

Regional Electric Vehicle Outreach and Marketing Plan



Driving to Net Zero

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County
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I. Setting the Stage

The transportation sector is among the largest contributors to greenhouse gas (GHG) emissions in California, responsible for 39 percent of GHG emissions in 2015.¹ Electric vehicles (EVs), with their environmental, fuel, and cost-saving benefits, offer a viable alternative to conventional automobiles.

California dominates the EV market in the country. Rising sales and substantial charging infrastructure investments coupled with key legislation have contributed to growing EV adoption and penetration in the state. The primary legislation driving EV adoption throughout California is the Zero Emissions Vehicle (ZEV) Program. The program today mandates that 15 percent of light duty vehicles sold in California be ZEVs by 2025, which includes battery electric vehicles, fuel cell vehicles, and transitional zero emission vehicles like plug-in hybrid electric vehicles. In March 2012, Governor Brown issued an Executive Order that set a target of 1.5 million ZEVs on California's roadways by 2025. The Governor's Office recently set a new more ambitious goal of 5 million ZEVs on the road by 2030. The ZEV program is largely responsible for the growing number of EV models available on the market today.

Supporting EV adoption is California's growing network of EV charging infrastructure, which represents 31% of U.S. public vehicle charging infrastructure.²

Through May 2017, nearly 300,000 EVs have been sold in California, accounting for around half the number of such vehicles in the country.³

These factors present a timely marketing opportunity for Santa Clara County, which is striving to increase EV market penetration as part of the **Driving to Net Zero** (DNZ) project.

Currently, there are over 32,000 EVs in Santa Clara County. The EV adoption rate in the county is three times higher than California as a whole (0.74%).⁴ For context, Governor Brown's goal of having 5 million EVs on the roadways by 2030 translates to about a 14% adoption rate. Santa Clara County is clearly a leader in early adoption of EVs, but there is much work to be done to achieve widespread adoption.

That said, these statistics do not tell the whole story. Perceptions, beliefs, and actions of consumers provide further insight into the market for EVs.

In fall 2017, ICF conducted a survey in Santa Clara County to understand regional transportation trends, and in particular, to look at EV awareness and use ([Appendix A](#)). The survey was distributed to a statistically representative sample, and reached 529 respondents.

This survey revealed:

- A majority of survey respondents:
 - Currently do not drive an EV as their primary vehicle (91%)
 - Have never driven an EV (70%)
 - Are not at all familiar with state (51%) and federal (58%) incentives to buy or lease EVs

¹ <https://www.arb.ca.gov/cc/inventory/data/data.htm>

² https://www.theicct.org/sites/default/files/publications/CA-cities-EV-update_ICCT_Briefing_30052017_vF.pdf

³ http://www.energy.ca.gov/renewables/tracking_progress/documents/electric_vehicle.pdf

⁴ [CVRP Rebate Statistics](#) coupled with ICF analysis of DMV registration data provided by IHS Automotive.

- Significantly, survey respondents who currently do not drive an electric vehicle:
 - Are either unsure (22%) or do not believe EVs are affordable (35%)
 - Are unsure (38%) of the safety of EVs
 - Are unfamiliar (27%) with EVs or are unsure if they are familiar (18%)
 - Are either unsure (36%) or do not believe (18%) that EVs have great performance
 - Don't expect to own or lease (31%) an EV over the next three years, or are unsure about it (38%)

This outreach plan provides a comprehensive communications strategy supported by actionable, results-oriented, and flexible activities. To guarantee the surround sound effect of an integrated plan, education and outreach to the audience has been combined with creative concept samples, earned and paid media tactics, events, and a social media communications strategy. Importantly, all activities will be measured on a set of key performance indicators to regularly measure impact, engagement, and inform the program as it moves forward.

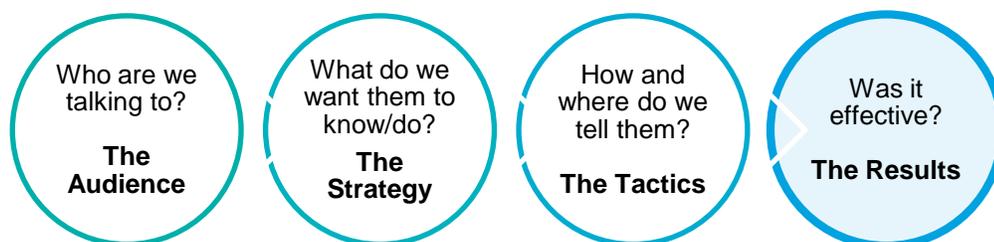
This plan will also support the outreach efforts of DNZ project partners Cupertino, Morgan Hill, Mountain View, Palo Alto, San Jose, Sunnyvale, and other municipalities who all have an important role in improving awareness to increase EV use.

II. The Goal

The goal of this outreach plan is two-fold:

- **Facilitate consumer adoption of EVs** by improving awareness of benefits among residents, correcting misperceptions, providing information on available incentives, and sharing opportunities for consumers to tangibly experience EVs
- **Accelerate EV charging infrastructure deployment** by educating charging station site hosts about available funding incentives to make installations easier and less expensive

To ensure this plan is consumer-centric, fully-integrated, and in line with the county's goals and objectives, the following process was followed.



III. The Audience

Step 1: Who Are We Talking To?

Audience segmentation enables us to focus on groups we can realistically reach with available resources, and allows us to motivate distinct groups to adopt messages based on their needs and values.

Segmentation is necessary to ensure audiences receive the appropriate messages. Gaining a holistic view of target segments involves looking at their demographic backgrounds and their use of, and relationship with, various marketing and media channels. By identifying the right target audiences upfront, as well as their mindset and beliefs, and then tailoring messaging to their individual beliefs, we can prompt a better response. Finally, creative concepts can be developed that integrate the consumer lifestyle and media preferences.

There are two distinct audience groups for this outreach plan: **Consumers** (EV buyers) and **charging station site hosts**.

1. Audience: Consumers

For the purpose of this analysis, Santa Clara County residents were considered. The county has nearly 2 million residents and a median household income of around \$101,000.

The key takeaways from an overview of census data⁵ in Santa Clara County show that a typical resident:

- Takes around 27 minutes to get to work
- Is under age 65
- Tends to own the home they live in
- Is affluent (around two times the national median household income)

The 2017 Santa Clara County Transportation Survey provided another set of takeaways about respondents. The majority:

- Live in a single-family home (60%) (2-3 adults with no children (61%))
- Drive 30 or less miles round trip on a typical weekday (70%) and tend to drive every day of the week
- Expect the price of gasoline to increase (72%)
- Expect to buy or lease their next primary vehicle more than two years from now (65%)
- Rate safety (90%), brand reliability (78%), miles per gallon (71%), retail price (70%), monthly payment (56%), and monthly cost of fuel (56%) as very important in selecting their next primary vehicle

At the same time, demographics for new vehicle purchases are changing. While younger people are buying fewer cars, the share of new vehicles bought by people 55 years and older has increased.⁶

⁵ <https://www.census.gov/quickfacts/fact/table/santaclaracountycalifornia/INC110216>

⁶ <https://www.federalreserve.gov/econresdata/notes/feds-notes/2016/the-young-and-the-carless-the-demographics-of-new-vehicle-purchases-20160624.html>

The number of Santa Clara County residents who could potentially be reached through promotions and advertising is large. To pull out the key audiences, ICF looked at candidates who are showing a propensity to participate. The focus is to push those who are interested in EVs further along in the purchase process, and persuade those who will soon be in the market to purchase to choose an EV over conventional gasoline-powered vehicles.

Based on this, we have identified the following three consumer segments⁷ whose levels of engagement and commitment are critical to meeting our goals.

Status Seeking Singles

Age range: Mostly between the ages of 30 and 45, these unattached Americans are predominantly white with an above-average presence of Asians.

Where they live: Well-decorated condos and homes in desirable neighborhoods near nightlife, health clubs and hip restaurants.

What they do: A majority have college degrees and many have advanced degrees. Although many are still early in their careers, they already have white-collar jobs in technology, education, business and public administration.

Outlook: Progressive in their values and global in their outlook. Strong liberals who favor environmental issues.

Shopping Habits: Reluctant shoppers. Prefer high-priced items and “the latest” gadgets. Consumption patterns reflect deep pockets and upscale tastes.

Car purchase habits: When purchasing a vehicle, they may check out the safety rating, but typically end up buying a luxury import sedan or sports car that represents their status.

Media consumption habits: Little interest in traditional media. Do not read newspapers and subscribe to only a handful of specialty titled magazines. TV is main source of entertainment and information. However, they actively avoid watching TV commercials. They prefer the Internet, going online daily to social networking sites, blogs and sites that offer news, sports and commentary. They are more than twice as likely to notice ads in airports, subways, and taxis as compared to the average Americans, and are very responsive to internet advertising.



Couples with Clout

Age range: Affluent, childless, married couples in their 30's – 40's.

Where they live: Tend to live in pricey homes (\$900k+) in the nation's largest metro areas downtown areas and close-in suburbs.



⁷ Experian Marketing Services - Mosaic USA Group and Segment Descriptions

What they do: Devote themselves to white-collar professional and management jobs in business, public administration, education, and sciences (high earners).

Outlook: Risk takers who travel frequently, and far away. Happily pursuing the good life. They like their cars to express their hard-earned status: premium SUVs, upscale sedans and hybrid cars and trucks.

Shopping Habits: They enjoy shopping at high-end retailers. Consumption patterns reflect deep pockets and upscale tastes.

Car purchase habits: Find joy in consumption and like to buy luxury SUVs and imported sedans filled with the latest high-tech features.

Media consumption habits: Moderate media consumers. They spend the average amount of time reading newspapers and magazines and are selective about TV programming. Marketers will find them on the internet.

Platinum Prosperity

They like to buy a new car every 2-3 years, but don't take road trips—they prefer to travel by plane, train, or cruise when they vacation. They have a cautious streak—when they buy a car, safety features trump video screens and flashy styling.



Age range: Empty-nesting couples in their 50s and 60s and retirees enjoying a comfortable retirement.

Where they live: Many own spacious suburban homes or exclusive downtown condos valued at more than \$900k and have lived there for more than a decade.

What they do: Nearly a fifth are retired, those still in the workforce are at the peak of their careers, holding executive and management positions in business, technology and professional services.

Outlook: “Work hard, play hard” attitude. Enjoy getting away from busy schedules and like to travel often. They like to learn new things and pursue a healthy, sustainable lifestyle. Environmentally sensitive.

Shopping Habits: Seek quality, and like to purchase popular brands that are high-quality and cutting edge. They are environmentally sensitive, often driving hybrid cars and seeking out green products despite any added costs.

Car purchase habits: They like to buy a new car every 2-3 years, but have a cautious streak, as safety is a top concern.

Media consumption habits: Dislike TV and Internet advertising, but do respond to print ads in news, business and travel publications, catalogs, and airport billboards. Increasingly going online for news and commerce as long as it does not infringe on their privacy.

2. Message Strategy: Consumers

Step 2: What do we want them to know/do?

There are common messages that can be used to reach each of the three consumer segments. These messages are supported with customized themes addressing issues unique to each group.

Overarching messages should address common concerns and misperceptions associated with EVs:

- Lack of awareness of EVs and their capabilities: Many consumers have not experienced what it is like to drive an EV. They have some misperceptions about EVs, particularly around safety, performance, and range.
- Financial barriers: Some consumers find EVs to be expensive. They also have concerns around installing charging infrastructure in their homes and may be unaware there are incentives available to do so. They may not be aware or fully understand the incentives available to buy or lease an EV, or the lower total cost of ownership compared to a conventional gasoline vehicle.

Targeted messages should aim to change the mindset of consumers by addressing issues that are top of mind. These messages need to be conveyed by channels that would be heard by the audience. As such, consumers should be targeted where they **live, work, and play**.

The call-to-action for all audiences is to visit the program website. As further explored in the tactics section, the website is envisioned as a central hub for EV-related campaign information. The campaign will bring diverse audiences to a single starting point—the website—from where they can branch out to access information that is most pertinent to them. For example, a consumer interested in EV discounts will no longer need to conduct their own research online; instead they can visit the county’s website to find all relevant information in one place. By strategically using campaign URLs⁸, the implementation team can learn which collateral pieces are working better than others. Monitoring website metrics (see KPIs section) will provide data on campaign performance.

The table below provides the messaging strategy for the three consumer segments.

Exhibit 1. Message Strategy - Consumers

What do consumers believe? (Barriers)	What should they know? (Strategy)	What should they do next? (Next Steps)	How will we tell them? (Sample Tactics)
<ul style="list-style-type: none"> • EVs are unsafe • EVs don’t perform well • EVs have very limited range—I’ll be worried about having sufficient charge • EVs are not budget-friendly 	<ul style="list-style-type: none"> • EVs meet federal safety standards • EVs have quick acceleration and great handling—they are fun to drive • Range of EVs is greater than daily drive of most Santa 	<ul style="list-style-type: none"> • Visit the program website 	<ul style="list-style-type: none"> • Social media messaging focused on financial incentives • Social media messages that cross-promote financial incentives from others (such as utilities)

⁸ <https://ga-dev-tools.appspot.com/campaign-url-builder/>

What do consumers believe? (Barriers)	What should they know? (Strategy)	What should they do next? (Next Steps)	How will we tell them? (Sample Tactics)
<ul style="list-style-type: none"> I'm worried about where to charge: <ul style="list-style-type: none"> - Will I have to install something at home? That'll be expensive - My employer does not have charging facilities - I don't know if there are enough publicly-available charging sites 	<p>Clara County residents</p> <ul style="list-style-type: none"> A range of incentives/rebates are available to purchase EVs. There are financial incentives to set up charging sites in homes There are more than 330 publicly available and more than 100 privately available charging sites in the county.⁹ The number of employers and property owners/managers who are adding charging sites is increasing EVs are great for the environment EVs are family cars EVs get to use the carpool lane—you'll get home or to work faster! 		<ul style="list-style-type: none"> Social media ads Social media video testimonial Local media outreach and op-eds (e.g., in San Jose, Palo Alto) National media op-eds Targeted native online search ads Testimonials featuring EV owners (print and video) 'Get started' toolkit for setting up charging site in single family homes Community events (pop-ups, booths) Posters in gyms, theaters, offices

3. Audience: Charging Station Hosts

Charging station hosts or site hosts are the other important audience segment. This group is instrumental in accelerating charging infrastructure deployment across communities.

One of the biggest barriers this group faces is around costs.

Charging infrastructure costs are primarily comprised of hardware, permitting, and installation. Total costs vary by charging level, site characteristics, and equipment features. However, in workplace charging, fleet charging, and opportunity charging, there may be significant costs attributable to trenching and concrete, as well as ensuring ADA accessibility.

The table below summarizes the expected costs of Level 1, Level 2, and DC fast charging installations in non-residential applications.

