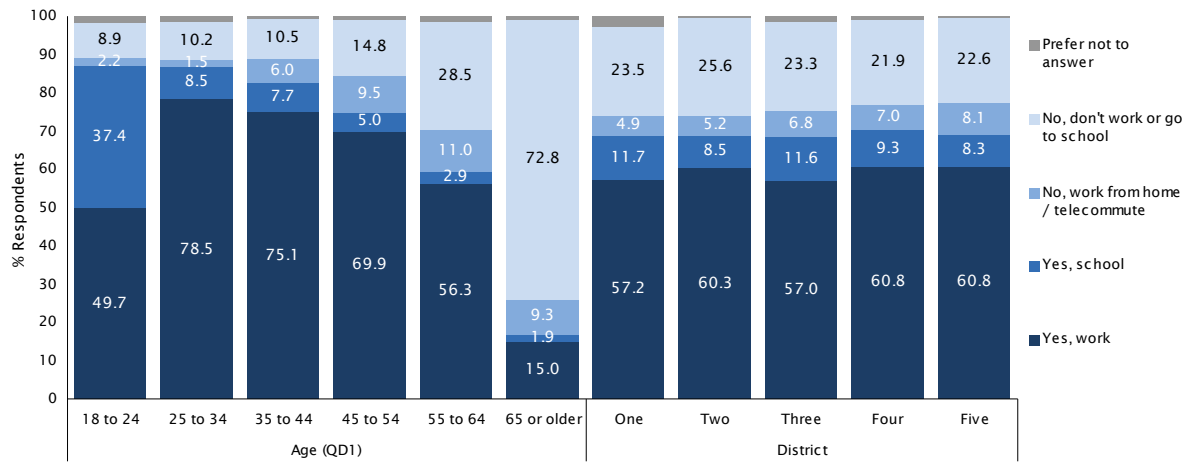**FIGURE 53 SATISFACTION WITH COMMUNICATION BY STUDY YEAR**

† Statistically significant change (p < 0.05) between the 2011 and 2015 studies.

Figures 54-58 recalculate the results to Question 16 to be among just those with an opinion and show how satisfaction with OCTA's communication efforts varied across key resident subgroups. Length of residence, household income, general opinion of OCTA, and exposure to OCTA advertisements bore the strongest relationships to satisfaction with OCTA's communication efforts.

FIGURE 54 SATISFACTION WITH COMMUNICATION BY YEARS IN ORANGE COUNTY & AGE

FIGURE 55 SATISFACTION WITH COMMUNICATION BY EMPLOYMENT STATUS & ETHNICITY

FIGURE 56 SATISFACTION WITH COMMUNICATION BY HSLD INCOME & DISTRICT

FIGURE 57 SATISFACTION WITH COMMUNICATION BY OPINION OF OCTA, ENCOUNTERED OCTA ADS, ENCOUNTERED OCTA NEWS & HEARD OF MEASURE M

FIGURE 58 SATISFACTION WITH COMMUNICATION BY FREQUENCY OF VOTING

OCTA ADVERTISEMENTS   All respondents were next asked whether—in the past six months—they recalled hearing, reading, or seeing any advertisements for or from OCTA. Overall, 35% indicated that they did recall encountering OCTA advertising during the period of interest in 2015, which is a statistically significantly increase from levels recorded in 2011 (Figure 59). Figures 60-63 show how recalled exposure to OCTA advertising during the past six months varied across subgroups of Orange County residents.

Question 17 *In the past six months, do you recall hearing, reading or seeing any advertisements for or from OCTA?*

FIGURE 59 ENCOUNTERED OCTA ADS IN PAST 6 MONTHS BY STUDY YEAR

† Statistically significant change (p < 0.05) between the 2011 and 2015 studies.

FIGURE 60 ENCOUNTERED OCTA ADS IN PAST 6 MONTHS BY YEARS IN ORANGE COUNTY & AGE

FIGURE 61 ENCOUNTERED OCTA ADS IN PAST 6 MONTHS BY EMPLOYMENT STATUS & ETHNICITY

FIGURE 62 ENCOUNTERED OCTA ADS IN PAST 6 MONTHS BY HSLD INCOME & DISTRICT

FIGURE 63 ENCOUNTERED OCTA ADS IN PAST 6 MONTHS BY FREQUENCY OF VOTING

NEWS ABOUT OCTA   In a manner similar to Question 17, respondents were next asked if they recalled hearing, reading, or seeing any *news stories* about OCTA in the six months prior to the interview. Overall, 28% of respondents in 2015 recalled encountering news stories about OCTA during the period of interest, which is significantly higher than the corresponding percentage in 2011. Recalled exposure to OCTA news stories was greatest among those who had lived in Orange County at least 10 years, residents over the age of 45, retired and disabled individuals, Caucasians, residents of Supervisorial District 3, and high frequency voters (see Figures 65-68).

