THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

List of Tables

List of Figures

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. In 2003, OCTA purchased the 91 Express Lanes (Lanes) from the California Private Transportation Company (CPTC), with the purpose being to expedite general purpose and capacity improvements to State Route 91 (SR-91) that otherwise would be delayed due to a noncompete provision that existed in the franchise agreement between CPTC and Caltrans. Since 2003, OCTA has been responsible for managing the 91 Express Lanes and related facilities, as well as setting all policy, pricing, and performance standards for the toll road.

PURPOSE OF STUDY

The overarching purpose of the survey presented in this report was to provide OCTA with a *statistically reliable* understanding of 91 Express Lanes customers' satisfaction, priorities, concerns and experiences as the pertain to OCTA and the 91 Express Lanes. Like similar customer surveys conducted on a periodic basis since 1998, the current survey provides the OCTA Board and staff with information that can be used to make sound, strategic decisions in a variety of areas, including planning, service delivery and enhancements, setting toll charges, and identifying effective marketing strategies.

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

- Profile customers' travel behavior on the 91 Express Lanes, including frequency and time of use, trip purposes, as well as origin and destination.
- Identify the relative importance that customers place on specific performance aspects/standards when traveling on the 91 Express Lanes.
- Measure customers' overall satisfaction with their 91 Express Lanes experiences, as well as how well they feel the 91 Express Lanes is meeting specific performance standards.
- Measure customers' perceptions of OCTA's management of the 91 Express Lanes.
- Identify customers' current exposure to OCTA's communications, as well as their preferences with respect to future communications efforts.

OVERVIEW OF METHODOLOGY

A full description of the methodology used for this study is included later in this report (see *Methodology* on page 67). In brief, a total of 1,349 randomly selected 91 Express Lanes customers[1] participated in the survey between August 19 and September 20, 2014. The sample was stratified by relevant customer characteristics including frequency of using the Lanes, location of residence, and availability of contact information to ensure proper representation of customer subgroups. To encourage and maximize participation, a mixed-method recruiting strategy was employed whereby customers were recruited by email and/or mailed invitation letters to participate in the survey through a secure, password-protected website hosted by True North.[2]

1. Customers were required to have used the 91 Express Lanes at least 12 times (once per month average) during the past year to qualify for inclusion in the study.
2. Recent rule changes pertaining to the use of telephone information for toll customers prohibited the use of telephone calls for recruiting or interviewing purposes.

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 67). 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 70), 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 2014 alongside the results found in the prior 2011 survey for identical questions. In such cases, True North conducted the appropriate tests of statistical significance to identify changes that likely reflect actual changes in customer opinion during this period—as opposed to being due to chance associated with selecting two samples independently and at random. Differences between the two 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 2011.[3]

ACKNOWLEDGEMENTS True North thanks Stella Lin, Ellen Burton, and the entire Executive Committee at OCTA for contributing valuable input during the design stage of this study. Their collective experience, insight, and local knowledge improved the overall quality of the research presented here.

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 800 survey research studies for public agencies, including more

3. It is also important to note that there was a change in the survey methodology between the 2011 and 2014 studies. Whereas in 2011 both online and telephone data collection were employed, recent rule changes prohibited the use of telephone calls to recruit and/or interview 91 Express Lanes customers for the 2014 study. This change in methodology can account for some of the differences in survey results when comparing the 2011 and 2014 studies, along with changes in customer opinions.

than 300 studies for California municipalities, special districts, and transportation planning agencies.

Just the Facts

The following is an outline of the main factual findings from the 91 Express Lanes customer satisfaction survey. For the reader's convenience, we have organized the findings according to the section titles used in the body of this report. Thus, to learn more about a particular finding, simply turn to the appropriate report section.

FASTRAK DECISIONS

- The majority of customers (53%) indicated that they have only one transponder in their household, while the remaining customers indicating that they had two (34%), three (8%), or at least four (5%) transponders.
- The most commonly reported method of acquiring their transponder was an in-store purchase at the Customer Service Center in Corona (37%), followed by telephone (36%), via the Internet (14%), the OCTA store in Orange (5%), or an alternative method (5%).
- The vast majority of customers (91%) reported that they *personally* pay for their toll charges, with an additional 2% indicating that their toll charges are paid by another member of their family. Overall, just 6% of customers indicated that their employer is primarily responsible for paying their toll charges, whereas 1% mentioned an alternative individual or entity.

USE OF 91 EXPRESS LANES

- Among all customers surveyed, the average number of *days* reported for using the 91 Express Lanes was 8.86 per month.
- Forty-nine percent (49%) of 91 Express Lanes customers reported that they also use at least one other Southern California toll road in a typical month.
- Among *all* customers surveyed, the most commonly used alternative toll road was the 241 (39%), followed by the 261 (21%), 133 (18%), 73 (16%), and the Interstate 15 toll road (9%).
- Customers reported an average 6.17 one-way trips per week on the 91 Freeway.
- Customers reported an average 3.9 one-way trips per week on the 91 Express Lanes.
- Customers reported an average 3.07 midweek (Monday through Friday) one-way trips per week on the 91 Express Lanes.
- Customers reported an average 2.6 one-way trips per week on the 91 Express Lanes during rush hour periods.
- The most commonly reported *purposes* for trips made on the 91 Express Lanes were visiting friends and family (mentioned by 67% of all customers) and shopping or recreation trips (63%). More than half (60%) of all customers indicated that they use the 91 Express Lanes for their work commute, whereas just 6% indicated that they use the Lanes for commuting to or from school.
- Among *work* trips that involve the 91 Express Lanes, three-quarters (74%) *originate* in Riverside County, 10% in Orange County, 9% in San Bernardino County, and 3% in Los Angeles County.
- More than half (54%) of work trips that involve the 91 Express Lanes are *destined* for Orange County, 23% for Los Angeles County, 6% for Riverside County, 3% for San Bernardino County, and 5% for an 'other' county.

- The pattern is more diverse for *non-work* trips. Although Riverside County is still the dominant county of origin (49%), the percentage of non-work trips that originate in Orange County (26%) and Los Angeles County (15%) is higher, whereas San Bernardino County represents about the same percentage of work and non-work trip originations (7%).
- With respect to non-work trip destinations, Orange County is the most popular destination (42%), followed by Riverside County (27%), Los Angeles County (10%), San Bernardino County (6%), and 'other' counties (5%).

OPINION OF 91 EXPRESS LANES

- An overwhelming majority (91%) of customers indicated that they were generally satisfied with their experiences when using the 91 Express Lanes, with just under half (45%) stating that they were *very* satisfied. A small portion of customers (9%) reported that they were dissatisfied.
- Satisfied customers were most apt to cite time savings or faster travel (26%) as the primary reason they were satisfied with the 91 Express Lanes, followed by the ability to bypass traffic (17%) and the ease of use/convenience offered by the Lanes (8%).
- Those who were generally dissatisfied with their experiences when using the 91 Express Lanes, on the other hand, were most likely to mention the amount of traffic that exists on the toll road (11%) and the expense of using the Lanes (8%) as the reasons for their position.
- When asked to rate 13 specific service standards in terms of their importance, customers rated saving time when they use the Lanes as the most important service standard (96%), followed by that the Lanes is a fast way to travel (93%), that their billing statements are accurate (89%), and that the Lanes are well-maintained and in good condition (88%).
- At the other end of the spectrum, customers rated as comparatively less important the use of tolls to help improve the 91 Freeway (60%) and the reduction of wear and tear on their vehicle (60%).
- When asked to rate how well the 91 Express Lanes are performing in meeting the same 13 service standards, customers expressed the highest levels of agreement that the Lanes allow them to save time (95%), followed by they are treated in a professional manner by 91 Express Lanes customer service (94%), their billing statements are accurate (94%), and the Lanes are a fast way to travel (94%).
- Although still very high levels of agreement, fewer customers agreed that the tolls they pay are used to help improve the 91 Freeway (76%), the convenience received from using the 91 Express Lanes is worth the cost (79%), and using the Lanes creates less wear and tear on their vehicle (84%).

PERFORMANCE NEEDS AND PRIORITIES

- Considering the importance that customers place on specific service standards and their perception of how well the Lanes are meeting these standards, the top priorities for improvement are increasing the perceived use of tolls to improve the 91 Freeway, improving the relationship between the perceived convenience and cost of the Lanes, improving customers' understanding that the Lanes creates less wear and tear on their vehicle, and improving the reliability of travel times when using the Lanes.
- Among all customers who reported a perceived time savings, the average perceived time savings when using the 91 Express Lanes during *morning* rush hour was 23.61 minutes.

- Among all customers who reported a perceived time savings, the average perceived time savings when using the 91 Express Lanes during the *afternoon* rush hour was 29.36 minutes.

IMPROVEMENTS TO 91 EXPRESS LANES

- Approximately half (48%) of customers supported creating additional entrance/exit points for the Lanes in Orange County, whereas 38% opposed creating more access points and 14% were unsure or preferred not to share their opinion.
- Customers who supported creating additional access points for the Lanes in Orange County cited convenience as their primary reasoning (45%), whereas opponents cited concerns about increased traffic congestion (61%) and safety issues (36%) as their main reasons for opposing additional access points.
- When the 91 Express Lanes are extended to connect with Interstate 15, 73% of existing customers anticipate using the extended section of the Lanes in both directions, 6% expect to the use the section only when traveling east, 2% anticipate using the new section only when traveling west, whereas 18% do not expect to use the extension and 1% are unsure.
- Overall, 57% of customers indicated that they support the proposed direct connection between the 91 Express Lanes and the 241 toll road, compared to just 7% who opposed the project and 35% who were unsure.
- A majority (55%) of 91 Express Lanes customers indicated that they support the policy of setting the toll charge high enough to keep traffic free flowing, whereas 30% opposed this policy and 15% were unsure or unwilling to share their opinion.
- If the toll charge were reduced just before and after rush hour periods, nearly half of customers (47%) stated that they would alter their travel schedule to realize the savings, whereas 37% indicated that they would not alter their travel behavior and 16% were unsure or unwilling to share their opinion.
- Customers were rather evenly split between those who preferred remaining with *time-of-day* pricing for the Lanes (45%) and those who preferred to switch to *dynamic* pricing (42%). An additional 13% were unsure or unwilling to share their opinion.

OCTA AND COMMUNICATION

- Eighty-four percent (84%) of customers indicated that they were aware that OCTA is responsible for managing the 91 Express Lanes, whereas 15% stated that they did not know the Lanes were managed by OCTA, and 2% were unsure.
- More than eight-in-ten customers in 2014 (85%) agreed that *OCTA does a good job communicating with me about the 91 Express Lanes through newsletters, billing inserts, emails, signs and other methods*.
- Although fewer customers agreed that *OCTA is financially responsible when managing the 91 Express Lanes* (71%), most of the remaining customers simply had no opinion. Just 7% of customers disagreed with the statement.
- When asked how they prefer to receive information about the 91 Express Lanes, email was by far the most popular method among existing customers (82%), followed by direct mail (44%). Electronic message signs, website, road signs, and text messages were also mentioned by 28%, 18%, 14% and 14% of customers, respectively.
- Overall, 47% of customers indicated they would prefer to receive their billing statement via email, 44% preferred mail, 4% preferred to be able to check their statement online, whereas 4% were unsure or unwilling to answer the question.

- Overall, the average total monthly toll charge reported by 91 Express Lanes customers surveyed in the 2014 study was $63.83.
- Customers were quite mixed in the ways they generally learn about toll charge changes, with 45% viewing the change on price signs along the 91 Express Lanes, one-quarter (25%) learning via billing statement inserts, 20% from email notifications, 5% via a website, and 1% from 'other' sources.

BACKGROUND & DEMOGRAPHICS

The following table presents the demographic profile of 91 Express Lanes customers overall, as well as the profile for high-frequency users (3+ trips per week using the Lanes).

TABLE 1 DEMOGRAPHICS OF CUSTOMERS OVERALL & HIGH FREQUENCY USERS

	All Customers	High Freq Users (3+ Weekday Trips Per Week)
Total Respondents	*1,349*	*367*
QD1 Gender		
Male	53.3	56.4
Female	43.4	41.3
Prefer not to answer	3.4	2.3
QD2 Age		
18 to 24	0.9	1.6
25 to 34	7.3	10.2
35 to 44	16.0	16.7
45 to 54	29.0	31.3
55 to 64	26.1	26.8
65 and older	17.1	10.8
Prefer not to answer	3.7	2.5
QD3 Employment status		
Employed full time	69.7	82.3
Employed part time	6.6	4.4
Student	1.0	1.3
Homemaker	2.2	0.8
Retired	16.1	8.8
Between jobs	1.4	0.5
Prefer not to answer	3.0	1.9
QD4 Education level		
Less than high school	1.0	0.8
High school grad	7.6	8.0
Tech / Voc	5.2	4.2
Some college	27.0	27.6
College grad	32.5	33.3
Some grad school	3.5	3.0
Graduate degree	17.4	18.8
Prefer not to answer	5.8	4.2
QD7 Household income		
Less than $25K	2.0	1.8
$25K to $49K	6.5	3.4
$50K to $74K	12.4	12.3
$75K to $99K	12.0	13.9
$100K to $149K	21.6	24.9
$150K to $199K	10.6	13.1
$200K or more	10.0	8.8
Not sure	1.0	1.6
Prefer not to answer	23.9	20.2

Conclusions

As noted in the *Introduction*, this study was designed to provide OCTA with a statistically reliable understanding of 91 Express Lanes customers' satisfaction, priorities, concerns and experiences as they pertain to OCTA and the 91 Express Lanes. As such, it can provide the OCTA Board and staff with information that can be used to make sound, strategic decisions in a variety of areas, including planning, service delivery and enhancements, setting toll charges, and identifying effective marketing strategies. 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.

The following conclusions are based on the True North's interpretations of the results, as well as the firm's collective experience conducting similar studies for government agencies throughout the State.

How are customers using the 91 Express Lanes?

The most basic objective of this study was to develop an up-to-date understanding of how 91 Express Lanes customers are using the 91 Express Lanes, including how *often* they use the Lanes, *when* they typically use the Lanes, for what *purposes* they use the Lanes, as well as *where* they typically originate and end their trips.

The average 91 Express Lanes customer makes 6.17 one-way trips per week on the 91 Freeway, 3.9 of which involve using the 91 Express Lanes. Although most of these trips on the 91 Express Lanes occur midweek (3.07) and during rush hour periods (2.6), it is important to recognize that approximately one-third of all trips occur outside of midweek, rush hour periods.

Although there is a tendency for some to focus on the 91 Express Lanes as a tool for commuters, the reality is that customers use the 91 Express Lanes for more than just their daily commute. In fact, approximately two-thirds of customers indicated that they use the 91 Express Lanes when visiting friends or family, *and* for shopping and/or recreation trips. By comparison, 60% of 91 Express Lanes customers indicated that they use the Lanes for their work commute, and just 6% indicated that they use the Lanes for commuting to or from school.

Differences in trip *purpose* correspond with pronounced differences in the origins and destinations for trips made on the 91 Express Lanes. Approximately three out of every four work-related trips (74%) begin in Riverside County, and more than half of all work-related trips (54%) are destined for Orange County. By comparison, non-work trips are more diverse in where they begin and end, with less than half (49%) originating in Riverside County and 42% concluding in Orange County.

The aforementioned findings point to an important fact about 91 Express Lanes customers—they have been (and continue to be) a diverse group. Although it is instructive to examine the behaviors of the *average* 91 Express Lanes customer, the reality is that it is arguably even more important to appreciate that customers vary widely in their frequency and timing of using the Lanes, their use of alternative toll roads, and trip purposes. For example, the number of trips customers make on the 91 Express Lanes generally diminishes with age. At the extremes, young customers (under 35) reported three times as many weekly trips using the Lanes (6.55), on average, when compared to seniors (2.02). With respect to trip purposes, residents of Riverside County and San Bernardino County were about twice as likely to report using the 91 Express Lanes for work trips when compared to their respective counterparts in Orange and Los Angeles counties. Differences in how customers use the 91 Express Lanes—and especially how *often* they use the Lanes—can lead to substantial variation in the perceived value of the Lanes (more on this topic later in this section).

Has use of the Lanes changed since 2011?

Yes. Likely reflecting the improving economic climate over the past three years, use of the 91 Express Lanes has changed in reported *frequency* and *purpose*. When compared to the number of weekly one-way trips reported in 2011 as the region was just beginning to come out of the recession (2.71), the average number of trips reported on the 91 Express Lanes in 2014 increased significantly to 3.9 trips per week. Associated with this increase in frequency is a substantial (and statistically significant) increase in the percentage of customers who are using the Lanes for commuting to/from work. Whereas in 2011 less than half (46%) reported using the Lanes for their work commute, the corresponding figure in 2014 was 60%. Reported use of other toll roads by 91 Express Lanes customers was also higher in 2014 (49%) when compared to 2011 (42%).

How do customers prioritize among various performance standards for the 91 Express Lanes?

In addition to profiling customers' use of the 91 Express Lanes, the survey also sought to gauge the relative importance that customers place on specific performance aspects/standards when traveling on the 91 Express Lanes. In other words, what matters *most* to customers when they choose to travel on the 91 Express Lanes?

Of 13 specific performance standards tested, customers prioritized the following standards: saving time, traveling fast, accurate billing statements, and a road that is well-maintained. At least 88% of customers surveyed indicated that these were either extremely or very important performance standards, and by extension are the dominant factors in how they evaluate the overall performance of the 91 Express Lanes. It is worth noting, moreover, that these are the same standards that customers prioritized in 2011.

At the other end of the spectrum, customers continue to place less importance on the tolls they pay being used to help improve the 91 Freeway and that using the Lanes reduces the wear and tear on their vehicle.

How well are the 91 Express Lanes meeting customers' needs?

Overall, the 91 Express Lanes (and OCTA) are continuing to do an excellent job meeting customers' needs and expectations. From an *overall performance rating* perspective, 91% of customers indicated that they were satisfied with their experiences when using the 91 Express Lanes, with nearly half (45%) stating that they were *very* satisfied. The 2014 overall satisfaction score is slightly higher (1%) when compared to 2011, although the intensity of customer opinions was also moderated somewhat in 2014.[4]

Satisfaction was also widespread among customers, exceeding 84% in *every* identified subgroup regardless of frequency of use, trip purposes, length of time being a customer, county of residence, or a variety of demographic characteristics.

The high levels of satisfaction expressed by customers with respect to the 91 Express Lanes' overall performance were also generally echoed within each of the 13 specific performance standards tested in the study. The Lanes are meeting the performance expectations of at least 77% of customers for every performance standard tested, and at least 92% of customers for the majority of standards tested. Moreover, the Lanes continue to perform exceptionally well on the aspects that matter most to customers: saving time, being a fast way to travel, accurate billing statements, and having a well-maintained road.

What are the best opportunities for improving overall customer satisfaction?

Perhaps the most important recommendation, and one that is occasionally overlooked in customer satisfaction research, is for OCTA to recognize the many things that it does exceptionally well and to focus on continuing to perform at a high level in these areas. As noted throughout this report, customers expressed high levels of satisfaction regarding the 91 Express Lanes and have a favorable opinion of the Lanes performance in most respects. The top priority for OCTA should thus be to do what it takes to maintain the high quality of service on that it currently provides on the 91 Express Lanes.

However, as OCTA continues to strive for improvement, the results of this study do suggest opportunities to further bolster customer satisfaction. Considering the list of performance standards and their respective priority status (see *Performance Needs & Priorities* on page 40) and customers' perspectives on future capital improvement projects (see *Improvements to 91 Express Lanes* on page 45), the top candidates for improvement are: improving the relationship between the perceived con-

4. In other words, fewer people indicated that they were either *very* satisfied or *very* dissatified.

venience and cost of the Lanes (i.e, overall value), improving the reliability of travel times when using the Lanes, completing the extension of the 91 Express Lanes to Interstate 15, building a direct connection between the 91 Express Lanes and the 241 toll road, and improving customers' understanding that their tolls help improve the 91 Freeway and using the Lanes creates less wear and tear on their vehicle.

Are high frequency users less satisfied with the Lanes?

One of the clear findings of the 2011 study was that the more frequently a customer uses the 91 Express Lanes, the *less* likely they were to be very satisfied with their experiences using the Lanes. This pattern was found in the 2014 study as well, especially for weekday and rush hour trips. For example, 57% of customers who reported taking no midweek, rush hour trips on the Lanes indicated that they were very satisfied with their experiences using the Lanes in general, whereas the corresponding figure among customers who reported making six or more trips per week during rush hour periods was 27%. Similarly, dissatisfaction with the Lanes continues to be strongly related to the amount a customer pays in an average month. Satisfied customers reported paying an average $60.48 per month for 91 Express Lanes' toll charges, whereas the corresponding figure among dissatisfied customers was $96.07.

The results of the survey indicate that OCTA should continue exploring strategies for addressing the needs and perceptions of *high-frequency* customers. Graduated toll structures, earning 'reward points' for trips made past a certain threshold each month, and other incentive-based programs would likely help improve the perceived value that high frequency users find in the Lanes. Such targeted programs could also have the added benefit of spurring additional trips and revenue for OCTA.

Are customers supportive of OCTA's management of the Lanes?

More than eight-in-ten (84%) of 91 Express Lanes customers were aware that the Lanes are owned and managed by OCTA, and they generally have a high opinion of OCTA's performance in this respect.

The litmus test for measuring OCTA's performance in managing the 91 Express Lanes is simple: what percentage of customers are satisfied with their experiences when using the Lanes? As noted above, this percentage is very high (91%). Of course, customers can also comment on more narrowly defined aspects of OCTA's performance, including the Authority's efforts to communicate with customers and its management of funds. In these respects as well, customers generally held a high opinion of OCTA's performance. Customers who *agreed* that OCTA does a good job communicating with them about the Lanes outnumbered those who disagreed by nearly nine to one (9:1), and those who felt that OCTA is financially responsible outnumbered those who did not by approximately eight to one (8:1).

Do customers prefer a switch to dynamic pricing?

Toll charges for the 91 Express Lanes are currently based on the day, time, and direction of travel. Using this *time-of-day pricing* methodology, times typically associated with higher congestion levels are tolled the highest, whereas times that generally exhibit lower congestion levels are tolled at a lower rate. Toll charges are evaluated quarterly.

In contrast, an alternative approach to setting tolls is known as *dynamic pricing*, where toll charges are based on real-time traffic conditions and can change every few minutes, depending on the level of congestion in the toll lanes. Toll charges will be higher when there is more traffic and lower when there is less traffic.

When asked to identify which approach they preferred for the 91 Express Lanes, customers were rather evenly split with 45% preferring time-of-day pricing, 42% preferring a switch to dynamic pricing, and 13% unsure or unwilling to share their opinion. The close split in tolling methodology preferences among all customers was generally exhibited at the subgroup level as well, with the exception of dissatisfied customers and high income ($200,000 annually or more) customers who strongly preferred a switch to dynamic pricing.

Have customers' communication preferences changed?

One of the more compelling trends identified in this study is the apparent evolution of 91 Express Lanes customers' preferences with respect to how OCTA can best communicate with them regarding the Lanes. Since 2007, there has been a pronounced shift in customers' preferences away from direct mail in favor of email. Whereas 44% of customers in 2007 preferred email, a preference for email communications in the current study was found among 82% of customers. Even among seniors—a group that usually favors traditional mail—email was the preferred method by which customers desired to receive information about the 91 Express Lanes.

Although 91 Express Lanes customers have shown a preference for email for general information about the Lanes, in past years they nevertheless also generally preferred to receive their *billing statements* via mail. However, this pattern changed significantly in 2014. Overall, 47% indicated they would prefer to receive their statement via email, 44% preferred mail, 4% preferred to be able to check their statement online, whereas 4% were unsure or unwilling to answer the question.

FasTrak Decisions

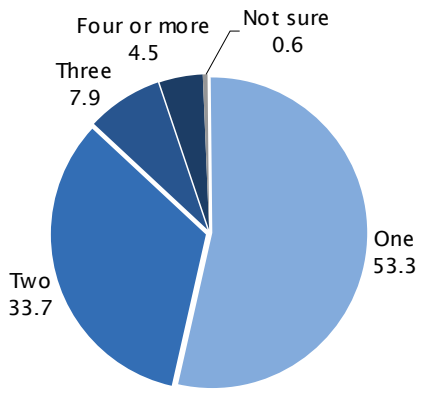
The opening series of questions in the survey were designed to profile 91 Express Lanes customers with respect to the number of FasTrak transponders in their household, the method by which they acquired the transponders, as well as the individuals or entities responsible for paying their toll charges.

NUMBER OF TRANSPONDERS IN THE HOUSEHOLD

The first question in this series asked customers to identify the number of FasTrak transponders they currently have in their household. As shown in Figure 1 below, the majority of customers (53%) indicated that theirs is the only transponder in their household, with the remaining customers indicating that they had two (34%), three (8%), or at least four (5%) transponders.

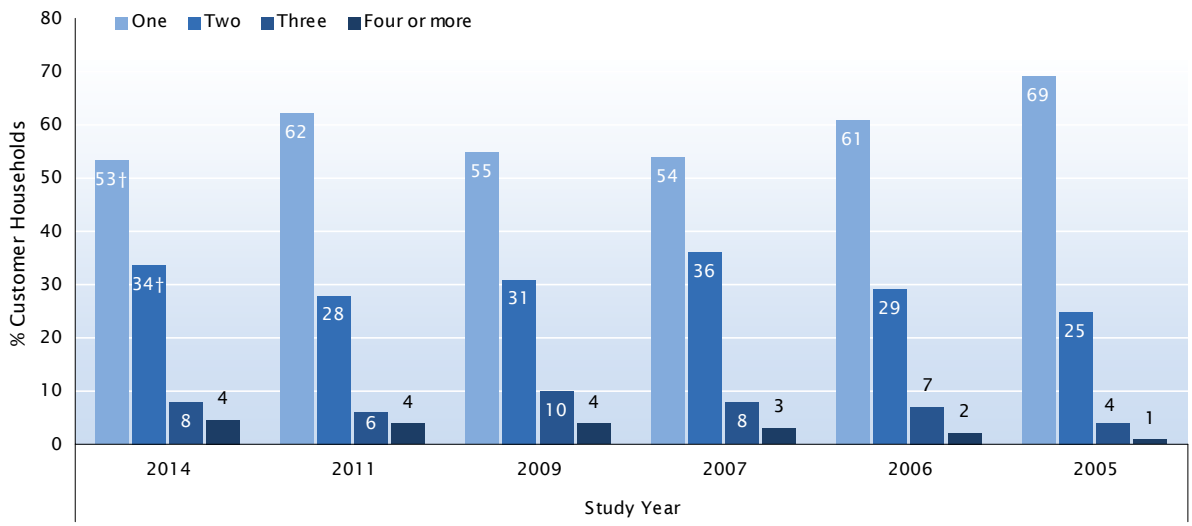
Question 2 *How many FasTrak transponders do you currently have in your household?*

FIGURE 1 NUMBER OF FASTRAK TRANSPONDERS IN HOUSEHOLD



For the interested reader, Figure 2 shows how the number of transponders per household has fluctuated during the past six survey cycles. When compared to 2011, there was a statistically significant increase in the percentage of households with two transponders, and a corresponding decrease in the percentage of households with just one transponder.

FIGURE 2 NUMBER OF FASTRAK TRANSPONDERS IN HOUSEHOLD BY STUDY YEAR



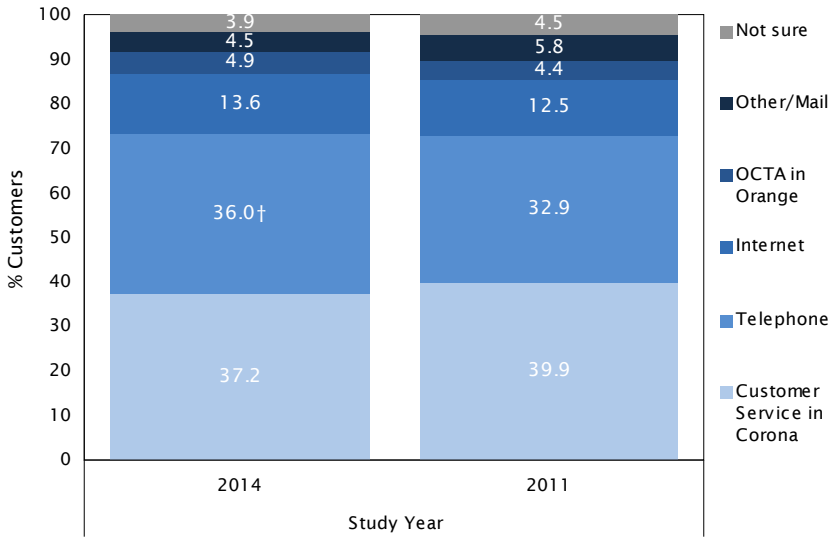
† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

METHOD OF ACQUISITION

All customers were next asked to describe *how* they acquired the FasTrak responder that they use when traveling on the 91 Express Lanes. The most commonly reported method of acquisition was an in-store purchase at the Customer Service Center in Corona (37%), followed by telephone (36%), via the Internet (14%), the OCTA store in Orange (5%), or an alternative method (5%) (Figure 3). Interestingly, the methods by which customers acquired their transponders varied substantially by the length of time that they have used the 91 Express Lanes. As shown in Figure 4 on the next page, reliance on the Customer Service Center in Corona and telephone orders was far more common among longtime customers (8+ years), whereas customers who acquired their transponders more recently (last two years) have made much greater use of the Internet for this purpose.

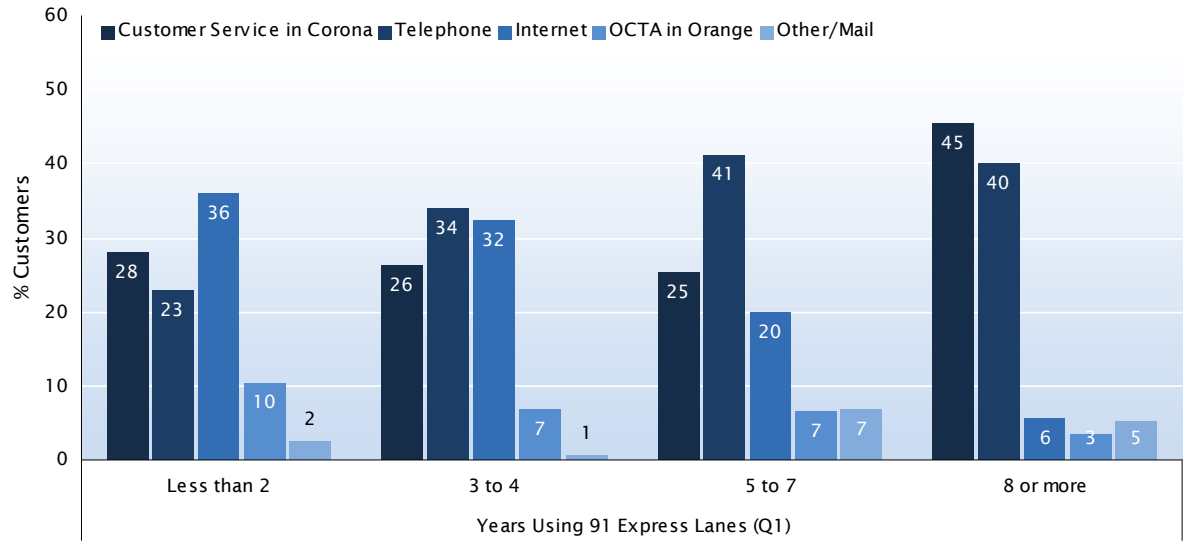
Question 3 *How did you acquire the FasTrak transponder you use when traveling on the 91 Express Lanes? Did you pick it up in person at the OCTA store in Orange, in person at the Customer Service Center in Corona, order it by phone and have it mailed to you, or did you order it over the Internet?*

FIGURE 3 METHOD OF ACQUIRING FASTRAK TRANSPONDERS BY STUDY YEAR



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

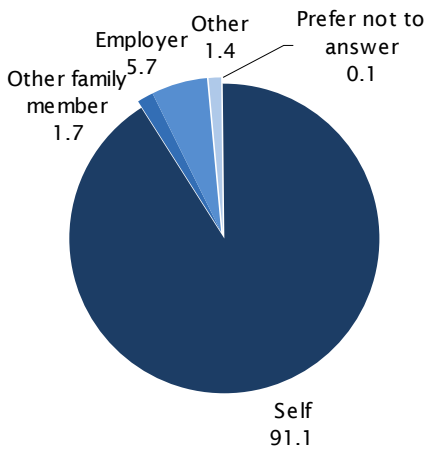
FIGURE 4 METHOD OF ACQUIRING FASTRAK TRANSPONDERS BY YEARS USING 91 EXPRESS LANES



WHO PAYS YOUR TOLL CHARGES? The final question in this series asked respondents to identify who pays their toll charges when they use the 91 Express Lanes. The vast majority of customers (91%) reported that they *personally* pay for their toll charges, with an additional 2% indicating that their toll charges are paid by another member of their family. Overall, just 6% of customers indicated that their employer is primarily responsible for paying their toll charges, whereas 1% mentioned an alternative individual or entity (Figure 5). Recalculating the percentages to capture the top three named sources for comparability with prior surveys,[5] Figure 6 on the next page shows that there has been a striking pattern of consistency over time with respect to *who* pays customers' toll charges for using the 91 Express Lanes.