⁹ <https://www.afdc.energy.gov/locator/stations/>

Exhibit 1. Cost ranges for single port electric vehicle charging stations in non-residential applications¹⁰

Cost Element	Level 1		Level 2		DC fast charge	
	Low	High	Low	High	Low	High
Hardware	\$300	\$1,500	\$400	\$6,500	\$10,000	\$40,000
Permitting	\$100	\$500	\$100	\$1,000	\$500	\$1,000
Installation	\$0*	\$3,000	\$600	\$12,700	\$8,500	\$51,000
Total	\$400	\$5,000	\$1,100	\$20,200	\$19,000	\$92,000

* The \$0 installation cost assumes the site host is offering an outlet for PEV users to plug in their Level 1

The values presented in the table above are based on single charge ports being installed at each location. It is also worth noting that the marginal cost of the next charger installations—for each level of charging infrastructure shown in the table above—is a fraction of the total installed cost listed. The charging equipment hardware is the only cost element that does not yield some benefit with increased number of installations. This is particularly relevant because the hardware represents a small fraction of the overall cost for both Level 1 and Level 2 equipment. Even for DC fast charging equipment, there is potentially significant savings with about 25-60 percent of the installed cost represented by the hardware. Charging station hosts should consider the quantity and location of electric vehicle supply equipment (EVSE) that will need to be installed over the next 10-20 years when installing the first unit. To maximize cost efficiency, hosts should upgrade electrical service for the anticipated long-term EVSE load and run conduit to the anticipated future EVSE locations. This will minimize the cost of installing future.

Charging site hosts can also face ongoing operation and maintenance costs. Changes to commercial electricity rates, demand charges, charging network fees for networked EVSE, fixes to EVSE components, and the need for new parts either due to breakdown or vandalism all contribute to ongoing costs.

3.1 Employers

Santa Clara County has more than 44,000 employer establishments.¹¹

Of these establishments, approximately:

- 31,500 have less than 20 employees
- 12,600 have 20-499 employees
- 6,700 have 500+ employees

A list of major employers in the county shows both public and private employers (see [Appendix B](#)).¹² Most are large technology firms (Adobe, Apple, Cisco, EBay), with some universities (Stanford), hospitals (Veterans Medical Center), and government offices (NASA) in the mix.

Offering workplace charging benefits the employer—one such gain is improved employee satisfaction. EV-driving employees can use carpool lanes to get to work faster. The opportunity

¹⁰ Cost ranges are based on data from [U.S. Department of Energy. 2015. Costs Associated With Non-Residential Electric Vehicle Supply Equipment](#) and [EPRI. 2013. Electric Vehicle Supply Equipment Installed Cost Analysis](#)

¹¹ <https://www.sba.gov/advocacy/firm-size-data>

¹² <http://www.labormarketinfo.edd.ca.gov/majorer/countymajorer.asp?CountyCode=000085>

to charge in the workplace can also reduce “range anxiety,” a driver’s concern that they will run out of charge before they reach their destination.

Some employers—typically larger organizations—are early adopters and already provide worksite charging facilities to their employees. While the companies leverage the benefits of providing EV charging sites—improved employee satisfaction, green reputation, improved air quality, among others—some are also encountering “charge rage”—a case of many electric cars, but not enough charging spots at work.¹³

At the same time, employers of all sizes have physical and organizational considerations to take into account as they plan for a workplace charging site. They need to plan ahead to ensure new sites are optimal. Parking spots have to be close to electric service as well as near to the office. Accessibility regulations per the Americans with Disabilities Act also have to be met. Lighting, wet areas, and pedestrian hazards also need to be considered.

There are no laws requiring workplaces to install charging infrastructure at existing buildings. However, if they are developing new office buildings or campus sites, those developments are regulated by the California Building Code, which has pre-wiring requirements.

Employers may need to work with several other groups—employees, utilities, government, charging infrastructure suppliers, contractors, property owners, and approval bodies. At each step, there are cost and legal considerations as well.

All of the above can be daunting to employers, who may believe this is a costly, time-consuming process. This may be especially true for small- to medium-scale businesses. Messaging will need to address these barriers while giving them a strong incentive to participate.

3.2 Property Owners and Managers

This group includes residential (apartments, condominiums) and commercial (malls, restaurants, performance venues) property owners and managers. Their motivations to deploy charging infrastructure vary.

Some businesses stand to increase revenue because charging stations have been shown to increase “dwell time,” i.e., the amount of time visitors spend at the location. While they are waiting for their vehicles to charge, EV drivers are more likely to linger at businesses, potentially increasing sales. A case study by the EV charging infrastructure company ChargePoint found that installing charging stations can increase customer dwell-time by an average of 50 minutes per customer.¹⁴

Building owners may wish to attract tenants by offering charging as an amenity. Commercial property owners may want to visibly show their commitment to sustainability and get LEED certified. Others realize that offering charging facilities is a brand differentiator. For some it may be about gaining a competitive edge by generating new business and gaining loyalty from eco-minded customers.

Finally, as the EV market grows, property owners and managers may not want to be left behind.

¹³ <https://www.mercurynews.com/2014/01/19/charge-rage-too-many-electric-cars-not-enough-workplace-chargers/>

¹⁴ [ChargePoint: Leading Retailer Partners with ChargePoint to Attract and Retain Loyal Customers](#)

However, this segment may be 1) unaware of available state and federal grants to defray deployment costs and 2) may not know whom to contact for more information and support.

The messaging strategy, explored in the following section, will provide ways to address these concerns.

4. Message Strategy: Charging Station Hosts

Step 2: What do we want them to know/do?

San Jose has more than five times the national average number of public charging stations per capita. Employers in San Jose area are also leaders in installing charging stations for employees.¹⁵ But site hosts across the spectrum typically face three key barriers:

- Significant upfront costs associated with equipment and installation
- Uncertainty over demand
- Uncertainty over customers' willingness to pay for charging services

It is essential that the messaging strategy assuage these fears by providing information on subsidies available to make investments worthwhile in the near term. In other words, a modified "hand-raiser" approach to the messaging strategy is key.

In marketing, "hand raisers" are those who actively show their interest in a company's products by providing their contact information. For the company, this group is of great interest because they are indicating they want a relationship with the brand. This could translate to gaining a new customer or selling more products.

This plan suggests catalyzing hand-raisers, in this case, the site hosts. By using this strategy, Santa Clara County positions itself as a key connector. It connects charging site hosts with entities that are offering financing. An outreach plan that increases awareness around available funds may result in more hand-raisers. The primary message it would convey is that EV infrastructure is coming, and this is the optimal time to be a site host.

The benefits of this approach are three-fold:

- Site hosts will have a lower barrier to entry
- Funders will meet their spend goals
- The county will see an increase in charging stations overall

The table below explores messaging strategy to reach site hosts:

Exhibit 2. Message Strategy - Charging Station Hosts

What do site hosts believe? (Barriers)	What should they know? (Strategy)	What should they do next? (Next Steps)	How will we tell them? (Sample Tactics)
<ul style="list-style-type: none"> • It's costly to install and maintain charging stations • Charging stations are not profitable 	<ul style="list-style-type: none"> • EVs are here to stay • Funding is available 	<ul style="list-style-type: none"> • Visit the program website 	<ul style="list-style-type: none"> • Leveraging local chambers of commerce • Social media via Santa Clara

¹⁵ https://www.theicct.org/sites/default/files/publications/CA-cities-EV-update_ICCT_Briefing_30052017_vF.pdf

What do site hosts believe? (Barriers)	What should they know? (Strategy)	What should they do next? (Next Steps)	How will we tell them? (Sample Tactics)
<ul style="list-style-type: none"> It's overwhelming to think about all this. Where to start? 	<ul style="list-style-type: none"> It's important to plan ahead for ongoing costs; solutions are available including talking to local utilities about time-of-use rates and/or special EV charging rates Setting up the infrastructure will help realize associated benefits Information on getting started is available in one location 		<p>County's Facebook page and @SCCgov</p> <ul style="list-style-type: none"> Social media video testimonial Social media sharing/reciprocity Local media outreach and op-eds (e.g., in San Jose, Palo Alto) National media op-eds Native online search ads Success stories featuring employers, commercial property owners, and residential property managers 'Get started' toolkit for employers and property owners/managers (includes FAQs, one-pager overview/print brochure, customized PPT deck, list of funders/resources)

IV. The Tactics

Step 3: How and where do we tell them?

Campaign tactics are specific actions taken to carry out the strategy and achieve goals. The tactics will help to carry the program's message forward to target audience groups.

1. Develop a suite of DNZ marketing collateral.

ICF recommends creating a compelling and engaging suite of collateral, with messaging tailored to the consumer and site host audiences, focused on gaps or needs, and that are easily adapted to social media.

The collateral will be designed to be used across a variety of channels—website, social, email, face-to-face meetings—to address multiple uses and audience needs.

Strategy for these pieces includes:

- **Maximizing reach** by being multi-use—print, electronic, social.
- **Grabbing reader’s attention** with highly visual, easy-to-understand content.
- **Telling stories** about EV owners and site hosts to show the personal/organizational impact of adoption.

A marketing suite should include:

	Purpose
Fact sheet	Targeted informational resource that uses data to address common concerns and misperceptions.
Infographic	Highly visual, data-driven piece suitable for sharing on social media.
Ads	Capture attention as audiences actively search for terms related to EV adoption.
Leave-behind	Reinforce messages and provide next steps.
Poster	Visually arresting piece with key messages highlighted.
Campaign image library	Approved, high-resolution images for use across the marketing suite by any municipality participating in the campaign. It helps create a consistent look-and-feel across the region.
Social media plan	Messages that raise awareness, share resources, and contain strong calls-to-action. Strategy on sharing highly engaging content (images, infographics, short videos, animations).

2. Develop a branded, community-facing, program website

For most audiences, their first interaction with DNZ will be via the website. ICF recommends creating a landing page or resource site that leverages the both the [current content](#) on the county’s Office of Sustainability page, and the new creative and message concepts developed in Tactic 1.

To kick-start this effort, the following steps should be taken:

- For municipalities: Develop a resource hub (behind a login) containing marketing materials and templates. This will help them maintain brand consistency while being able to customize the pieces to meet local needs.
- Draft content to provide information that caters to both the consumer group and the charging station hosts. Focus on listing informational resources that will facilitate decision making.
- Add interactive elements (such as being able to search for grants) and visual assets (video testimonial).

After the website is launched, ensure the hyperlink is consistently included in every collateral piece and outbound messages.

3. Conduct a campaign launch

Use press releases to pursue earned media through local channels. Specific local and regional print and radio media outlets can help promote the message. Down the line, ads, articles, and op-eds are some ways to leverage these mediums and keep the campaign message fresh in the minds of the audience.

See [Appendix C](#) for a list of regional media.

4. Conduct a targeted paid media campaign

Paid media, including traditional and digital advertising, paid search terms via Google, and sponsored social media content via Facebook allow organizations to put a very specific message in front of a targeted audience at defined times. When paired with tested creative, paid media can deliver predictable conversion rates for dollars allocated.

Paid search and social campaigns create top-of-mind awareness among the target audience. Ads can drive traffic to the campaign website and other informational resources. With paid social, targeted ads are placed in Facebook’s highly interactive environment. These newsfeed ads can also help amplify organic content posts.

	Media Partner	Targeting Strategy
Paid Search	Google Search	Reach users by identifying key terms being searched for by the audience. E.g. “electric vehicle incentives,” “electric vehicle charging costs”
Paid Social	Facebook	Target users by geographic location, job title, interests, gender, date of birth

5. Use social media to drive awareness

The county’s Facebook and Twitter pages can drive awareness, and grow and engage audiences. To get the most out of this channel, leverage visual assets, tailor content to reach various audiences, and consistently use campaign-related hashtags. It is also easy to tag related programs to widen the audience for the message. E.g. Tagging a utility that offers EV incentives can result in mutual cross-promotion.

For more, see [Appendix D](#) for the social media plan.

6. Promote DNZ at events/conferences

Strategically participating in events and conferences helps inform and educate the target audience about EVs, and helps to mitigate any concerns they may have. It also serves as a recruitment channel for program participation. Event participants can be asked to share contact information, which enables post-event follow-up.

- **Consumer events:** Ride-and-drive events are a popular way to help consumers tangibly experience EVs. The county should look for opportunities to be associated with such events: Sponsorships, paid ads in event programs, speaking opportunities, poster displays, and promotion via social media are some ways to do so. The “live, work, play” model of targeting consumers is helpful in determining venues for promotional activities.
- **Employer events:** The county should participate in employer events such as Earth Day celebrations and benefits fairs. Participation need not necessarily be in person; the county could use these opportunities to share information via flyers or eblasts with human resources and facilities managers.

See [Appendix E](#) for examples of upcoming events in Santa Clara County.

7. Engage employers and property owners/managers

The county should leverage lunch and learn opportunities at the local chambers of commerce to promote financial incentives. Sending targeted eblasts or postcards to current and potential charging site hosts can help increase awareness. It is important to be specific when choosing recipients. E.g., choosing to send a postcard to Apple’s corporate address will have a smaller impact compared to sending a highly targeted LinkedIn message to the facilities manager or human resource personnel. Other opportunities include banner ad placement and outreach via social media.

See [Appendix B](#) for a list of major employers, [Appendix F](#) for a list of funders, [Appendix G](#) for a list of residential and commercial property owners/managers, and [Appendix H](#) for a list of chambers of commerce.

8. Conduct email marketing

Develop a series of email campaigns to human resources and facilities managers that inform and drive web traffic to the program website.

Consider these types of campaigns:

- General awareness/informational
- Segmented: E.g. Employer-specific by size (small, medium, large businesses) or by type (hospitals)
- Seasonal – i.e. January/New Year – starting fresh, Spring – focus on environment etc.
- Deadline-driven: Based on countdowns. E.g. Funding deadlines.
- Follow-up: Reconnecting with those who have shown interest

V. A note on disadvantaged communities

Santa Clara County—a global technology hub—is one of the wealthiest counties in the state. But that wealth is not uniformly spread across the region. There are many communities facing significant disadvantages stemming from a variety of factors. The median income is ~\$101,000 for households in the county, and true for White (~\$100,000) and Asian (~\$121,000) households primarily. Black or African American (~\$66,000), American Indian and Alaska Native (~\$59,000), and Hispanic or Latino origin households (~\$64,000) have lower median incomes.¹⁶ In turn, this could impact purchasing power (and the ability to secure favorable auto loans) for members of these communities. At the same time, many disadvantaged communities also have strengths that are harder to measure, for example, strong community and familial bonds. All these factors should be considered when the marketing plan is implemented. While this initial plan provides an approach to target higher income groups, it is important to expand the plan to cover outreach to low- to moderate-income residents in Phase 2.

Here are some ways to begin planning for Phase 2:

- *Speak their language*: Capture cultural nuances when translating marketing materials (Spanish, Tagalog, Mandarin, Hindi)
- *Meet them where they are*: Participate in community-based events and celebrations; target multiple generations with strategic messaging
- *Emphasize savings*: Provide information on incentives; also focus on promoting used EVs

Promoting used EVs:

Compared to the used gasoline-powered cars on the resale market, the number of used EVs is significantly smaller. Though small at the moment, this market will likely become more active with EV leases ending. So it is essential that these vehicles be considered during outreach. Low- to moderate-income consumers may find it harder to buy brand new EVs, but used EVs are often available at great value. Similar to the primary audience, addressing misperceptions will be critical—the reliability and range of EVs will be major concerns. Consumers are concerned about weakened batteries, lower ranges, and potential costs to make upgrades to used EVs. Focusing on affordability, increasing awareness of EV benefits, and pointing to the potential for cost savings can help.