Question 18   *In the past six months, do you recall hearing, reading or seeing any news stories about OCTA?*

FIGURE 64 ENCOUNTERED OCTA NEWS STORIES IN PAST 6 MONTHS BY STUDY YEAR

† Statistically significant change (p < 0.05) between the 2011 and 2015 studies.

FIGURE 65 ENCOUNTERED OCTA NEWS STORIES IN PAST 6 MONTHS BY YEARS IN ORANGE COUNTY & AGE

FIGURE 66 ENCOUNTERED OCTA NEWS STORIES IN PAST 6 MONTHS BY EMPLOYMENT STATUS & ETHNICITY

FIGURE 67 ENCOUNTERED OCTA NEWS STORIES IN PAST 6 MONTHS BY HSLD INCOME & DISTRICT

FIGURE 68 ENCOUNTERED OCTA NEWS STORIES IN PAST 6 MONTHS BY FREQUENCY OF VOTING

PRIMARY INFORMATION SOURCE   Having measured respondents' exposure to OCTA news stories and advertisements, the final substantive question of the survey (Question 19) transitioned to the broader topic of information sources in general. Specifically, respondents were asked 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 69, just under one-third (29%) indicated in 2015 that they rely on the Internet for most of their information about Orange County news and events, followed closely by television (28%). The remaining sources—newspapers, social media, and radio—were identified as primary information sources for news and events in Orange County by 18%, 13% and 8% of respondents, respectively. Over the past four years, the percentage of Orange County residents who rely on newspapers as their primary information source declined significantly, whereas the percentage who primarily turn to social media for their news increased significantly.

Question 19   *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 69 PRIMARY SOURCE FOR ORANGE COUNTY NEWS & EVENTS BY STUDY YEAR

† Statistically significant change (p < 0.05) between the 2011 and 2015 studies.

Figure 70 on the next page shows how the reliance on particular information sources in 2015 varied according to respondent age and Supervisorial District. The most consistent patterns occur with respect to age. Primary reliance on the Internet or social media declines with age, whereas use of newspapers and television increases with age.

FIGURE 70 PRIMARY SOURCE FOR ORANGE COUNTY NEWS & EVENTS BY AGE & DISTRICT

TABLE 8 DEMOGRAPHIC OF SAMPLE BY STUDY YEAR

	Study Year 2015	Study Year 2011
Total Respondents	*2,000*	*2,010*
District		
One	20.8	21.3
Two	22.7	23.8
Three	17.7	18.6
Four	23.6	23.1
Five	18.3	18.4
Years in Orange County (Q1)		
Less than 5	6.0	9.8
5 to 9	6.8	8.7
10 to 14	9.7	12.3
15 or more	77.3	68.9
Prefer not to answer	0.1	0.3
Age (QD1)		
18 to 24	14.2	14.2
25 to 34	18.8	18.1
35 to 44	19.3	17.3
45 to 54	18.3	17.0
55 to 64	13.3	11.7
65 or older	13.9	13.7
Prefer not to answer	2.3	7.9
Frequency of Voting (QD4/QD5)		
Always	45.1	44.8
Most of the time	17.0	15.4
Sometimes	9.5	8.4
Never	26.3	25.6
Prefer not to answer	2.1	5.8
Employment Status (QD6)		
Employed full time	52.2	47.3
Employed part time	13.4	11.0
Student	6.7	9.6
Homemaker	6.8	5.7
Retired	13.4	13.5
Between jobs	3.6	5.5
Disabled	2.6	1.6
Prefer not to answer	1.4	5.9
Ethnicity (QD7)		
Caucasian / White	40.0	39.8
Latino / Hispanic	31.7	29.0
Af Amer / Black	5.1	1.4
Asian American	14.1	15.4
Other / Mixed	7.3	2.8
Prefer not to answer	1.9	11.6
Hsld Income (QD8)		
Less than $25K	15.9	10.5
$25K to $49K	19.3	15.3
$50K to $74K	16.5	13.6
$75K to $99K	13.5	13.0
$100K to $149K	12.5	11.3
$150K or more	12.0	10.3
Prefer not to answer	10.3	25.9
Gender		
Male	50.6	51.8
Female	49.4	48.2

Table 8 presents the key demographic and background information that was collected during the survey. Because of the probability-based sampling methodology used in creating the sample (see *Sample* on page 54), the results shown are representative of the universe of Orange County adults. 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.