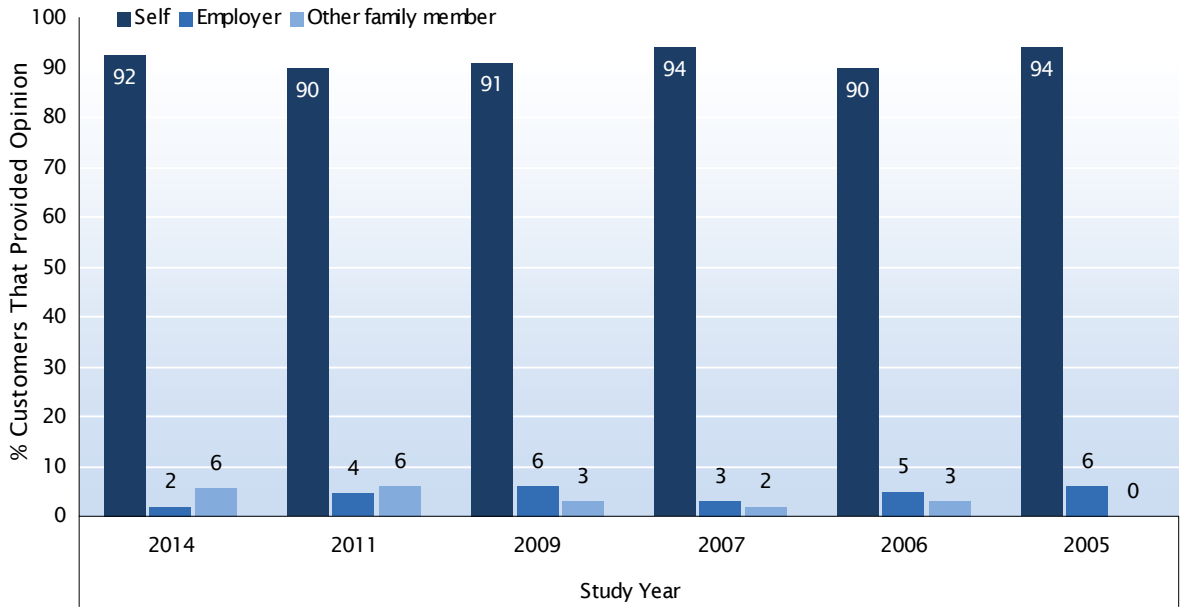
Question 4 *Which of the following best describes who pays your toll charges when you use the 91 Express Lanes?*

FIGURE 5 WHO PAYS TOLL CHARGES



5. Prior survey reports occasionally did not display an 'other' category.

FIGURE 6 WHO PAYS TOLL CHARGES BY STUDY YEAR



Use of 91 Express Lanes

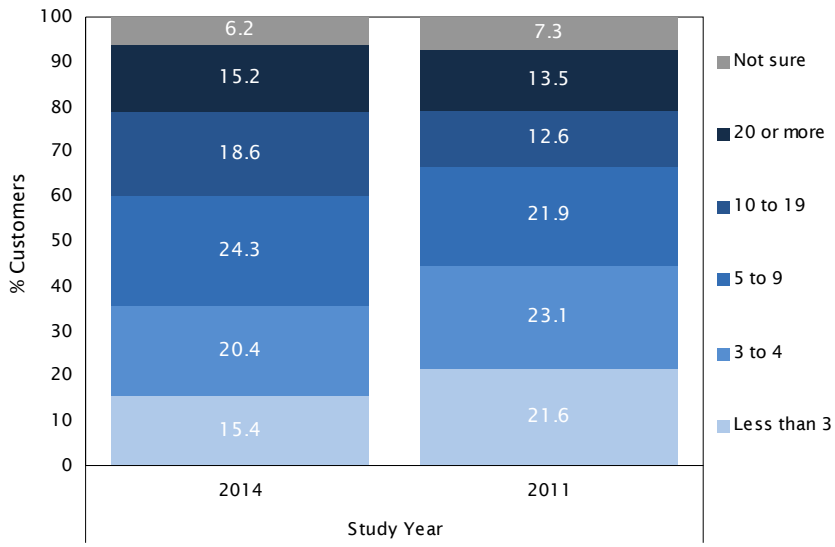
One of the central objectives of this study was to profile customers' use of the 91 Express Lanes, including how *often* they use the Lanes, *when* they typically use the Lanes, for what *purposes* they use the Lanes, as well as *where* they typically originate and end their trips. The answers to these and related topics are provided in this section.

MONTHLY FREQUENCY OF USING THE 91 EXPRESS LANES

All customers were initially asked to describe the number of *days* in a typical month that they use the 91 Express Lanes toll road. The sampling design for the survey used frequency of use as one of the stratifying criteria, which ensures that the distribution shown in Figure 7 is representative of 91 Express Lanes customers who use the Lanes at least once per month on average. As shown in the figure, customers varied substantially in the number of days per month they use the Lanes, with 36% using them four or fewer days per month, 43% using the Lanes between 5 and 19 days per month, and 15% using the 91 Express Lanes at least 20 days per month. An additional 6% were unsure.

Question 5 *In a typical month, how many days do you use the 91 Express Lanes toll road?*

Figure 7 Days per Month Using 91 Express Lanes by Study Year



Among all customers surveyed in 2014, the average number of days reported for using the 91 Express Lanes was 8.86 per month, which is slightly higher than the 7.66 days recorded in the 2011 study. However, as shown in Figures 8-10, this average varied substantially by certain customer demographics including age, employment status, and county of residence. When compared to their respective counterparts, customers under 35 years of age, full-time employees, and residents of Riverside and San Bernardino counties reported the highest average number of days per month using the 91 Express Lanes.

FIGURE 8 AVERAGE DAYS PER MONTH USING 91 EXPRESS LANES BY STUDY YEAR, AGE, GENDER & EMPLOYED FULL TIME

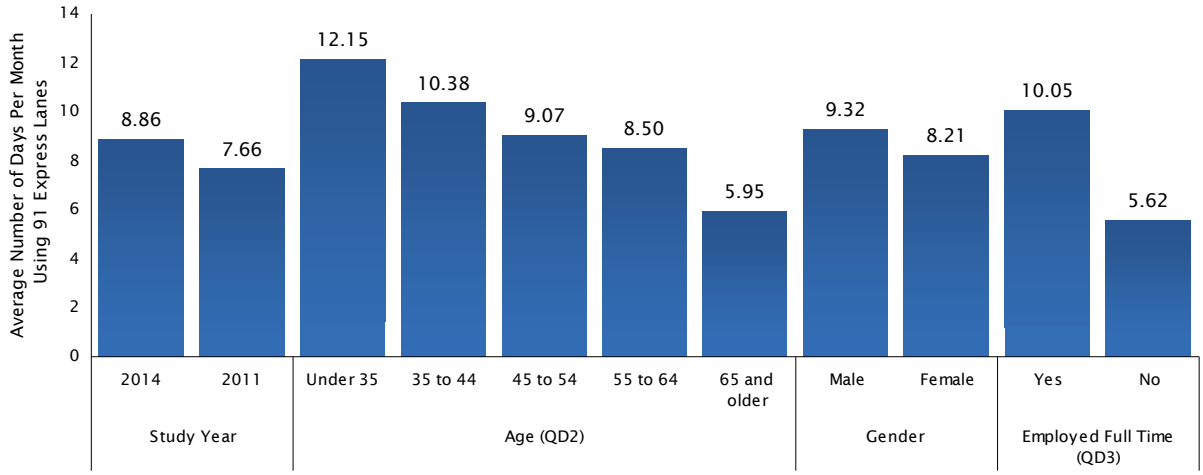


FIGURE 9 AVERAGE DAYS PER MONTH USING 91 EXPRESS LANES BY HOUSEHOLD INCOME & EDUCATION LEVEL

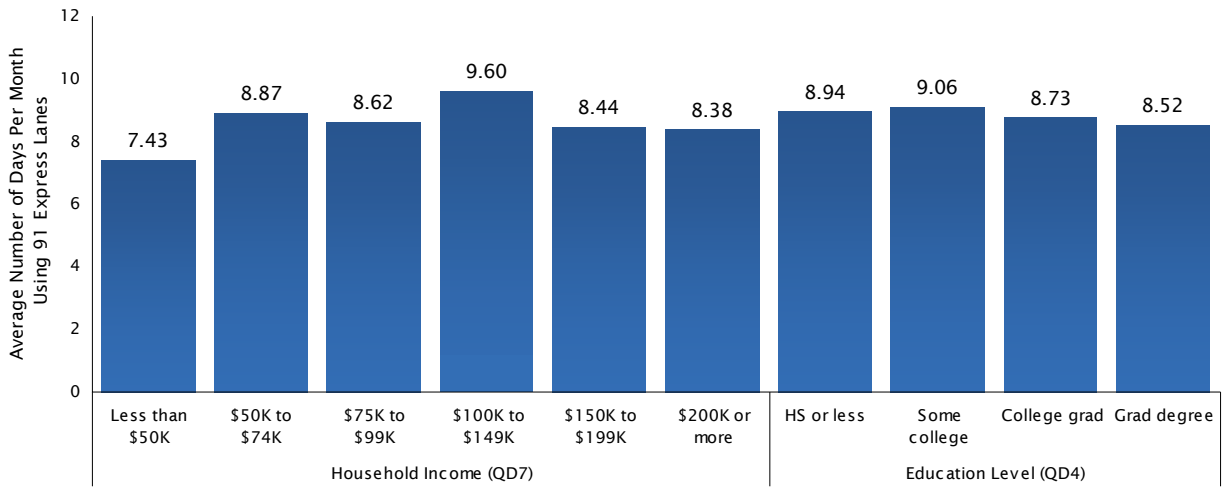
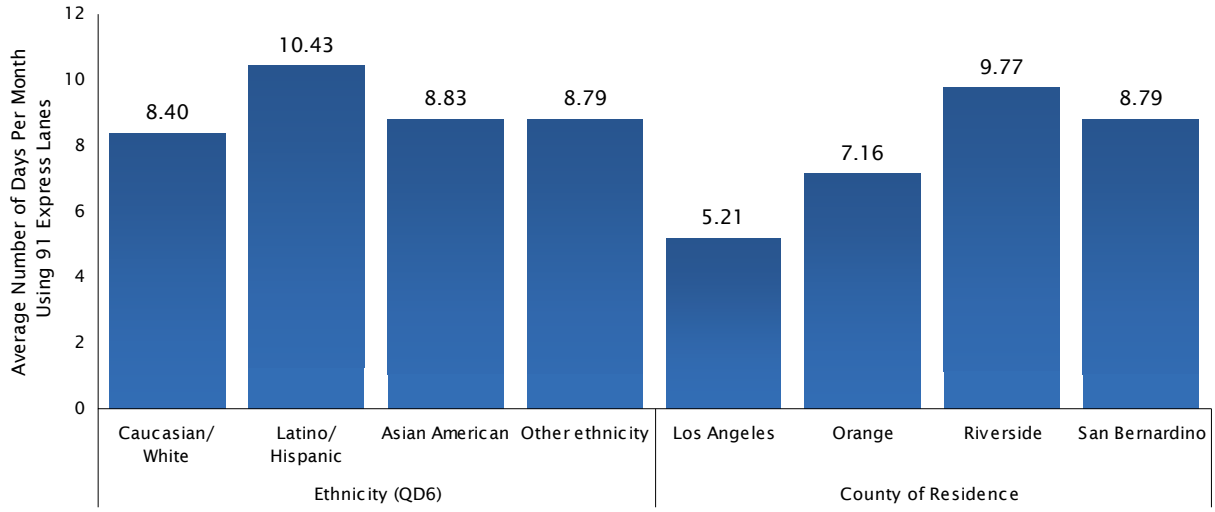


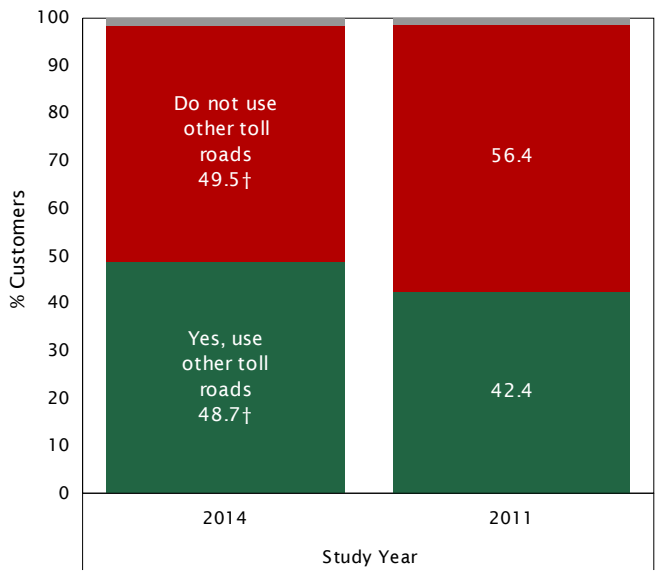
FIGURE 10 AVERAGE DAYS PER MONTH USING 91 EXPRESS LANES BY ETHNICITY & COUNTY OF RESIDENCE



DO YOU USE OTHER TOLL ROADS IN SOUTHERN CALIFORNIA? Although the survey focused on customers' experiences using the 91 Express Lanes, OCTA was also interested in understanding the extent to which 91 Express Lanes customers also use other toll roads in Southern California. As shown in Figure 11, 49% of 91 Express Lanes customers reported in 2014 that they use at least one other Southern California toll road in a typical month, which is a statistically significant increase over the 42% reported in 2011.

Question 6 *In a typical month, do you use any other toll roads in Southern California?*

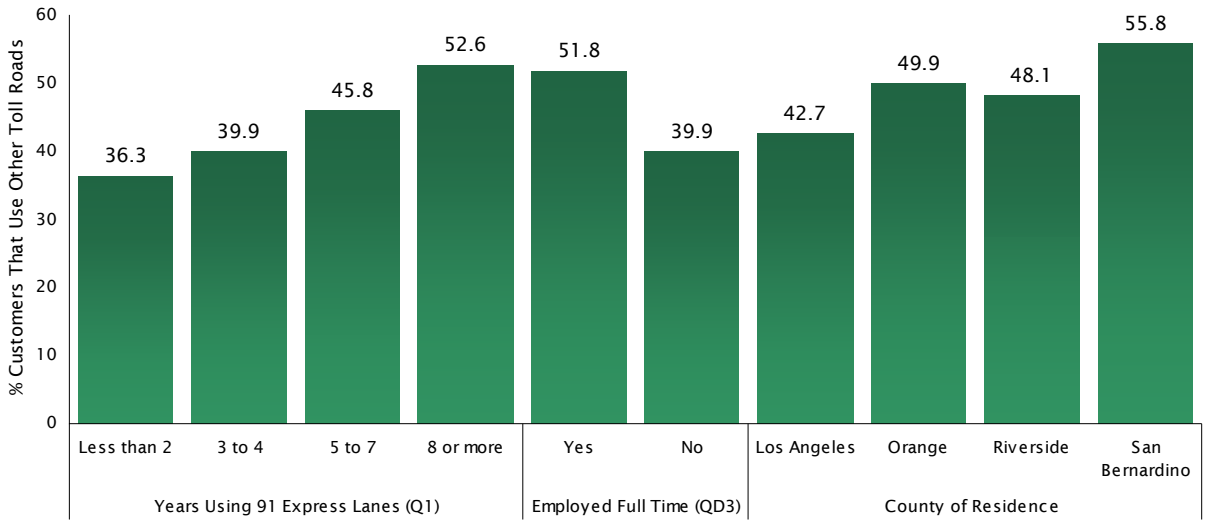
FIGURE 11 USE OTHER TOLL ROADS IN SOUTHERN CALIFORNIA BY STUDY YEAR



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

The tendency to use other toll roads in addition to the 91 Express Lanes was *strongly* related to several factors, including the length of time that a respondent had been a 91 Express Lanes customer, employment status, and county of residence (see Figure 12). Long-time customers (8+ years), full-time employees, and residents of San Bernardino County were more likely than their respective counterparts to report using toll roads in addition to the 91 Express Lanes.

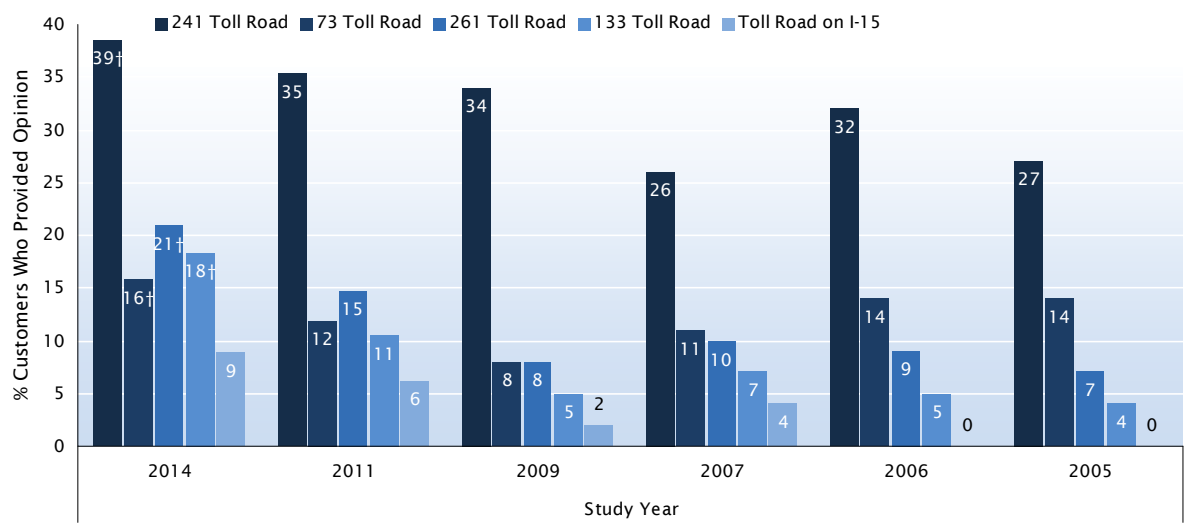
FIGURE 12 USE OTHER TOLL ROADS IN SOUTHERN CALIFORNIA BY YEARS USING 91 EXPRESS LANES, EMPLOYED FULL TIME & COUNTY OF RESIDENCE



Among *all* customers surveyed, the most commonly used alternative toll road was the 241 (39%), followed by the 261 (21%), 133 (18%), 73 (16%), and the Interstate 15 toll road (9%). Figure 13 shows how these patterns have changed since 2005, as well as the significant increases found in alternative toll road use between 2011 and 2014 for most toll roads tested.

Question 7 *Which other toll roads do you use in a typical month? Check all that apply.*

FIGURE 13 OTHER SOUTHERN CALIFORNIA TOLL ROADS USE BY STUDY YEAR

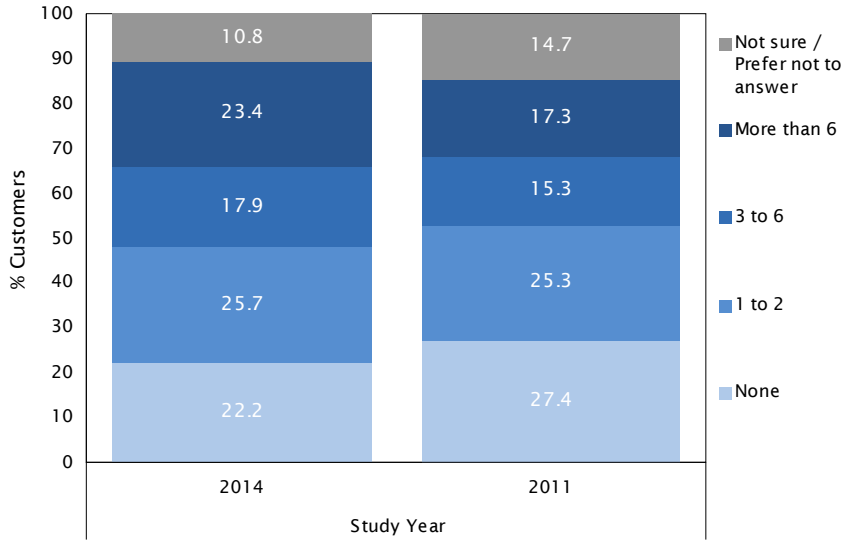


† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

WEEKLY TRAVEL ON 91 FREEWAY Whereas Question 5 asked about the number of days per month a customer uses the 91 Express Lanes, at this point the survey transitioned to asking a series of questions that focused on the number of *one-way trips* that customers make in a typical week. The first question in this series (Question 8) simply asked how many total one-way trips the customer typically makes on the 91 Freeway per week, inclusive of trips in which they use the 91 Express Lanes. Approximately one-quarter (23%) of customers indicated that they make at least seven trips per week, 18% make three to six trips per week, one-quarter (26%) make one to two trips in a typical week, whereas 22% indicated that they do not use the 91 Freeway in a typical week and 11% were unsure or unwilling to answer the question (Figure 14).

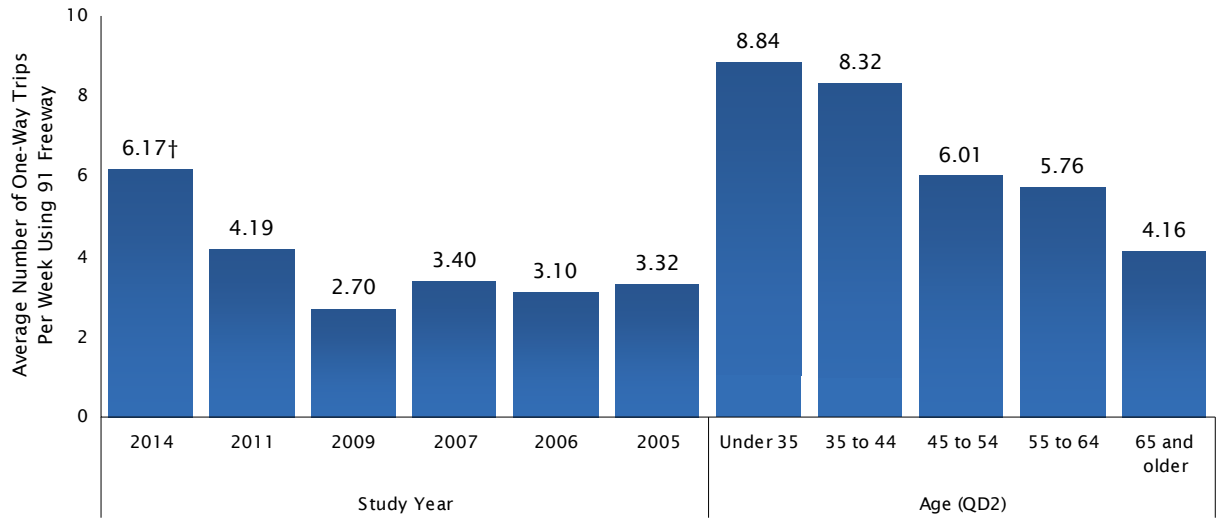
Question 8 *In a typical week, how many one-way trips do you take on the State Route 91 Freeway? Please count all trips, including trips when you use the 91 Express Lanes toll road and those when you don't.*

FIGURE 14 NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 FREEWAY BY STUDY YEAR



Overall, customers reported an average 6.17 trips per week on the 91 Freeway in 2014, which is significantly greater than the number of trips reported in prior studies (see Figure 15). Moreover, when compared to their respective counterparts, customers under 35 years of age, males, full-time employees, those whose annual household income is $150,000 to $199,999, those without a high school education, Latinos, and residents of Riverside County reported the greatest average number of one-way trips on the 91 Freeway in a typical week (see Figures 15-17).

FIGURE 15 AVERAGE NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 FREEWAY BY STUDY YEAR & AGE



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

FIGURE 16 AVERAGE NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 FREEWAY BY GENDER, EMPLOYED FULL TIME & HOUSEHOLD INCOME

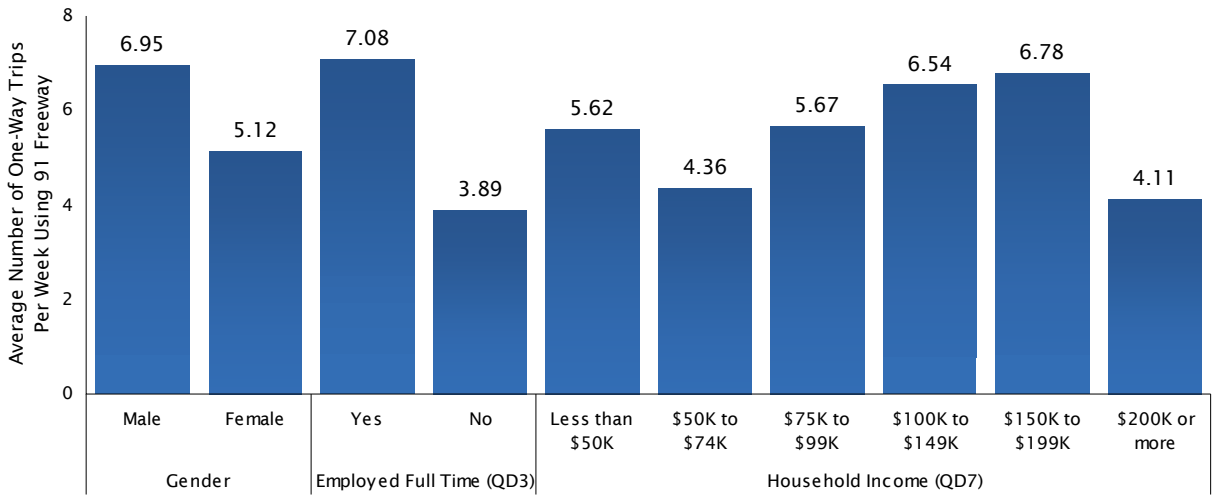
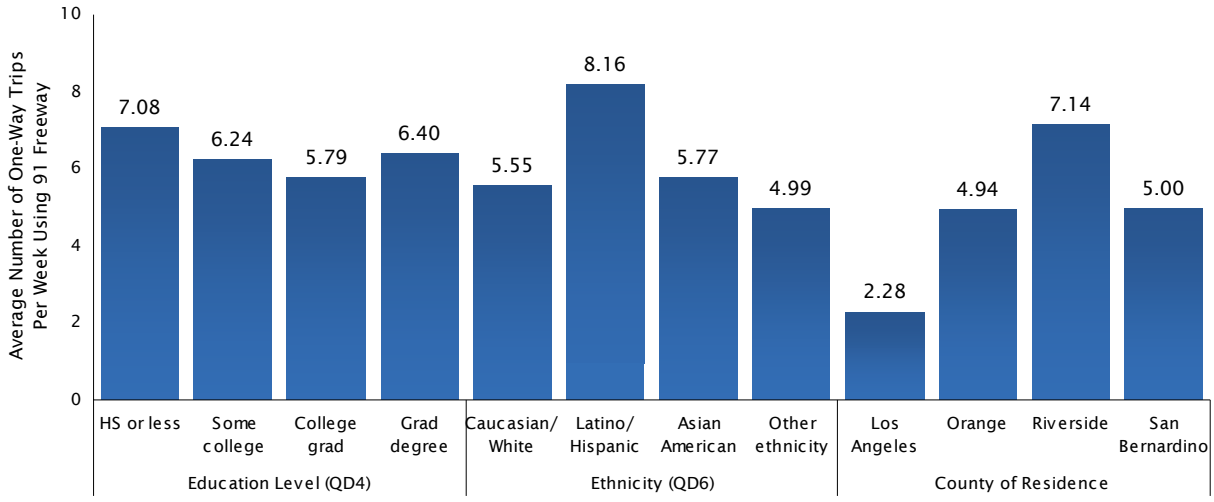


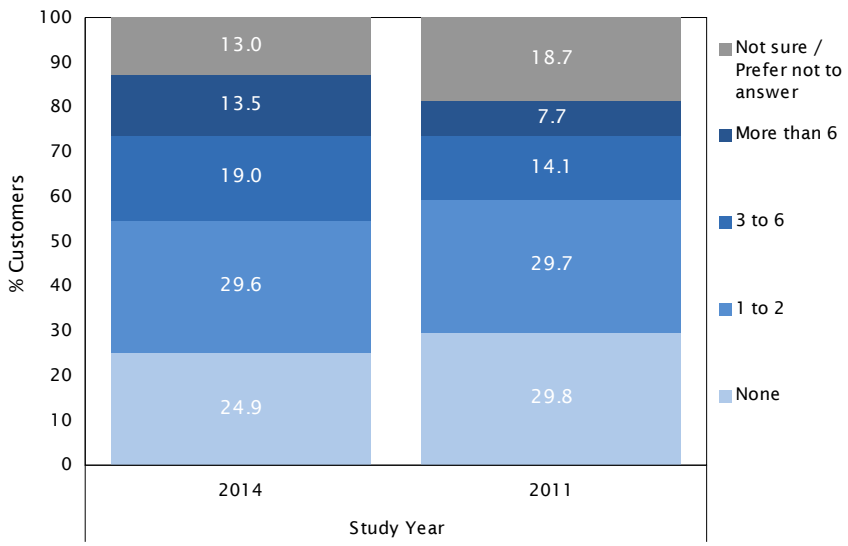
FIGURE 17 AVERAGE NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 FREEWAY BY EDUCATION LEVEL, ETHNICITY & COUNTY OF RESIDENCE



WEEKLY TRAVEL ON 91 EXPRESS LANES Having established the number of one-way trips a customer makes on the 91 Freeway in a typical week, the survey next asked respondents to identify the number of these trips that involved the 91 Express Lanes toll road. Approximately 14% of customers indicated that they make at least seven trips per week on the 91 Express Lanes, 19% make three to six trips in a typical week, 30% make one to two trips per week, whereas 25% indicated that they do not use the 91 Express lanes in a typical week and 13% were unsure or unwilling to answer the question (Figure 18).