¹⁶ [Data.census.gov](https://data.census.gov)

VI. The Results

Step 4: Was it effective?

This final section of the outreach plan identifies how Santa Clara County will measure the performance of the recommended marketing tactics to promote the DNZ program.

These marketing performance measures provide a means for Santa Clara County to determine the effectiveness of its marketing campaign strategy, and to identify opportunities for future enhancements.

1. Overarching measures

Both qualitative and quantitative data should be used to evaluate the effectiveness of the proposed tactics.

1.1 Program performance measures:

The primary call to action during the campaign launch is to send consumers and site hosts to the program website—a central repository of information—to learn more. Metrics to measure website usage are explored in section 1.2 below; however, it is also essential to look at other year-over-year data. While harder to measure when compared to website data, these metrics provide a more direct look at EV site installations and EV adoption—providing input into overarching campaign success.

Over the long-term, the county should track:

- Number of engaged site hosts who installed EVSE
- Number of engaged consumers who leased or purchased an EV

The above can be tracked via longitudinal analyses—e.g., checking in with the same group of site hosts every January to see if they completed installations.

These data can also be gathered by surveying the target audience periodically. E.g., the county should leverage partnerships with funders to see how many hosts pointed to the county's campaign when asked how they heard about incentives.

1.2 Marketing performance measures:

On the qualitative side, municipalities promoting DNZ can share feedback with the Santa Clara County team. Collecting feedback from hand-raisers who have completed at least one EV site installation and feedback from the funders will be helpful. As new collateral is rolled out, continuous monitoring will allow the county to identify what messages are working well, and what may need to be adjusted.

On the quantitative side, month-to-month campaign tracking should include:

- Visits: Increased visits to the program website landing page
- Conversions: Increased clicks to available resources and outbound pages
- Leads: Increased inquiries to program email address and phone numbers
- Direct outreach metrics: Leads from events, meetings, and calls

Examples of key performance indicators for specific tactics follow:

2. Key Performance Indicators

To start, the county should first establish baselines where possible. E.g., the county already has a [Facebook page](#) and the team should download page metrics to examine current data. This provides one way to measure progress after the campaign launches. Similarly, the county can collect baseline data for how eblasts and webpages are performing across other county initiatives.

KPIs can also be compared against industry standards. The 2017 Granicus Benchmark Report: Insights for Mapping an Effective Digital Strategy¹⁷ provides useful benchmarking information. The table below contains industry standards where available.

Tactic	Terms	Definition	Use
Media Outreach	Coverage	Number of published pieces related to the DNZ program	Coverage and reach measure how effectively the program is able to use media to reach its audiences.
	Reach	The number of people a piece may be seen by, sometimes referred to as circulation	
Website (ICF recommends Santa Clara County install a Google Analytics tag on the program web page to enable data collection of the listed web metrics.)	Traffic sources		Traffic sources show how users are led to a site and provide critical information about how the website is promoted.
	▪ Organic search	Search traffic derived from unpaid search engine results (e.g., Google, Bing)	
	▪ Email	Links embedded in an email	
	▪ Referrals	Linked from another website	
	▪ Direct	Accessed via a favorited/bookmarked page, or URL typed in address bar	
	▪ Social	Linked from a social account (e.g., Facebook, Twitter)	Site usage statistics inform site and page performance.
	Site usage overview		
	▪ Number of sessions	Number of times a user visits a website (users who leave the site and return within 30 minutes are counted as part of the original session)	
	▪ Users	Visitors to a site	
	▪ Total pageviews	Total number of pages within the website viewed (repeated views of a single page are counted)	
▪ Pages per session	Pages per session (average page depth) is the average number of pages viewed during a session (repeated views of a single page are counted)		
▪ Average session duration	Period of time a user is active on a site (averages the session time of all users)		

¹⁷ [The 2017 Granicus Benchmark Report: Insights for Mapping an Effective Digital Strategy](#)

Tactic	Terms	Definition	Use
	<ul style="list-style-type: none"> ▪ Bounce rate 	Percentage of single-page visits (i.e., visits in which a user left a site from the entrance page without interacting with the page)	
	<ul style="list-style-type: none"> ▪ Top visited pages 	Pages on website with the most page views	Used to determine which pages earn the most traffic. When examined alongside other metrics, this can inform elements of page design or promotional strategy.
Program e-blasts	Number of subscribers and open rates		Used to identify the success of email program engagement.
	<ul style="list-style-type: none"> ▪ Open rates 	Percentage of users who open the email Industry standards for state and local government: 23% median open rate	
	<ul style="list-style-type: none"> ▪ Click-through rates 	Number of unique clicks in an email divided by the number of emails successfully delivered Industry standards for state and local government: 3.1% click rate	
	<ul style="list-style-type: none"> ▪ Subscriber growth 	Percent change in subscribers over a period of time	
	<ul style="list-style-type: none"> ▪ Forwards 	When a user forwards the email to another address	
	<ul style="list-style-type: none"> ▪ Bounces 	When an email is undeliverable due to an incorrectly provided email address	
	<ul style="list-style-type: none"> ▪ Spam reports 	When the email is reported as spam (measures email's reputability)	
	<ul style="list-style-type: none"> ▪ Unsubscribes 	When a previously subscribed user opts to no longer receive messages	
	<ul style="list-style-type: none"> ▪ Engagement Rate 	Number of unique email recipients who opened an email or clicked on a link in an email over a period of 90 days, divided by total number of email recipients who received an email during that time period. Industry standards for state and local government: 49% engagement rate	
Social Media	Amplification	When content is shared or retweeted; retweets/shares amplify (extend) the life of digital content	Used to identify the success of the social media plan.
	Appreciation	Series of social media interactions in which a user positively responds (e.g., likes, favorites, thumbs-up)	

Tactic	Terms	Definition	Use
	Engagement	Measures a user's interaction with content (e.g., comments)	
	Tweet impressions	Number of times a tweet is delivered to users' Twitter streams or Facebook post is seen in users' newsfeeds	
	Use Facebook Insights for		Find aggregate information about page interactions and audience geography, demographics, purchase behavior and more.
	▪ Actions on page	Number of clicks on a page's contact information and call-to-action button	
	▪ Reach	Number of people a post reached, plus likes, comments, shares, and more	
	▪ Post engagements	Number of times people engaged with a post through likes, comments, shares, and more	
	Use Twitter Analytics for		The audience insights dashboard contains information about your followers. Track follower growth over time and learn more about followers' interests and demographics.
	▪ Impressions	Number of times a tweet is delivered to users' Twitter streams	
	▪ Engagements	Includes clicks, likes, retweets, and replies	
	▪ Engagement rate	Engagements divided by impressions	
	▪ Link clicks	Number of times a user clicks on a link contained in a tweet	
	▪ Detail expands	Clicks on an in-stream tweet to view the full details	
	▪ Audience insights	Includes follower growth, followers' interests, followers' demographics, and sometimes consumer behaviors, lifestyles, and mobile devices	

VII.Example Program Tactics Timeline

Based on the strategy and tactics presented above, ICF recommends the following execution plan.

	Month1	Month2	Month3	Month4	Month5	Month6	Month7	Month8	Month9	Month10	Month11	Month12
Website	Launch	Review/revise copy as needed, review metrics	Review monthly metrics	Review monthly metrics	Review monthly metrics	Review/revise copy as needed, review metrics	Review monthly metrics	Review monthly metrics	Review monthly metrics	Review monthly metrics	Review monthly metrics	Review/revise copy as needed, review metrics
Press release	Draft, secure approvals, launch	Follow up	Follow up			Mid-year release/update	Follow up	Follow up				Year 1 results release
Local media outreach/ follow up		Pitch release and op-eds	Ongoing	Ongoing			Pitch release and op-eds	Ongoing	Ongoing			
National media outreach/ follow up			Pitch national op-eds	Ongoing	Ongoing			Pitch national op-eds	Ongoing	Ongoing		
Email campaign	Launch subscription and general awareness campaign	Informational messages	Informational messages	Informational messages	Begin segmented emails	Segmented emails	Segmented emails	Segmented emails	Segmented emails	Segmented emails	Segmented emails	Segmented emails
Social media/ toolkit	Launch social - Press release information	Ongoing	Ongoing Highlight op-eds	Ongoing	Ongoing Highlight op-eds	Ongoing	Ongoing Highlight results	Ongoing Highlight op-eds, testimonials	Ongoing	Ongoing Highlight op-eds, testimonials	Ongoing	Ongoing Highlight results
Paid online search	Launch with press release/web site	Ongoing	Ongoing Revise based on results	Ongoing	Ongoing Revise based on results	Ongoing	Ongoing Revise based on results	Ongoing Revise based on results	Ongoing Revise based on results	Ongoing Revise based on results	Ongoing Revise based on results	Ongoing
Testimonials & success stories			Identify possible successes	Conduct interviews	Develop materials	Secure review	Launch with op-eds and social	Ongoing	Ongoing	Ongoing	Ongoing	Revise as needed

Driving to Net Zero: Outreach Campaign

Events (see Appendix E)	Prepare materials, select speakers (as needed)	Ongoing										
KPIs	Review/report monthly	Review/report monthly	Review/report monthly	Review/report monthly	Review/report monthly	Review/report monthly	Review/report monthly	Review/report monthly	Review/report monthly	Review/report monthly	Review/report monthly	Review/report monthly

VIII. Appendices

Appendix A: 2017 Santa Clara County Transportation Survey

Executive Summary

This report describes the implementation and results of the 2017 Santa Clara Transportation Survey, conducted on behalf of Santa Clara County by ICF, a research and consulting firm with expertise in transportation and energy-related surveys.

The study's primary goal was to determine the perceptions and purchase intentions surrounding electric vehicles (EVs) among the County's general population. The survey also included questions about transportation habits as well as demographics. The questionnaire was developed in partnership with the County of Santa Clara.

The target population was Santa Clara County residents aged 18 and older. We asked that the respondent be involved in decisions about buying or leasing vehicles for the household.

Using an address-based sample, we invited respondents to respond to the survey either by mail—by returning a paper questionnaire, or by web—by accessing a URL and entering a unique code assigned to them. We obtained a total of 529 completed surveys, which we processed and analyzed.

General Transportation Habits

- The vast majority of Santa Clara residents currently drive a vehicle for work or personal use. More than 80 percent of residents reported that drive less than 40 miles per day round trip on an average week day. A majority expected to make up to five long trips of over 100 miles in the next 12 months.
- Almost three-quarters of residents expect that gasoline prices will increase compared to current prices.
- Use of ridesharing and car-sharing apps among residents was relatively low.
- Residents reported low familiarity with the BART Silicon Valley extension.

Vehicle-buying Intentions and Preferences

- Almost two-thirds of residents planned on acquiring their next vehicle more than two years in the future. Nearly half planned on purchasing a new vehicle, as opposed to a pre-owned one. The most popular model choices were mid-or full size cars and mini or compact SUVs.
- Two thirds of respondents said that gasoline was their preferred fuel type for their next vehicle purchase, but electricity was close behind. Nearly 60% of residents said that electricity was either their preference or a fuel type they would strongly consider for their next vehicle purchase.
- The most important vehicle features respondents reported in selecting their next primary vehicle were safety, brand reliability and miles per gallon.

- The most popular makes based on intention to buy were Toyota, Honda, Tesla, Ford and Nissan.

Electric Vehicle Ownership, Experience and Perceptions

- When residents were asked to think about EVs, what came to mind was the Tesla brand, concepts related to charging and range, and attributes related to environmental-friendliness. The most common EV brand to come to mind was Tesla, specifically the Model S.
- EV ownership of survey respondents is relatively high, with 9% of residents reporting that they currently drive a plug-in EV as their primary vehicle. The most popular models that respondents had driven most recently were the Tesla Model S, Toyota Prius, Nissan Leaf, Chevy Volt and Ford CMax.
- When asked to rate certain statements about EVs, residents strongly agreed or agreed with the statements that EVs are very quiet, save money on fuel and that sales of these vehicles will continue to increase in California.
- A majority of residents are not at all familiar with the financial incentives offered at the state or Federal level to encourage EV sales.
- The most common source of information about EVs was family, friends or neighbors.

Background

Transportation is the single largest contributor to greenhouse gas (GHG) emissions in California (39% of total emissions in 2015), and about 70% of emissions within the transportation sector come from light-duty vehicles like cars, motorcycles and light-duty trucks.¹⁸ The transportation sector thus has a major role to play in meeting state GHG reduction targets and other climate, air and energy goals. Electric vehicles (EVs) are a key component of California's petroleum and GHG reduction goals, and as the nation's leader in EV sales, California has been making progress in growing EV infrastructure and addressing some of the challenges faced in the deployment of charging stations.¹⁹

Rates of EV adoption are expected to continue to increase as battery prices fall and electric models become more economical; some estimates show that 54% of new car sales in 2040 will be electric.²⁰ California is the national leader in plug-in sales and ownership, with 50% of plug-in sales occurring in the state.²¹ In fact, California is the second largest EV car market in the world after China.²² Within California, Santa Clara is a leader in EV sales and ownership: six of the top ten EV cities by market share are located in the county (Palo Alto, Los Altos, Saratoga, Los

¹⁸ California Air Resources Board (CARB), "California Greenhouse Gas Emission Inventory – 2017 Edition," www.arb.ca.gov/cc/inventory/data/data.htm; CARB, California Greenhouse Gas Emissions for 2000 to 2014 – Trends of Emissions and Other Indicators, www.arb.ca.gov/cc/inventory/pubs/reports/2000_2014/ghg_inventory_trends_00-14_20160617.pdf

¹⁹ California Energy Commission, "2014 Integrated Energy Policy Report Update," www.energy.ca.gov/2014publications/CEC-100-2014-001/CEC-100-2014-001-CMF.pdf

²⁰ *Bloomberg Finance*, "Electric Vehicle Outlook 2017," data.bloomberglp.com/bnef/sites/14/2017/07/BNEF_EVO_2017_ExecutiveSummary.pdf

²¹ EV Volumes, "USA Plug-in Vehicle Sales for 2016 – Final," www.ev-volumes.com/news/usa-plug-in-vehicle-sales-for-2016/

²² Busch, Chris, "California Wants More Than 4.2 Million Electric Vehicles By 2030; A New Plan Charts The Road Ahead," *Forbes*, 12/14/2017: www.forbes.com/sites/energyinnovation/2017/12/14/california-wants-4-2-million-electric-vehicles-by-2030-a-new-state-plan-charts-the-road-ahead/#11f6d96a4b44

Gatos, Cupertino and Mountain View).²³ In 2016, Palo Alto led the state in EV market share, with EVs accounting for 22% of new vehicle sales.

Research Purpose and Objectives

While there clearly is a relatively high rate of EV adoption in Santa Clara County, this survey aimed to better understand how residents perceived EVs and how likely they would be to buy or lease an EV in the future. The study's main research questions were developed in partnership with the County and included:

1. What kinds of features matter most to Santa Clara residents when they think about purchasing or leasing a vehicle?
 - a. How much is electric power a factor in this decision?
 - b. What are the most popular car makes and models?
2. What kind of experience do Santa Clara residents have with EVs? What proportion of county residents have driven EVs and what proportion of households currently own an EV?
3. How do residents of Santa Clara perceive EVs?