METHODOLOGY

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

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

Some questions asked in this study were presented only to a subset of respondents. For example, only respondents who had heard of Measure M (Question 9) were asked to share their opinion of OCTA's management of the projects funded by Measure M (Question 10). The questionnaire included with this report (see *Questionnaire & Toplines* on page 58) identifies the skip patterns that were used during the interview to ensure that each respondent received the appropriate questions. Many of the questions were also tracked from prior surveys conducted for OCTA in 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 integrity of the questionnaire was pretested 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. The survey was also programmed into a password-protected survey website hosted by True North to allow respondents who preferred to participate online the option to do so.

SAMPLE   Households within Orange County were chosen for this study using a random digit dial (RDD) sampling method for land lines, as well as random sample of geo-targeted mobile phone numbers that service the County. An RDD sample is drawn by first selecting all of the active phone exchanges (first three digits in a seven digit phone number) and working blocks that service the area. After estimating the number of listed households within each phone exchange that are located within the area, a sample of randomly selected phone numbers is generated with the number of phone numbers per exchange being proportional to the estimated number of households within each exchange in the area. This method ensures that both listed and unlisted households are included in the sample. It also ensures that new residents and new developments have an opportunity to participate in the study, which is not true if the sample were based on a telephone directory. Supplementing the land line sample was an additional sample of mobile phone numbers that are active in the County.

Although the RDD method is widely used for community surveys, the method also has several known limitations that must be adjusted for to ensure representative data. Research has shown, for example, that individuals with certain demographic profiles (e.g., older women) are more

likely to be at home and are more likely to answer the phone even when other members of the household are available. If this tendency is not adjusted for, the RDD sampling method will produce a survey that is biased in favor of women—particularly older women. To adjust for this behavioral tendency, the survey included a screening question which initially asked to speak to the youngest male available in the home. If a male was not available, then the interviewer was instructed to speak to the youngest female currently available. This protocol was followed—to the extent needed—to ensure a representative sample. In addition to following this protocol, sample demographics, such as age and ethnicity, were monitored as the interviewing proceeded to make sure they were within certain tolerances.

Additionally, to ensure a representative distribution of interviews across each of the five supervisorial districts in the County, respondents were initially asked the ZIP code of their residence (see questions SC1 and SC2). Quotas were established to balance the interviews appropriately between districts.

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 2,000 respondents for a particular question and what would have been found if all of the estimated 2,318,930 adult residents[4] had been interviewed.

For example, in estimating the percentage of adult residents who have heard of OCTA (Question 4), the margin of error can be calculated if one knows the size of the population, the size of the sample, a desired confidence level, and the distribution of responses to the question. The appropriate equation for estimating the margin of error, in this case, is shown below:

$$\hat{p} \pm t \sqrt{\left(\frac{N-n}{N}\right)\frac{\hat{p}(1-\hat{p})}{n-1}}$$

where $\hat{p}$ is the proportion of survey respondents who had heard of OCTA (0.84 for 84% in this example), N is the population size of all adult residents (2,318,930), n is the sample size that received the question (2,000), and t is the upper $\alpha/2$ point for the t-distribution with $n-1$ degrees of freedom (1.96 for a 95% confidence interval). Solving the equation using these values reveals a margin of error of ± 1.61%. This means that with 84% of survey respondents indicating they had heard of OCTA, we can be 95% confident that the actual percentage of all adult residents in Orange County who had heard of OCTA is between 82% and 86%.

Figure 71 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 (i.e., $\hat{p}$ = 0.5). For this survey, the maximum margin of error is ± 2.19% for questions answered by all 2,000 respondents county wide.

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4. Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey.

FIGURE 71 MAXIMUM MARGIN OF ERROR DUE TO SAMPLING

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 71 above is thus useful for understanding how the maximum margin of error for a per-centage 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 ± 4.4% and ± 5.3%.

DATA COLLECTION   The primary method of data collection for this study was telephone interviewing. Interviews were conducted in English, Spanish, and Vietnamese during weekday evenings (5:30PM to 9PM) and on weekends (10AM to 5PM) between June 3 and July 14, 2015. Interviewing was suspended over the 4th of July holiday weekend. 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 bias the sample. The interviews averaged 20 minutes in length. Respondents who preferred to participate in the survey online were allowed to do so using a password-protected website designed and hosted by True North Research.