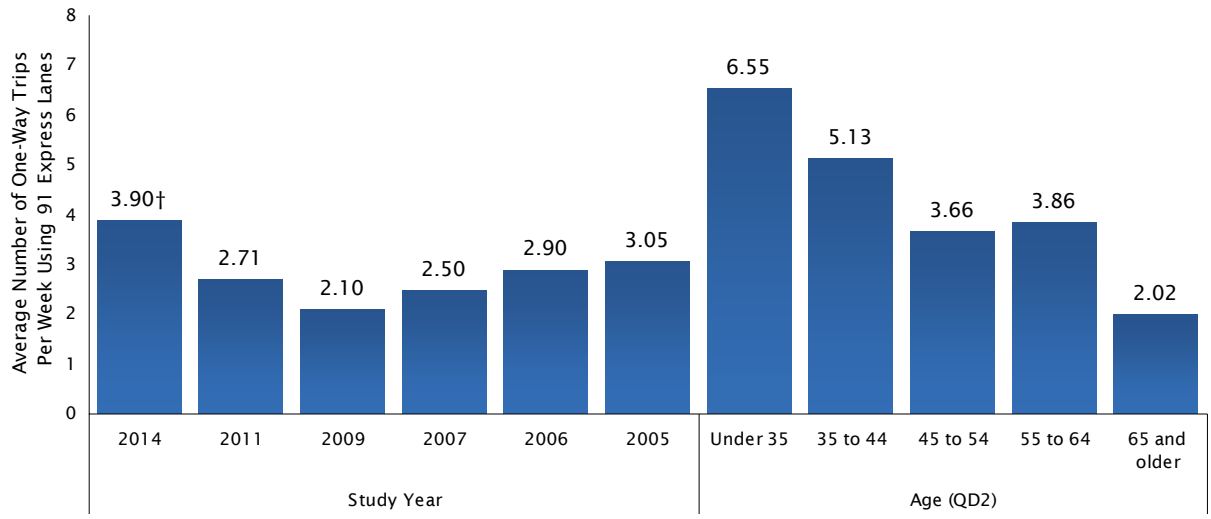
Question 9 *Of the <<insert # trips from Q8>> one-way trips you take on the State Route 91 Freeway in a typical week, approximately how many do you use the 91 Express Lanes toll road?*

FIGURE 18 NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 EXPRESS LANES BY STUDY YEAR



Overall, customers reported an average 3.9 trips per week on the 91 Express Lanes in 2014, which is significantly greater than the 2.71 trips reported in 2011 (Figure 19). Moreover, when compared to their respective counterparts, customers under 35 years of age, males, full-time employees, those whose annual household income is $150,000 to $199,999, and residents of Riverside County reported the greatest average number of one-way trips on the 91 Freeway in a typical week (see Figures 19-21).

FIGURE 19 AVERAGE NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 EXPRESS LANES BY STUDY YEAR & AGE



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

FIGURE 20 AVERAGE NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 EXPRESS LANES BY GENDER, EMPLOYED FULL TIME & HOUSEHOLD INCOME

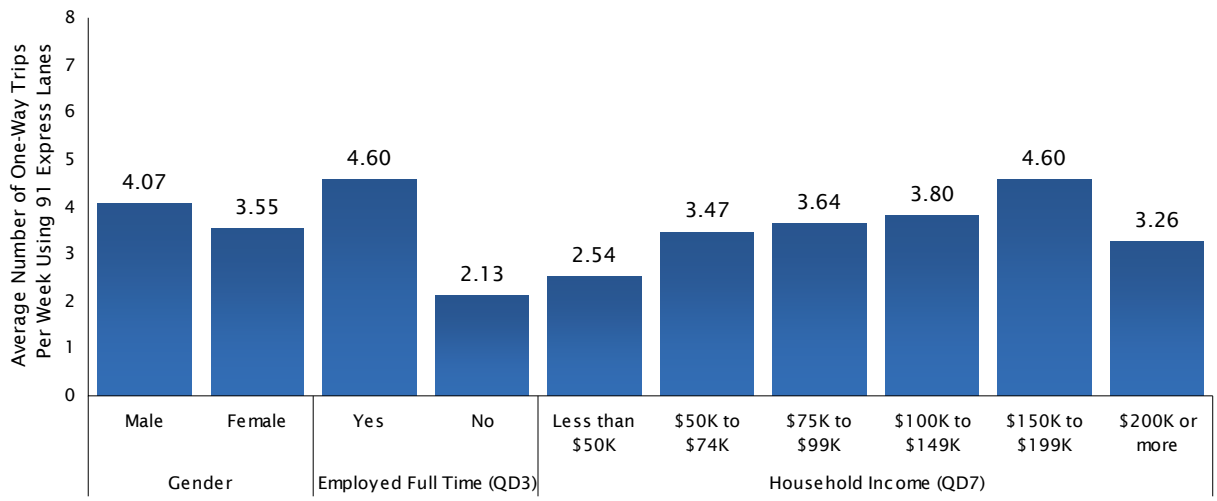
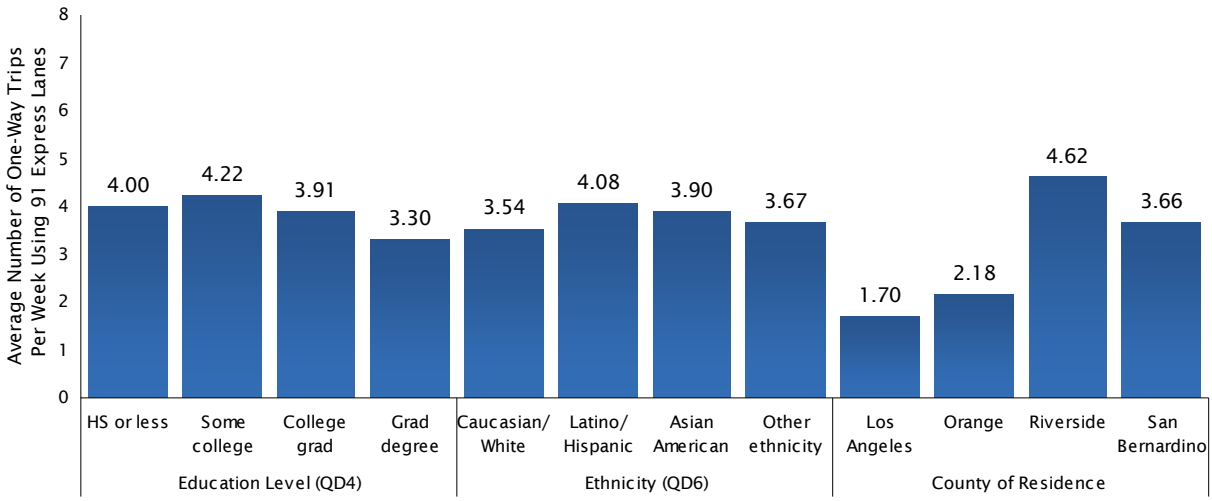


FIGURE 21 AVERAGE NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 FREEWAY BY EDUCATION LEVEL, ETHNICITY & COUNTY OF RESIDENCE

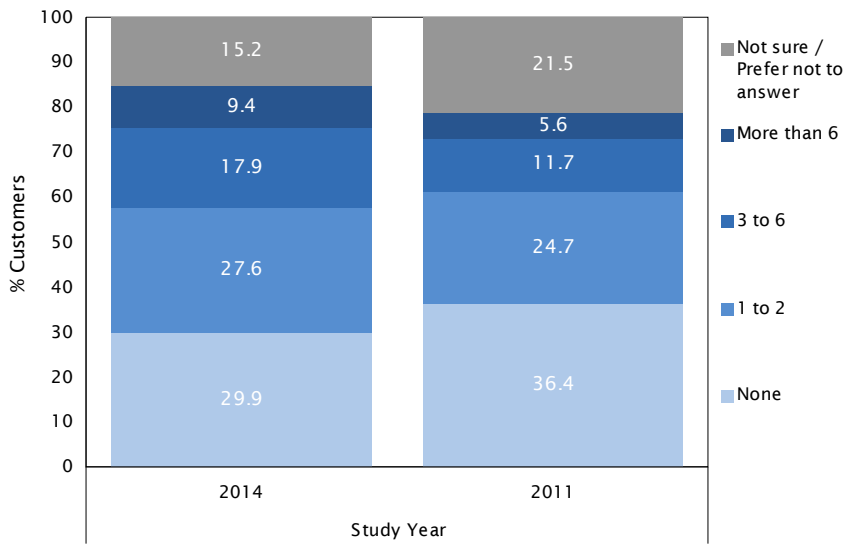


WEEKDAY TRAVEL ON 91 EXPRESS LANES

Similar to Question 9, Question 10 next asked respondents to identify the number of their weekly 91 Express Lanes trips that occur *mid-week*, Monday through Friday. Approximately 9% of customers indicated that they make at least seven midweek trips per week on the 91 Express Lanes, 18% make three to six midweek trips in a typical week, 28% make one to two trips per week, whereas 30% indicated that they do not use the 91 Express lanes Monday through Friday in a typical week and 15% were unsure or unwilling to answer the question (Figure 22).

Question 10 *Of the <<insert # trips from Q9>> one-way trips you use the 91 Express Lanes toll road in a typical week, how many do you take Monday through Friday?*

FIGURE 22 NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 EXPRESS LANES, MON TO FRI BY STUDY YEAR



Overall, customers reported an average 3.07 midweek trips per week on the 91 Express Lanes in 2014, which is somewhat (but not significantly) higher than the 2.17 trips reported in 2011. When compared to their respective counterparts, customers between the ages of 35 and 44, full-time employees, those from households that earn $150,000 to $199,999 annually, and residents of Riverside County reported the greatest average number of one-way trips on the 91 Express Lanes between Monday and Friday in a typical week (see Figures 23-25).

FIGURE 23 AVERAGE NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 EXPRESS LANES, MON TO FRI BY STUDY YEAR, AGE, GENDER & EMPLOYED FULL TIME

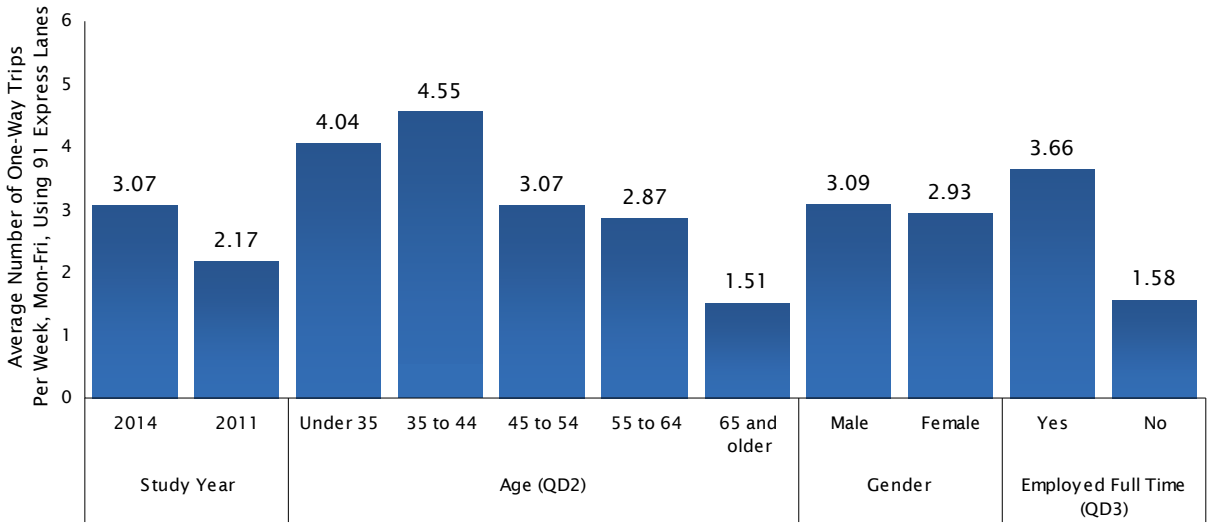


FIGURE 24 AVERAGE NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 EXPRESS LANES, MON TO FRI BY HOUSEHOLD INCOME & EDUCATION LEVEL

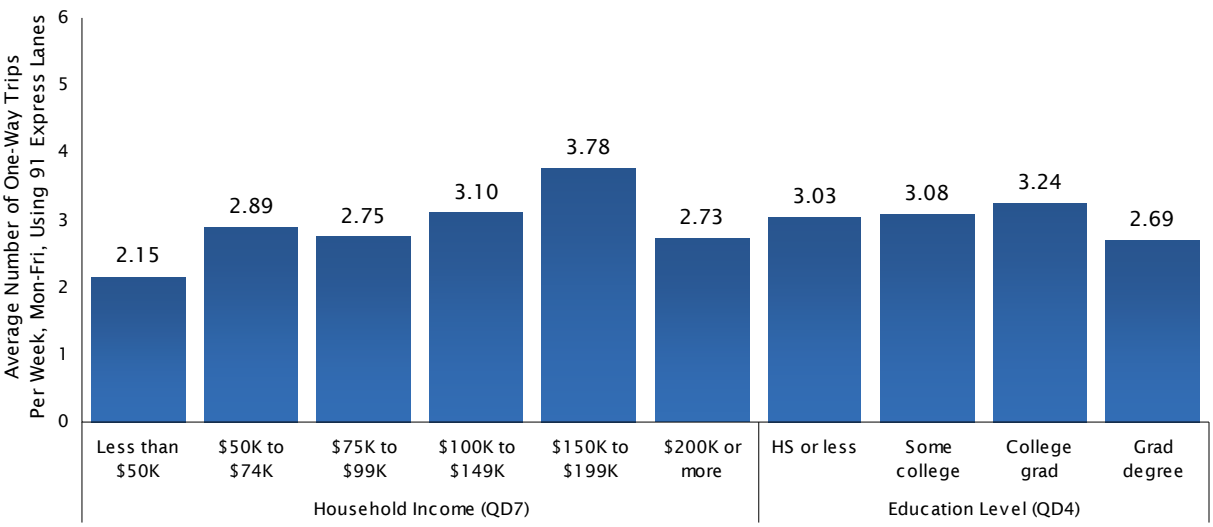
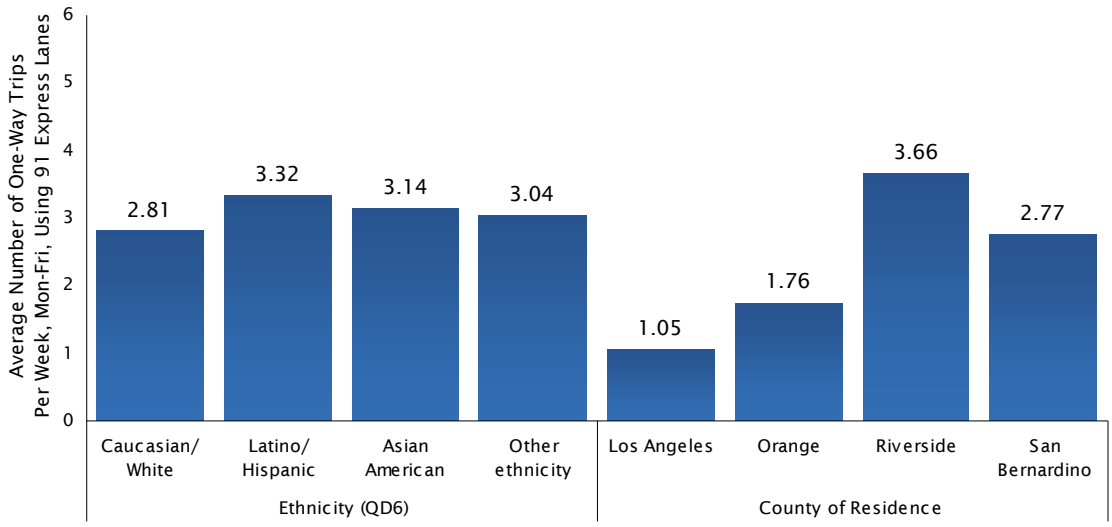


FIGURE 25 AVERAGE NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 EXPRESS LANES, MON TO FRI BY ETHNICITY & COUNTY OF RESIDENCE



RUSH HOUR TRAVEL ON 91 EXPRESS LANES

Having identified the number of *mid-week* trips a respondent typically makes using the 91 Express Lanes, the survey next asked respondents to estimate how many of these trips occur during rush hour periods between 5AM and 9AM, or 3PM and 7PM. Approximately 8% of customers indicated that they make at least seven trips per week on the 91 Express Lanes during rush hour periods, 15% make three to six midweek trips during rush hour in a typical week, 23% make one to two trips per week during rush hours, whereas 38% indicated that they do not use the 91 Express lanes during rush hour periods in a typical week and 16% were unsure or unwilling to answer the question (Figure 26).

Question 11 *Of the <<insert # trips from Q10>> one-way trips you use the 91 Express Lanes toll road between Monday and Friday, how many do you take during rush hour periods - between 5AM and 9AM, or 3PM and 7PM?*

FIGURE 26 NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 EXPRESS LANES, MON TO FRI RUSH HOUR BY STUDY YEAR

Overall, customers in 2014 reported an average 2.6 trips per week on the 91 Express Lanes during rush hour periods, which is greater than the 1.81 reported in 2011. When compared to their respective counterparts, customers between the ages of 35 and 44, full-time employees, those from households that earn $150,000 to $199,999 annually, and residents of Riverside County reported the greatest average number of one-way trips on the 91 Express Lanes during rush hour periods in a typical week (see Figures 27-29).

FIGURE 27 AVERAGE NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 EXPRESS LANES, MON TO FRI RUSH HOUR BY STUDY YEAR, AGE, GENDER & EMPLOYED FULL TIME

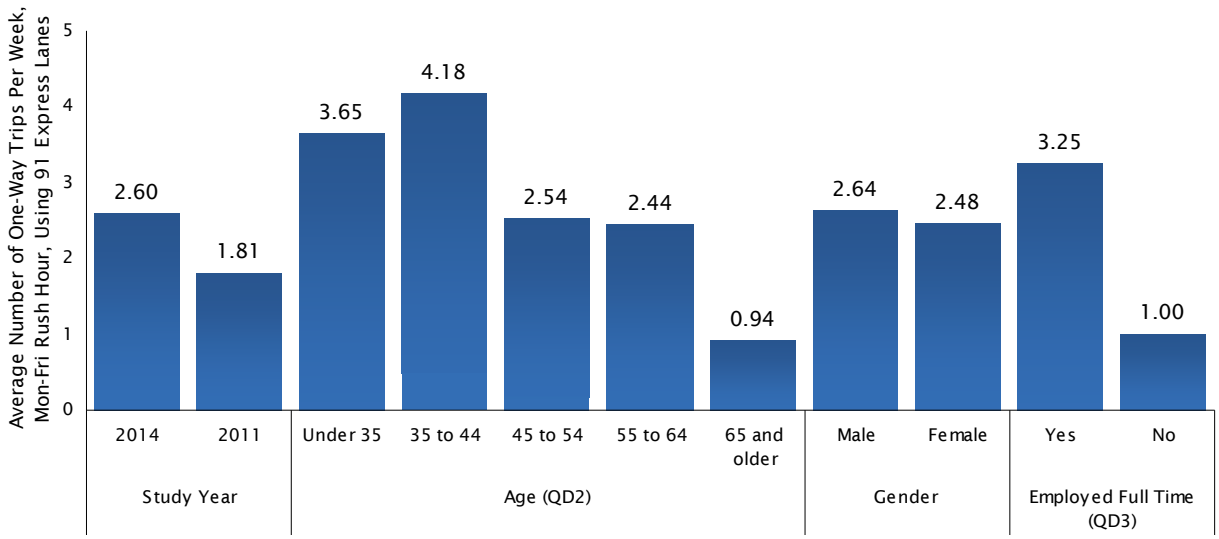


FIGURE 28 AVERAGE NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 EXPRESS LANES, MON TO FRI RUSH HOUR BY HOUSEHOLD INCOME & EDUCATION LEVEL

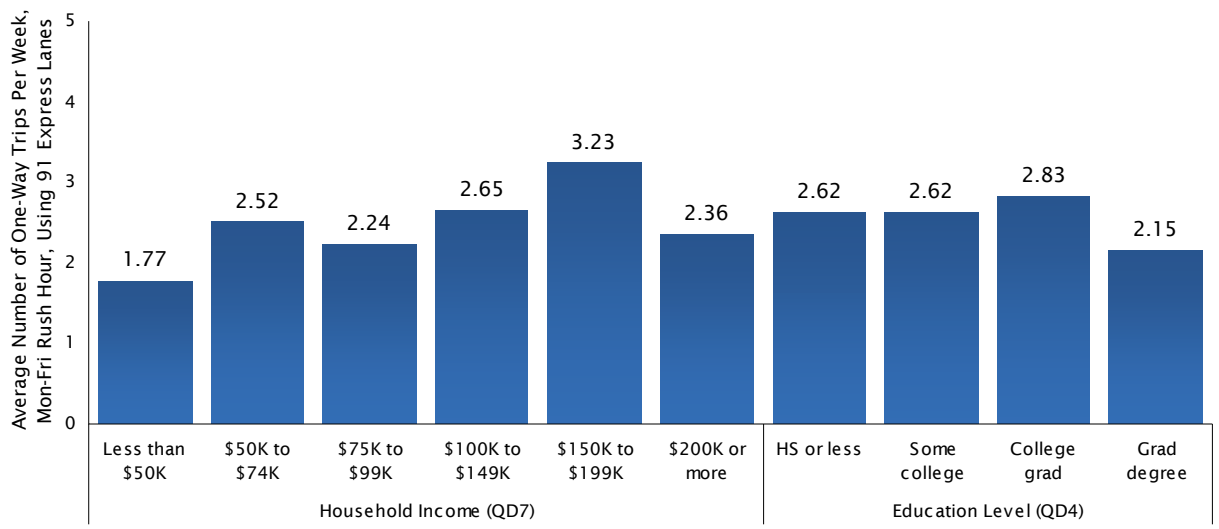
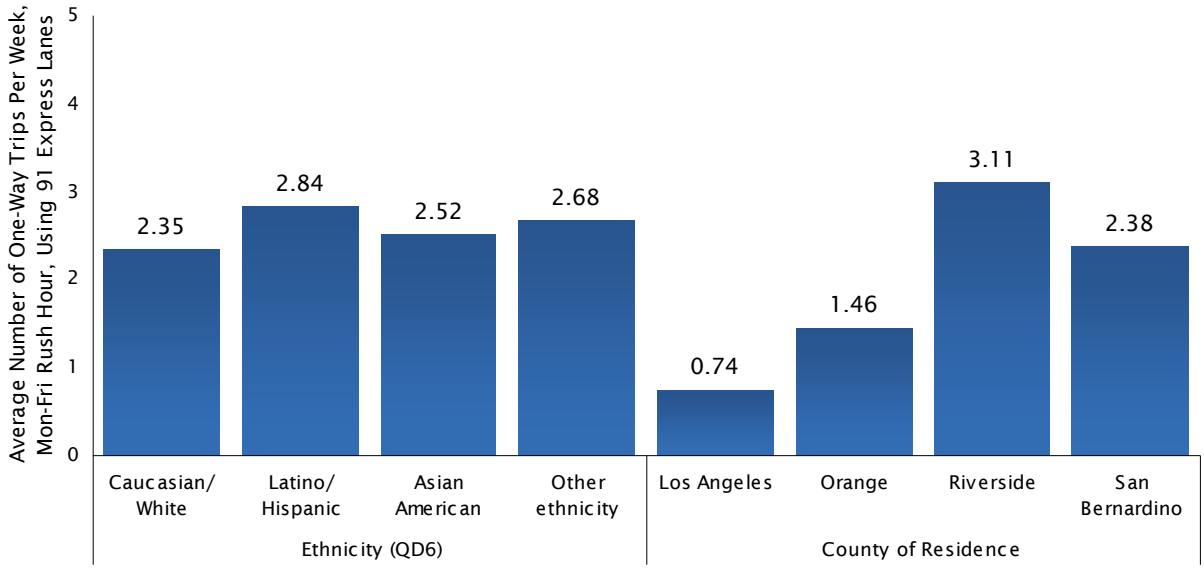


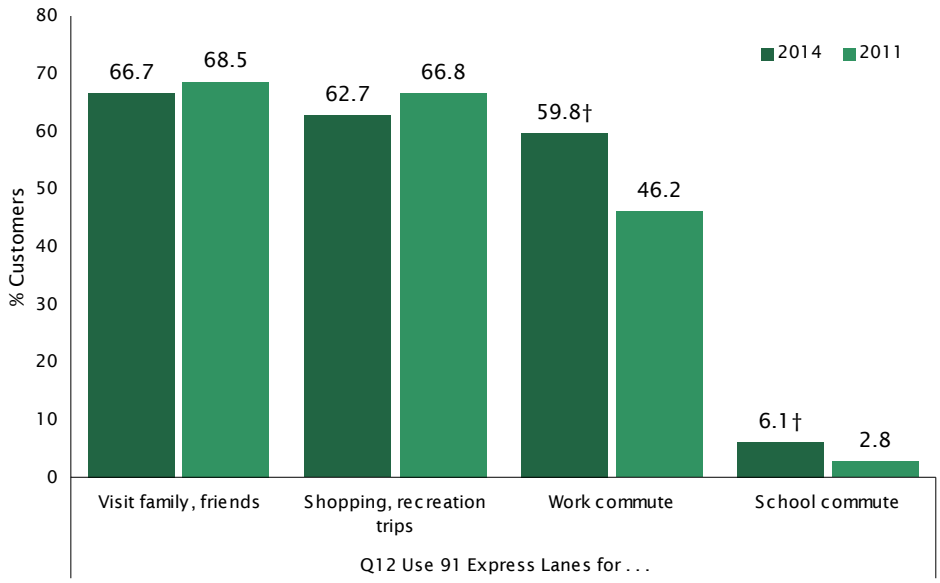
FIGURE 29 AVERAGE NUMBER OF ONE-WAY TRIPS PER WEEK TAKEN ON 91 EXPRESS LANES, MON TO FRI RUSH HOUR BY ETHNICITY & COUNTY OF RESIDENCE



TRIP PURPOSE ON 91 EXPRESS LANES Whereas the prior questions in this series focused on profiling the *frequency* of trips that a respondent makes using the 91 Express Lanes, at this point the survey transitioned to measuring the *type* of trips they make using the Lanes. In other words, for what trip purposes do they use the 91 Express Lanes?

Question 12 *Do you use the 91 Express Lanes toll road for: _____?*

FIGURE 30 EXPRESS LANES USAGE BY STUDY YEAR



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

As shown in Figure 30 on the previous page, most customers use the 91 Express Lanes for more than just their daily commute. In fact, the most commonly reported trips were visiting friends and family (mentioned by 67% of all customers) and shopping or recreation trips (63%). Nearly six-in-ten customers (60%) indicated that they use the 91 Express Lanes for their work commute, which is significantly greater than the percentage who reported using the Lanes for this purpose in 2011. Approximately 6% indicated that they use the Lanes for commuting to or from school in 2014, which is also significantly greater than the corresponding percentage in 2011.

For the interested reader, Figures 31 and 32 show how the percentage of customers who use the 91 Express Lanes for trip purposes varied by age, gender, county of residence, and the length of time that they have been a 91 Express Lanes customer. The largest variation in trip purpose occurs for work trips, which were reported by a substantially higher percentage of younger customers (under 45), males, residents of Riverside and San Bernardino counties, and customers who have used the Lanes less than five years when compared to their respective counterparts.

FIGURE 31 EXPRESS LANES USAGE BY AGE & GENDER

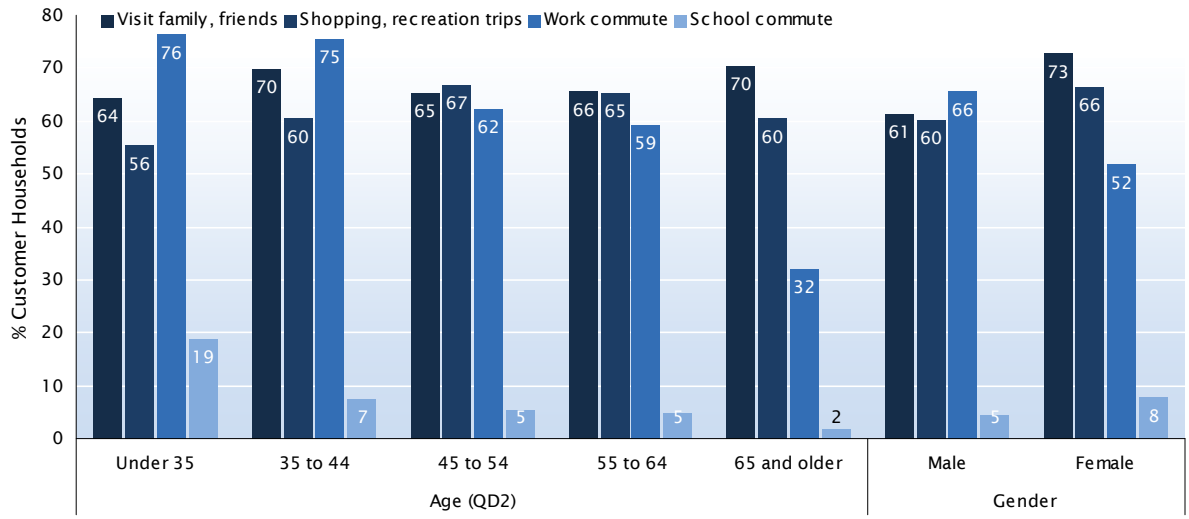
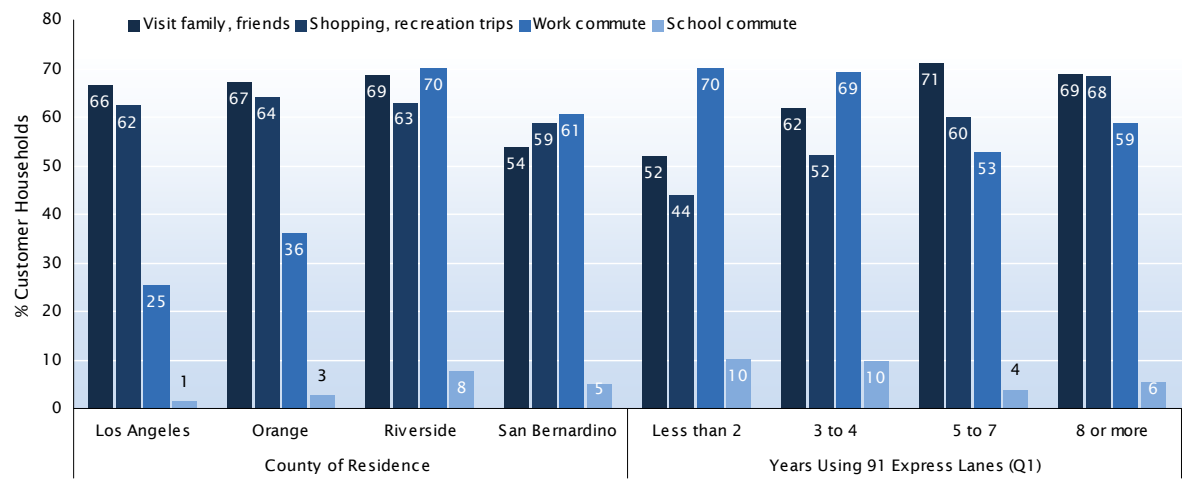


FIGURE 32 EXPRESS LANES USAGE BY COUNTY OF RESIDENCE & YEARS USING 91 EXPRESS LANES



ORIGIN AND DESTINATION FOR TYPICAL TRIP ON 91 EXPRESS LANES

The final questions in this series asked respondents to identify the city in which they typically begin their trips that involve the 91 Express Lanes, as well as their typical destination. For respondents who reported that they use the Lanes for their work commute, the survey asked specifically about their work commute (Questions 13 & 14). Similarly, for respondents who indicated that they use the Lanes for commuting to/from school, the survey asked that they report the origin and destination of their school commute (Questions 15 & 16). Customers who indicated that they do not use the 91 Express Lanes for a work or school commute were asked to report the city that they typically originate their trips when using the Lanes, as well as the city that is their typical destination (Questions 17 & 18). The answers to all three groups are combined in Figure 33, with the origins and destinations shown at the county level.[6]

Question 13 *In what city do you typically begin your commute to work?*

Question 14 *What is the destination city for your work commute?*

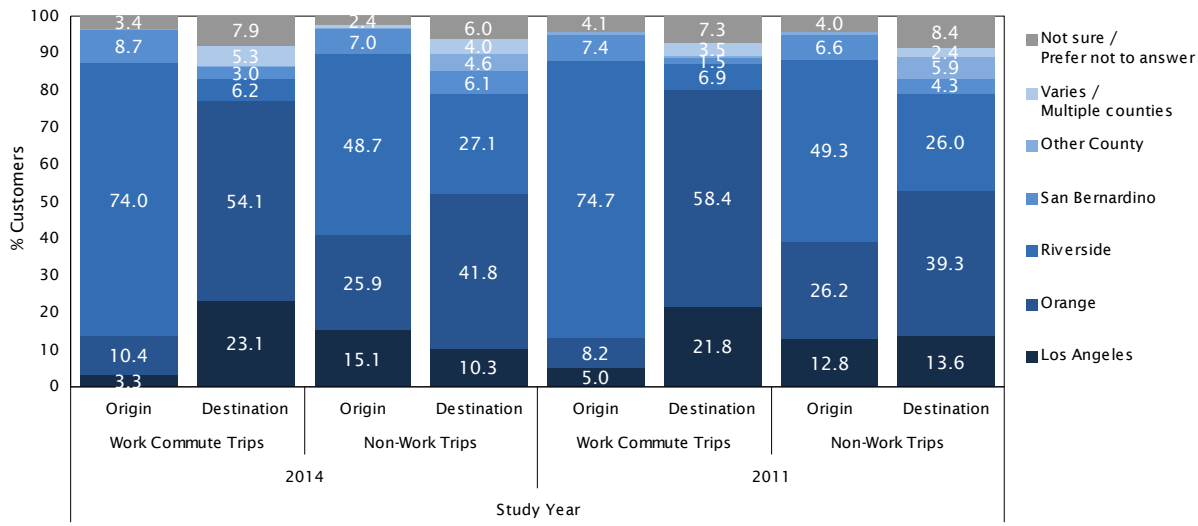
Question 15 *In what city do you typically begin your commute to school?*

Question 16 *What is the destination city for your school commute?*

Question 17 *In what city do you typically begin your trips that involve using the 91 Express Lanes toll road?*

Question 18 *What is the destination city that you are most often traveling to when you use the 91 Express Lanes?*

FIGURE 33 ORIGIN COUNTY & DESTINATION COUNTY OF WORK COMMUTE AND NON-WORK TRIPS BY STUDY YEAR



6. Because the sample size of respondents who use the 91 Express Lanes for commuting to school was small, they are grouped in the non-work trips category rather than as a separate category in Figure 33.