The survey also afforded an opportunity to gather general information on transportation habits and preferences.

²³ The International Council on Clean Transportation, "Update: California's electric vehicle market," www.theicct.org/sites/default/files/publications/CA-cities-EV-update_ICCT_Briefing_30052017_vF.pdf

Methodology

The Santa Clara County Transportation Survey was developed with input and approval from the Santa Clara County Office of Sustainability. The questionnaire consisted of four main sections: Transportation and Driving Habits; BART Silicon Valley; Car Buying or Leasing; Demographics.

Sampling

To accurately represent the target population of households in Santa Clara County, California, ICF developed a survey design consisting of an address-based sampling approach coupled with a web/paper survey data collection protocol. We designed and selected a simple random sample that would yield more than 400 completed surveys, the target sample size necessary to provide precise overall estimates (within $\pm 5\%$ at the 95% confidence level). In all, 529 Santa Clara County residents completed the survey over a 7 week period between October and December 2017. We obtained 285 mail completes and 244 web completes, one of which was in Spanish.

Data Collection

Survey data were collected using an online web survey and a printed survey mailed to residents' households. To maximize response, we employed up to four contacts to potential respondents.²⁴ Our first contact was a one-page letter mailed to each selected household directing them to a website to complete the survey. The letter was mailed in both English (one side) and Spanish (reverse side). The invitation contained the website URL (www.SCTransportationSurvey.com), a unique password to securely access the online survey and a \$1 bill. The letter was mailed in a white, standard-sized window envelope. Residents receiving the survey invitation were instructed that someone 18 or older, who is involved in decisions about buying or leasing vehicles for the household, should complete the survey.

The second contact was an English-language paper surveyed mailed to residents selected into the sample who had not responded to the web survey. A one-page cover letter in both English (one side) and Spanish (reverse side) was also included. The letter provided an email address in case residents had questions about the survey. This was mailed in a large, white, windowed envelope. The third contact was an English-language reminder postcard to non-responders asking them to complete the survey online. The postcard included one sentence in Spanish instructing residents to e-mail the survey help desk if they wanted to complete the survey in Spanish. The fourth contact was a second English-language paper survey mailed to non-responders, also sent in a large, white, windowed envelope.

Weighting

We weighted the survey data to account for differential sampling probabilities and response propensities. The sampling weight was computed as the inverse of the selection probability for the random sample of household addresses and also accounts for the subsampling within households. The probability for each sampled adult is the probability of selecting each household (the number of sampled households divided by the number of households in the frame) multiplied by the probability of selecting each adult within household (the reciprocal of

²⁴ Dillman, DA, Smyth, JD, Christian, LM. (2014). Internet, Phone, Mail, and Mixed Mode Surveys: The Tailored Design Method. 4th Ed.

the number of adults in each household). Due to the simple random sampling design, household selection probabilities are all the same, so the sampling weight for each sampled adult is the number of adults in each household.

Sampling weights were adjusted for non-response using a simple ratio adjustment. The adjustment was computed as the ratio of two sums: a) the total of the sampling weights over the set of sampled households, and b) the total of the sampling weights over the subset of participating households.

As a final step, the weights were post-stratified to known population control totals available from the American Community Survey (2016 ACS 5-year estimates) population estimates for adults (18+) in Santa Clara County. Post-stratum cells were defined by age group and Hispanic ethnicity, and cell population totals were computed from the ACS data. Since the age and Hispanic variables have some missing values in the survey data, the missing responses were imputed at random with the probabilities estimated from the non-missing data. The adjustment made the final adjusted weights sum to the total number of adults in Santa Clara County as reported in the ACS data.

Results

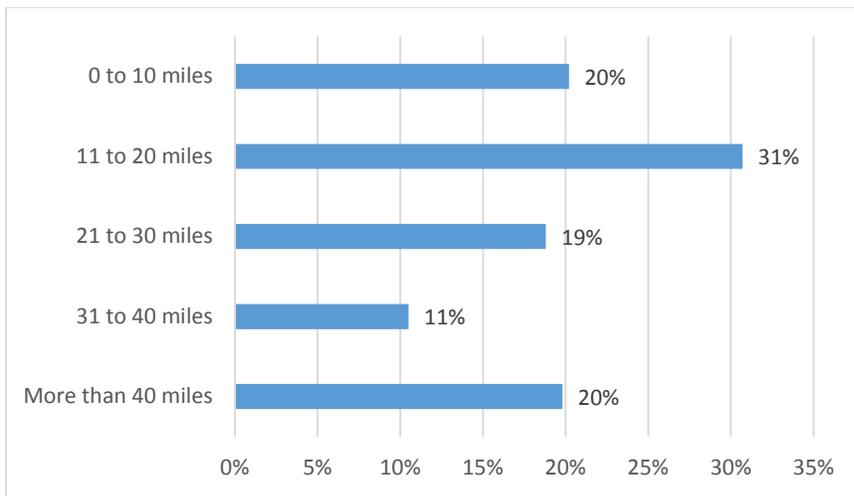
In the pages that follow, we present survey results following the order of the questionnaire, which can be found in Appendix A. For each topic, we provide the question number from the survey so that readers can reference the entire text of the question.

Transportation Characteristics

Current Driving Characteristics (Q1-Q3)

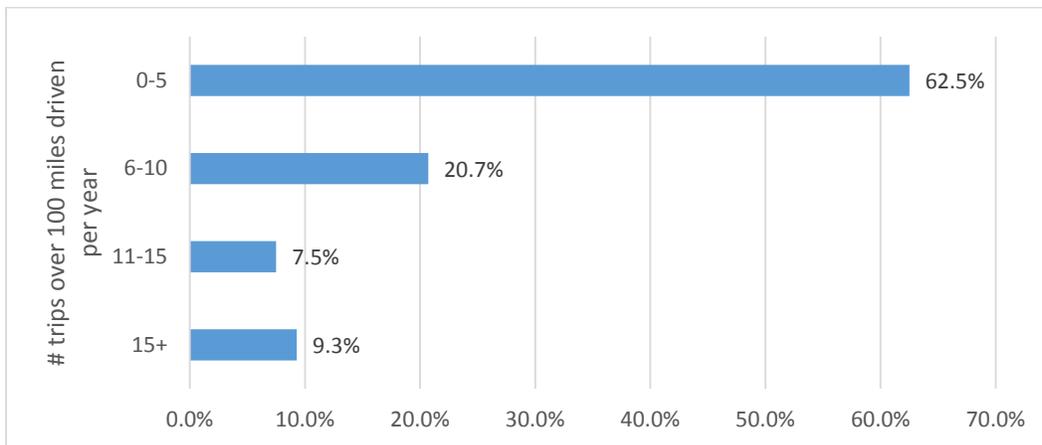
The vast majority of Santa Clara residents currently drive a vehicle for work or personal use (93.6%). Drivers reported their weekly travel distance, with a plurality traveling 11 to 20 miles in a week day (31%). How often people need to drive and how far is an important factor in understanding the potential for electrifying travel segments. More than 80% of residents reported that drive less than 40 miles per day round trip on an average week day. These short distance trips have the potential to be electrified as they are well within the electric range of most electric vehicles on the market today.

Figure 1: Round-trip travel in typical week day



Drivers were asked to self-report the number of trips over 100 miles they expected to make over the next 12 months. A majority expected to make between 0 and 5 of these trips (62.5%) while one in five expected to travel this distance between 6 and 10 times in the coming year (20.7%).

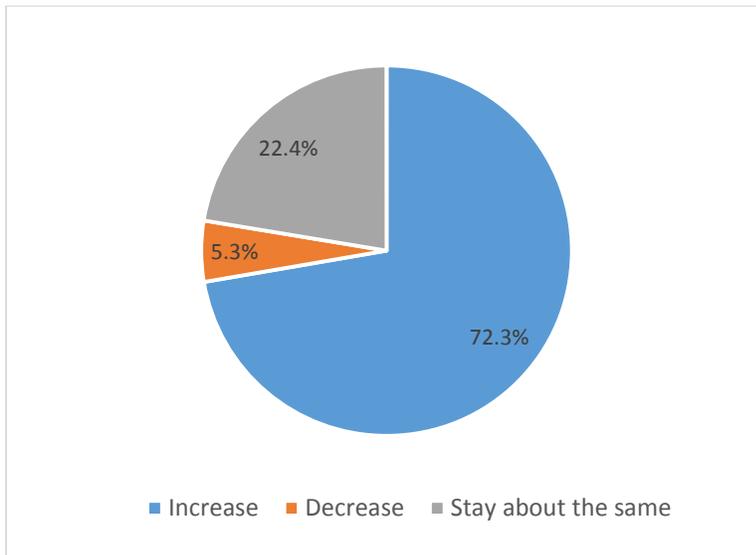
Figure 2: Expected trips over 100 miles



Expectations of Future Gas Prices (Q4)

Almost three-quarters of residents (72.3%) expect that gasoline prices will increase compared to current prices. Only 5.3% expected prices to go down, while just over one in five thought that prices would stay about the same (22.4%).

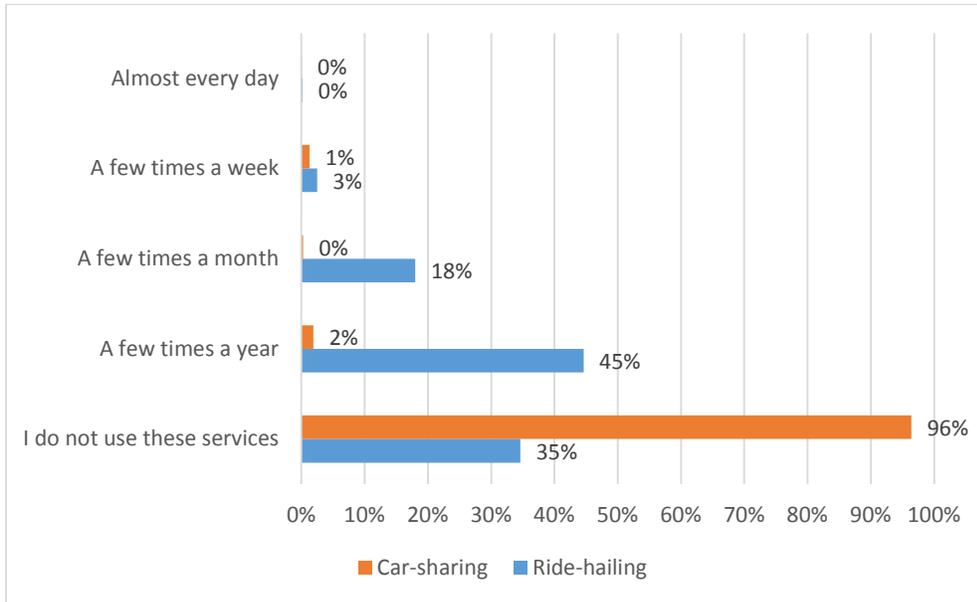
Figure 3: Expectations of future gas prices



Use of Ride-hailing and Car-sharing Services (Q5-Q6)

Santa Clara County residents used ride-hailing services like Uber and Lyft in a limited way, with 18% saying they used them a few times a month, and nearly half (45%) reporting using these apps only a few times a year. Use of car-sharing services was even less widespread, with 96% of residents reporting not using car-sharing services like Zipcar.

Figure 4: Use of ride-hailing and car-sharing services



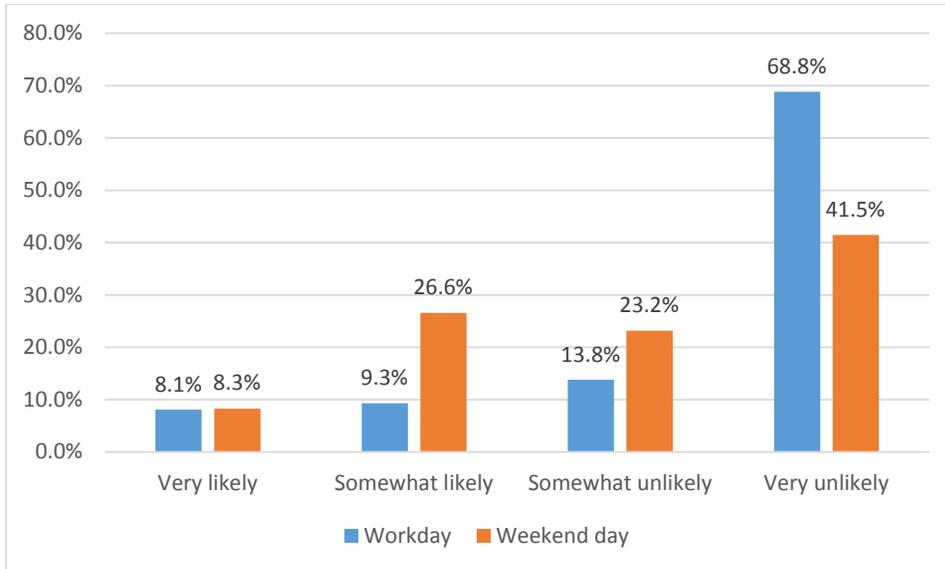
BART Silicon Valley

The Bart Silicon Valley Extension is an extension of the Bay Area Rapid Transit (BART) system into Santa Clara County. Portions of the extension have been completed while others are still under development.

Familiarity with BART Silicon Valley extension and likelihood to ride (Q7-Q9)

Nearly half of residents reported not being at all familiar with the BART Silicon Valley Extension (44.6%) and only 8.4% said they were very familiar with the service. When asked how likely they would be to ride the BART Silicon Valley on a typical workday, more than two-thirds of residents said they were very unlikely to do so (68.8%), and only 8.1% said it was very likely they would use the transit service. At the same time, residents reported greater likelihood to ride to ride the BART Silicon Valley on a weekend day. Just over a third of residents said they were very or somewhat likely to ride the BART Silicon Valley on a weekend (34.9%), compared to 17.4% for a workday.

Figure 5: Likelihood to ride the BART Silicon Valley Extension



Car Buying or Leasing

Current Vehicle Ownership and Use Patterns (Q10-Q13)

The vast majority of residents reported that they or someone in their household owns or leases a car (97.3%); only 2.7% of residents were in a car-free household. In an open-ended question, respondents were asked to report the make, model and model year of the vehicle they drive most frequently. As shown in Table 1 below, residents are most likely to drive a Toyota, Honda or Ford, while 3.6% of residents reported driving a Tesla. Popular models include Prius, Accord and Camry. The most popular model years were 2016 and 2015, with about one-quarter of respondents reporting these model years.