DATA PROCESSING   Data processing consisted of checking the data for errors or inconsis-tencies, coding and recoding responses, categorizing open-ended responses, and preparing fre-quency 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 applica-ble, tests of statistical significance were conducted to evaluate whether a change in responses between 2011 and 2015 was due to an actual change in opinion or was likely an artifact of inde-pendently 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.

Section 1: Introduction to Study

Hi, my name is _____, and I'm calling on behalf of TNR, an independent public opinion research firm. 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.
If needed: The survey should take about 14 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 our 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 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 in the Study

For statistical reasons, I would like to speak to the youngest adult male currently at home who 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 who 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

Offer web option if prefer online.

SC1	To begin, what is the zip code at your residence? *Read zip code back to them to confirm correct.*	
		Data on file
SC2	*Record which area the zip code falls into. If the respondent provided a zip code that does not appear in one of the areas below, terminate the interview.*	
1	District 1	21%
2	District 2	23%
3	District 3	18%
4	District 4	24%
5	District 5	18%

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	1%
	2	1 to 2 years	2%
	3	3 to 4 years	2%
	4	5 to 9 years	7%
	5	10 to 14 years	10%
	6	15 years or longer	77%
	99	Not sure/ 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	35%
	2	Good	48%
	3	Fair	14%
	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.	
		Water issues, drought	19%
		Not sure / Cannot think of anything	15%
		Traffic	10%
		Economy, unemployment	9%
		Real estate, housing	9%
		Cost of living	8%
		Public safety	7%
		Population, overcrowding	6%
		Education, schools	5%
		Homelessness	4%
		Illegal immigration issues	3%
		Socioeconomic issues	3%
		Taxes	2%

Public transportation	2%
Leadership, government	2%
Environment	2%
Development, loss of open space	2%
Budget, spending	1%
Healthcare	1%
Graffiti	1%
Improve police department	1%
Infrastructure maintenance, repair	1%
No issues / Everything is okay	1%

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	84%
	2	No	15%
	98	Not sure	1%
	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 Not sure either way? *Get answer, if 'favorable' or 'unfavorable', ask:* Would that be very (favorable/unfavorable) or somewhat (favorable/unfavorable)?		
	1	Very favorable	20%
	2	Somewhat favorable	26%
	3	Somewhat unfavorable	9%
	4	Very unfavorable	6%
	98	Not sure	38%
	99	Prefer not to answer	0%

Q6	Next, I'm going to read a series of statements. For each that I read, please tell me whether you agree or disagree with the statement. If you don't have an opinion, just say so. Here is the (first/next) one: O.C.T.A _____. Do you agree or disagree with this statement? *Get answer, then ask:* Would that be strongly (agree/disagree) or somewhat (agree/disagree)?						
	Randomize	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Not sure	Prefer not to answer
A	Makes good use of public funds	14%	21%	9%	9%	47%	0%
B	Is actively seeking solutions to our transportation issues	22%	29%	7%	6%	36%	0%
C	Is a public agency I trust	29%	31%	7%	6%	26%	0%
D	Listens to the general public	14%	24%	9%	8%	44%	0%
E	Has made many improvements to Orange County's transportation system in the past 5 years	26%	29%	10%	7%	27%	0%
F	Helps our local and regional economies function by improving our transportation system	29%	35%	9%	6%	21%	0%

Section 5: Perceptions of OCTA Programs and Services							
Q7	How would you rate: _____ in Orange County? Would you say it is excellent, good, fair, poor, or very poor – or do you have Not sure?						
	Read A first, then randomize B-L	Excellent	Good	Fair	Poor	Very Poor	Not sure	Prefer not to answer
A	The overall transportation system	10%	39%	27%	10%	4%	10%	0%
B	Bus service	11%	33%	16%	7%	4%	28%	0%
C	ACCESS Paratransit services for the disabled	13%	27%	11%	3%	1%	44%	0%
D	Rideshare and carpool matching programs	8%	26%	12%	5%	2%	46%	0%
E	Metrolink commuter rail service	11%	25%	11%	7%	2%	43%	0%
F	Road and freeway <u>planning</u>	9%	37%	26%	11%	5%	12%	0%
G	The overall quality and condition of freeways	14%	48%	25%	9%	3%	2%	0%
H	Vanpool programs	6%	17%	10%	4%	2%	61%	0%
I	The overall quality and condition of city streets	11%	43%	32%	11%	3%	1%	0%
J	The overall quality and condition of the 91 Express Lanes toll road	11%	30%	15%	9%	5%	31%	0%
K	Freeway Service Patrol tow trucks	16%	33%	14%	3%	1%	33%	0%
L	Bikeway planning	11%	29%	19%	11%	4%	25%	0%