Among work trips, three-quarters (74%) *originate* in Riverside County, 10% in Orange County, 9% in San Bernardino County, and 3% in Los Angeles County. More than half (54%) of work trips that involve the 91 Express Lanes are destined for Orange County, 23% for Los Angeles County, 6% for Riverside County, 3% for San Bernardino County, and 5% for an 'other' county.

The pattern is more diverse for non-work trips. Although Riverside County is still the dominant county of origin (49%), the percentage of non-work trips that originate in Orange County (26%) and Los Angeles County (15%) is higher, whereas San Bernardino County represents about the same percentage of work and non-work trip originations (7%). With respect to non-work trip destinations, Orange County is the most popular destination (42%), followed by Riverside County (27%), Los Angeles County (10%), San Bernardino County (6%), and 'other' counties (5%). In general, the origin and destination patterns found in 2014 are quite similar to those found in the 2011 customer survey.

Opinions of 91 Express Lanes

Having profiled customers' *use* of the 91 Express Lanes in the prior section, the survey next turned to assessing their opinions about the Lanes' performance in meeting their expectations.

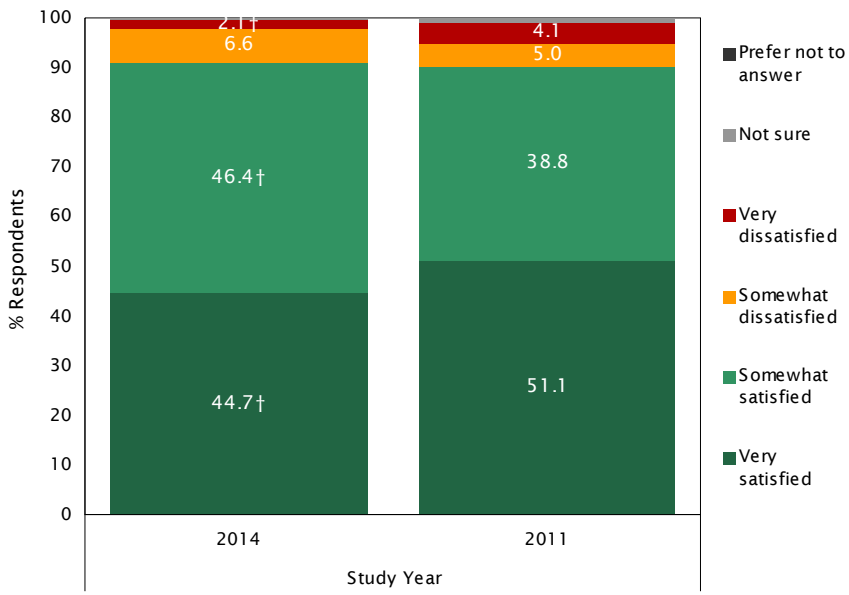
OVERALL SATISFACTION

The first question in this series asked respondents to indicate if, overall, they were satisfied or dissatisfied with their experiences when using the 91 Express Lanes. Because this question does not reference a specific aspect, facility, or service and requested that the respondent consider their experiences overall, the findings of this question may be regarded as an *overall performance rating* for the 91 Express Lanes.

As shown in Figure 34, an overwhelming majority (91%) of customers indicated that they were generally satisfied with their experiences when using the 91 Express Lanes, with just under half (45%) stating that they were *very* satisfied. A small portion of customers (9%) reported that they were dissatisfied. When compared to the 2011 survey, overall satisfaction with the 91 Express Lanes increased slightly (+1%) in 2014, although the balance shifted with somewhat fewer customers indicating that they were *very* satisfied. There was also a significant reduction in the percentage of customers who stated they were *very dissatisfied* with their experiences using the 91 Express Lanes in 2014.

Question 19 *Overall, are you satisfied or dissatisfied with your experiences when using the 91 Express Lanes?*

FIGURE 34 OVERALL SATISFACTION WITH 91 EXPRESS LANES BY STUDY YEAR



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

The next three figures display how customers' opinions about the 91 Express Lanes' overall performance varied by subgroup, including length of use, days per month they use the Lanes, and demographic characteristics. Although there are some noteworthy differences across subgroups—e.g., the more weekday and rush hour trips they use the Lanes, the less likely custom-

ers were to report being *very* satisfied—the most striking pattern is the general consistency of the results when combining the very and somewhat satisfied categories. More than 84% of customers in *every* identified subgroup reported being satisfied with their 91 Express Lanes experiences overall.

FIGURE 35 OVERALL SATISFACTION WITH 91 EXPRESS LANES BY YEARS USING 91 EXPRESS LANES & DAYS PER MONTH USING 91 EXPRESS LANES

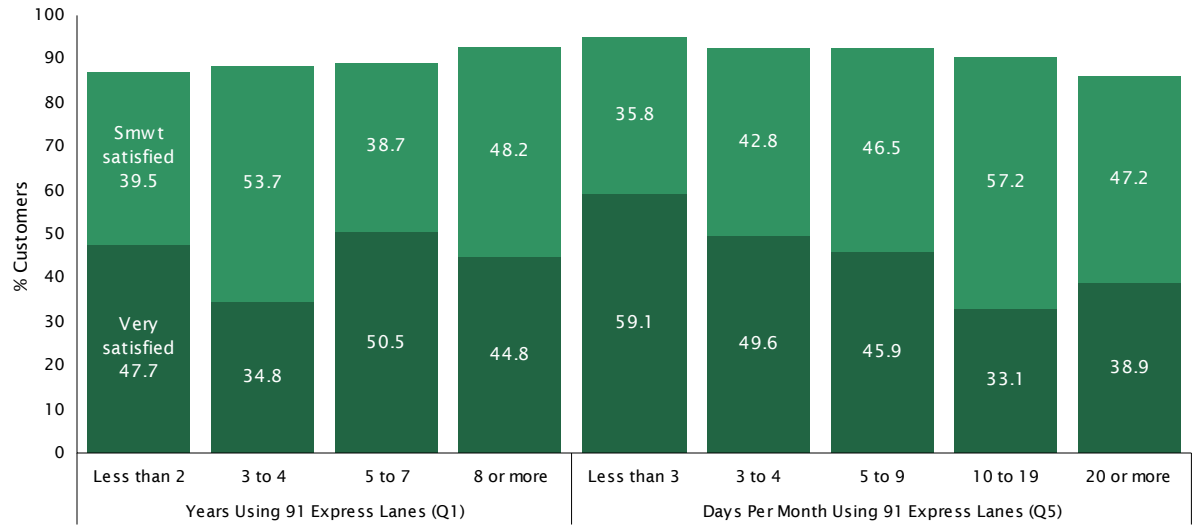


FIGURE 36 OVERALL SATISFACTION WITH 91 EXPRESS LANES BY TRIPS ON 91 EXPRESS LANES, MON TO FRI, TRIPS ON 91 EXPRESS LANES, MON TO FRI RUSH HOUR AND GENDER

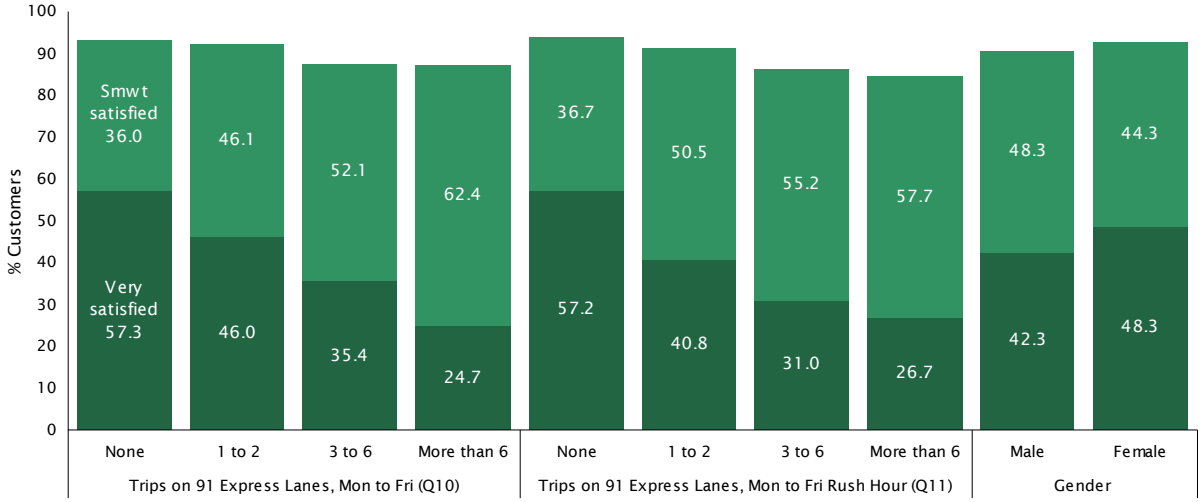
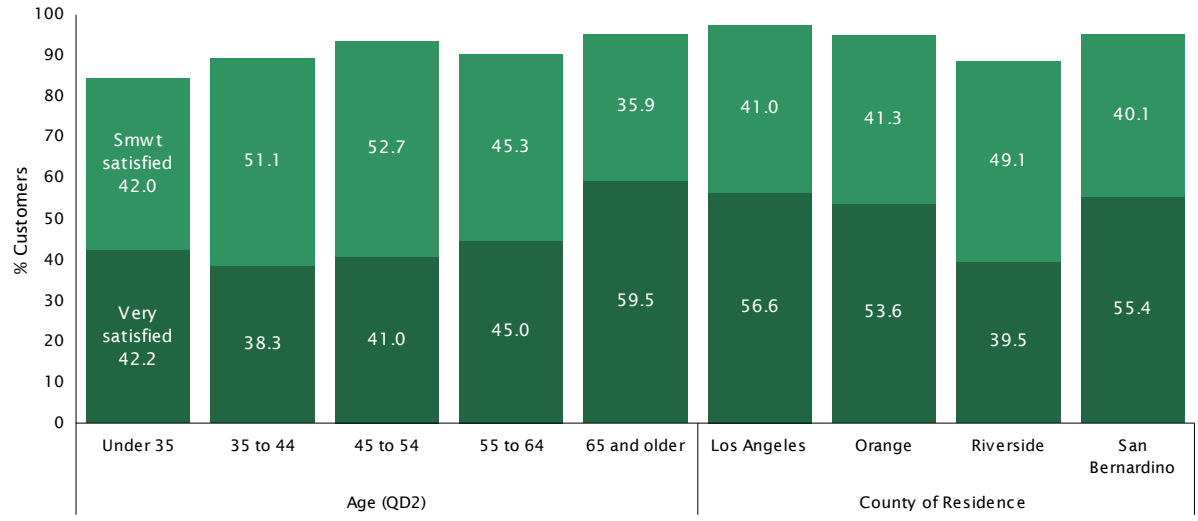


FIGURE 37 OVERALL SATISFACTION WITH 91 EXPRESS LANES BY AGE & COUNTY OF RESIDENCE



REASONS FOR OVERALL SATISFACTION/DISSATISFACTION Respondents were next asked to indicate if there was a particular reason why they are generally satisfied or dissatisfied with their experiences when using the 91 Express Lanes. Question 20 was presented in an open-ended manner, which allowed respondents to mention any reason 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 38 on the next page. For the reader's convenience, reasons that were offered by those who were generally satisfied are represented by green bars, whereas reasons offered by dissatisfied customers are represented by red bars.

Satisfied customers were most apt to cite time savings or faster travel (26%) as the primary reason they were satisfied with the 91 Express Lanes, followed by the ability to bypass traffic (17%) and the ease of use/convenience offered by the Lanes (8%). Those who were generally dissatisfied with their experiences when using the 91 Express Lanes, on the other hand, were most likely to mention the amount of traffic that exists on the toll road (11%) and the expense of using the Lanes (8%) as the reasons for their position. Table 2 displays the five most frequently mentioned responses to Question 20 in 2014 and 2011.

Question 20 *Is there a particular reason why you are <<satisfied/dissatisfied>>?*

FIGURE 38 REASONS FOR SATISFACTION & DISSATISFACTION

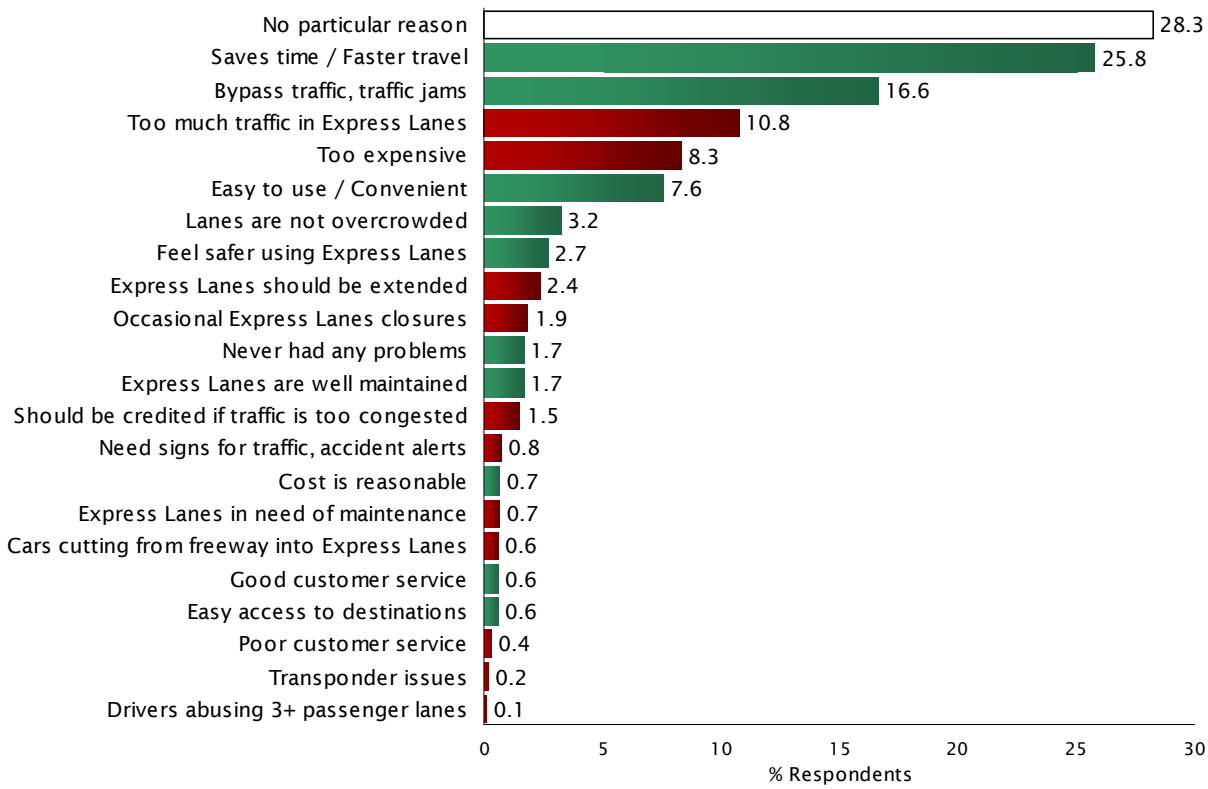


TABLE 2 REASONS FOR SATISFACTION & DISSATISFACTION BY STUDY YEAR

Study Year	
2014	2011
No particular reason	Saves time / Faster travel
Saves time / Faster travel	Bypass traffic, traffic jams
Bypass traffic, traffic jams	No particular reason
Too much traffic in Express Lanes	Too expensive
Too expensive	Easy to use / Convenient

SPECIFIC SERVICE STANDARDS Whereas Question 20 addressed the 91 Express Lanes *overall* performance, the next series of questions asked respondents to rate the importance of *specific* service standards, as well as how well the Lanes are meeting these standards.

For each standard of service, respondents were first asked to indicate how important the service standard is to them as a 91 Express Lanes customer using a scale of extremely important, very important, somewhat important or not at all important. Respondents were then asked the extent to which they agreed (or disagreed) that the 91 Express Lanes are meeting the standard. The order of the items was randomized for each respondent to avoid a systematic position bias.

Figure 39 presents the service standards in rank order of importance according to the proportion of respondents who rated the standard as *at least* very important. Overall, 91 Express Lanes' customers rated saving time when they use the Lanes as the most important service standard (96%), followed by that the Lanes is a fast way to travel (93%), that their billing statements are accurate (89%), and that the Lanes are well-maintained and in good condition (88%). At the other end of the spectrum, customers rated as comparatively less important the use of tolls to help improve the 91 Freeway (60%) and the reduction of wear and tear on their vehicle (60%).

Question 21 *Would you say it is extremely important, very important, somewhat important, or not at all important to you that: _____?*

FIGURE 39 IMPORTANCE OF 91 EXPRESS LANES ASPECTS

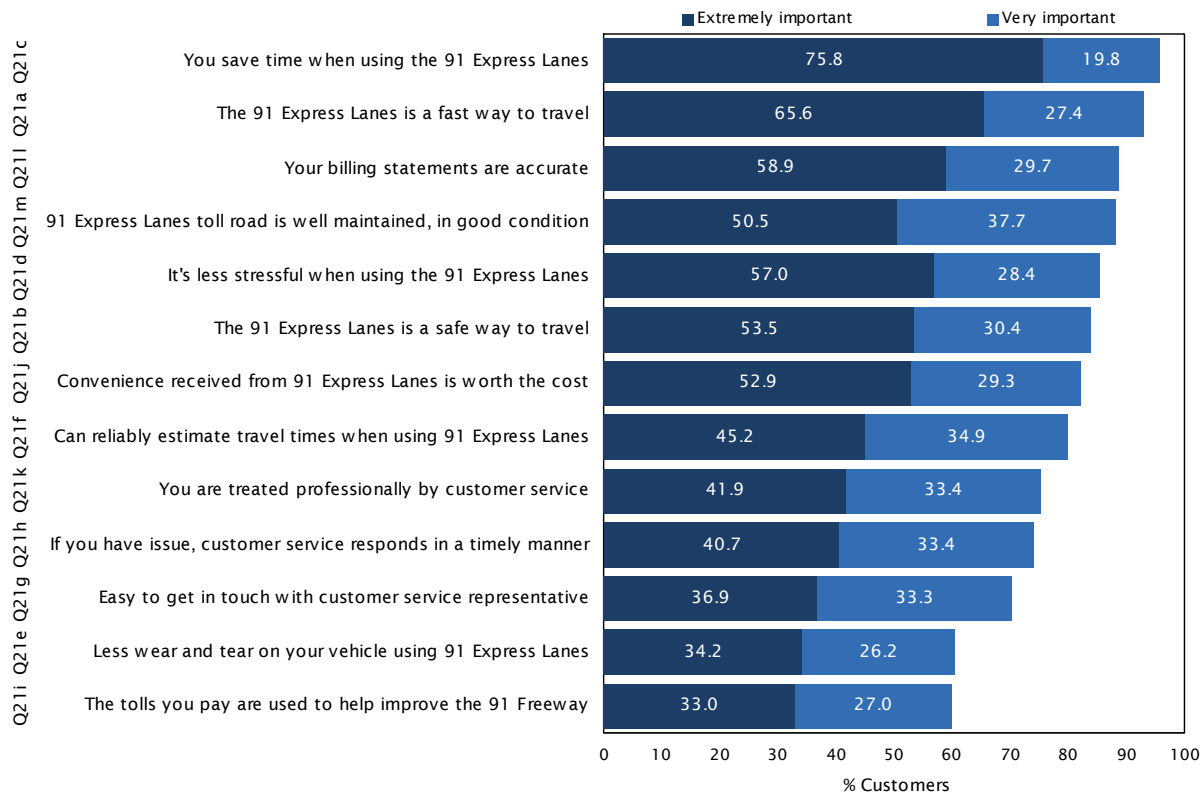


Table 3 displays the percentage of respondents in each study year (2014 and 2011) who rated each performance standard as being at least very important, as well as the difference between the study results in the far right column. When compared to 2011, there was a statistically significant decline in the percentage of customers who rated the following standards as at least very important: You create less wear and tear on your vehicle when using the 91 Express Lanes, You are treated professionally by 91 Express Lanes customer service, and It's less stressful when using the 91 Express Lanes.

TABLE 3 IMPORTANCE OF 91 EXPRESS LANES ASPECTS BY STUDY YEAR

	Study Year		Difference in Extremely + Very Important
	2014	2011	
Convenience received from 91 Express Lanes is worth the cost	82.2	81.2	+1.0
You save time when using the 91 Express Lanes	95.7	94.9	+0.8
Can reliably estimate travel times when using 91 Express Lanes	80.1	79.4	+0.6
The 91 Express Lanes is a fast way to travel	93.0	92.7	+0.3
Easy to get in touch with customer service representative	70.2	70.8	-0.6
The tolls you pay are used to help improve the 91 Freeway	59.9	60.6	-0.6
Your billing statements are accurate	88.6	89.6	-1.0
91 Express Lanes toll road is well maintained, in good condition	88.1	89.3	-1.2
If you have issue, customer service responds in a timely manner	74.1	76.0	-1.9
The 91 Express Lanes is a safe way to travel	83.9	86.4	-2.5
It's less stressful when using the 91 Express Lanes	85.4	88.3	-2.9†
You are treated professionally by customer service	75.3	79.0	-3.7†
Less wear and tear on your vehicle using 91 Express Lanes	60.4	66.1	-5.8†

† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

Turning to the satisfaction component, Figure 40 on the next page sorts the same list of service standards according to the proportion of respondents who agreed (strongly or somewhat) that the 91 Express Lanes is meeting the service standard. To allow for an apples-to-apples comparison of the ratings, only respondents who held an opinion (either agree or disagree) were included in the figure. Those who did not have an opinion were removed from this analysis. The percentage who held an opinion for each service standard is shown to the right of the service label in parentheses.

Overall, 91 Express Lanes customers expressed the highest levels of agreement that the Lanes allow them to save time (95%), followed by they are treated in a professional manner by 91 Express Lanes customer service (94%), their billing statements are accurate (94%), and the Lanes are a fast way to travel (94%). Although still very high levels of agreement, fewer customers agreed that the tolls they pay are used to help improve the 91 Freeway (76%), the convenience received from using the 91 Express Lanes is worth the cost (79%), and using the Lanes creates less wear and tear on their vehicle (84%).

Table 4 displays the percentage of respondents in each study year (2014 and 2011) who stated they agreed that the Lanes meet the indicated performance standard, as well as the difference between the study results in the far right column. When compared to 2011, there was a statistically significant increase in 2014 in the percentage of customers who agreed with the following statements: It is easy to get in touch with a 91 Express Lanes customer service representative when needed, and If you have an issue, 91 Express Lanes customer service responds in a timely manner. There was also a significant decline in the percentage of customers who agreed that the tolls they pay are used to help improve the State Route 91 Freeway.

Question 22 *Do you agree or disagree that:_____?*

FIGURE 40 AGREEMENT WITH 91 EXPRESS LANES ASPECTS

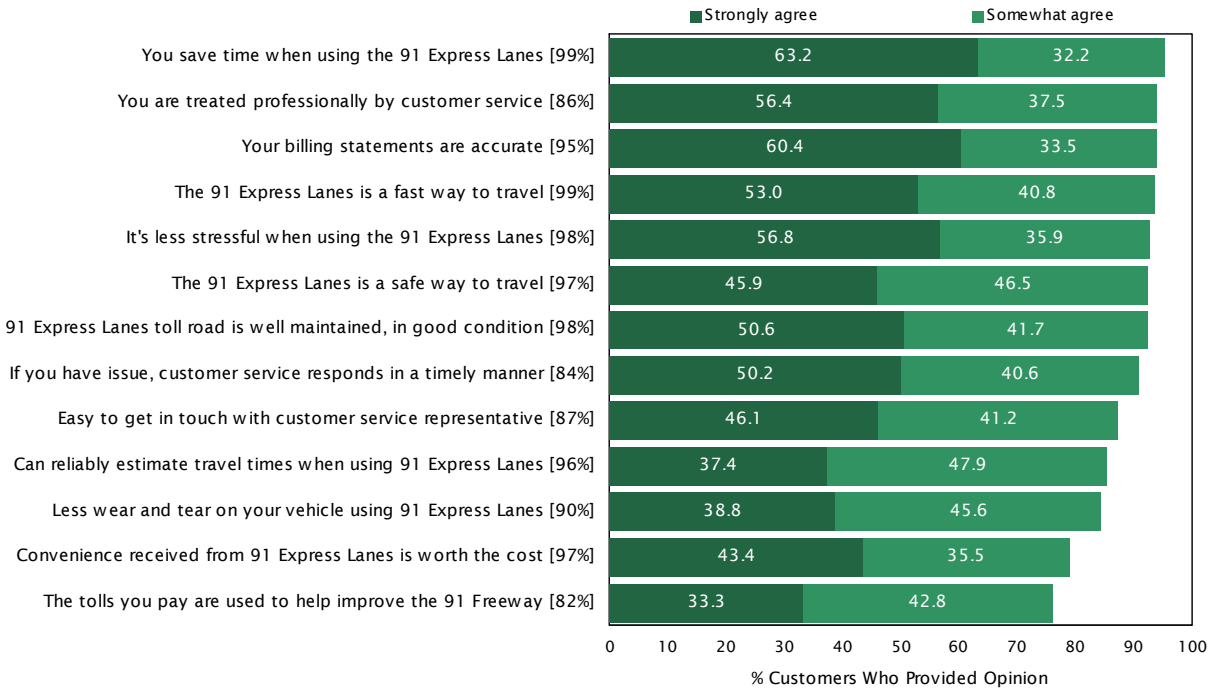


TABLE 4 AGREEMENT WITH 91 EXPRESS LANES ASPECTS BY STUDY YEAR

	Study Year		Difference in Agreement
	2014	2011	
Easy to get in touch with customer service representative	87.4	80.1	+7.3†
If you have issue, customer service responds in a timely manner	90.8	86.9	+3.9†
The 91 Express Lanes is a safe way to travel	92.3	91.5	+0.9
Convenience received from 91 Express Lanes is worth the cost	78.9	78.5	+0.4
You are treated professionally by customer service	94.0	93.7	+0.3
It's less stressful when using the 91 Express Lanes	92.7	93.2	-0.5
Can reliably estimate travel times when using 91 Express Lanes	85.3	86.3	-1.0
Your billing statements are accurate	93.9	95.2	-1.3
You save time when using the 91 Express Lanes	95.4	96.8	-1.4
Less wear and tear on your vehicle using 91 Express Lanes	84.4	86.2	-1.8
91 Express Lanes toll road is well maintained, in good condition	92.3	94.3	-2.0
The 91 Express Lanes is a fast way to travel	93.7	95.7	-2.0
The tolls you pay are used to help improve the 91 Freeway	76.1	81.0	-5.0†

† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

Performance Needs & Priorities

With a measure of the importance of a service standard to customers as well as a measure of customers' satisfaction with the 91 Express Lanes' performance in meeting the standards, True North is able to examine the relationship between these two dimensions and identify service areas where OCTA has the greatest opportunities to improve overall customer satisfaction—as well as identify for which service standards the Lanes are meeting, and even exceeding, the vast majority of customers' needs.

Rather than rely on sample *averages* to conduct this analysis, True North has developed and refined an *individualized* approach to identifying priorities that is built on the recognition that opinions will vary from customer to customer, and that understanding this variation is required for assessing how well the 91 Express Lanes is meeting the needs of its customers.[7] Table 5 presents a two-dimensional space, or grid, based on the importance and agreement scales. The horizontal axis corresponds to the four *importance* response options, whereas the vertical scale corresponds to the four *agreement* (satisfaction) response options. The 16 cells within the grid are grouped into one of six categories based on how well the Lanes is meeting, or not meeting, a customer's needs for a particular service standard. The six groups are as follows:

Exceeding Needs	The Lanes is exceeding a respondent's needs if a respondent is satisfied and the level of expressed agreement (satisfaction) is higher than the importance the respondent assigned to the standard.
Meeting Needs, Moderately	The Lanes is moderately meeting a respondent's needs if the respondent is satisfied and the level of agreement (satisfaction) is commensurate with the level of importance assigned to the standard.
Meeting Needs, Marginally	The Lanes is marginally meeting a respondent's needs if the respondent agrees that the Lanes is meeting a service standard, but their level of agreement is lower than the level of importance assigned to the standard.
Not Meeting Needs, Marginally	The Lanes is marginally *not* meeting a respondent's needs if the respondent disagrees somewhat that the standard is being met, but the service standard is also viewed as just somewhat or not at all important.
Not Meeting Needs, Moderately	The Lanes is moderately *not* meeting a respondent's needs if a) a respondent strongly disagrees that a standard is being met, but the service is viewed as just somewhat or not at all important, or b) a respondent somewhat disagrees that a standard is being met and the standard is viewed as very important.

7. Any tool that relies solely on the opinions of the average respondent will provide a limited and occasionally somewhat distorted picture of how well an agency or facility is performing. OCTA's customers are not comprised entirely of *average* customers—the group is comprised of unique individuals who will vary substantially in their opinions of the 91 Express Lanes performance in different service areas. Thus, although the arithmetic average of these individuals' opinions is a useful statistic, it does not capture the variation in opinions that occurs among customers—it is this variation that is critical for assessing how well the Lanes is meeting the needs of its customers. Thus, True North conducts the priority analysis at the individual respondent level, rather than at an aggregated level using the *average* of customer's opinions.

Not Meeting Needs, Severely

The Lanes is severely *not* meeting a respondent's needs if a) a respondent disagrees that a standard is being met and the service standard is viewed as extremely important, or b) a respondent is strongly disagrees that a standard is being met and the standard is viewed as very important.