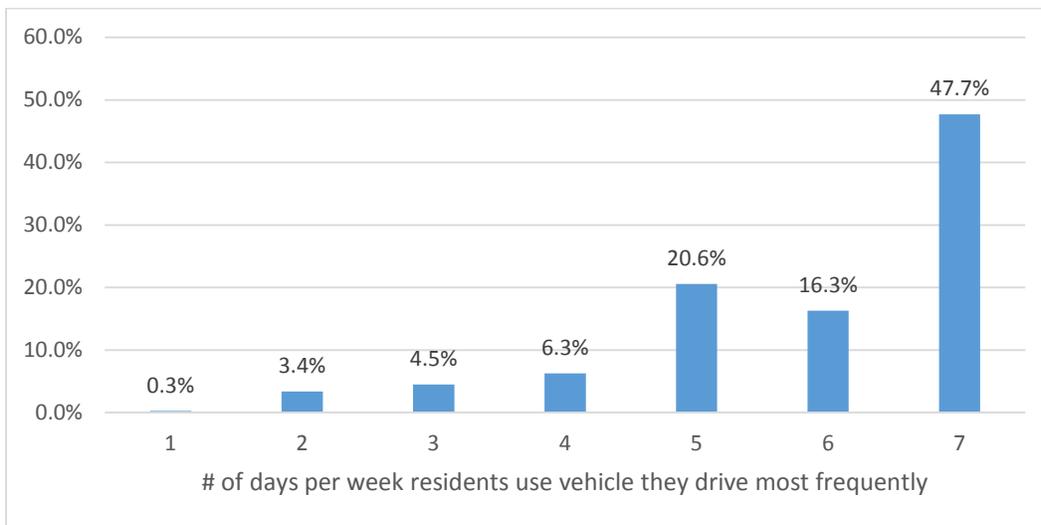
Table 2: Current vehicle ownership by make of car

Value	Weighted Percent
TOYOTA	20.8%
HONDA	13.2%
FORD	7.3%
CHEVROLET	6.7%
NISSAN	4.7%
VOLKSWAGEN	4.2%
LEXUS	4.0%
BMW	3.7%
TESLA	3.6%
JEEP	3.3%

SUBARU	3.1%
MAZDA	3.0%
SCION	3.0%
HYUNDAI	2.5%
ACURA	2.4%
MERCEDES	2.4%
MITSUBISHI	1.9%
AUDI	1.4%
INFINITI	1.4%

Eighty-three percent of residents use the vehicle they drive most frequently to commute to work or school. Nearly half of residents use this primary vehicle every day of the week (47.7%), while one in five drive this vehicle five days a week (20.6%).

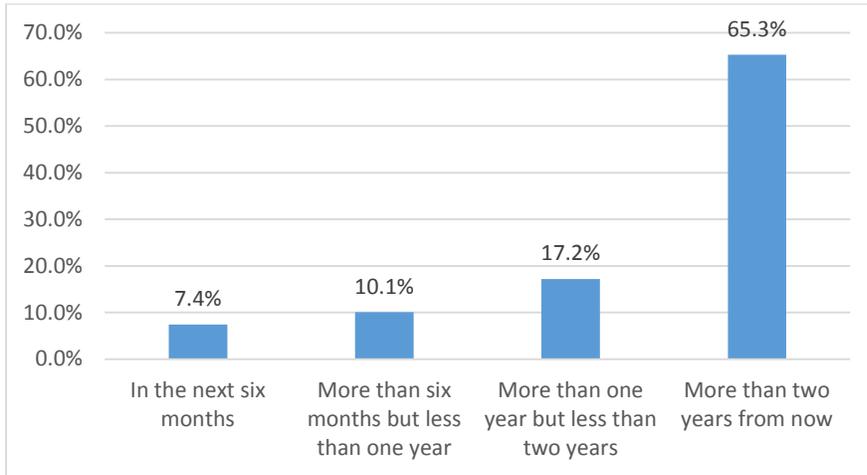
Figure 6: Vehicle use by days of the week



Buying/Leasing Next Vehicle (Q14-Q16)

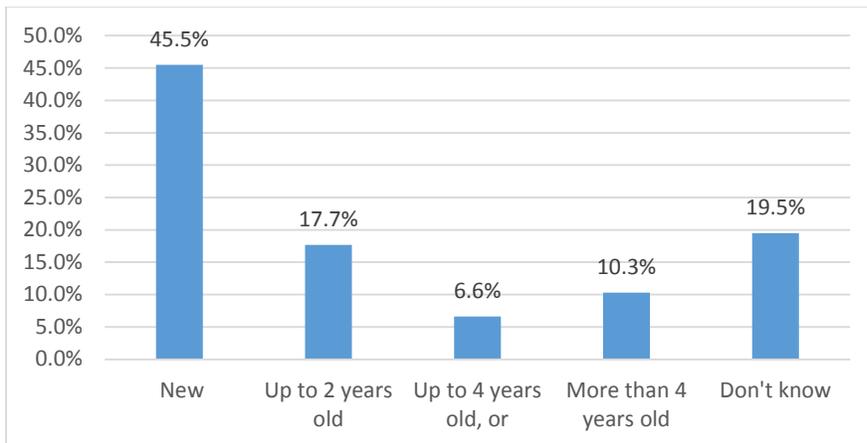
Thinking about the next primary vehicle that they will buy or lease, nearly one-third of residents (27.3%) planned to acquire a new vehicle in the next two years, while two-thirds of residents planned on acquiring a new vehicle more than two years in the future (65.3%).

Figure 7: Timeframe for acquiring new vehicle



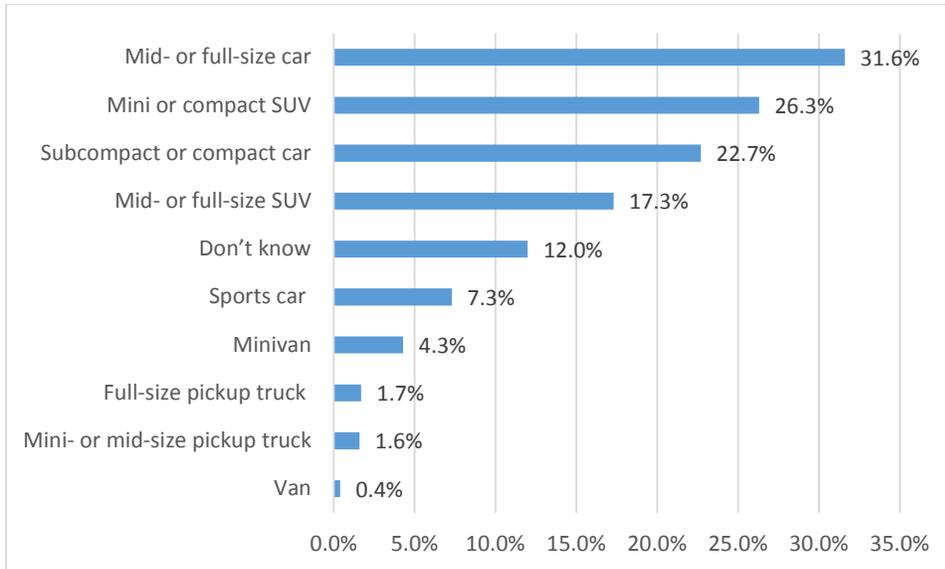
Almost half of residents planned to acquire a *new* vehicle (45.5%), while nearly one-third planned to acquire a pre-owned vehicle (34.6%). The remaining residents were not sure how old they expected their next vehicle to be (19.5%).

Figure 8: Age of new vehicle



When thinking about the next vehicle they would buy or lease to drive regularly, 31.6% of residents preferred a mid-or full-size car like a Toyota Camry or Hyundai Genesis, and just over one-quarter selected a mini or compact SUV such as a Honda CR-V or Toyota Rav4 (26.3%). Note that in this question we asked respondents to select up to two answers.

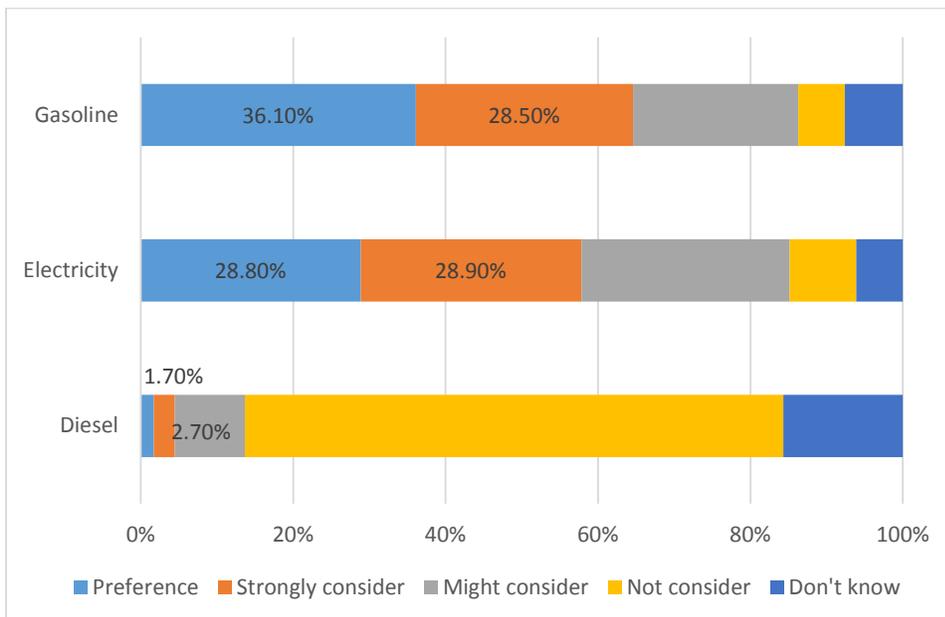
Figure 9: Next vehicle type



Fuel Type for Next Vehicle (Q17)

Respondents were asked to evaluate different fuel types for their next vehicle purchase. Nearly two-thirds of respondents said that gasoline was their preferred fuel type or they would strongly consider it (64.6%), but electricity was close behind: a combined 57.7% of residents ranked EVs as being their preference or as something they would strongly consider. Diesel was largely unpopular, with 69.8% of residents saying they would not consider this fuel type.

Figure 10: Fuel type preferences for next vehicle



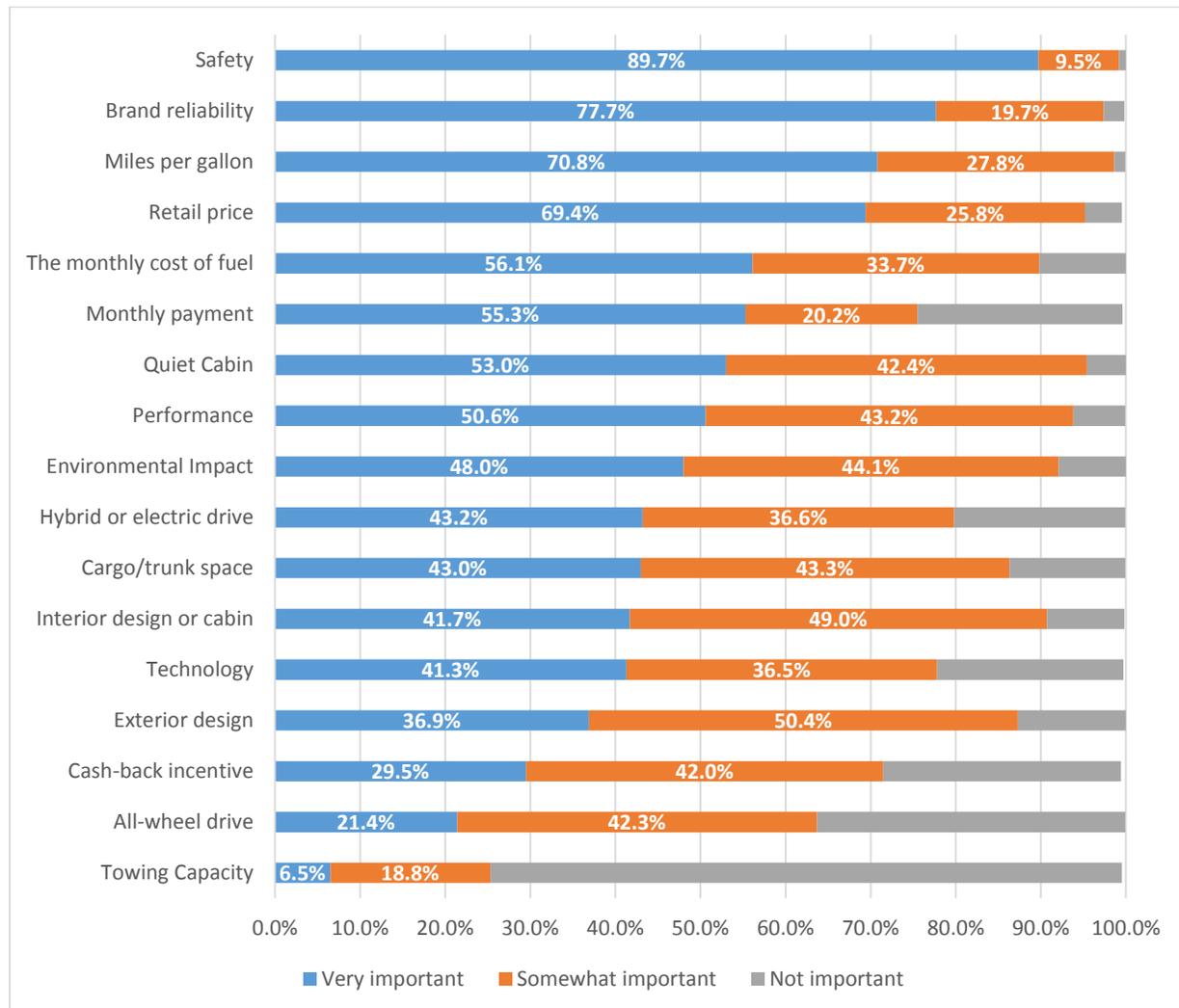
For those who do not currently drive an EV, gasoline was the preference of just under two in five respondents (39.2%), while just under one in five non-EV drivers said electricity was their preferred fuel type (22.8%). For current EV drivers, electricity was by far the preferred fuel

source, with 81.9% rating it as their preference. Only 5.8% of EV drivers rated gasoline as their preference.

Important Features (Q18)

Respondents rated 17 vehicle features as very important, somewhat important, or not important in selecting their next primary vehicle. The most important features to residents are safety (99.2% rated this as very or somewhat important), brand reliability (97.4%), and miles per gallon (98.6%). Features least likely to be important are towing capacity (74.2% rated this feature “not important”) and all-wheel drive (36.2%). Hybrid or electric drive ranked in the middle of the features available: 79.8% said this was very or somewhat important to them.

Figure 11: Importance of vehicle features



Brand Consideration (Q19)

When asked which brands respondents would consider buying for their next primary vehicle, the most popular options were Toyota and Honda, matching the most popular vehicles residents currently own (see Table 1). Note that respondents could select more than one vehicle here. In the “other” category, the most popular makes were Subaru, Audi and Mazda.