	Section 6: Transportation Priorities & Measure M						
Q8	There are a variety of improvements that could be made to Orange County's transportation system. As I read the following list of improvements, please indicate whether you think it should be a high priority, a medium priority, or a low priority. If you think no money should be spent on this project, please say so. Please keep in mind that not all of the improvements can be high priorities. Here is the (first/next) one: _____. Should this project be a high, medium or low priority?						
	Randomize	High Priority	Medium Priority	Low Priority	Shouldn't spend money on project	Not Sure	Prefer not to answer
A	Widen the freeways	50%	29%	14%	4%	2%	0%
B	Expand bus services	34%	39%	18%	3%	5%	0%
C	Expand the Metrolink rail service	32%	36%	20%	4%	8%	1%
D	Expand vanpool programs	18%	35%	30%	5%	11%	1%
E	Improve ACCESS paratransit service for people with disabilities	50%	36%	9%	1%	4%	0%
F	Improve the network of bike lanes	27%	36%	28%	5%	3%	0%
G	Construct roads over or under rail tracks where needed to improve traffic flow	37%	36%	20%	3%	4%	0%
H	Build additional toll lanes to help relieve traffic congestion	26%	28%	33%	12%	2%	0%
I	Coordinate traffic signals on major roadways to improve traffic flow	65%	27%	6%	1%	1%	0%
J	Fix potholes and repair roadways	71%	23%	5%	0%	1%	0%
K	Optimize the existing transportation system	41%	40%	10%	2%	6%	1%
L	Improve safety and security at transit stops and stations	46%	33%	14%	2%	4%	0%
M	Provide transit services to seniors and the disabled at a discounted rate	60%	31%	6%	1%	1%	0%
N	Provide free assistance and tow truck service to motorists who break down on freeways	39%	33%	21%	5%	1%	0%
O	Clean up polluted runoff from roads to reduce water pollution and protect local beaches	65%	24%	9%	1%	1%	0%
P	Close gaps, improve intersections, and reduce traffic congestion on major roads throughout the county	62%	28%	6%	1%	3%	0%
Q	Improve access to METROLINK stations using shuttles, light rail, and other transit services	30%	40%	21%	3%	6%	0%

R	Add local bus and shuttle services in communities that aren't well served by regional transit services.	39%	42%	13%	2%	4%	0%
S	Preserve and restore open space land to offset the impacts of freeway improvement projects	38%	36%	17%	3%	5%	0%

Q9	Prior to taking this survey, had you heard of Measure M - Orange County's voter-approved half cent transportation sale tax?		
	1	Yes	26%	*Ask Q10*
	2	No	71%	*Skip to Q11*
	98	Not sure	2%	*Skip to Q11*
	99	Prefer not to answer	0%	*Skip to Q11*

Q10	In your opinion, is OCTA doing an excellent, good, fair, poor or very poor job of delivering the transportation projects and improvements funded by Measure M – or do you have no opinion?	
	1	Excellent	9%
	2	Good	28%
	3	Fair	22%
	4	Poor	9%
	5	Very poor	4%
	98	Not sure	28%
	99	Prefer not to answer	0%

Section 7: Travel Behavior & 91 Express Lanes

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

Q11	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)	58%
	2	Carpool/drive with **ONE other person**	16%
	3	Carpool/drive with **TWO or more other people**	14%
	4	Vanpool	3%
	5	Bus (**local**)	5%
	6	Bus (**express** service)	0%
	7	Metrolink commuter rail	0%
	8	Motorcycle/Moped/Motorized Scooter	1%

9	Bike	2%
10	Walk/Run	1%
11	Other	1%
98	Not sure	0%
99	Prefer not to answer	0%

Q12	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	7%	4%	3%	2%	7%	77%	0%
B	An Express Bus	2%	1%	1%	1%	2%	94%	0%
C	METROLINK commuter rail	1%	2%	2%	3%	10%	81%	0%
D	ACCESS paratransit service	1%	0%	1%	0%	1%	96%	1%
E	The 91 Freeway	29%	18%	13%	11%	12%	16%	1%
F	The 91 Express Lanes toll road	5%	6%	6%	5%	8%	69%	1%

Q13	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	60%
	2	Yes, school	10%
	4	No, work from home/telecommute	6%
	5	No, don't work or go to school	23%
	99	Not sure / Prefer not to answer	1%

<div align="center">*Ask Q14 if Q12E=(1,2,3,4,5).*</div>

Q14	Overall, are you satisfied or dissatisfied with your experiences when using the 91 <u>Freeway</u>? *Get answer, then ask:* Would that be very (satisfied/dissatisfied) or somewhat (satisfied/dissatisfied)?