TABLE 5 NEEDS & PRIORITY MATRIX

Agreement	Importance: Not at all important	Somewhat important	Very important	Extremely important
Strongly agree	Exceeding needs	Exceeding needs	Meeting needs, moderately	Meeting needs, moderately
Somewhat agree	Exceeding needs	Meeting needs, moderately	Meeting needs, marginally	Meeting needs, marginally
Somewhat disagree	Not meeting needs, marginally	Not meeting needs, marginally	Not meeting needs, moderately	Not meeting needs, severely
Strongly disagree	Not meeting needs, moderately	Not meeting needs, moderately	Not meeting needs, severely	Not meeting needs, severely

Using this framework, True North categorized respondents individually for each of the 13 service standards tested. For example, a respondent who indicated that saving time when using the 91 Express Lanes was somewhat important and they strongly agreed that they do save time when using the Lanes would be categorized in the *exceeding needs* group for this service standard. The same respondent may be grouped in the *marginally not meeting needs* group for another service standard if they somewhat disagreed that the Lanes were meeting the service standard, but the standard was viewed as only somewhat important.

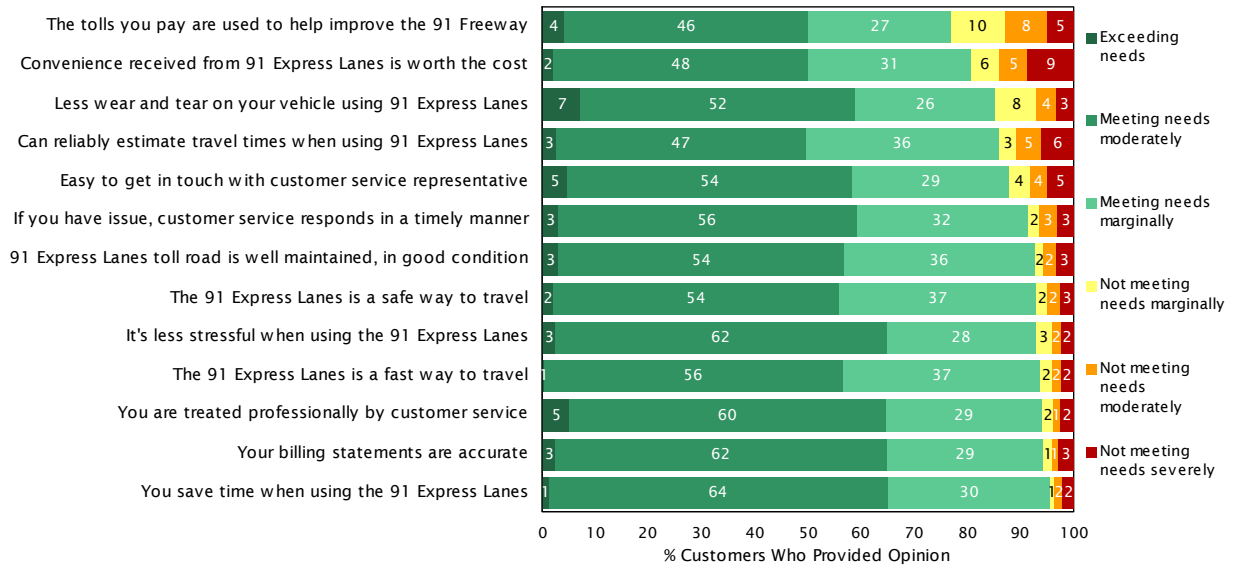
Figure 41 on the next page presents each of the 13 service standards, along with the percentage of respondents grouped into each of the six possible categories. For ease of interpretation, the color-coding in Figure 41 is consistent with that presented in Table 5. For example, for the service standard *The tolls you pay are used to help improve the 91 Freeway*, the Lanes is exceeding the needs of 4% of customers, moderately meeting the needs of 46% of customers, marginally meeting the needs of 27% of customers, marginally not meeting the needs of 10% of customers, moderately not meeting the needs of 8% of customers, and severely not meeting the needs of 5% of customers.

The most striking pattern in the figure is that the 91 Express Lanes is meeting the expectations of at least 77% of customers for *every* service standard tested, and at least 92% of customers for the majority of standards tested.

Operating from the management philosophy that—all other things being equal—OCTA should focus on improving service standards that have the highest percentage of customers for which the Lanes is currently *not* meeting their needs, the standards have been sorted by order of priority. Thus, increasing the perceived use of tolls to improve the 91 Freeway is the top priority, followed by improving the relationship between the perceived convenience and cost of the Lanes,

improving customers' understanding that the Lanes creates less wear and tear on their vehicle, and improving the reliability of travel times when using the Lanes.

FIGURE 41 CUSTOMER SERVICE NEEDS



PERCEIVED TIME-SAVINGS WHEN USING 91 EXPRESS LANES

Given the importance that customers assign to time-savings when using the 91 Express Lanes, the survey sought to gauge the *amount* of time that customers perceive they are saving when they use the Lanes. Question 23 inquired about the time they save for a typical one-way trip during morning rush hour, whereas Question 24 referenced the afternoon rush hour period.

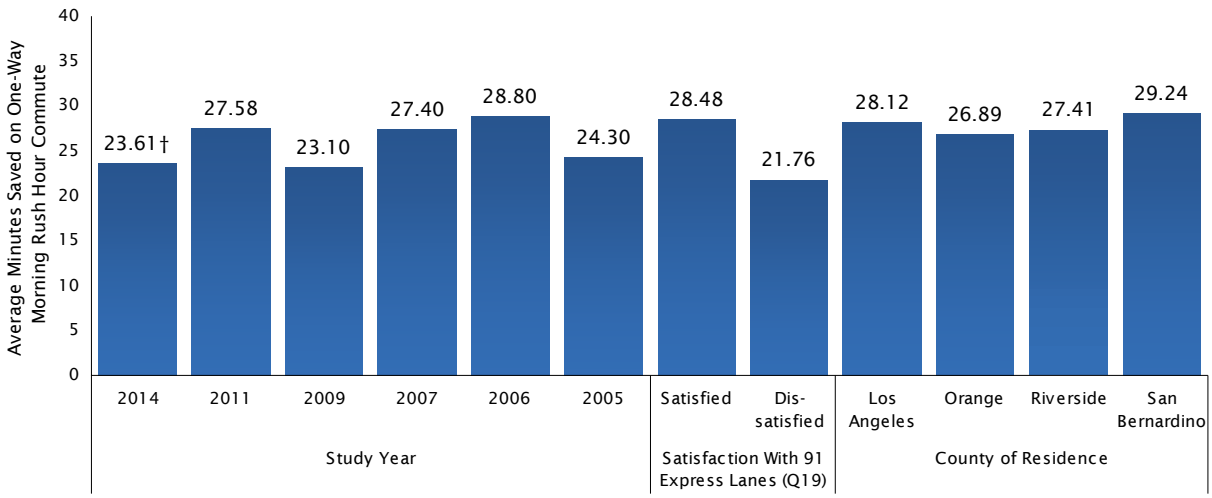
Question 23 *About how much time do you think you save for a typical one-way trip during the morning rush hour when you travel on the 91 Express Lanes?*

FIGURE 42 TIME SAVED IN A TYPICAL ONE-WAY TRIP DURING MORNING RUSH HOUR BY STUDY YEAR

Among all customers surveyed, 35% indicated that they do not use the 91 Express Lanes during the morning rush hour period, and an additional 8% indicated they were not sure about their time-savings. Among the remaining customers, 12% indicated they save less than 15 minutes, 20% reported a perceived time savings of 15 to 24 minutes, 16% felt they save between 25 and 34 minutes, whereas 9% perceived that they save 35 minutes or more per one-way trip.

Among all customers who reported a perceived time savings, the average perceived time savings when using the 91 Express Lanes during morning rush hour was 23.61 minutes in 2014, which is significantly lower than the 27.58 minutes recorded in 2011. Figure 43 also shows how the perceived time savings varied by year, whether customers were generally satisfied or dissatisfied with their experiences using the 91 Express Lanes, and county of residence. It is noteworthy that customers who were generally dissatisfied with the 91 Express Lanes perceived a substantially smaller time savings when compared to customers who were generally satisfied.

FIGURE 43 AVERAGE TIME SAVE IN A TYPICAL ONE-WAY TRIP DURING MORNING RUSH HOUR BY STUDY YEAR, SATISFACTION WITH 91 EXPRESS LANES & COUNTY OF RESIDENCE



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

With respect to the afternoon rush hour period, customers perceived that their time savings when using the 91 Express Lanes was even greater. Among all customers surveyed, 15% indicated that they do not use the 91 Express Lanes during the morning rush hour period, and an additional 11% indicated they were not sure about their time-savings. Among the remaining customers, 8% indicated they save less than 15 minutes, 25% reported a perceived time savings of 15 to 24 minutes, 21% felt they save between 25 and 34 minutes, whereas 20% perceived that they save 35 minutes or more per one-way trip.

Among all customers who reported a perceived time savings in 2014, the average perceived time savings when using the 91 Express Lanes during the afternoon rush hour was 29.36 minutes, significantly shorter than the 34.24 minutes reported in 2011. Once again, customers who were generally dissatisfied with the 91 Express Lanes perceived a substantially smaller time savings when compared to customers who were generally satisfied (see Figure 45).

Question 24 *About how much time do you think you save for a typical one-way trip during the afternoon rush hour when you travel on the 91 Express Lanes?*

FIGURE 44 TIME SAVE ON TYPICAL ONE WAY DURING AFTERNOON RUSH HOUR BY STUDY YEAR

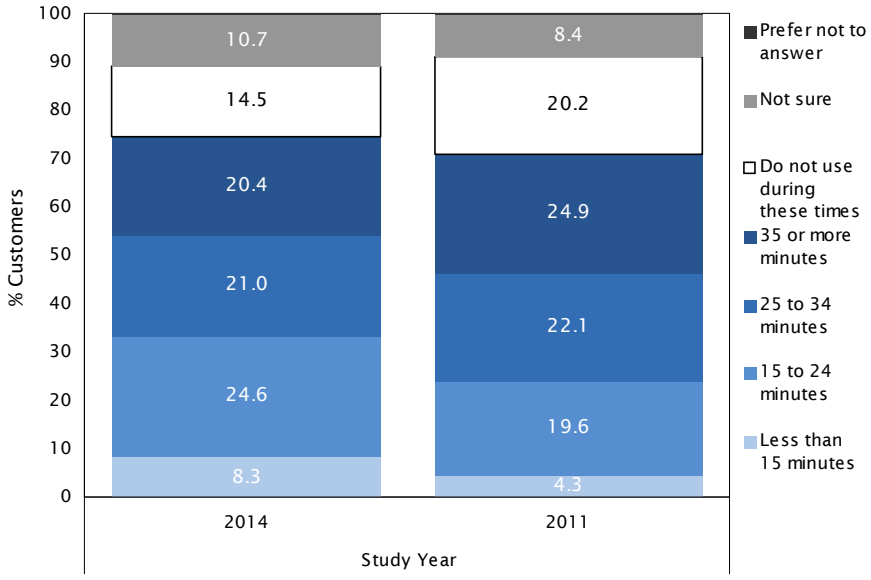
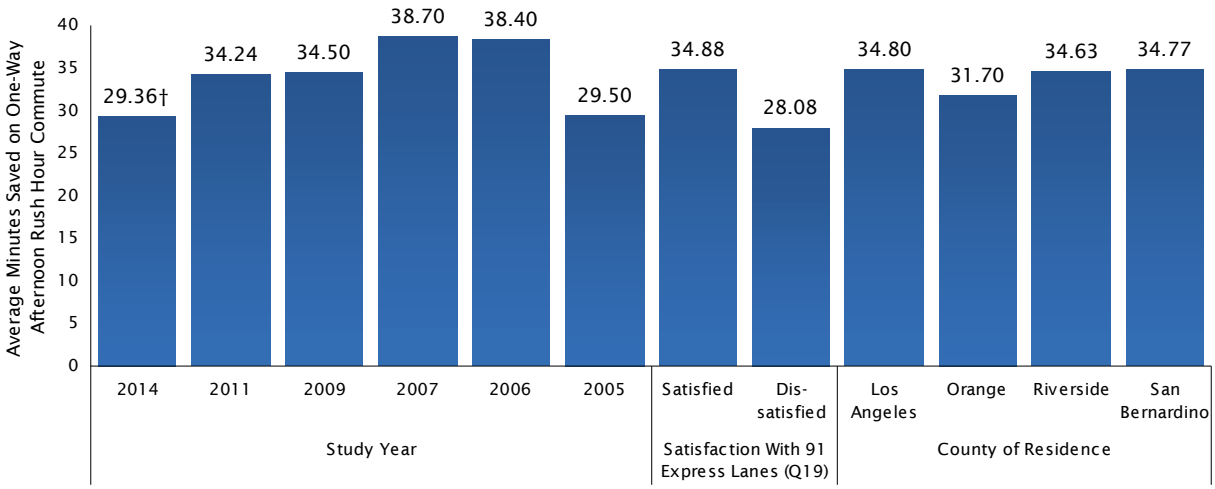


FIGURE 45 AVERAGE TIME SAVE ON TYPICAL ONE-WAY DURING AFTERNOON RUSH HOUR BY STUDY YEAR, SATISFACTION WITH 91 EXPRESS LANES & COUNTY OF RESIDENCE



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

Improvements to 91 Express Lanes

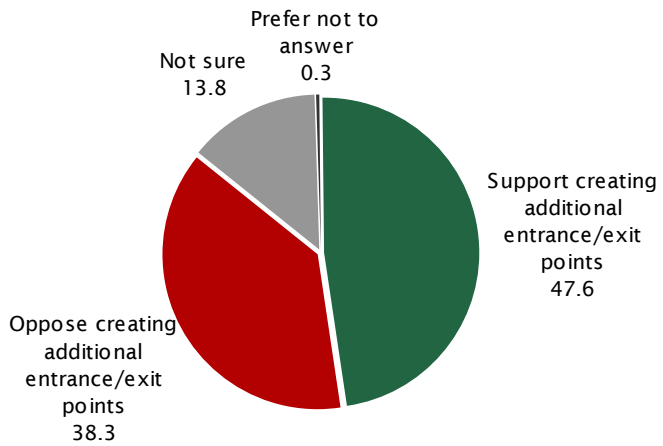
The prior two sections of this report focused on profiling customers' use of the 91 Express Lanes as well as how well their needs are currently being met by the Lanes across a variety of performance dimensions. Beginning with Question 25, however, the survey became more *future* oriented, addressing potential improvements and policy changes related to the 91 Express Lanes.

ADDITIONAL ACCESS POINTS

The opening question in this series asked customers 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.

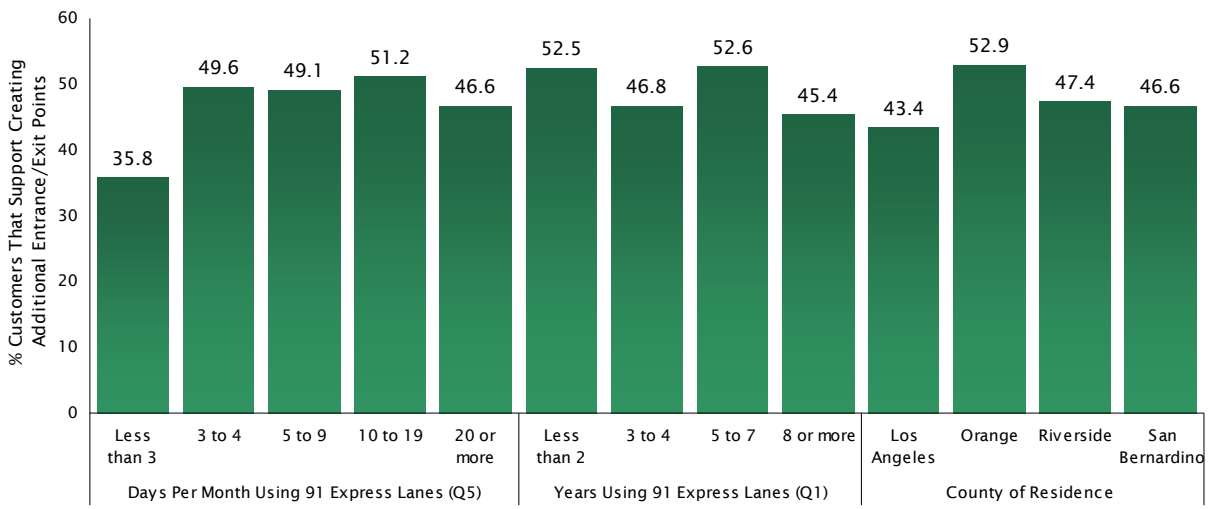
Question 25 *Do you support or oppose creating more points at which you can get in/out of the 91 Express Lanes in Orange County?*

FIGURE 46 SUPPORT FOR CREATING POINTS IN AND OUT OF 91 EXPRESS LANES



As shown in Figure 46, opinions were divided on this issue. Approximately half (48%) of customers supported creating additional entrance/exit points for the Lanes in Orange County, whereas 38% opposed creating more access points and 14% were unsure or preferred not to share their opinion. Figure 47 displays how support for creating additional access points to the Lanes in Orange County varied by frequency of using the Lanes, years using the Lanes, and county of residence.

FIGURE 47 SUPPORT FOR CREATING POINTS IN AND OUT OF 91 EXPRESS LANES BY DAYS PER MONTH USING 91 EXPRESS LANES, YEARS USING 91 EXPRESS LANES & COUNTY OF RESIDENCE

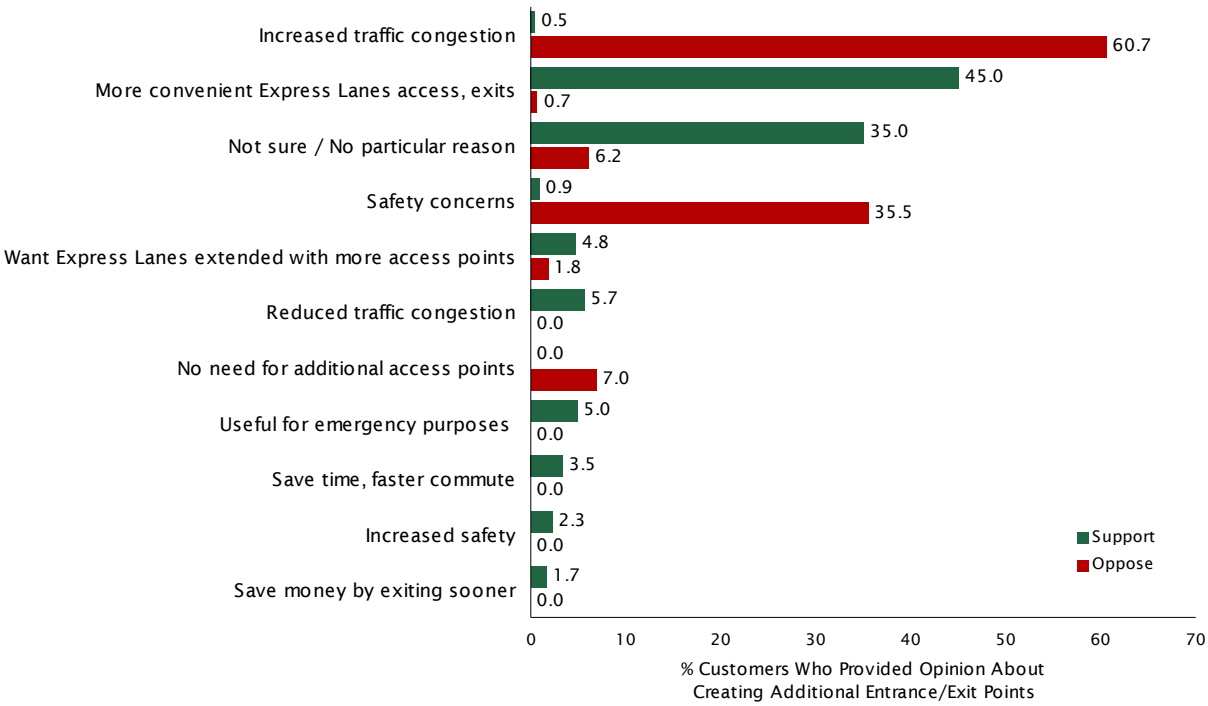


Customers who indicated that they supported or opposed creating more access points for the 91 Express Lanes were next asked if there was a particular reason for their position. Question 26 was posed in an open-ended manner, which allowed customers to explain their reasoning in their own words without being prompted or constrained by a particular list of options. True North later reviewed the verbatim responses and grouped them into the categories shown in Figure 48. Reasons that were offered for opposing additional access points are represented by red bars, whereas reasons for supporting additional access points are denoted by green bars.

Customers who supported creating additional access points for the Lanes in Orange County cited additional convenience as their primary reasoning (45%), whereas opponents cited concerns about increased traffic congestion (61%) and safety issues (36%) as their main reasons for opposing additional access points.

Question 26 *Is there a particular reason why you <support/oppose> creating more access points for the 91 Express Lanes in Orange County?*

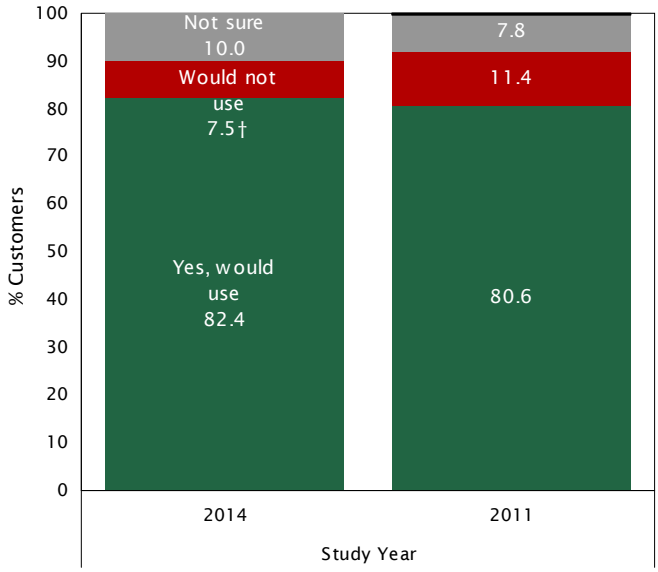
FIGURE 48 REASONS FOR SUPPORT, OPPOSE CREATING MORE ACCESS POINT FOR 91 EXPRESS LANES



EXTENSION OF 91 EXPRESS LANES One of the improvements that OCTA is in the process of making to Orange County's transportation system is extending the 91 Express Lanes east to connect with Interstate 15. This survey presented an opportunity to ask existing customers whether they would use this new section of the Lanes once it is completed. Figure 49 demonstrates that the vast majority of existing customers (82%) anticipate that they would use the new section of the Lanes, whereas 8% expected that they would not use the new section, and 10% were unsure or unwilling to share their opinion.

Question 27 *Construction has begun to extend the 91 Express Lanes east to Interstate 15. Once completed, would you use this new section of the 91 Express Lanes?*

FIGURE 49 WOULD USE NEW SECTION OF 91 EXPRESS LANES BY STUDY YEAR



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

For the interested reader, Figures 50 and 51 show how expected use of the extended section of the 91 Express Lanes varied by monthly use of the Lanes, the number of trips customers currently make during rush hour periods, trip purposes, overall satisfaction with the Lanes, and county of residence.

FIGURE 50 WOULD USE NEW SECTION OF 91 EXPRESS LANES BY DAYS PER MONTH USING 91 EXPRESS LANES & TRIPS ON 91 EXPRESS LANES, MON TO FRI RUSH HOUR

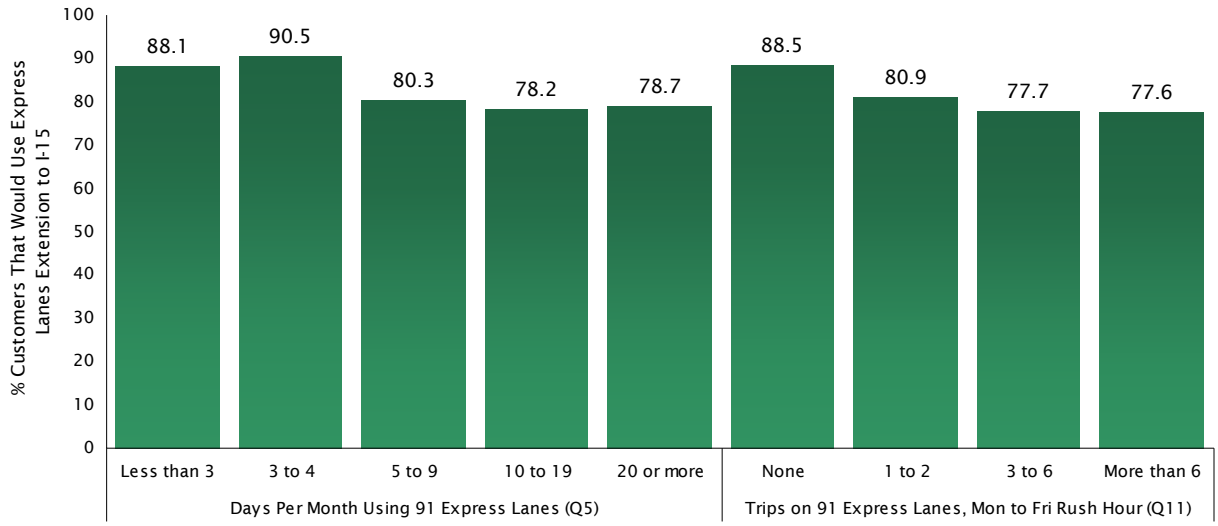
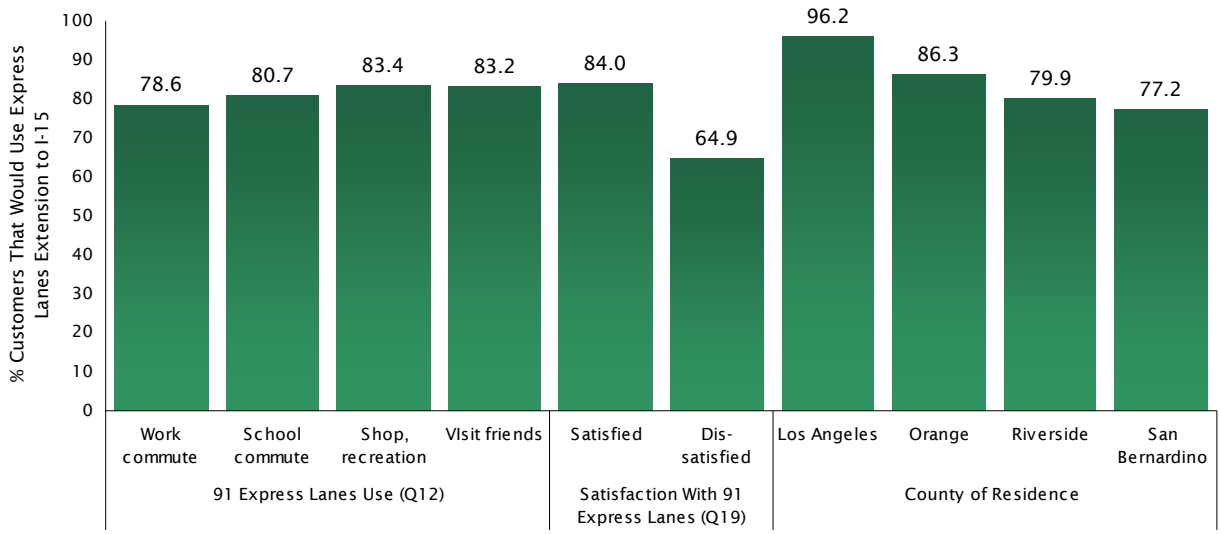


FIGURE 51 WOULD USE NEW SECTION OF 91 EXPRESS LANES BY 91 EXPRESS LANES USE, SATISFACTION WITH 91 EXPRESS LANES & COUNTY OF RESIDENCE



Customers who anticipated using the extended section of the 91 Express Lanes in the future were also asked if they expected to use the new section when traveling both directions, or just east or west. Figure 52 combines the answers to Questions 27 and 28 to profile the expected use of the new section of the Lanes among *all* customers. Overall, 73% of existing customers anticipated using the extended section of the 91 Express Lanes in both directions, 6% expected to the use the section only when traveling east, 2% anticipated using the new section only when traveling west, whereas 18% did not expect to use the extension and 1% were unsure. Figures 53 and 54 on the next page show how anticipated use of the 91 Express Lanes extension varied across key customer subgroups.