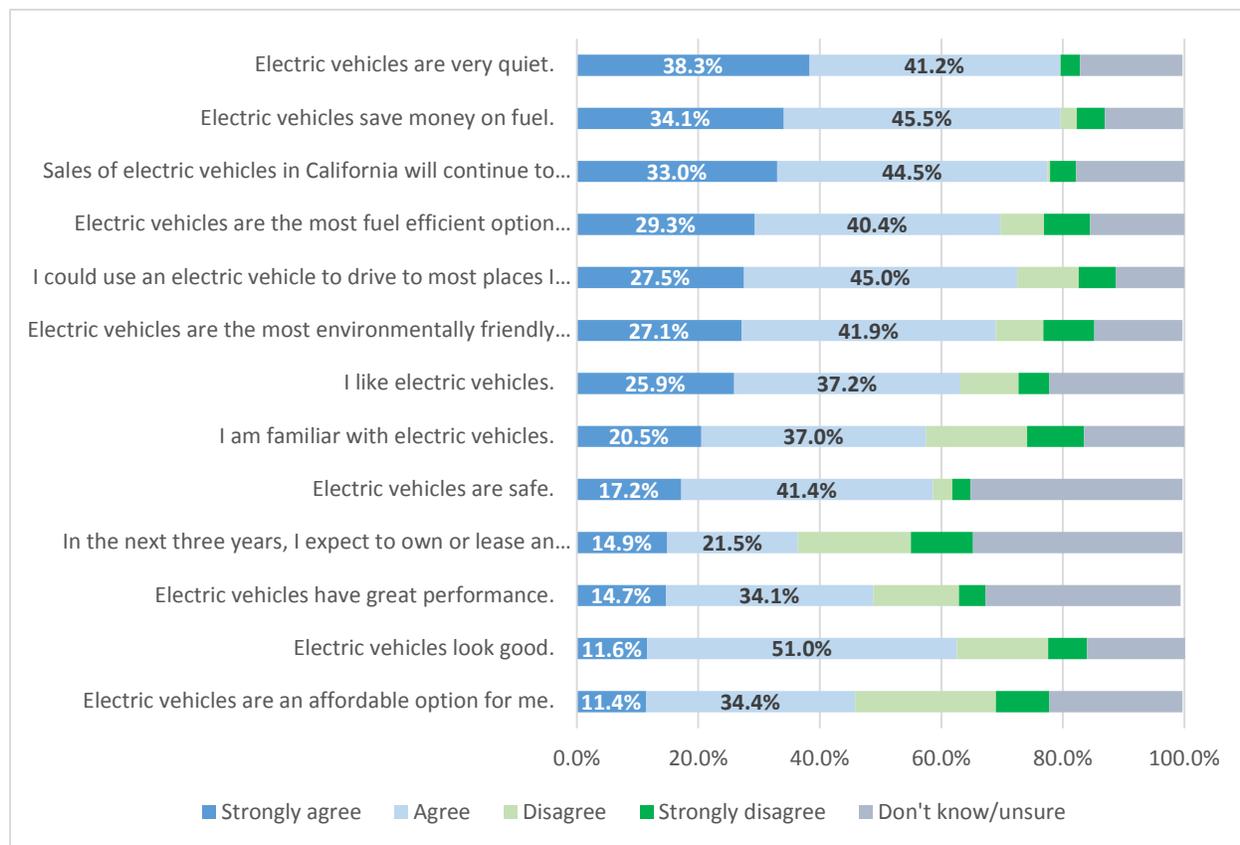
Table 3: Most popular makes based on intention to buy or lease

Vehicle Make	Weighted Percent
Toyota	61.0%
Honda	52.9%
Tesla	39.5%
Ford	24.6%
Nissan	23.8%
BMW	23.5%
Lexus	23.4%
Other	23.0%
Mercedes	21.0%
Chevrolet	20.8%
Hyundai	15.8%
VW	14.3%
Kia	8.0%
Dodge	7.9%

Word Association with Electric Vehicles (Q20-Q21)

The survey contained two open-ended questions that aimed to learn more about residents' perceptions of EVs. When asked what words came to mind when they thought about an EV, the most commonly-cited themes were related to battery life, driving range, and charging (availability and location). Another common theme had to do with environmental friendliness—with the adjectives “clean” and “green” appearing often. A comparable number of residents reported that they thought of fuel cost and efficiency, the quiet sound, and the fact that electric vehicles are “the future” and trendy. Many thought of the car manufacturer Tesla. Some respondents reported perceived disadvantages like high cost and lack of reliability and practicality. HOV and carpooling advantages were cited in smaller numbers. Figure 12 below represents the open-ended responses in word cloud format. Word clouds are visual representations of text data, with greater prominence given to words or phrases cited more frequently.

Figure 13: Perceptions of EVs



As shown in Figure 13, some of the highest levels of disagreement and uncertainty relate to:

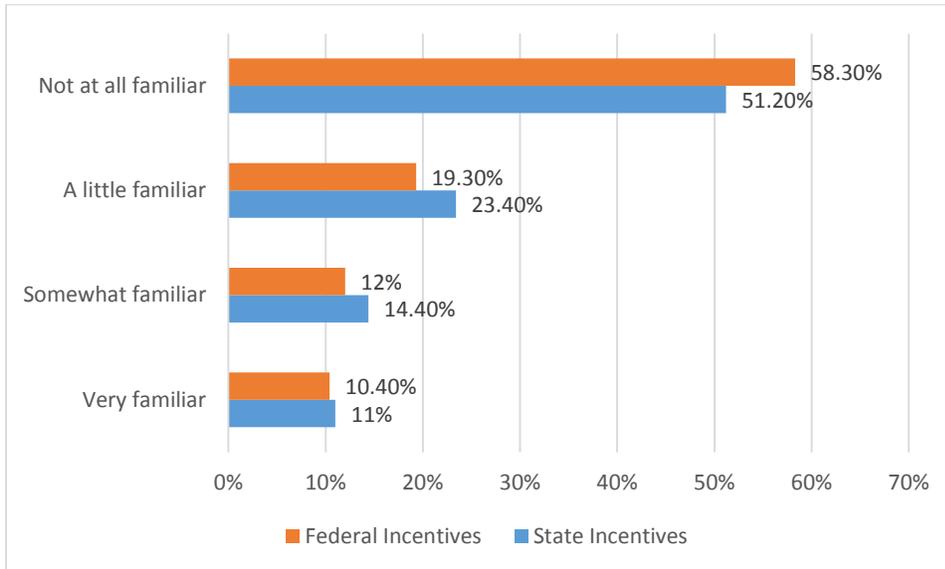
- Intention to buy EVs in the future:** 63.3% of all respondents either disagree with the statement that they expect to own or lease an EV in the next three years, or are unsure. Just over one third strongly agree or agree with the statement (36.4%). For the subset of respondents who plan to buy or lease their next primary vehicle *in the next two years*, a combined 49.2% either agree or strongly agree with the statement that they expect to own or lease an EV in the next three years.
- EV affordability:** 53.9% of residents disagree with the statement that EVs are an affordable option for them, or are unsure. This finding shows that there may be a lack of awareness among residents on the more affordable EV models on the market today and/or understanding of the total cost of owning an EV compared to a conventional vehicle.
- EV performance:** 50.6% of residents either disagree that EVs have great performance, or are unsure.
- EV safety:** As shown in Figure 11, respondents rated safety is the single most important feature when selecting their next primary vehicle. And yet over one-third of respondents were unsure whether electric vehicles are safe (34.9%).

The results of these questions about perceptions show there is clear room for marketing and outreach to educate the public about EV performance, safety and affordability.

Financial Incentives (Q26-Q27)

Despite relatively high levels of EV ownership in Santa Clara County, it is notable that a majority of residents are not at all familiar with the financial incentives offered by either the state of California or the Federal government to buy or lease EVs. This shows there may be some room for educating the public on the incentives available to them.

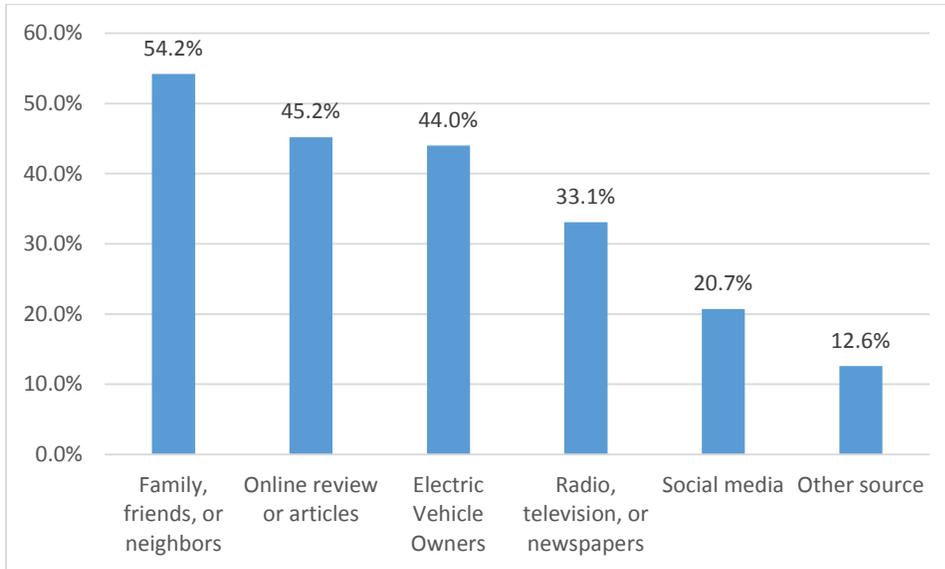
Figure 14: Familiarity with financial incentives



Sources of Information (Q27)

Residents reported that the most common source of information about EVs was family friends or neighbors (54.2%). This finding confirms what is reported in other studies on EVs in California – that early adopters of EVs have been key to disseminating information through word of mouth and act as informal brand ambassadors. Online reviews or articles and EV owners were also important sources.

Figure 15: Sources of Information about EVs



Demographics

The final section of the questionnaire included demographic questions. Demographics are an important part of any survey: they characterize the respondent population and are used in weighting to known population totals (see D. Methodology, Weighting, above).

Household characteristics (Q29-Q31)

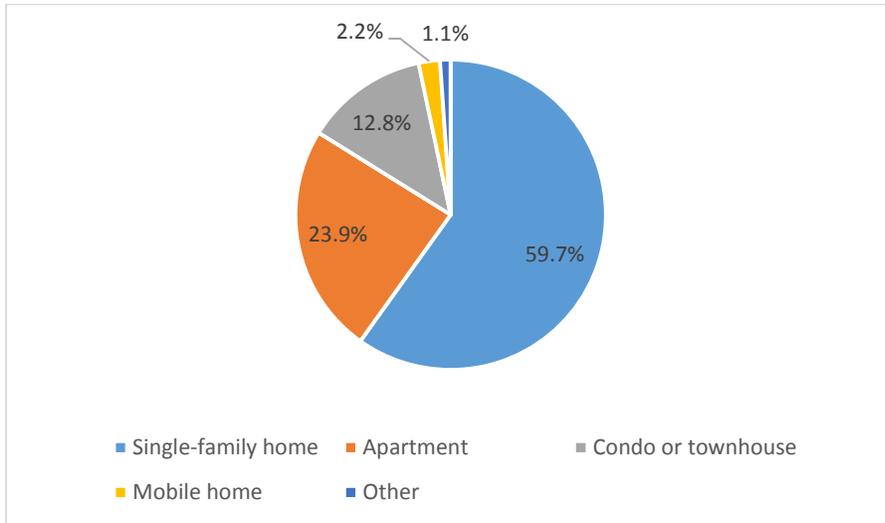
About two out of five respondents were the only adult in their household (40.2%), while nearly half lived in households with one or two other adults (45.3%). A majority of households reported having no children living with them (60.9%), while 15.6% reported one child under 18 and 17.5% reported two children under 18.

A majority of respondents lived in households where two people regularly drove (58.4%) and about one in seven had just one driver (14.4%).

Residential characteristics (Q32-Q34)

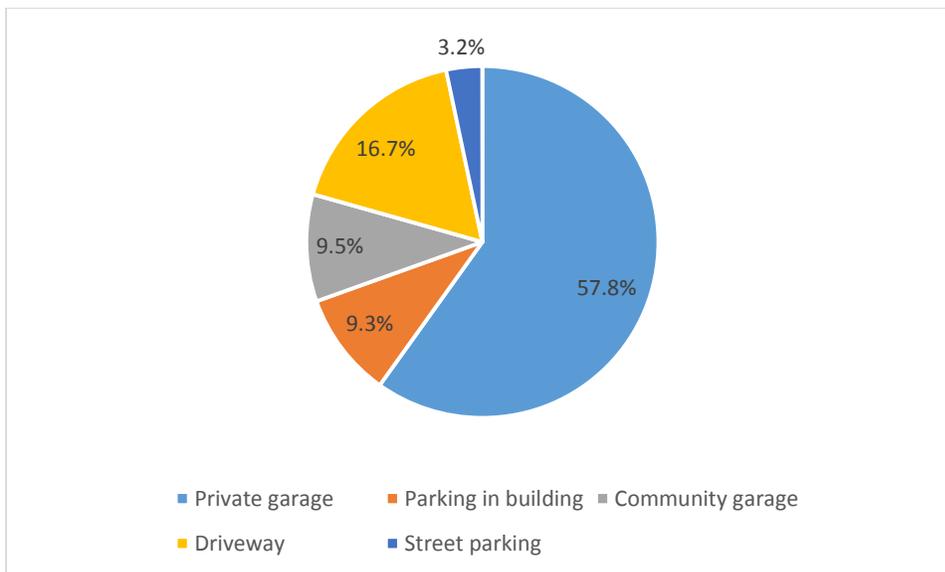
As shown in the Figure below, a majority of respondents lived in single-family homes (59.7%), while just under one-quarter lived in apartments (23.9%).

Figure 16: Primary residence type



A majority of respondents had a private garage, either attached or separate from their residence (57.8%). About 1 in 6 used a covered or uncovered driveway next to their residence (16.6%) to park their vehicle.

Figure 17: Parking arrangements



More than two-thirds of respondents own their home (68.1%) and just under one-third rent their residence (31.6%).

Other Demographics (Q35-Q41)

Residents were asked to report their year of birth. Their age in 2017 was calculated from that response and are show in ranges in Table 3.

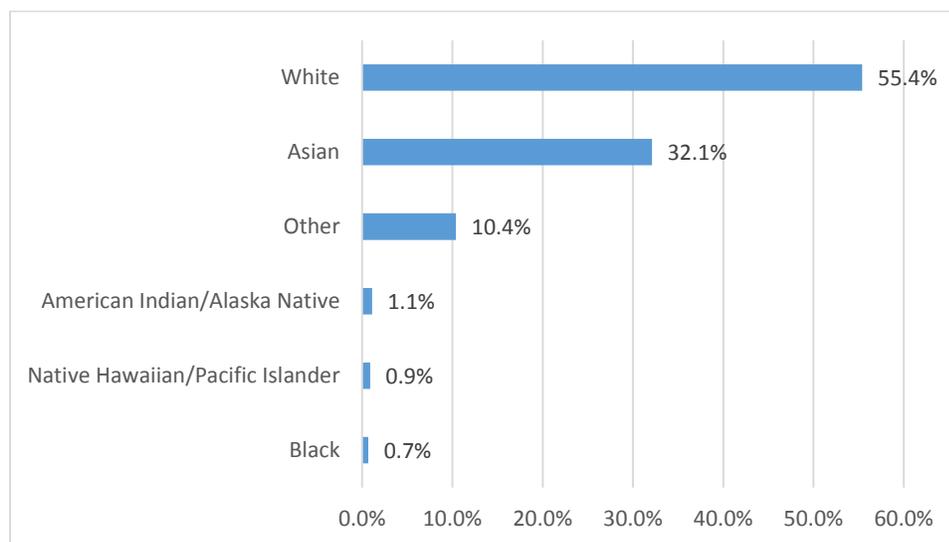
Table 4: Respondent age ranges

Age Range	Percentage
20 to 29	11.7%
30 to 39	29.9%
40 to 49	17.5%
50 to 59	19.3%
60 to 69	12.4%
70 to 79	5.7%
80+	3.6%

In terms of gender, 54.1% of respondents were male and 43.6% were female. About one percent reported their gender as “Other.”