	1	Very satisfied	17%
	2	Somewhat satisfied	41%
	3	Somewhat dissatisfied	15%
	4	Very dissatisfied	21%
	98	Not sure	5%
	99	Prefer not to Answer	1%

	Ask if Q15 if Q12E=(1,2,3,4,5) OR Q12F=(1,2,3,4,5).	
Q15	Do you support or oppose creating more points at which you can get in and out of the 91 Express Lanes toll road in Orange County?	
1	Support	55%
2	Oppose	25%
98	Not sure	20%
99	Prefer not to answer	0%

Section 8: Communications		

Now for a different topic….

Q16	Overall, are you satisfied or dissatisfied with OCTA's efforts to communicate with Orange County residents through E-newsletters, advertisements, the Internet, news media, and other means? *Get answer, then ask:* Would that be very (satisfied/dissatisfied) or somewhat (satisfied/dissatisfied)?	
1	Very satisfied	22%
2	Somewhat satisfied	32%
3	Somewhat dissatisfied	13%
4	Very dissatisfied	10%
98	Not sure	22%
99	Prefer not to answer	1%

Q17	In the past six months, do you recall hearing, reading or seeing any advertisements for or from OCTA?	
1	Yes	35%
2	No	62%
98	Not sure	2%
99	Prefer not to answer	1%

Q18	In the past six months, do you recall hearing, reading or seeing any news stories about OCTA?	
1	Yes	28%
2	No	69%
98	Not sure	2%
99	Prefer not to answer	1%

Q19	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?	
1	Newspapers	18%
2	Television	28%
3	Radio	8%
4	Internet	29%
5	Social media like Facebook and Twitter	13%
6	None/Don't pay attention to news and events in Orange County	2%
98	Not sure	1%
99	Prefer not to answer	1%

Section 9: 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	19%
3	35 to 44	19%
4	45 to 54	18%
5	55 to 64	13%
6	65 and over	14%
99	Prefer not to answer	2%
D2	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	3%
99	Refused	1%

D3	Which of the following best describes your current home?		
	1	Single family detached home	60%
	2	Apartment	23%
	3	Condominium	13%
	4	Mobile home	2%
	99	Prefer not to answer	2%
D4	Are you registered to vote in Orange County?		
	1	Yes	76%	*Ask D5*
	2	No	22%	*Skip to D6*
	98	Not sure	1%	*Skip to D6*
	99	Prefer not to answer	1%	*Skip to D6*
D5	How *consistent* are you in voting when elections occur in Orange County? Would you say you always vote when there is an election, you vote most of the time, you vote sometimes, or you never vote?		
	1	Always	59%
	2	Most of the time	22%
	3	Sometimes	12%
	4	Never	5%
	99	Prefer not to answer	1%
D6	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	52%
	2	Employed part-time	13%
	3	Student	7%
	4	Homemaker	7%
	5	Retired	13%
	6	In-between jobs	4%
	7	Disabled/unable to work	3%
	99	Prefer not to answer	1%

D7	What ethnic group do you consider yourself a part of or feel closest to*? Read list if respondent hesitates*	
	1	Caucasian/White	40%
	2	Latino/Hispanic	32%
	3	African-American/Black	5%
	4	American Indian or Alaskan Native	1%
	5	**Asian** -- Korean, Japanese, Chinese, Vietnamese, Filipino or other Asian	14%
	6	Pacific Islander	1%
	7	Middle Eastern	1%
	8	Mixed Heritage	3%
	98	Other	2%
	99	Prefer not to answer	2%
D8	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	16%
	2	$25,000 to less than $50,000	19%
	3	$50,000 to less than $75,000	16%
	4	$75,000 to less than $100,000	14%
	5	$100,000 to less than $150,000	13%
	6	$150,000 to less than $200,000	6%
	7	$200,000 or more	6%
	98	Not sure	3%
	99	Prefer not to answer	7%

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

Post Interview Items		
S1	Gender	
	1	Male	51%
	2	Female	49%