Question 28 *Would you use it when traveling both directions, or just east or west?*

FIGURE 52 USE OF NEW SECTION OF 91 EXPRESS LANES

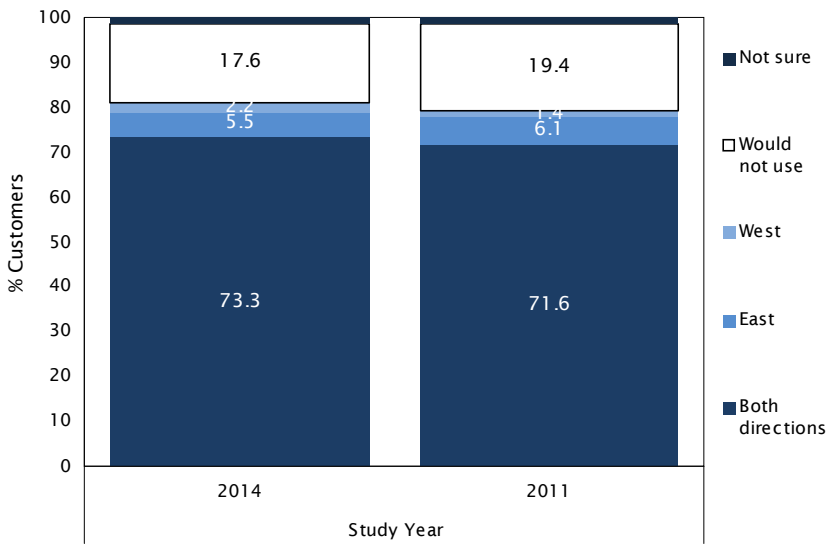


FIGURE 53 USE OF NEW SECTION OF 91 EXPRESS LANES BY DAYS PER MONTH USING 91 EXPRESS LANES & TRIPS ON 91 EXPRESS LANES, MON TO FRI RUSH HOUR

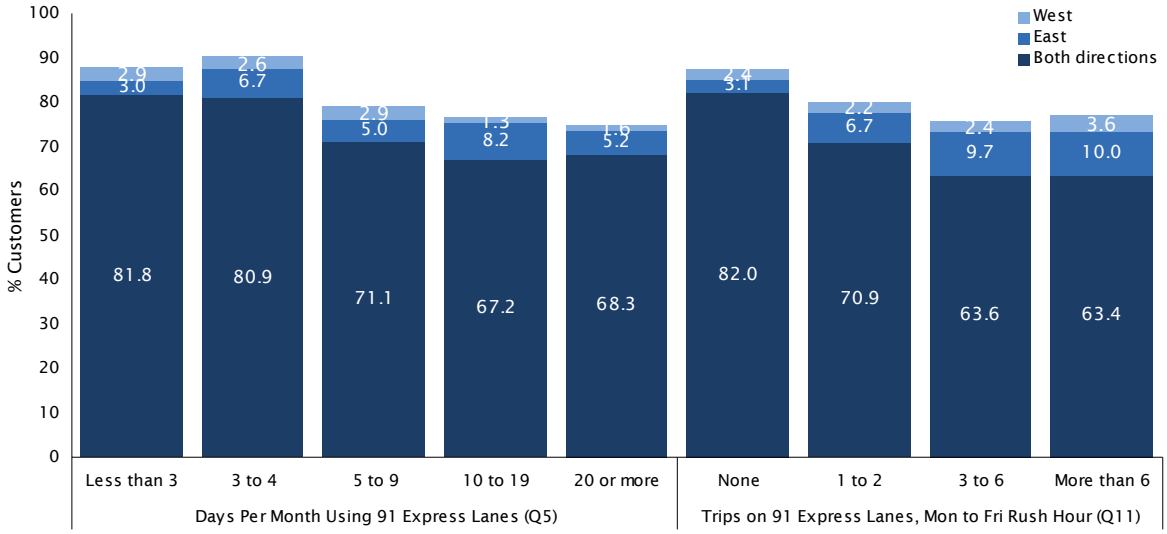
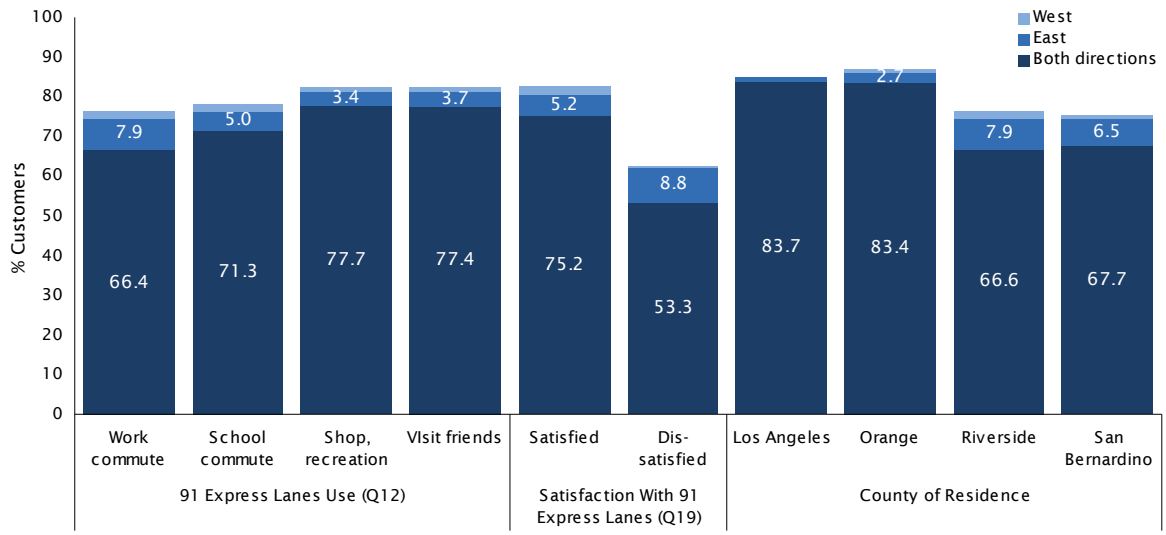


FIGURE 54 USE OF NEW SECTION OF 91 EXPRESS LANES BY 91 EXPRESS LANES USE, SATISFACTION WITH 91 EXPRESS LANES & COUNTY OF RESIDENCE



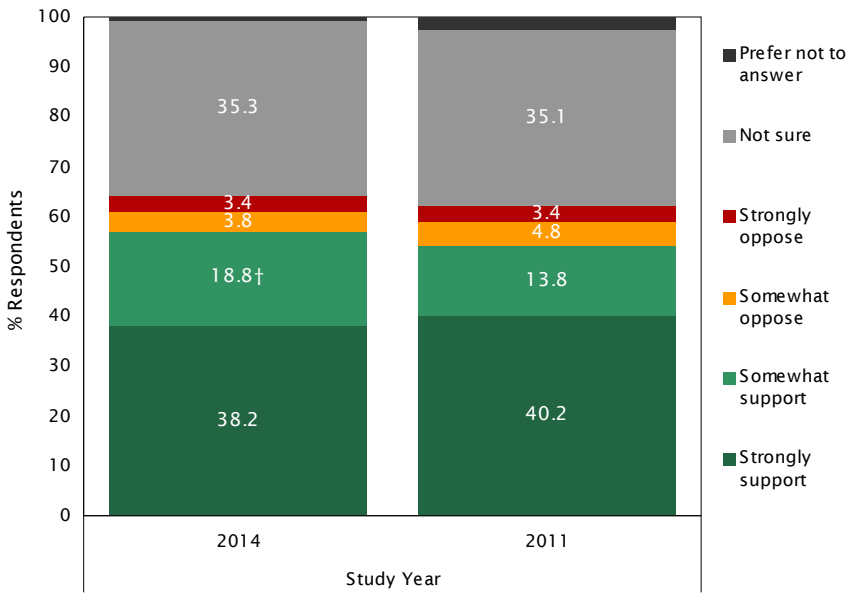
SUPPORT FOR 91 EXPRESS LANES - 241 DIRECT CONNECT

In addition to extending the 91 Express Lanes, OCTA is also considering a direct connection between the 91 Express Lanes and the 241 toll road. After briefly describing the potential project, Question 29 of the survey asked respondents whether they support or oppose plans to build this connection, or if they have no opinion either way.

Just over one-third (35%) of 91 Express Lanes customers indicated that they did not have an opinion about the proposed direct connection between the Lanes and the 241 toll road (see Figure 55 on the next page). Among those with an opinion, however, the results were decidedly positive, with supporters outnumbering opponents more than eight to one (8:1). Overall, 57% of customers indicated that they support the proposed direct connection between the 91 Express Lanes and the 241 toll road, compared to just 7% who opposed the project.

Question 29 *There is a study underway for a future direct connection between the 91 Express Lanes and the 241 toll road. Do you support or oppose building this connection, or do you have no opinion either way?*

FIGURE 55 SUPPORT OF CONNECTION TO 241 TOLL ROAD BY STUDY YEAR



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

The strong levels of support for building the 91 Express Lanes-241 toll road direct connection found among customers overall were also found within *all* of the key customer subgroups. As shown in Figures 56 and 57, there was not a single customer subgroup for which supporters of the project outnumbered opponents by less than 3 to 1.

FIGURE 56 SUPPORT OF CONNECTION TO 241 TOLL ROAD BY YEARS USING 91 EXPRESS LANES & DAYS PER MONTH USING 91 EXPRESS LANES

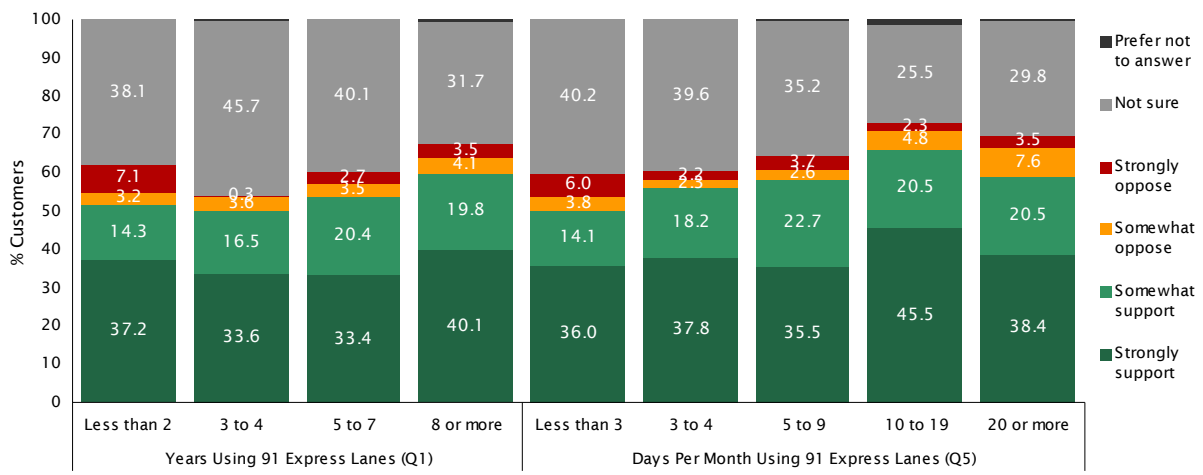
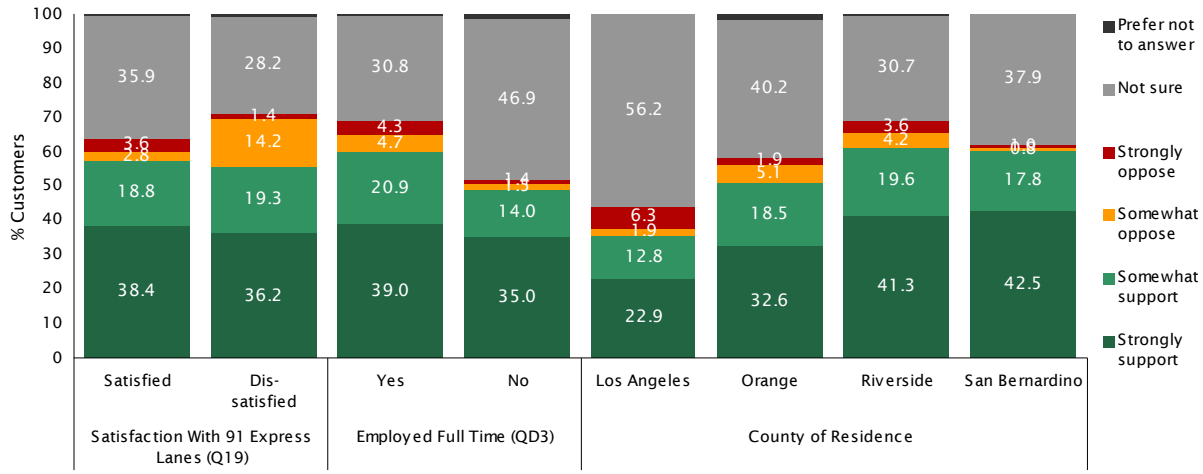


FIGURE 57 SUPPORT OF CONNECTION TO 241 TOLL ROAD BY SATISFACTION WITH 91 EXPRESS LANES, EMPLOYED FULL TIME & COUNTY OF RESIDENCE



TOLL CHARGE STRATEGY One of the challenges in establishing a toll charge for the 91 Express Lanes is that the price will dictate, to some degree, the level of use. Set the fee too high and customers will use the Lanes less frequently, possibly lowering the overall revenues to OCTA and leaving unused capacity. On the other hand, if the fee is set too low, too many customers may choose to use the 91 Express Lanes and create congestion, in which case customers will not receive the key benefits they seek (saving time/avoiding traffic) when they decide to use the Lanes.

Although OCTA realizes the relationship between the amount of the toll charge, use of the Lanes, and the state of congestion, the survey presented an opportunity to gauge customers' opinions on this matter. Question 30 first informed customers that the toll charge on the 91 Express Lanes is set so that traffic is free flowing—and that if the fee is set too low, it will lead to traffic congestion. All customers were next asked if they favor this policy of maintaining free flow driving conditions in the Express Lanes, even it if means paying a higher toll at times?

Overall, a majority (55%) of 91 Express Lanes customers indicated that they support the policy of setting the toll charge high enough to keep traffic free flowing, whereas 30% opposed this policy and 15% were unsure or unwilling to share their opinion (see Figure 58). Although most sub-groups clearly supported the policy of setting the toll charge high enough to keep traffic free flowing, it is worth noting that support tended to diminish as frequency of use increased. Moreover, customers who were generally *dissatisfied* with their experiences using the 91 Express Lanes were the one subgroup that opposed the policy (see Figures 59 & 60).

Question 30 *The toll charge on the 91 Express Lanes is set so that traffic is free flowing. If the toll charge is set too low, it will lead to traffic congestion. Do you favor this policy of maintaining free flow driving conditions in the Express Lanes, even if it means paying a higher toll at times?*

FIGURE 58 OPINION OF VARIABLE TOLL BY STUDY YEAR

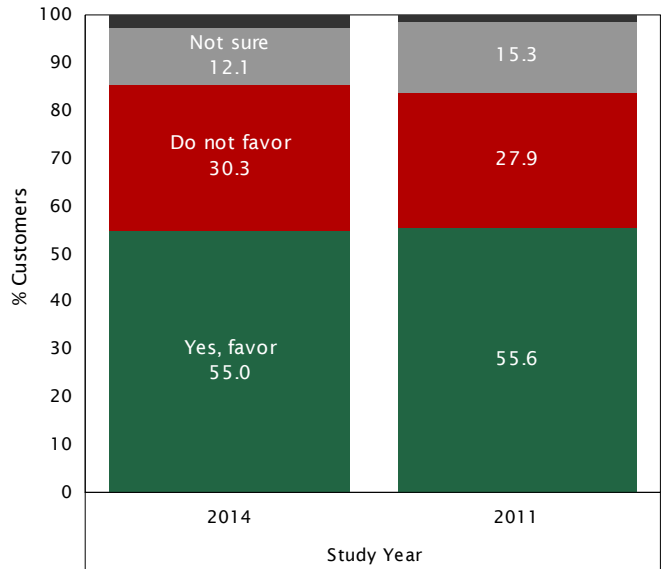


FIGURE 59 OPINION OF VARIABLE TOLL BY YEARS USING 91 EXPRESS LANES & DAYS PER MONTH USING 91 EXPRESS LANES

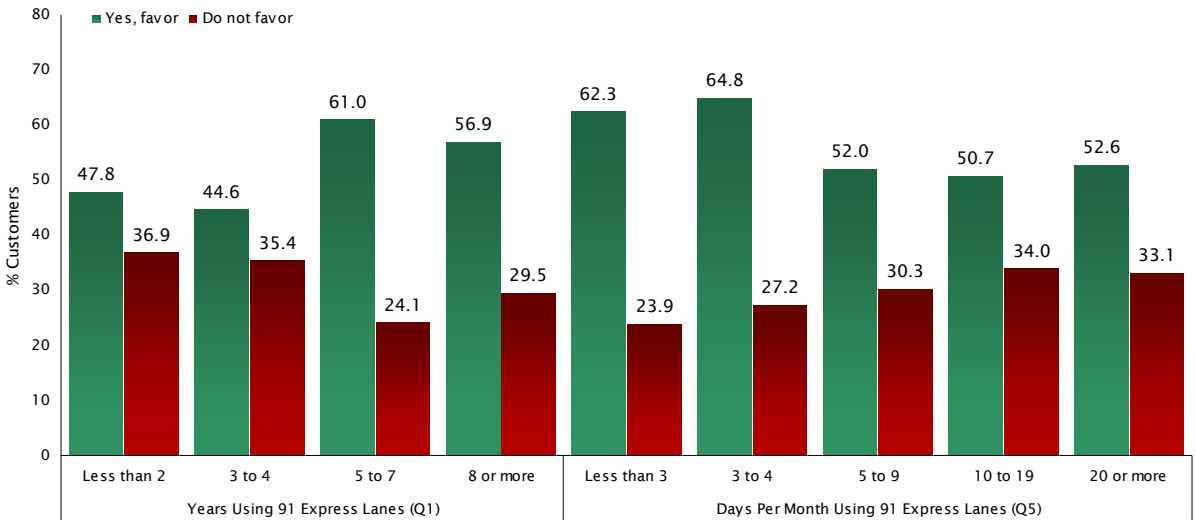
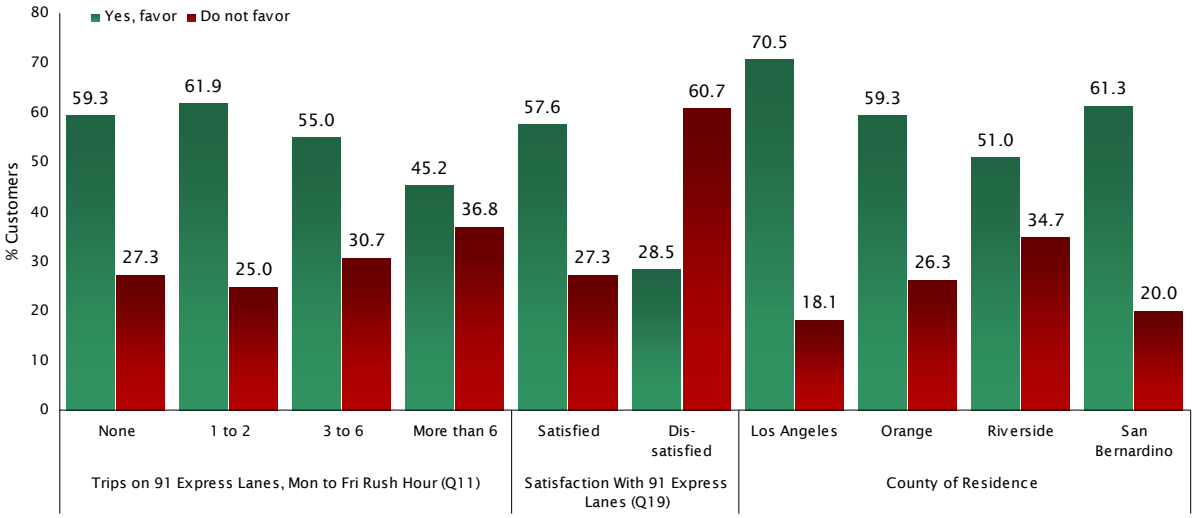


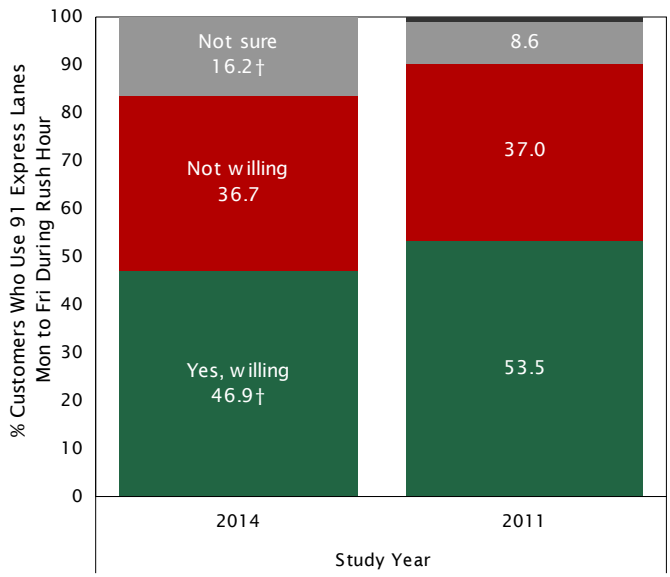
FIGURE 60 OPINION OF VARIABLE TOLL BY TRIPS ON 91 EXPRESS LANES, MON TO FRI RUSH HOUR, SATISFACTION WITH 91 EXPRESS LANES & COUNTY OF RESIDENCE



IMPACT OF TOLL CHARGE ON TRAVEL TIME The next question in this series asked customers whether they would alter their daily travel schedule to avoid rush hour periods if the toll for using the 91 Express Lanes was lower just before and after rush hour. As shown in Figure 61, nearly half (47%) of customers in 2014 stated that they would alter their travel schedule to realize the savings, whereas 37% indicated that they would not alter their travel behavior and 16% were unsure or unwilling to share their opinion. When compared to 2011, there was a statistically significant decline in the proportion of customers who were willing to alter their travel schedule to realize cost savings.

Question 31 *Would you be willing to alter your daily travel schedule to avoid rush hour if the toll for using the 91 Express Lanes was lower just before and after rush hour?*

FIGURE 61 WILLING TO AVOID RUSH HOUR TO PAY LOWER TOLL BY STUDY YEAR



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

A willingness to change one's travel schedule bore a strong relationship to certain customer characteristics, including the number of trips they typically make during rush hour, their overall level of satisfaction with the 91 Express Lanes, and county of residence (see Figures 62 & 63). When compared to their respective counterparts, customers who currently make fewer rush hour trips on the 91 Express Lanes per month (less than 6), customers who were dissatisfied with their overall experiences when using the Lanes, and residents of San Bernardino County were the most likely to anticipate changing their travel schedule in response to this tolling strategy.

FIGURE 62 WILLING TO AVOID RUSH HOUR TO PAY LOWER TOLL BY YEARS USING 91 EXPRESS LANES & TRIPS ON 91 EXPRESS LANES, MON TO FRI RUSH HOUR

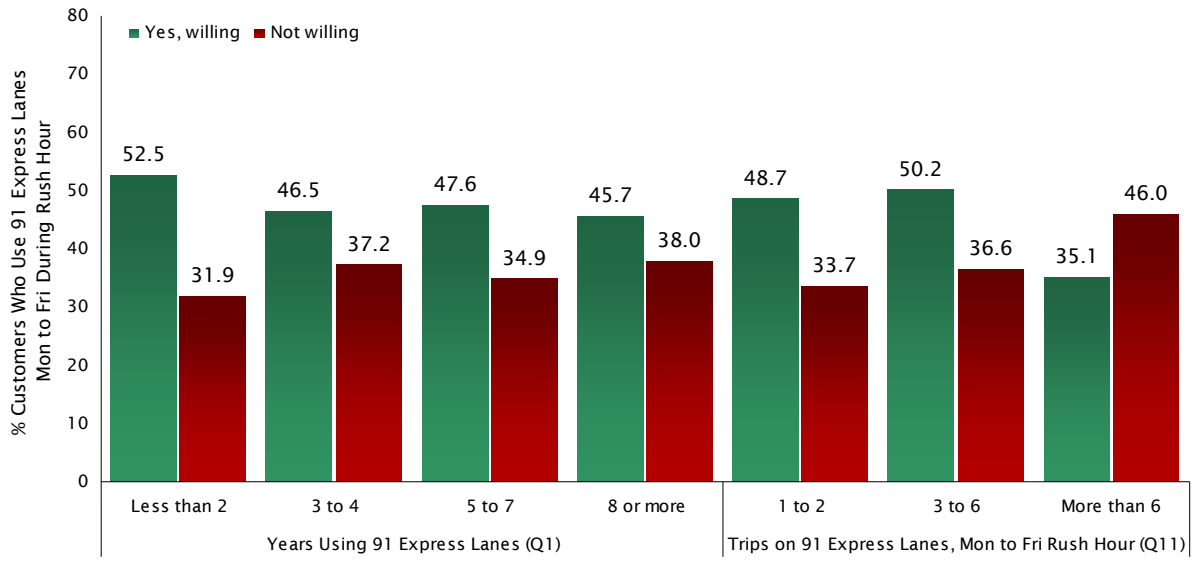
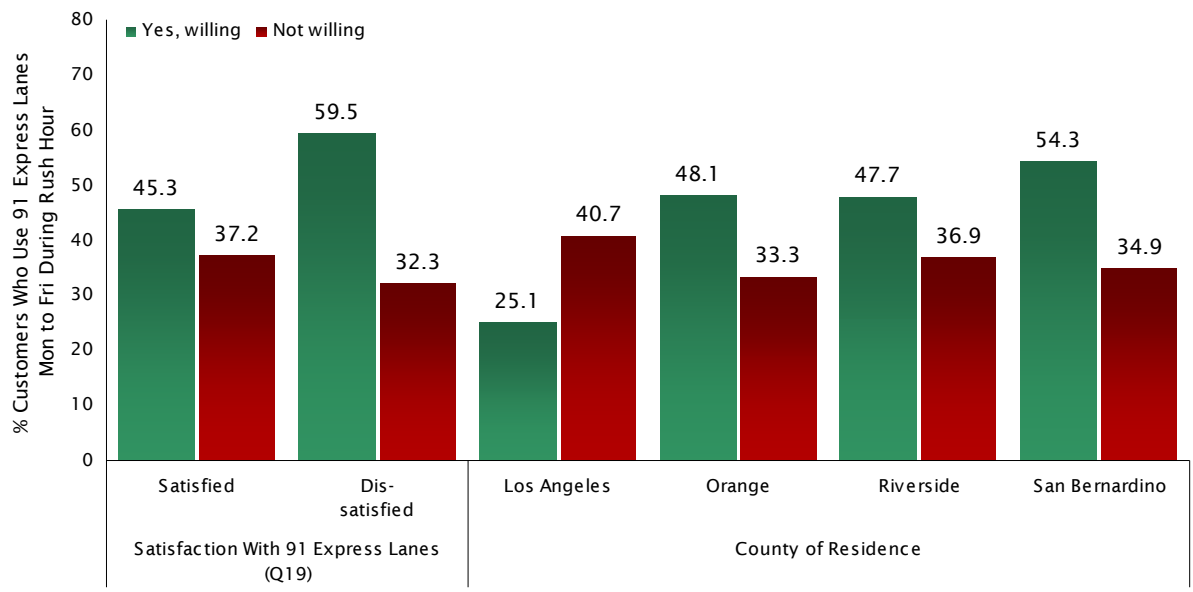


FIGURE 63 WILLING TO AVOID RUSH HOUR TO PAY LOWER TOLL BY SATISFACTION WITH 91 EXPRESS LANES & COUNTY OF RESIDENCE



TIME-OF-DAY VS. DYNAMIC PRICING Toll charges for the 91 Express Lanes are currently based on the day, time, and direction of travel. Using this *time-of-day pricing* methodology, times typically associated with higher congestion levels are tolled the highest, whereas times that generally exhibit lower congestion levels are tolled at a lower rate. Toll charges are evaluated quarterly.

In contrast, an alternative approach to setting tolls is known as *dynamic pricing*, where toll charges are based on real-time traffic conditions and can change every few minutes, depending on the level of congestion in the toll lanes. Toll charges will be higher when there is more traffic and lower when there is less traffic.

After describing the alternative tolling methodologies, Question 32 simply asked customers to identify which approach they preferred for the 91 Express Lanes. As shown in Figure 64, customers were rather evenly split with 45% preferring time-of-day pricing, 42% preferring a switch to dynamic pricing, and 13% unsure or unwilling to share their opinion. The close split in tolling methodology preferences among all customers was generally exhibited at the subgroup level as well, with the exception of dissatisfied customers and high income ($200,000 annually or more) customers who strongly preferred a switch to dynamic pricing (see Figures 65 & 66).

Question 32 *Toll charges for the 91 Express Lanes are based on the day, time, and direction of travel. Times with higher congestion levels are tolled the highest; times with lower congestion levels are tolled at a lower rate. Toll charges are evaluated quarterly and adjusted up or down only when traffic volumes in the toll lanes meet certain trigger points. When and if an adjustment is made, those toll charges stay in effect for six months. This method is known as time of day pricing. Dynamic pricing is a different way of determining toll prices. With dynamic pricing, toll charges are based on real-time traffic conditions and can change every few minutes, depending on the level of congestion in the toll lanes. Toll charges will be higher when there is more traffic and lower when there is less traffic.Which of these options do you prefer?*

FIGURE 64 OPINION OF PREFERENCE FOR TOLL CHARGES

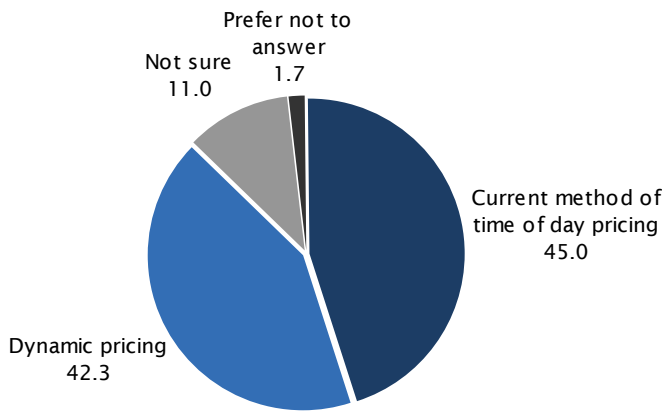


FIGURE 65 OPINION OF PREFERENCE FOR TOLL CHANGES BY YEARS USING 91 EXPRESS LANES, TRIPS ON 91 EXPRESS LANES, MON TO FRI RUSH HOUR & SATISFACTION WITH 91 EXPRESS LANES

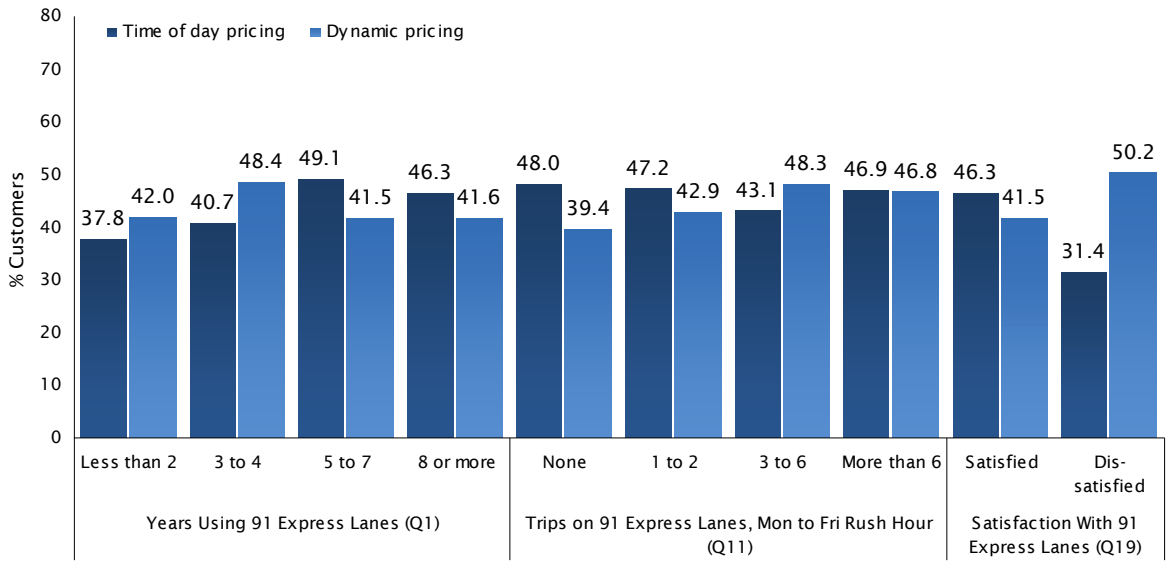
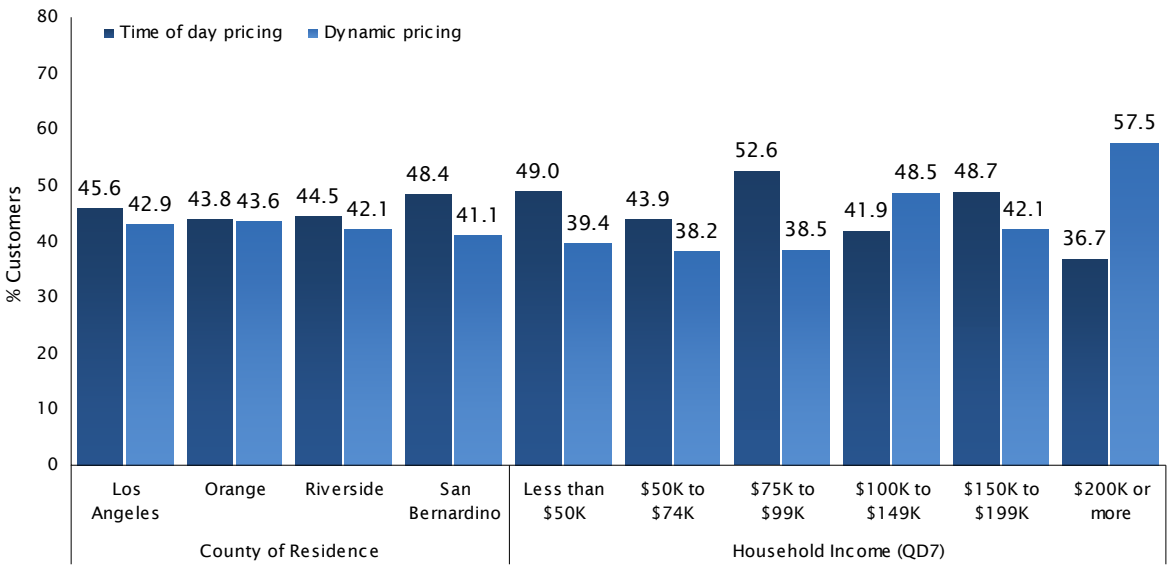


FIGURE 66 OPINION OF PREFERENCE FOR TOLL CHANGES BY COUNTY OF RESIDENCE & HOUSEHOLD INCOME



OCTA and Communication

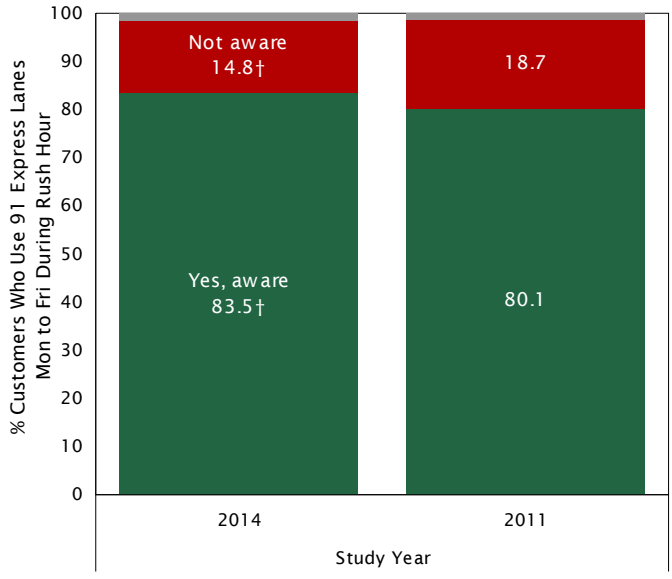
Among the key goals of this survey were to profile 91 Express Lanes customers' awareness and opinions of OCTA's management of the Lanes, identify which OCTA communications they rely on for information about the Lanes, as well as reveal their preferences with respect to future OCTA communications. The results to questions in these topic areas are presented in this section of the report.