In regards to ethnicity, just under one-quarter of respondents reported being of Hispanic, Latino or Spanish origin. For the race question, respondents could select all the options that applied to them. Over half of respondents reported being white (55.4%) while just under one-third were Asian (32.1%). Just over one in ten selected “Other” and in the open-ended space, most of these reported being “Hispanic” or “Mexican.”²⁷ Some said they were “Indian” or “Indian-American” and others took offence at the question.

Figure 18: Respondents by race



²⁷ Many Hispanic Americans consider their Hispanic or Latino background as part of their racial identity. The Census is working to improve survey questions to address this. See Pew Research Center, “Is being Hispanic a matter of race, ethnicity or both?” <http://www.pewresearch.org/fact-tank/2015/06/15/is-being-hispanic-a-matter-of-race-ethnicity-or-both>

When asked what language they mostly spoke at home, nearly three-quarters of respondents selected English (74.2%) and 6.4% selected Spanish. (As noted in the Methodology section, only one respondent completed the survey in Spanish). An additional 15.6% selected “Other,” and the most common responses in the write-in section were Chinese/Mandarin and Vietnamese.

As shown in the table below, about a quarter of respondents made less than \$75,000 per year. Respondents reported living in relatively high-income households, with 42.5% making \$150,000 per year or more.

Table 5: Respondents by income

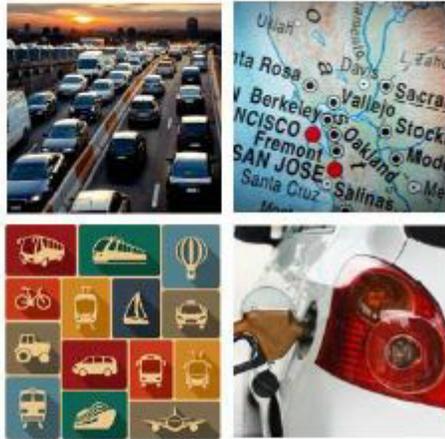
Income bracket	Percentage
Less than \$15,000	5.3%
\$15,000 to 49,999	9.0%
\$50,000 to 74,999	9.6%
\$75,000 to 99,999	14.9%
\$100,000 to 149,999	13.4%
\$150,000 to 199,999	11.7%
\$200,000 to 299,999	16.1%
\$300,000 or more	14.7%

The final demographic question asked about educational attainment. Respondents tended to be highly-educated, with just under three-quarters of respondents having obtained a Bachelor’s degree or higher.

Table 6: Respondents by educational attainment

Degree	Percentage
Some high school	2.20%
High school or GED	4.90%
Some college or trade school	17.50%
Bachelor's degree	39.20%
Master's degree	25.10%
Terminal degree (PhD, JD, etc.)	10.30%

Mail Questionnaire



Santa Clara County Transportation Survey

This survey is sponsored by the County of Santa Clara. Your participation in this survey will contribute to a better understanding of regional transportation trends. Thank you for your participation!

MARKING INSTRUCTIONS

- Please use a No. 2 pencil or a blue or black ink pen.
- Please do not use pens with ink that soaks through the paper.
- Please make solid marks that fill the response completely.
- Please make no stray marks on this form

CORRECT: ● INCORRECT: ☒ ☓ ☉ ☪

Your Transportation

We'd like to begin by asking a few questions about your driving habits.

Q1. Do you drive a motor vehicle, regardless of whether it is for work or for personal use?

- Yes → CONTINUE TO Q2
- No → SKIP TO Q4

Q2. How many miles do you drive round-trip on a typical week day (ONE day between Monday and Friday)?

Please consider activities such as driving to work, running errands, dropping children at school or taking children to after-school activities.

- 0 to 10 miles
- 11 to 20 miles
- 21 to 30 miles
- 31 to 40 miles
- More than 40 miles

Q3. Over the next 12 months, how many trips over 100 miles will you drive?

Driving from San Jose to Santa Rosa or from San Jose to Sacramento would be a trip that is 100 miles or more.

Q4. Compared to now, do you expect that the price of a gallon of gasoline will...

- Increase
- Decrease
- Stay about the same

Q5. How often do you use ridesharing/ride-hailing services, like Uber and Lyft? With these services, typically users request a ride, are picked up and driven in a private car, and payment and tipping are handled through an app or website.

- Almost every day
- A few times a week
- A few times a month
- A few times a year
- I do not use ridesharing/ride-hailing services

Q6. How often do you use car sharing services, like Zipcar? With these services, typically members use an access card to unlock and use a vehicle for a set amount of time.

- Almost every day
- A few times a week
- A few times a month
- A few times a year
- I do not use car sharing services

BART Silicon Valley

BART Silicon Valley is an extension of the San Francisco Bay Area Rapid Transit (BART) system. It is 16 miles and extends to Santa Clara. These next few questions ask you about BART Silicon Valley.

Q7. In general, how familiar are you with the BART Silicon Valley extension?

- Very familiar
- Familiar
- Somewhat familiar
- Not at all familiar

Continue to Q8

IF YOU DRIVE A VEHICLE FOR WORK OR PERSONAL USE, SKIP TO Q10.
IF YOU DON'T DRIVE A VEHICLE FOR WORK OR PERSONAL USE, SKIP TO Q20.

Q8. How likely are you to ride BART Silicon Valley on a typical workday?

- Very likely
- Somewhat likely
- Somewhat unlikely
- Very unlikely

Q9. How likely are you to ride BART Silicon Valley on a typical weekend day?

- Very likely
- Somewhat likely
- Somewhat unlikely
- Very unlikely

Car Buying or Leasing

Next, we would like to know about the vehicles you currently drive, and the factors that you consider when deciding which vehicle to buy or lease. *If you are unsure, please give us your best guess.*

Q10. Do you or someone in your household currently own or lease a motor vehicle?

- Yes
- No → SKIP TO Q20

Q11. Think of the vehicle that you drive most frequently. What is the make, model, and year of this vehicle?

Q11a. Make: _____

Q11b. Model: _____

Q11a. Year: _____

Q12. On a typical day, do you use this vehicle to commute to work or school?

- Yes
- No

Q13. In a typical week, how many days do you drive this vehicle?

_____ days out of the week

Q14. When do you think you will buy or lease your next primary vehicle? Think of the motor vehicle that you drive most frequently.

- In the next six months
- More than six months but less than one year
- More than one year but less than two years
- More than two years from now

Q15. How old do you expect your next primary vehicle will be when you buy or lease it?

- New
- Up to 2 years old
- Up to 4 years old, or
- More than 4 years old
- Don't know

Q16. Would the next vehicle that you buy or lease to drive regularly, likely be a? Please select up to two answers.

- Subcompact or compact car (e.g., Toyota Corolla, Honda Civic, Ford Focus)
- Mid- or full-size car (e.g., Toyota Camry, Hyundai Genesis)
- Sports car (e.g., Ford Mustang, Chevrolet Camaro, Porsche 911)
- Mini or compact SUV (e.g., Honda CR-V, Ford Escape, Toyota RAV4, Lexus RX350)
- Mid- or full-size SUV (e.g., GMC Yukon, Ford Explorer, Hyundai Santa Fe, Toyota Land Cruiser, Cadillac Escalade)
- Mini- or mid-size pickup truck (e.g., Toyota Tacoma or Tundra, Ford Ranger or F150, Nissan Frontier, or Chevrolet Silverado)
- Full-size pickup truck (e.g. Dodge Ram)
- Minivan (e.g., Toyota Sienna, Honda Odyssey, Chrysler Town & Country)
- Van (e.g. Ford Econoline, Chevrolet Express)
- Don't know

Q17. Which of the following fuel types would you consider for your next primary vehicle?

Q17a. Gasoline

- This is my preference
- Would strongly consider
- Might consider
- Would not consider
- Don't know or unsure

Q17b. Diesel

- This is my preference
- Would strongly consider
- Might consider
- Would not consider
- Don't know or unsure

Q17c. Electricity

- This is my preference
- Would strongly consider
- Might consider
- Would not consider
- Don't know or unsure

<p>Q18. How important is each of the following in selecting your next primary vehicle?</p> <p>Q18a. Cargo/trunk space</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18b. Towing capacity</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18c. Safety</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18d. Brand reliability</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18e. Miles per gallon</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18f. Exterior design</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18g. Interior design or cabin</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18h. Retail price</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18i. Monthly payment</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p>	<p>Q18j. Cash-back incentive</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18k. Hybrid or electric drive</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18l. Performance (acceleration or handling)</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18m. Technology like GPS, Bluetooth, and dashboard</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18n. Environmental impact</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18o. Quiet cabin</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18p. All-wheel drive</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p> <p>Q18q. The monthly cost of fuel</p> <p><input type="radio"/> Very important <input type="radio"/> Somewhat important <input type="radio"/> Not important</p>
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Q19. Which of the following brands would you consider buying or leasing for your primary vehicle? Select all that apply.

- Toyota
- Honda
- Ford
- Nissan
- Chevrolet
- Lexus
- BMW
- Mercedes
- Hyundai
- Volkswagen
- Dodge
- Kia
- Tesla
- Other: _____

Car Buying or Leasing

Q20. What words come to mind when you think about an electric vehicle?

Q21. When you think of electric vehicles, what specific model names come to mind first?

Q22. Do you, or does a member of your household, currently own/lease an electric vehicle?

- Yes → SKIP TO Q24
- No

Q23. Have you, or has a member of your household, ever owned or leased an electric vehicle?

- Yes
- No

Q24. Have you ever driven an electric vehicle?

- Yes
- No → SKIP TO Q25

Q24a. What was the make and model of the electric vehicle you have driven most recently?

Make: _____

Model: _____

Q25. How much you agree or disagree with each of the following statements?

Q25a. Electric vehicles are an affordable option for me.

- Strongly disagree
- Disagree
- Agree
- Strongly agree
- Don't know/unsure

Q25b. Electric vehicles are the most fuel efficient option available.

- Strongly disagree
- Disagree
- Agree
- Strongly agree
- Don't know/unsure

Q25c. Electric vehicles are the most environmentally friendly vehicles out there.

- Strongly disagree
- Disagree
- Agree
- Strongly agree
- Don't know/unsure

Q25d. Electric vehicles have great performance.

- Strongly disagree
- Disagree
- Agree
- Strongly agree
- Don't know/unsure

Q25e. I could use an electric vehicle to drive to most places I regularly drive.

- Strongly disagree
- Disagree
- Agree
- Strongly agree
- Don't know/unsure

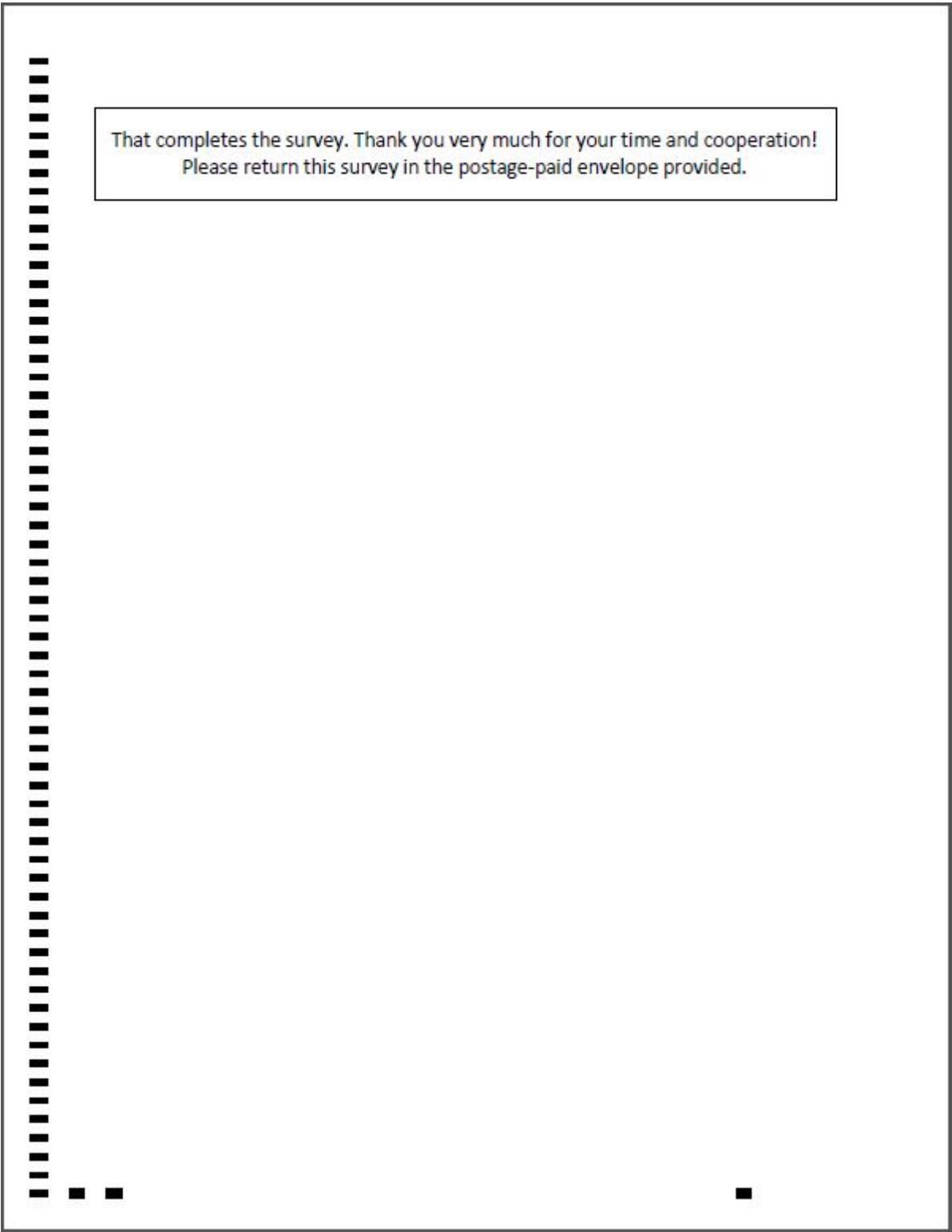
Q25f. Electric vehicles are very quiet.