WERE YOU AWARE THAT OCTA MANAGES THE 91 EXPRESS LANES?

The opening question in this series asked all customers whether, prior to taking the survey, they were aware that the 91 Express Lanes are owned and managed by OCTA. Overall, 84% of customers indicated that they were aware of this fact, whereas 15% stated that they did not know the Lanes were managed by OCTA, and 2% were unsure. When compared to 2011, customers exhibited a statistically significant increase in awareness of OCTA's role in managing the Lanes.

Question 33 *Prior to taking this survey, were you aware that the 91 Express Lanes are owned and managed by the Orange County Transportation Authority - also known as OCTA?*

Figure 67 Aware of OCTA Owns & Manages 91 Express Lanes by Study Year



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

Awareness of OCTA's management role with respect to the 91 Express Lanes was also widespread. As shown in Figures 68 and 69 on the next page, at least two-thirds of customers in every identified subgroup indicated that they were aware that OCTA manages the 91 Express Lanes prior to taking the survey.

FIGURE 68 AWARE OF OCTA OWNS & MANAGES 91 EXPRESS LANES BY YEARS USING 91 EXPRESS LANES & DAYS PER MONTH USING 91 EXPRESS LANES

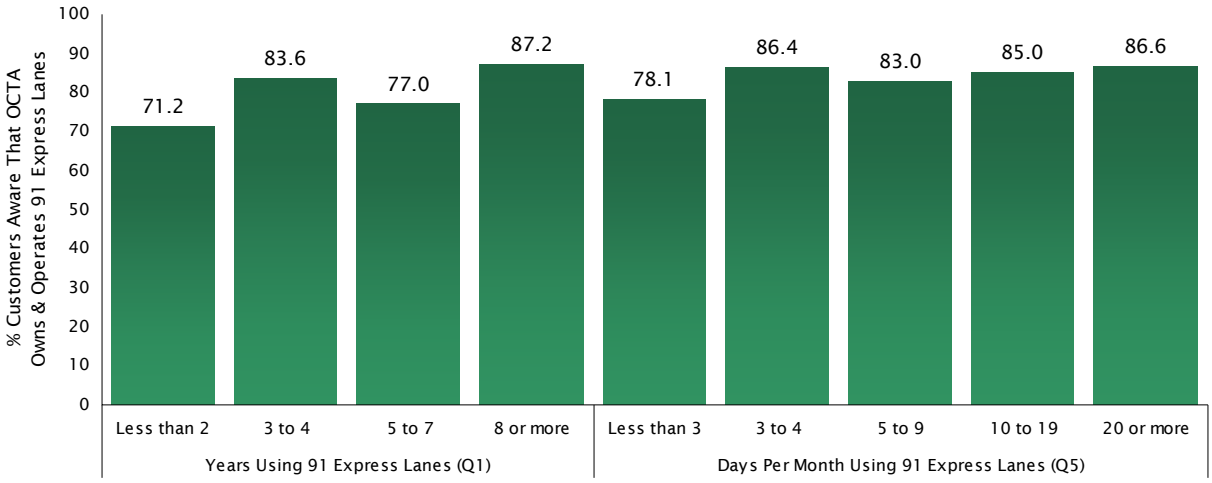
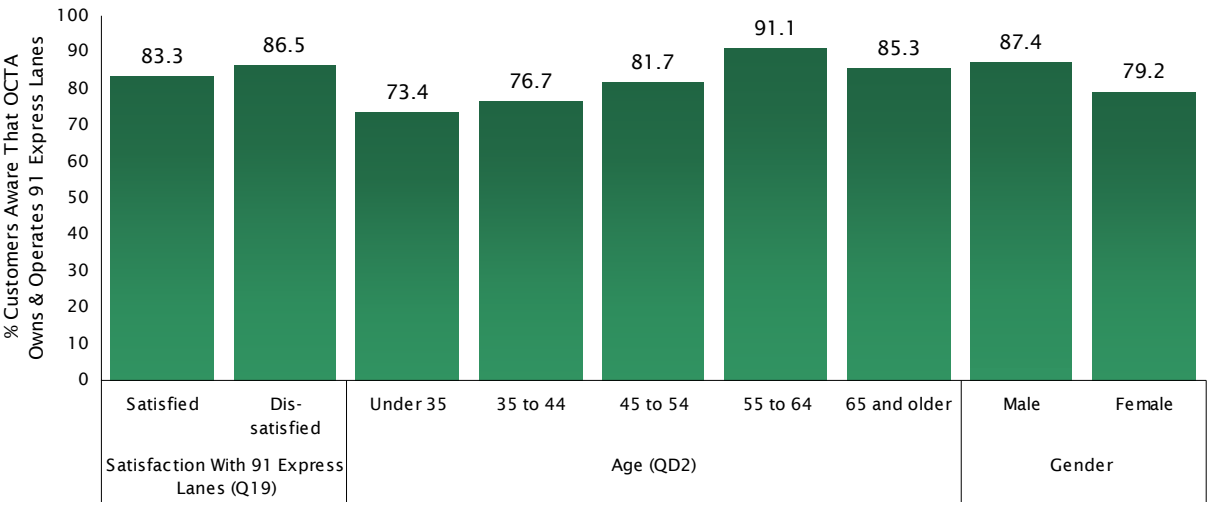


FIGURE 69 AWARE OF OCTA OWNS & MANAGES 91 EXPRESS LANES BY SATISFACTION WITH 91 EXPRESS LANES, AGE & GENDER

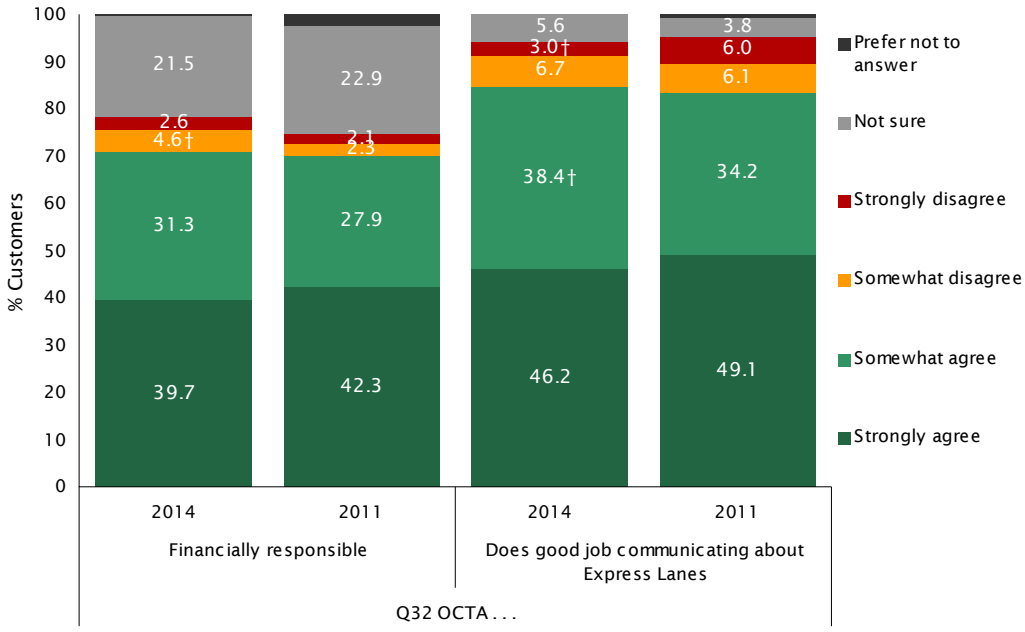


OPINIONS OF OCTA'S MANAGEMENT Regardless of their prior awareness of OCTA's management role, all customers were next asked two performance-related questions about OCTA and its management of the 91 Express Lanes. The format of Question 34 was straightforward: for each of the statements shown in truncated form at the bottom of Figure 70, customers were simply asked the extent to which they agreed or disagreed with the statement.

Overall, more than eight-in-ten customers (85%) in 2014 agreed that *OCTA does a good job communicating with me about the 91 Express Lanes through newsletters, billing inserts, emails, signs and other methods*. Although fewer customers agreed that *OCTA is financially responsible when managing the 91 Express Lanes* (71%), most of the remaining customers simply had no opinion. Just 7% of customers disagreed with the statement.

Question 34 *Do you agree or disagree that:_____?*

FIGURE 70 AGREEMENT WITH STATEMENTS ABOUT OCTA



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

PREFERRED METHOD OF COMMUNICATION When asked how they prefer to receive information about the 91 Express Lanes, email was by far the most popular method among existing customers (82%), followed by direct mail (44%). Electronic message signs, website, road signs, and text messages were also mentioned by 28%, 18%, 14% and 14% of customers, respectively (see Figure 71). For the interested reader, Table 6 displays the percentage of customers who preferred each communication method by year of study, whereas Table 7 shows how preferences in 2014 varied by age and county of residence.

Question 35 *How do you prefer to receive information about the 91 Express Lanes? Check your top three preferred methods.*

FIGURE 71 PREFERENCE FOR RECEIVING 91 EXPRESS LANE INFORMATION

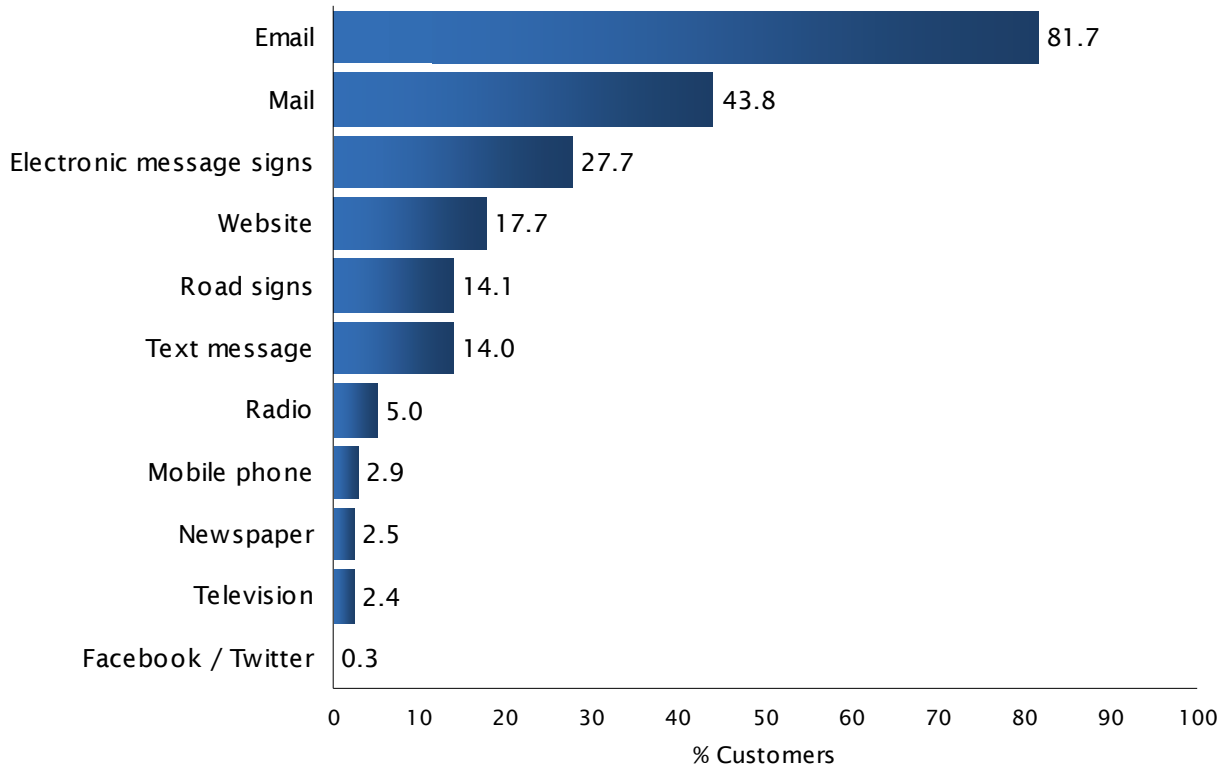


TABLE 6 PREFERENCE FOR RECEIVING 91 EXPRESS LANE INFORMATION BY STUDY YEAR

	Study Year			
	2014	2011	2009	2007
Email	82	70	52	44
Mail	44	37	52	53
Electronic message sign	28	11	2	1
Website	18	7	5	2
Road signs	14	8	1	3
Text message	14	3	0	0
Radio	5	2	1	1
Mobile phone	3	1	1	1
Newspaper	2	3	1	2
Television	2	3	1	1

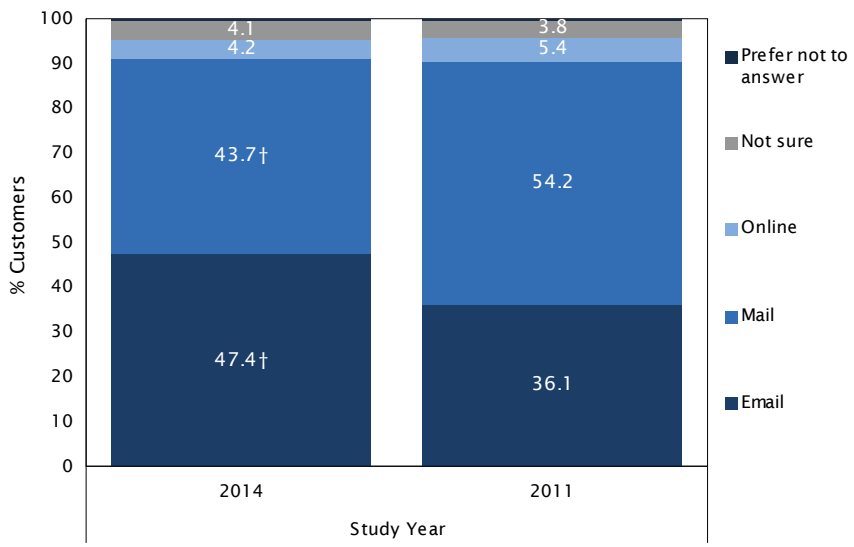
TABLE 7 PREFERENCE FOR RECEIVING 91 EXPRESS LANE INFORMATION BY AGE & COUNTY OF RESIDENCE

	Age (QD2)					County of Residence			
	Under 35	35 to 44	45 to 54	55 to 64	65 and older	Los Angeles	Orange	Riverside	San Bernardino
Email	87.8	87.8	81.2	80.2	78.3	93.3	75.7	81.2	86.7
Mail	30.6	35.2	41.4	48.0	53.4	40.2	51.8	43.4	34.0
Electronic message sign	27.8	20.4	27.9	32.0	29.5	27.2	20.7	28.5	35.3
Website	19.7	21.5	20.4	16.1	13.7	24.8	14.6	17.3	18.7
Road signs	22.8	16.2	13.9	10.8	11.2	7.6	13.0	14.7	16.3
Text message	16.7	15.9	15.8	12.3	12.2	13.8	16.1	14.1	7.7
Radio	5.3	6.5	3.4	6.2	3.5	1.9	6.5	4.6	9.3
Mobile phone	6.7	2.2	3.4	1.2	3.7	2.9	2.7	2.6	6.5
Newspaper	1.6	1.6	1.3	1.8	5.6	0.0	2.4	2.8	3.0
Television	0.8	4.9	2.8	2.0	1.2	1.9	0.3	2.8	4.8

Although most 91 Express Lanes customers have preferred to receive information about the Lanes via email, in past years they nevertheless also generally preferred to receive their *billing statements* via mail. As shown in Figure 72, however, this pattern changed significantly in 2014. Overall, 47% indicated they would prefer to receive their statement via email, 44% preferred mail, 4% preferred to be able to check their statement online, whereas 4% were unsure or unwilling to answer the question. Like communications in general, a preference for receiving billing statements electronically or by mail was related to respondent age (see Figure 73).

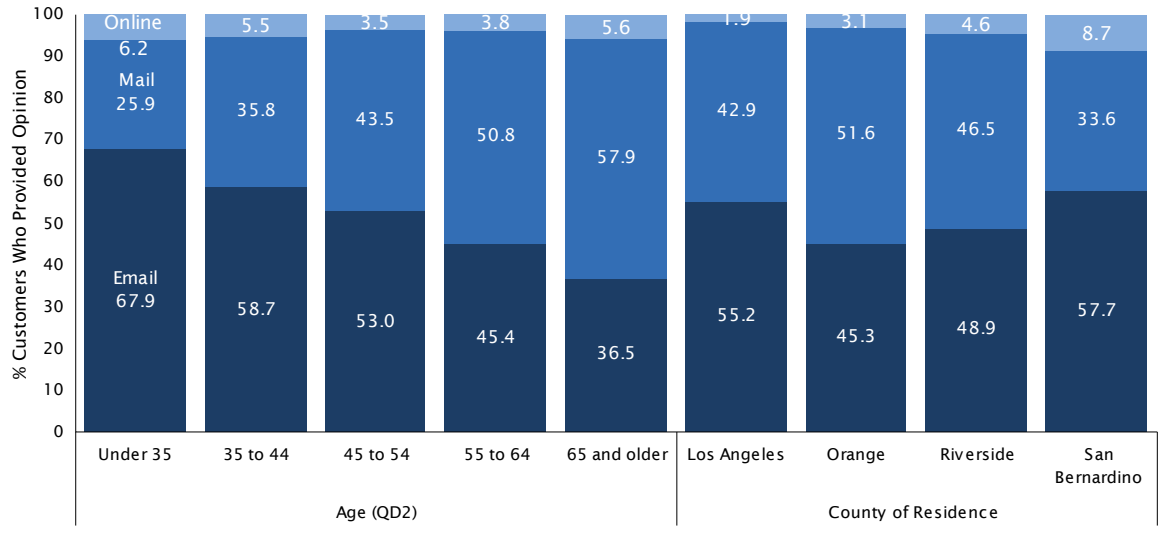
Question 36 *In the future, would you prefer to receive your billing statement through the mail, or would you prefer to receive it electronically by email or online?*

FIGURE 72 BILLING STATEMENT PREFERENCE BY STUDY YEAR



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

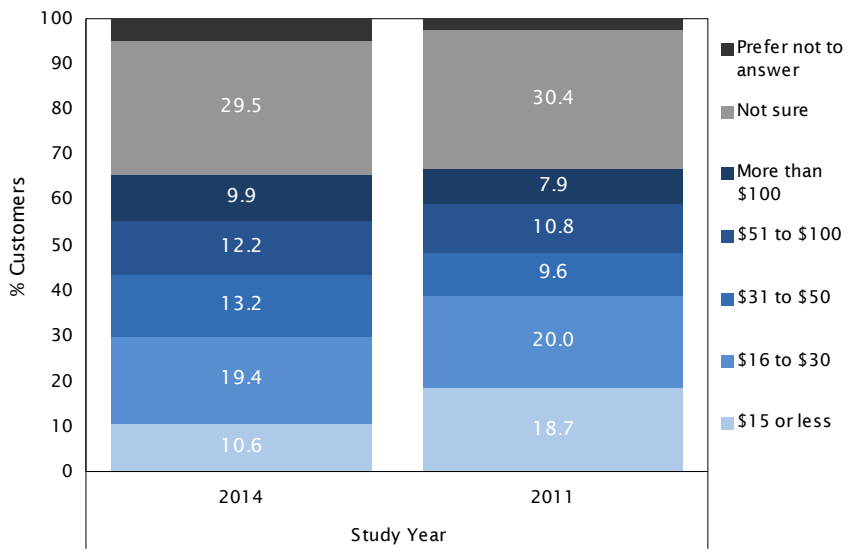
FIGURE 73 BILLING STATEMENT PREFERENCE BY AGE & COUNTY OF RESIDENCE



MONTHLY TOLL CHARGES All customers were next asked to identify the approximate amount they spend per month on toll charges for using the 91 Express Lanes. Approximately one-third of customers indicated that they were unsure (30%) or preferred not to answer the question (5%). Among the remaining respondents, 11% reported spending $15 or less, 20% between $16 and $30, 13% between $31 and $50 per month, 12% between $51 and $100, and 10% offered that they spend more than $100 monthly.

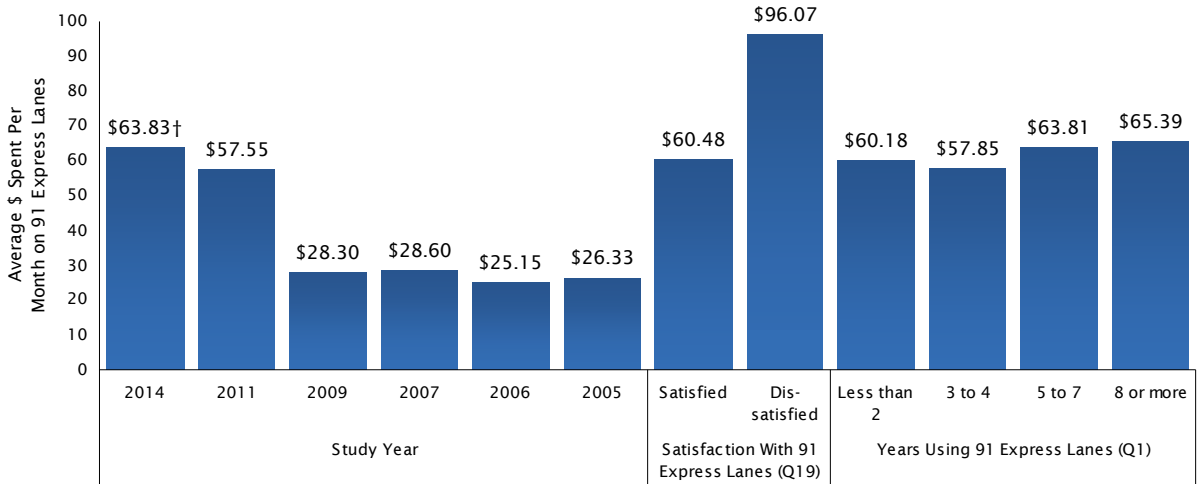
Question 37 *Approximately how much do you spend per month on toll charges to use the 91 Express Lanes? Enter dollar amount in text box below.*

FIGURE 74 AVERAGE DOLLAR SPENT PER MONTH ON 91 EXPRESS LANES



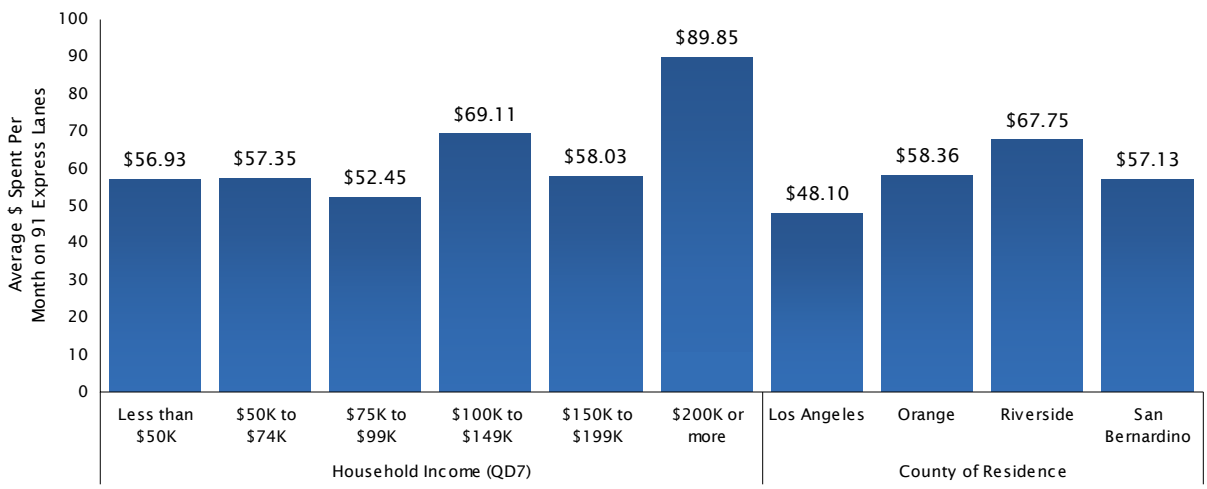
Overall, the average total monthly toll charge reported by 91 Express Lanes customers surveyed in the 2014 study was $63.83, a statistically significant increase when compared to the 2011 figure of $57.55 per month.[8] Its also worth noting that customers who were dissatisfied with the 91 Express Lanes overall spend a considerably larger amount per month on average when compared to satisfied customers (see Figure 75). The monthly amount of money spent using the 91 Express Lanes was also higher among high-income households ($200,000+ annually) and among customers who reside in Riverside County (see Figure 76).

FIGURE 75 AVERAGE DOLLAR SPENT PER MONTH ON 91 EXPRESS LANES BY STUDY YEAR, SATISFACTION WITH 91 EXPRESS LANES & YEARS USING 91 EXPRESS



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

FIGURE 76 AVERAGE DOLLAR SPENT PER MONTH ON 91 EXPRESS LANES BY HOUSEHOLD INCOME & COUNTY OF RESIDENCE

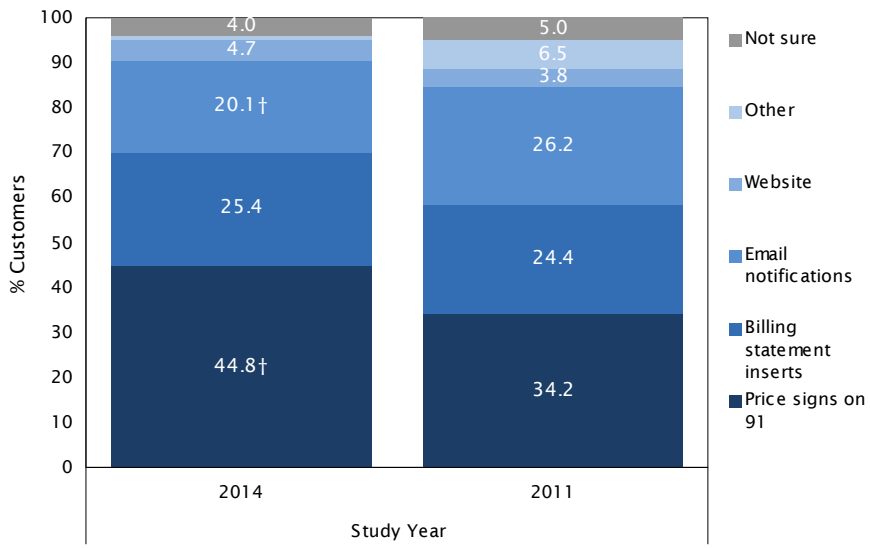


8. Prior to 2011, the reported monthly toll totals were much lower. True North double-checked the frequency of ridership in the 2011 survey sample against the actual toll charge frequency in the 91 Express Lanes customer database and they match closely. This suggest that perhaps the prior surveys were conducted with a sample that under-represented high-frequency users. Note that respondents to this study did report a higher frequency of trip-making on the 91 Freeway and 91 Express Lanes when compared to surveys prior to 2011.

HOW DO YOU LEARN ABOUT TOLL CHARGE CHANGES? The final substantive question of the survey asked customers to identify how they generally learn about changes to the toll charges for using the 91 Express Lanes. As shown in Figure 77 below, customers were quite mixed in the ways they generally learn about toll charge changes, with 45% viewing the change on price signs along the 91 Express Lanes, one-quarter (25%) learning via billing statement inserts, 20% from email notifications, 5% via a website, and 1% from 'other' sources. When compared to the 2011 study, there was a statistically significant increase in the percentage of customers who generally find out about changes to toll charges from price signs along the Lanes, as well as a significant decrease in those who generally learn via email notifications.

Question 38 *How do you generally find out about changes to the toll charges for using the 91 Express Lanes?*

FIGURE 77 SOURCE FOR LEARNING ABOUT CHANGES TO 91 EXPRESS LANES TOLL CHANGES BY STUDY YEAR



† Statistically significant difference ($p < 0.05$) between the 2011 and 2014 studies.

For the interested reader, Figures 78 and 79 on the next page display how the sources that customers generally rely on for information about toll charge changes varied by the number of years they have used the 91 Express Lanes, number of days per month they typically use the Lanes, age, and county of residence.

FIGURE 78 SOURCE FOR LEARNING ABOUT CHANGES TO 91 EXPRESS LANES TOLL CHANGES BY YEARS USING 91 EXPRESS LANES & DAYS PER MONTH USING 91 EXPRESS LANES

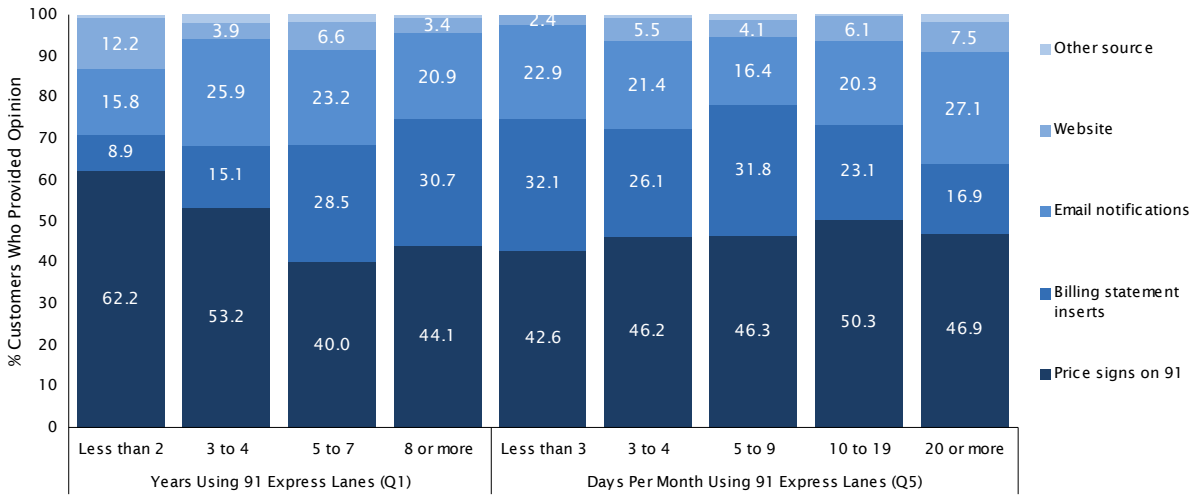
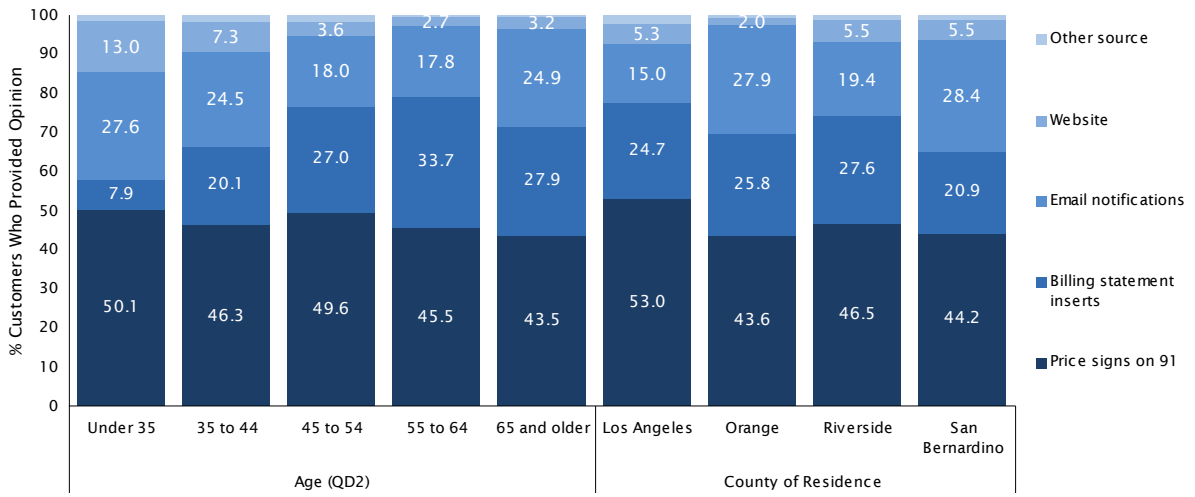


FIGURE 79 SOURCE FOR LEARNING ABOUT CHANGES TO 91 EXPRESS LANES TOLL CHANGES BY AGE & COUNTY OF RESIDENCE



Background & Demographics

Table 8 Demographics of Sample by Study Year

	Study Year	
	2014	2011
Total Respondents	*1,349*	*1,000*
Q1 Years using 91 Express Lanes		
Less than 1	2.6	3.9
1 to 2	8.0	7.9
3 to 4	10.2	11.6
5 to 7	15.8	19.6
8 or more	61.7	54.0
Not sure	1.7	3.0
Prefer not to answer	0.0	0.1
QD1 Gender		
Male	53.3	47.7
Female	43.4	51.0
Prefer not to answer	3.4	1.3
QD2 Age		
18 to 24	0.9	1.0
25 to 34	7.3	6.5
35 to 44	16.0	13.0
45 to 54	29.0	23.2
55 to 64	26.1	25.2
65 and older	17.1	20.1
Prefer not to answer	3.7	10.9
QD3 Employment status		
Employed full time	69.7	60.5
Employed part time	6.6	6.4
Student	1.0	1.6
Homemaker	2.2	3.6
Retired	16.1	23.1
Between jobs	1.4	2.3
Prefer not to answer	3.0	2.5
QD4 Education level		
Less than high school	1.0	2.4
High school grad	7.6	10.4
Tech / Voc	5.2	3.5
Some college	27.0	28.0
College grad	32.5	26.5
Some grad school	3.5	4.1
Graduate degree	17.4	20.4
Prefer not to answer	5.8	4.7
QD5a OCTA's OC Express bus service		
Yes, used	3.6	2.1
Have not used	95.1	95.5
Prefer not to answer	1.4	2.4
QD5b OCTA's regular bus service		
Yes, used	11.9	9.0
Have not used	87.2	89.0
Prefer not to answer	0.9	2.0
QD5c Metrolink weekday service		
Yes, used	24.4	16.2
Have not used	75.1	81.6
Prefer not to answer	0.5	2.2
QD5d Metrolink weekend service		
Yes, used	18.4	14.0
Have not used	80.9	84.0
Prefer not to answer	0.7	1.9
QD6 Ethnicity		
Caucasian/White	63.8	68.9
Latino/Hispanic	12.7	11.0
African American/Black	2.5	3.0
American Indian	0.8	0.3
Asian American	6.1	4.0
Pacific Islander	0.4	0.2
Mixed heritage	2.2	1.5
Not sure	1.3	1.9
Prefer not to answer	10.2	9.2
QD7 Household income		
Less than $25K	2.0	2.0
$25K to $49K	6.5	6.9
$50K to $74K	12.4	14.2
$75K to $99K	12.0	17.0
$100K to $149K	21.6	19.5
$150K to $199K	10.6	10.5
$200K or more	10.0	6.1
Not sure	1.0	2.4
Prefer not to answer	23.9	21.4

Table 8 presents the key demographic and background information that was collected during the survey interview. Because of the stratified probability-based sampling methodology used in creating the sample (see *Methodology* on page 67), the results shown are representative of current 91 Express Lanes customers who use the Lanes at least once per month on average.

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 customer characteristics (see crosstabulations in Appendix A for a full breakdown of each question), the information is also valuable for understanding the current profile of 91 Express Lanes customers.

METHODOLOGY

The following sections outline the mixed-methodology survey design used in this 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 in responses, the items were asked in a random order for each respondent.

Several questions asked in this study were presented only to a subset of respondents. For example, only respondents who reported that they use toll roads in Southern California in addition to the 91 Express Lanes (Question 6) where asked to name the toll roads they use (Question 7). The questionnaire included with this report (see *Questionnaire & Toplines* on page 70) identifies the skip patterns used during the interview to ensure that each respondent received the appropriate questions.

Many of the questions asked in the 2014 survey were also tracked directly from the 2011 customer survey to allow OCTA to track customer opinions and behavior over time.

PROGRAMMING & PRE-TEST Prior to fielding the survey, the questionnaire was CATI (Computer Assisted Telephone Interviewing) programmed to assist the live interviewers when conducting the telephone interviews, as well as web programmed to allow online participation. 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 happen during the interview. The integrity of the questionnaire was pre-tested internally by True North prior to fielding.

SAMPLE To ensure a representative sample, we first stratified the customer database on relevant customer characteristics—including frequency of using the 91 Express Lanes, location of residence, and availability of contact information to ensure proper representation of customer subgroups. Stratifying the sample in this manner prior to randomly selecting customers into their appropriate strata ensures that the final sample includes the correct proportion of customers in each strata and is representative of the 91 Express Lane customer base. Additionally, for demographic characteristics that are *not* coded on OCTA's customer database but are relevant to the objectives of this study (e.g., gender), the variables were monitored throughout the data collection period to ensure they were within acceptable ranges.

Given OCTA's interest in having statistically reliable results for customers overall—as well as within customer segments according to their usage patterns—we employed a large sample of 1,349 customers. As described below, a sample of this size will produce statistically reliable results for customers overall, as well as within specific customer segments.

MARGIN OF ERROR DUE TO SAMPLING

By using a stratified random sample and monitoring the sample characteristics as data collection proceeded, True North ensured that the sample was representative of 91 Express Lanes customers who had used the Lanes at least 12 times during the prior 12 month period. The results of the sample can thus be used to estimate the opinions of *all* customers who fit this profile. Because not *every* 91 Express Lanes customer 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 1,349 customers for a particular question and what would have been found if all of the estimated 61,200 customers who fit the desired profile had been interviewed.

For example, in estimating the percentage of customers who were aware that OCTA manages the 91 Express Lanes (Question 33), 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 portion of customers who were aware of OCTA's management role (0.84 for 84% in this example), N is the population size of all customers who fit the profile for the study (61,200), n is the sample size that received the question (1,349), 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 ± 1.94%. This means that with 84% of survey respondents indicating they were aware that OCTA manages the 91 Express Lanes, we can be 95% confident that the actual percentage of all customers who are aware of OCTA's management role is between 82% and 86%.

FIGURE 80 MAXIMUM MARGIN OF ERROR

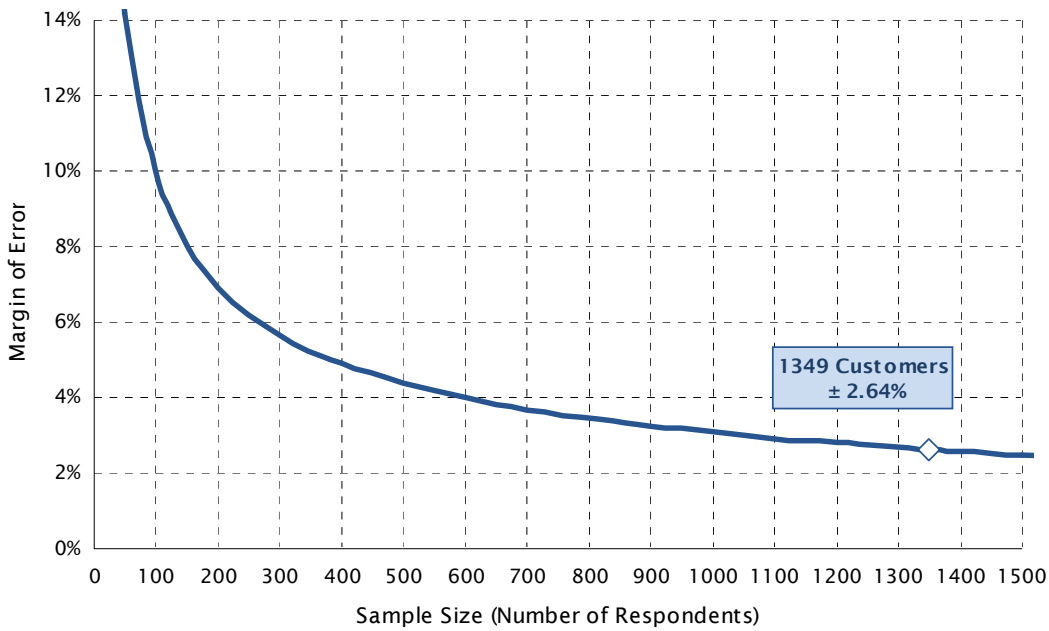


Figure 80 provides a plot of the *maximum* margin of error in this study. The maximum margin of error for a dichotomous percentage result occurs when the answers are evenly split such that 50% provide one response and 50% provide the alternative response (i.e., $\hat{p} = 0.5$). For this survey, the maximum margin of error is ± 2.64% for questions answered by all 1,349 respondents.

Within this report, figures and tables show how responses to certain questions varied by customer characteristics such as employment status, location of residence, and frequency of using the 91 Express Lanes. Figure 80 is thus useful for understanding how the maximum margin of error for a percentage estimate will grow as the number of individuals asked a question (or in a particular subgroup) shrinks. The main motivation for using a larger sample for this study was that it will produce statistically reliable results for customers as a whole, as well as within most customer subgroups. For example, even if the sample is divided into four subgroup samples of 250 individuals per group, the results would still have an acceptable margin of error of approximately ± 6% at the subgroup level.

DATA COLLECTION This study employed a mixed-method recruiting strategy whereby customers were recruited by email and/or mailed invitation letters to participate in the survey through a secure, password-protected website hosted by True North. Customers whose records included email contact information were recruited using emailed invitations, whereas customers whose records included just address information were sent invitations via mail. The invitations provided respondents with individualized passwords that they could us to access the survey online at a secure site. A total of 1,349 customers completed the survey during the data collection period that spanned from August 19 to September 20, 2014.

DATA PROCESSING Data processing consisted of checking the data for errors or inconsistencies, coding and recoding responses, categorizing open-ended responses, and preparing frequency analyses and crosstabulations.

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.

TRUE NORTH RESEARCH

OCTA
91 Express Lanes Customer Survey
Final Toplines (1,349 Customers)
September 2014

Section 1: Introduction to Study
Welcome to OCTA's survey of 91 Express Lanes customers! This survey addresses your experiences on the 91 Express Lanes only – not other toll lanes. Your individual responses will be kept strictly CONFIDENTIAL and will go directly to True North Research -- the independent research firm hired to design and conduct the survey.
Survey Instructions: During the survey, please do not use your browser's 'Forward' and 'Back' buttons. To move through the survey, use the 'Next' button at the bottom of each page. When you have finished the survey click the 'Done' button to submit your survey. To see the survey most clearly, MAXIMIZE this browser screen. *If accessing via email hotlink:* To start the survey, please click the 'begin' button. *If accessing the general URL listed on mailed invitation:* To start the survey, please enter in the box below the password that was provided in the letter you received and then push the 'begin' button.

Section 2: Screeners for Inclusion in the Study			
SC1	In the past 12 months, have you used the 91 Express Lanes at least 12 times? In other words, in a typical month you use the 91 Express Lanes at least once. *If unsure, ask them to estimate.*		
	1	Yes	*Go to intro preceding Q1*
	2	No	*Terminate*

Section 3: FasTrak Decisions			
To begin, we have a few questions about your FasTrak account.			
Q1	For how many years have you been using the 91 Express Lanes toll road?		
	1	Less than 1 year	3%
	2	1 to 2 years	8%
	3	3 to 4 years	10%
	4	5 to 7 years	16%
	5	8 years or more	62%
	98	Not sure	2%
	99	Prefer not to answer	0%

Q2	How many FasTrak transponders do you currently have in your household?		
	1	One	53%
	2	Two	34%
	3	Three	8%
	4	Four or more	4%
	98	Not sure	0%
	99	Prefer not to answer	0%
Q3	How did you acquire the FasTrak transponder you use when traveling on the 91 Express Lanes? Did you pick it up in person at the OCTA store in Orange, in person at the Customer Service Center in Corona, order it by phone and have it mailed to you, or did you order it over the Internet?		
	1	In person at OCTA in Orange	5%
	2	In person at Customer Service Center in Corona	37%
	3	By telephone	36%
	4	By Internet	14%
	6	Mail	4%
	5	Other	0%
	98	Not sure	4%
	99	Prefer not to answer	0%
Q4	Which of the following best describes who pays your toll charges when you use the 91 Express Lanes?		
	1	You pay your tolls	91%
	2	Another family member pays your tolls	2%
	3	Your employer pays your tolls either directly or by reimbursing you	6%
	4	Other	1%
	98	Not sure	0%
	99	Prefer not to answer	0%

Section 4: Use of 91 Express Lanes				
Next, we have a few questions about your travel habits.				
Q5	In a typical month, how many days do you use the 91 Express Lanes toll road? *Please estimate if unsure.* Average per customer = 8.86 days per month.			
	Less than 3		15%	
	3 to 4		20%	
	5 to 9		24%	
	10 to 19		19%	
	20 or more		15%	
	Not sure		6%	
	Prefer not to answer		0%	
Q6	In a typical month, do you use any other toll roads in Southern California?			
	1	Yes	49%	*Ask Q7*
	2	No	50%	*Skip to Q8*
	98	Not sure	2%	*Skip to Q8*
	99	Prefer not to answer	0%	*Skip to Q8*
Q7	Which other toll roads do you use in a typical month? *Check all that apply.*			
	1	241 Toll Road	79%	
	2	73 Toll Road	32%	
	3	261 Toll Road	43%	
	4	133 Toll Road	38%	
	5	Toll Road portion of State Route 125	1%	
	6	Toll Road portion of Interstate 10	15%	
	7	Toll Road portion of Interstate 110	16%	
	8	Toll Road portion of Interstate 15	18%	
	98	Not sure	2%	
	99	Prefer not to answer	0%	

Q8	In a typical week, how many one-way trips do you take on the State Route 91 Freeway? Please count all trips, including trips when you use the 91 Express Lanes toll road and those when you don't. *Please estimate if unsure.* Average per customer = 6.17 one-way trips.	
	None	22%
	1 to 2	26%
	3 to 6	18%
	More than 6	23%
	Not sure	10%
	Prefer not to answer	0%
Q9	Of the <trips from 0> one-way trips you take on the State Route 91 Freeway in a typical week, approximately how many do you use the 91 Express Lanes toll road? *Please estimate if unsure.* Percentage of all respondents shown below. Average per customer = 3.90 one-way trips.	
	None	25%
	1 to 2	30%
	3 to 6	19%
	More than 6	13%
	Not sure	12%
	Prefer not to answer	1%
Q10	Of the <trips from Q9> one-way trips you use the 91 Express Lanes toll road in a typical week, how many do you take Monday through Friday? *Please estimate if unsure.* Percentage of all respondents shown below. Average per customer = 3.07 one-way trips.	
	None	30%
	1 to 2	28%
	3 to 6	18%
	More than 6	9%
	Not sure	15%
	Prefer not to answer	1%
Q11	Of the <trips from Q10> one-way trips you use the 91 Express Lanes toll road between Monday and Friday, how many do you take during rush hour periods – between 5AM and 9AM, or 3PM and 7PM? *Please estimate if unsure.* Percentage of all respondents shown below. Average per customer = 2.60 one-way trips.	
	None	38%
	1 to 2	23%
	3 to 6	15%
	More than 6	8%
	Not sure	16%
	Prefer not to answer	1%

Q12	Do you use the 91 Express Lanes toll road for: _____?			
	Randomize	Yes	No	Not sure / Prefer not to answer
A	Commuting to or from work	60%	39%	1%
B	Commuting to or from school	6%	93%	1%
C	Shopping or recreation trips	63%	36%	1%
D	Visiting friends or family	67%	32%	1%

If Q12a = 1 ask Q13 and Q14.

Q13	In what city do you typically begin your commute to work? *Enter city name in text box below.* City recorded, recoded into County categories as shown below.	
	Los Angeles	3%
	Orange	10%
	Riverside	74%
	San Bernardino	9%
	Other	<1%
	Varies / Multiple counties	<1%
	Not sure	1%
	Prefer not to answer	3%

Q14	What is the destination city for your work commute? *Enter city name in text box below.* City recorded, recoded into County categories as shown below.	
	Los Angeles	23%
	Orange	54%
	Riverside	6%
	San Bernardino	3%
	Other	0%
	Varies / Multiple counties	5%
	Not sure	3%
	Prefer not to answer	5%

If Q12a = (2,99) and Q12b = 1 ask Q15 and Q16.		
Q15	In what city do you typically begin your commute to school? *Enter city name in text box below.* City recorded for 19 respondents who received the question.	
		Data on file for 28 respondents
Q16	What is the destination city for your school commute? *Enter city name in text box below.* City recorded for 19 respondents who received the question.	
		Data on file for 28 respondents
If Q12a = (2,99) and Q12b = (2,99), ask Q17 and Q18.		
Q17	In what city do you typically begin your trips that involve using the 91 Express Lanes toll road? *Enter city name in text box below.* City recorded, recoded into County categories as shown below.	
	Los Angeles	15%
	Orange	27%
	Riverside	48%
	San Bernardino	7%
	Other	<1%
	Varies / Multiple counties	1%
	Not sure	1%
	Prefer not to answer	1%
Q18	What is the destination city that you are most often traveling to when you use the 91 Express Lanes? *Enter city name in text box below.* City recorded, recoded into County categories as shown below.	
	Los Angeles	10%
	Orange	40%
	Riverside	28%
	San Bernardino	6%
	Other	5%
	Varies / Multiple counties	4%
	Not sure	3%
	Prefer not to answer	2%

Section 5: Opinions of 91 Express Lanes				
Next, we have a few questions about your experiences when traveling on the 91 Express Lanes toll road.				
Q19	Overall, are you satisfied or dissatisfied with your experiences when using the 91 Express Lanes?			
	1	Very satisfied	45%	*Ask Q20*
	2	Somewhat satisfied	46%	*Ask Q20*
	3	Somewhat dissatisfied	7%	*Ask Q20*
	4	Very dissatisfied	2%	*Ask Q20*
	98	Not sure	0%	*Skip to Q21*
	99	Prefer not to answer	0%	*Skip to Q21*
Q20	Is there a particular reason why you are <satisfied/dissatisfied>? Verbatim responses recorded and later grouped into the categories shown below.			
	No particular reason		28%	
	Saves time / Faster travel		26%	
	Bypass traffic, traffic jams		17%	
	Too much traffic in Express Lanes		11%	
	Easy to use / Convenience		8%	
	Too expensive		8%	
	Feel safer using Express Lanes		3%	
	Lanes are not overcrowded		3%	
	Never had any problems		2%	
	Express Lanes are well maintained		2%	
	Occasional Express Lanes closures		2%	
	Express Lanes should be extended		2%	
	Should be credited if traffic is too congested		2%	
	Prefer not to answer		2%	
	Easy access to destinations		1%	
	Cost is reasonable		1%	
	Good customer service		1%	
	Need signs for traffic, accident alerts		1%	
	Cars cutting from freeway into Express Lanes		1%	
	Express Lanes in need of maintenance		1%	

Q21	Would you say it is extremely important, very important, somewhat important, or not at all important to you that: _____?						
	Randomize	Extremely Important	Very Important	Somewhat Important	Not at all Important	No Opinion	Prefer not to answer
A	The 91 Express Lanes is a fast way to travel	66%	27%	6%	1%	0%	0%
B	The 91 Express Lanes is a safe way to travel	54%	30%	12%	2%	2%	0%
C	You save time when using the 91 Express Lanes	76%	20%	3%	0%	0%	0%
D	It's less stressful when using the 91 Express Lanes	57%	28%	11%	2%	1%	0%
E	You create less wear and tear on your vehicle when using the 91 Express Lanes	34%	26%	25%	9%	6%	0%
F	You can reliably estimate your travel times when using the 91 Express Lanes	45%	35%	15%	3%	1%	1%
G	It is easy to get in touch with a 91 Express Lanes customer service representative when needed	37%	33%	17%	3%	9%	0%
H	If you have an issue, 91 Express Lanes customer service responds in a timely manner	41%	33%	12%	2%	11%	1%
I	The tolls you pay are used to help improve the State Route 91 Freeway	33%	27%	23%	12%	4%	2%
J	The convenience you receive from using the 91 Express Lanes is worth the cost	53%	29%	12%	3%	2%	1%
K	You are treated professionally by 91 Express Lanes customer service	42%	33%	13%	2%	10%	0%
L	Your billing statements are accurate	59%	30%	7%	1%	2%	0%
M	The 91 Express Lanes toll road is well maintained and in good condition	50%	38%	10%	1%	1%	1%
Q22	Do you agree or disagree that:_____?						
	Randomize	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	No Opinion	Prefer not to answer
A	The 91 Express Lanes is a fast way to travel	52%	40%	5%	1%	1%	1%
B	The 91 Express Lanes is a safe way to travel	44%	45%	6%	2%	3%	1%
C	You save time when using the 91 Express Lanes	63%	32%	4%	1%	0%	1%
D	It's less stressful when using the 91 Express Lanes	56%	35%	6%	2%	1%	1%
E	You create less wear and tear on your vehicle when using the 91 Express Lanes	35%	41%	11%	3%	9%	1%

F	You can reliably estimate your travel times when using the 91 Express Lanes	36%	46%	10%	4%	3%	1%
G	It is easy to get in touch with a 91 Express Lanes customer service representative when needed	40%	36%	8%	3%	13%	1%
H	If you have an issue, 91 Express Lanes customer service responds in a timely manner	42%	34%	5%	2%	16%	1%
I	The tolls you pay are used to help improve the State Route 91 Freeway	27%	35%	13%	7%	16%	1%
J	The convenience you receive from using the 91 Express Lanes is worth the cost	42%	35%	15%	6%	2%	1%
K	You are treated professionally by 91 Express Lanes customer service	49%	32%	3%	2%	13%	1%
L	Your billing statements are accurate	57%	32%	5%	1%	5%	1%
M	The 91 Express Lanes toll road is well maintained and in good condition	50%	41%	6%	2%	1%	1%

Q23	About how much time do you think you save for a typical one-way trip during the morning rush hour when you travel on the 91 Express Lanes? *Enter the number of minutes saved in the text box below.* Average per customer who uses 91 Express Lanes during morning rush hour = 23.61 minutes.	
	Less than 15 minutes	12%
	15 to 24 minutes	20%
	25 to 34 minutes	16%
	35 or more minutes	9%
	Do not use during these times	35%
	Not sure	8%
	Prefer not to answer	0%
Q24	About how much time do you think you save for a typical one-way trip during the afternoon rush hour when you travel on the 91 Express Lanes? *Enter the number of minutes saved in the text box below.* Average per customer who uses 91 Express Lanes during afternoon rush hour = 29.36 minutes.	
	Less than 15 minutes	8%
	15 to 24 minutes	25%
	25 to 34 minutes	21%
	35 or more minutes	20%
	Do not use during these times	14%
	Not sure	11%
	Prefer not to answer	0%

Section 6: Improvements to 91 Express Lanes				
Q25	Do you support or oppose creating more points at which you can get in/out of the 91 Express Lanes in Orange County?			
	1	Support	48%	
	2	Oppose	38%	
	98	Not sure	14%	
	99	Prefer not to answer	0%	
Q26	Is there a particular reason why you <support/oppose> creating more access points for the 91 Express Lanes in Orange County? *Enter response in text box below or check the appropriate box.* Verbatim responses recorded and later grouped into the categories shown below.			
	Increased traffic congestion		27%	
	More convenient Express Lanes access / exits		25%	
	Not sure / No particular reason		22%	
	Safety concerns		16%	
	No need for additional access points		3%	
	Would like to see Express Lanes extended with more access points		3%	
	Useful for emergency purposes		3%	
	Reduced traffic congestion		3%	
	Other (unique responses)		3%	
	Prefer not to answer		3%	
	Save time, faster commute		2%	
	Increased safety		1%	
	Save money by exiting sooner		1%	
Q27	Construction has begun to extend the 91 Express Lanes east to Interstate 15. Once completed, would you use this new section of the 91 Express Lanes?			
	1	Yes	82%	*Ask Q28*
	2	No	8%	*Skip to Q29*
	98	Not sure	10%	*Skip to Q29*
	99	Prefer not to answer	0%	*Skip to Q29*

Q28	Would you use it when traveling both directions, or just east or west?		
	1	Both directions	89%
	2	East	7%
	3	West	3%
	98	Not sure	2%
	99	Prefer not to answer	0%
Q29	There is a study underway for a future direct connection between the 91 Express Lanes and the 241 toll road. Do you support or oppose building this connection, or do you have no opinion either way?		
	1	Strongly support	38%
	2	Somewhat support	19%
	3	Strongly oppose	4%
	4	Somewhat oppose	3%
	98	Not sure	35%
	99	Prefer not to answer	1%
Q30	The toll charge on the 91 Express Lanes is set so that traffic is free flowing. If the toll charge is set too low, it will lead to traffic congestion. Do you favor this policy of maintaining free flow driving conditions in the Express Lanes, even if it means paying a higher toll at times?		
	1	Yes	55%
	2	No	30%
	98	Not sure	12%
	99	Prefer not to answer	3%
Only ask Q31 if Q11 is at least one trip.			
Q31	Would you be willing to alter your daily travel schedule to avoid rush hour if the toll for using the 91 Express Lanes was lower just before and after rush hour?		
	1	Yes	47%
	2	No	37%
	98	Not sure	16%
	99	Prefer not to answer	0%

Q32	Toll charges for the 91 Express Lanes are based on the day, time, and direction of travel. Times with higher congestion levels are tolled the highest; times with lower congestion levels are tolled at a lower rate. Toll charges are evaluated quarterly and adjusted up or down only when traffic volumes in the toll lanes meet certain trigger points. When and if an adjustment is made, those toll charges stay in effect for six months. This method is known as time of day pricing. Dynamic pricing is a different way of determining toll prices. With dynamic pricing, toll charges are based on real-time traffic conditions and can change every few minutes, depending on the level of congestion in the toll lanes. Toll charges will be higher when there is more traffic and lower when there is less traffic. Which of these options do you prefer?		
	1	Current method of time of day pricing	45%
	2	Dynamic pricing where toll charge varies based on real-time traffic conditions	42%
	98	Not sure	11%
	99	Prefer not to answer	2%

Section 7: OCTA and Communication			
Q33	Prior to taking this survey, were you aware that the 91 Express Lanes are owned and managed by the Orange County Transportation Authority – also known as OCTA?		
	1	Yes	84%
	2	No	15%
	98	Not sure	2%
	99	Prefer not to answer	0%

Q34	Do you agree or disagree that:_____?						
	Randomize	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	No Opinion	Prefer not to answer
A	OCTA is financially responsible when managing the 91 Express Lanes	40%	31%	5%	3%	22%	0%
B	OCTA does a good job communicating with me about the 91 Express Lanes through newsletters, billing inserts, emails, signs and other methods	46%	38%	7%	3%	6%	0%

Q35	How do you prefer to receive information about the 91 Express Lanes? *Check your top three preferred methods.*		
	1	Mail	44%
	2	Email	82%
	3	Website	18%
	4	Electronic Message Signs	28%
	5	Road Signs	14%
	6	Mobile Phone	3%
	7	Text Message	14%
	8	Newspaper	2%
	9	Radio	5%
	10	Television	2%
	11	Facebook/Twitter	0%
	12	Other	0%
	98	Not sure	0%
	99	Prefer not to answer	1%
Q36	In the future, would you prefer to receive your billing statement through the mail, or would you prefer to receive it electronically by email or online?		
	1	Mail	44%
	2	Email	47%
	3	Online	4%
	98	Not sure	4%
	99	Prefer not to answer	1%
Q37	Approximately how much do you spend per month on toll charges to use the 91 Express Lanes? *Enter dollar amount in text box below.* Average spent per month among customers who provided response = $63.83		
	$15 or less		11%
	$16 to $30		19%
	$31 to $50		13%
	$51 to $100		12%
	More than $100		10%
	Not sure		29%
	Prefer not to answer		5%

Q38	How do you generally find out about changes to the toll charges for using the 91 Express Lanes?		
	1	Website	5%
	2	Price signs on 91	45%
	3	Notifications sent by email	20%
	4	Inserts in my billing statement	25%
	5	Other	1%
	98	Not sure	4%
	99	Prefer not to answer	0%

Section 9: Background & Demographics			
Thank you so much for your participation. We have just a few background questions for statistical purposes.			
D1	Please indicate your gender.		
	1	Male	53%
	2	Female	43%
	99	Prefer not to answer	3%
D2	What is your age?		
	1	18 to 24	1%
	2	25 to 34	7%
	3	35 to 44	16%
	4	45 to 54	29%
	5	55 to 64	26%
	6	65 and over	17%
	99	Prefer not to answer	4%

D3	Which of the following best describes your employment status?		
	1	Employed full-time	70%
	2	Employed part-time	7%
	3	Student	1%
	4	Homemaker	2%
	5	Retired	16%
	6	In-between jobs	1%
	99	Prefer not to answer	3%
D4	What is the last grade or level you completed in school?		
	1	Elementary (8 or fewer years)	0%
	2	Some high school (9 to 11 years)	1%
	3	High school graduate (12 years)	8%
	4	Technical / Vocational school	5%
	5	Some college	27%
	6	College graduate	32%
	7	Some graduate school	3%
	8	Graduate, professional, doctorate degree (DDS, DVM, JD, LLM, MA, MS, MBA, MD, PhD)	17%
	99	Prefer not to answer	6%

D5	Have you ever used the following transportation services?			
	Randomize	Yes	No	Not sure / Prefer not to answer
A	OCTA's OC Express bus service	4%	95%	1%
B	OCTA's regular bus service	12%	87%	1%
C	Metrolink weekday service	24%	75%	1%
D	Metrolink weekend service	18%	81%	1%

D6	What ethnic group do you consider yourself a part of or feel closest to?		
	1	Caucasian/White	64%
	2	Latino/Hispanic/Mexican	13%
	3	African-American/Black	2%
	4	American Indian or Alaskan Native	1%
	5	Asian -- Korean, Japanese, Chinese, Vietnamese, Filipino or other Asian	6%
	6	Pacific Islander	0%
	7	Mixed Heritage	2%
	98	Other	1%
	99	Prefer not to answer	10%
D7	This last question is for statistical purposes only. Please indicate the category that best represents your household's total annual income before taxes.		
	1	Less than $25,000	2%
	2	$25,000 to $49,999	6%
	3	$50,000 to $74,999	12%
	4	$75,000 to $99,999	12%
	5	$100,000 to $149,999	22%
	6	$150,000 to $199,999	11%
	7	$200,000 or more	10%
	98	Not sure	1%
	99	Prefer not to answer	24%
Thanks so much for participating in this important survey! This survey was conducted for OCTA.			

Sample Items			
S1	County of residence		
	1	LA	9%
	2	Orange	16%
	3	Riverside	65%
	4	San Bernardino	8%
	5	Other	2%

S2	Customer With Email on File		
	1	Yes	84%
	2	No	16%
S3	Average 91 Express Lanes Trips Per Month		
	1	Low (fewer than 6 trips)	22%
	2	Medium (6 trips to 18 trips)	53%
	3	High (19 or more trips)	25%