- Strongly disagree
- Disagree
- Agree
- Strongly agree
- Don't know/unsure

<p>Q25g. Electric vehicles are safe.</p> <ul style="list-style-type: none"><input type="radio"/> Strongly disagree<input type="radio"/> Disagree<input type="radio"/> Agree<input type="radio"/> Strongly agree<input type="radio"/> Don't know/unsure	<p>Q26. How familiar are you with financial incentives to buy or lease an electric vehicle offered by the <u>State of California</u>?</p> <ul style="list-style-type: none"><input type="radio"/> Not at all familiar<input type="radio"/> A little familiar<input type="radio"/> Somewhat familiar<input type="radio"/> Very familiar
<p>Q25h. Electric vehicles save money on fuel.</p> <ul style="list-style-type: none"><input type="radio"/> Strongly disagree<input type="radio"/> Disagree<input type="radio"/> Agree<input type="radio"/> Strongly agree<input type="radio"/> Don't know/unsure	<p>Q27. How familiar are you with financial incentives to buy or lease an electric vehicle offered by the <u>Federal government</u>?</p> <ul style="list-style-type: none"><input type="radio"/> Not at all familiar<input type="radio"/> A little familiar<input type="radio"/> Somewhat familiar<input type="radio"/> Very familiar
<p>Q25i. Sales of electric vehicles in California will continue to increase.</p> <ul style="list-style-type: none"><input type="radio"/> Strongly disagree<input type="radio"/> Disagree<input type="radio"/> Agree<input type="radio"/> Strongly agree<input type="radio"/> Don't know/unsure	<p>Q28. From which of the following sources have you gotten information about electric vehicles? Mark all that apply.</p> <ul style="list-style-type: none"><input type="radio"/> Electric vehicle owners<input type="radio"/> Family, friends, or neighbors<input type="radio"/> Radio, television, or newspapers<input type="radio"/> Social media (e.g., Facebook, Twitter, LinkedIn, and others)<input type="radio"/> Online reviews or articles<input type="radio"/> Other source
<p>Q25j. I am familiar with electric vehicles.</p> <ul style="list-style-type: none"><input type="radio"/> Strongly disagree<input type="radio"/> Disagree<input type="radio"/> Agree<input type="radio"/> Strongly agree<input type="radio"/> Don't know/unsure	<h3>About You</h3> <p>Lastly, we'd like to ask you some questions about yourself and your household. Your answers will be combined with responses from other Santa Clara residents for analysis.</p>
<p>Q25k. In the next three years, I expect to own or lease an electric vehicle.</p> <ul style="list-style-type: none"><input type="radio"/> Strongly disagree<input type="radio"/> Disagree<input type="radio"/> Agree<input type="radio"/> Strongly agree<input type="radio"/> Don't know/unsure	<p>Q29. Not counting yourself, how many adults age 18 or older live in your household?</p> <p>_____</p>
<p>Q25l. I like electric vehicles.</p> <ul style="list-style-type: none"><input type="radio"/> Strongly disagree<input type="radio"/> Disagree<input type="radio"/> Agree<input type="radio"/> Strongly agree<input type="radio"/> Don't know/unsure	<p>Q30. How many children under the age 18 or older live in your household?</p> <p>_____</p>
<p>Q25m. Electric vehicles look good.</p> <ul style="list-style-type: none"><input type="radio"/> Strongly disagree<input type="radio"/> Disagree<input type="radio"/> Agree<input type="radio"/> Strongly agree<input type="radio"/> Don't know/unsure	<p>Q31. Including yourself, how many members of your household regularly drive?</p> <p>_____</p>

<p>Q32. Which of the following best describes your primary residence?</p> <ul style="list-style-type: none"><input type="radio"/> Single family home<input type="radio"/> Apartment<input type="radio"/> Condominium or Townhouse<input type="radio"/> Mobile home<input type="radio"/> Other <p>Q33. Which of the following best describes the type of parking at your residence?</p> <ul style="list-style-type: none"><input type="radio"/> Private garage, either attached or separate from your residence<input type="radio"/> Parking in your building<input type="radio"/> Community garage/parking area detached from your residence<input type="radio"/> A driveway, either covered or uncovered, next to your residence<input type="radio"/> Open street parking <p>Q34. Do you currently own or rent your residence?</p> <ul style="list-style-type: none"><input type="radio"/> Own<input type="radio"/> Rent <p>Q35. In what year were you born?</p> <p>_____</p>	<p>Q38. Which of the following best describes you? Please select all that apply.</p> <ul style="list-style-type: none"><input type="radio"/> White<input type="radio"/> Black or African American<input type="radio"/> American Indian or Alaska Native<input type="radio"/> Asian<input type="radio"/> Native Hawaiian or other Pacific Islander<input type="radio"/> Other <p>_____</p> <p>Q39. What language do you MOSTLY speak at home?</p> <ul style="list-style-type: none"><input type="radio"/> English<input type="radio"/> Spanish<input type="radio"/> Other _____ <p>Q40. What was your total household income from all sources in 2016 before taxes?</p> <ul style="list-style-type: none"><input type="radio"/> Less than \$15,000<input type="radio"/> \$15,000 to 49,999<input type="radio"/> \$50,000 to 74,999<input type="radio"/> \$75,000 to 99,999<input type="radio"/> \$100,000 to 149,999<input type="radio"/> \$150,000 to 199,999<input type="radio"/> \$200,000 to 299,999<input type="radio"/> \$300,000 or more <p>Q41. Please select your highest level of education achieved.</p> <ul style="list-style-type: none"><input type="radio"/> Some high school<input type="radio"/> High school or GED<input type="radio"/> Some college or trade school<input type="radio"/> Bachelor's degree<input type="radio"/> Master's degree<input type="radio"/> Terminal degree (PhD, JD, etc.)
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Page 7



That completes the survey. Thank you very much for your time and cooperation!
Please return this survey in the postage-paid envelope provided.

Appendix B: Major Employers in Santa Clara County

Employer Name ²⁸	Location	Industry
Adobe Systems Inc	San Jose	Publishers-Computer Software (Mfrs)
Advanced Micro Devices Inc	Sunnyvale	Semiconductor Devices (Mfrs)
Apple Inc	Cupertino	Computer & Equipment Dealers
Applied Materials Inc	Santa Clara	Semiconductor Manufacturing Equip (Mfrs)
Avaya Inc	Santa Clara	Telecommunications Services
Christopher Ranch Llc	Gilroy	Garlic (Mfrs)
Cisco Systems Inc	San Jose	Computer Peripherals (Mfrs)
E Bay Inc	San Jose	E-Commerce
Fujitsu Laboratories	Sunnyvale	Venture Capital Companies
Great America Pavilion	Santa Clara	Amusement & Theme Parks
Hcl Technologies Ltd	Sunnyvale	Computer Software
Hp Inc	Palo Alto	Computers-Electronic-Mfrs
Intel Corp	Santa Clara	Semiconductor Devices (Mfrs)
Kla-Tencor Corp	Milpitas	Semiconductor Devices (Mfrs)
Lockheed Martin Space Systems	Sunnyvale	Satellite Equipment & Systems-Mfrs
Lumileds Lighting Co	San Jose	Lighting Fixtures-Supplies & Parts-Mfrs
Microsoft Corp	Mountain View	Computer Software-Manufacturers
Nasa	Mountain View	Government Offices-US
Net App Inc	Sunnyvale	Computer Storage Devices (Mfrs)
Prime Materials	San Jose	Semiconductors & Related Devices (Mfrs)
San Jose Convention Ctr	San Jose	Recreation Centers
Sap Center	San Jose	Stadiums Arenas & Athletic Fields
Stanford Children's Health	Palo Alto	Hospitals
Stanford School of Medicine	Stanford	Schools-Medical
US Veterans Medical Ctr	Palo Alto	Hospitals

²⁸ <http://www.labormarketinfo.edd.ca.gov/majorer/countymajorer.asp?CountyCode=000085>

Appendix C: Media List

Location	Publication	Media Type
Los Angeles	Los Angeles Times	Daily newspaper, national & regional
San Jose	The Mercury News	Daily newspaper, regional
Sacramento	The Sacramento Bee	Daily newspaper, regional
San Francisco	San Francisco Chronicle	Daily newspaper, regional
San Diego	San Diego Union-Tribune	Daily newspaper, regional
Santa Clara	The Santa Clara Weekly	Weekly newspaper, community
Santa Clara	KKUP-FM	Radio station
Santa Clara	KSCU-FM	Radio station, Santa Clara University
Morgan Hill	KAZA-AM	Radio station, Hispanic religious
San Jose	KBAY-FM	Radio station, classic hits
San Jose	KEZR-FM	Radio station, hot adult contemporary
San Jose	KLIV-AM	Radio station, country music
San Jose	KLOK-AM	Radio station, South Asian news, music, and talk
San Jose	KOBO-AM	Radio station, regional Mexican
San Jose	KRTY-FM	Radio station, contemporary country
San Jose	KSJS-FM	Radio station, variety
San Jose	KSQQ-FM	Radio station, Portuguese programming
San Jose	KUFX-FM	Radio station, classic rock
San Jose	KXZM-FM	Radio station, regional Mexican
San Jose	KYAA-AM	Radio station, religious
San Jose	KZSJ-AM	Radio station, Vietnamese variety
Palo Alto	Daily Post	Daily newspaper, community
Morgan Hill	Morgan Hill Times	Weekly newspaper, community
Palo Alto	Mountain View Voice	Weekly newspaper, community
Palo Alto	Palo Alto Weekly	Weekly newspaper, community
San Jose	Silicon Valley Business Journal	Weekly, business focus
Sunnyvale	Sunnyville Sun	Weekly newspaper, community
San Jose (Almaden)	Almaden Times	Weekly newspaper, community
San Jose (Evergreen)	Evergreen Times	Weekly newspaper, community
San Jose (Willow Glen)	Willow Glen Times	Weekly newspaper, community

Appendix D: Social Media Plan

Please note this plan has also been delivered as a standalone PDF for easy access and distribution.

Importance of Social Media

Sixty-nine percent of all U.S. adults use at least one social media platform, according to Pew Research Center²⁹. While the vast majority of users are between the ages of 18 and 29, all age groups are represented and are increasing every year, according to the same study. As such, social media has become an increasingly important tool for businesses to influence decision making and behavior change through targeted messaging and campaigns.

Social media provides a great opportunity to quickly and easily share information with both consumers and businesses. It also serves as an entry point for users to access information and resources while developing relationships that yield repeated visits, downloads and other engagement.

There are several social media platforms that all serve different purposes when it comes to influencing behavior change. The top three platforms that will be discussed in this toolkit are Facebook, Twitter and LinkedIn. Each platform can be harnessed to increase awareness about the DNZ project, grow and engage audiences and influence behavior change. The key to all of this is targeted messaging, no matter what the platform.

Using This Plan

This toolkit provides the resources needed to reach the goals of: facilitating consumer adoption of EVs and accelerating EV charging infrastructure deployment. There are two major sections to note before promoting the DNZ project on social media platforms.

Audience Groups. Before implementing a social media campaign, it is crucial to first understand who you are talking to. Understanding audience groups is step one to using this toolkit and it will help to develop effective messaging that each audience group will be receptive to.

Suggested Social Media Posts. Posts are broken up by platform. Each post includes an audience group with whom the messaging should resonate. These messages serve as guideposts for future content.

Content types and platform best practices

When curating content for social media, it is important to think about each platform separately and differently. The obvious difference between Facebook and Twitter is the character limitations of a Tweet versus a Facebook post. While the character limits have increased from 140 characters to 280, the culture of short bursts of information has been well established in the Twitter world. This means users expect posts to be concise and timely (real-time). Facebook, on the other hand, is a great platform for on-going conversations, longer posts and evergreen content. In addition, Facebook generates 8 billion video views on average each day making videos, both organic and third party, an important component to any Facebook strategy.

²⁹ <http://www.pewinternet.org/fact-sheet/social-media/>

Some content can be shared across platforms, with minor tweaks to the post language. We recommend the below suggestions on the types of content and posts to use for each platform:

Twitter:

- Real-time events (i.e. conferences, summits, breaking news, etc.) – be sure to find the relevant hashtag associated with the event to join the conversation.
- Sharing third party content – keep messaging short, include relevant hashtags.
- Asking questions – users are more likely to engage with brands on Twitter.
- Frequent posts – don't be afraid to post several tweets a day. Retweeting is also effective.

Facebook:

- Storytelling posts – longer posts and content are great for Facebook.
- Evergreen content – promoting your program or services with calls to actions.
- Photos and videos – infographics and real, local photos will resonate best with users on Facebook. When it comes to video, both organic and third party content is acceptable.
- Sharing third party content – include customized messaging, tie back to program.

Facebook Posts

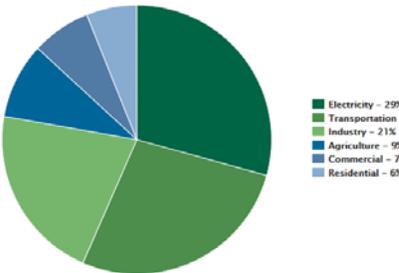
Use these sample Facebook posts to help promote EVs to potential consumers. The posts are identified with one or more consumer profiles, as messaging for young status seeking singles will not resonate the same with empty-nesting couples in retirement. Pairing posts with local or relevant imagery is highly recommended. Some suggested stock images (for idea generation only) are provided below, including automatically generated thumbnails.

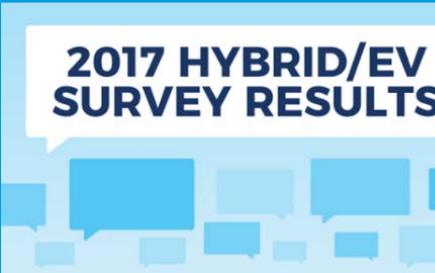
A paid Facebook campaign will still likely be necessary as Facebook has changed its algorithm, so organic posts are not capturing very high reach or engagement. Thousands of dollars need not be spent in order to achieve results with a paid Facebook ad. The spend can be as little as \$5 and ads can be terminated at any time.

Note: The website URL https://www.sccgov.org/sites/osp/Pages/net_zero.aspx will likely change, depending on the outcome of the website. This means the thumbnail associated with this post may also change.

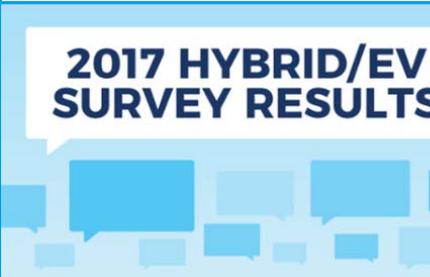
Audience 1: Consumers

Note: “Link thumbnail” refers to the image that is pulled automatically from the hyperlink in the message. In other words, if an article is referenced, Facebook will pull an image from the page as a thumbnail.

Facebook Post Content	Audience Groups	Photo/Thumbnail
<p>Governor Brown is serious about curbing carbon pollution and recently upped the ante – he wants to see 5 million zero-emission vehicles in California by 2030, up from 1.5 million by 2025. Let’s help California be the leader in EVs.</p> <p>https://www.sccgov.org/sites/osp/Pages/net_zero.aspx</p>	<ul style="list-style-type: none"> Status Seeking Singles Couples with Clout Platinum Prosperity 	<p>(link thumbnail)</p> 
<p>Did you know, the transportation sector is among the largest contributors to greenhouse gas (GHG) emissions in the US? Electric vehicles offer a viable alternative to conventional automobiles.</p> <p>https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions</p>	<ul style="list-style-type: none"> Status Seeking Singles Couples with Clout 	<p>2015 U.S. GHG Emissions by Sector</p>  <p>(No thumbnail, but if possible, add the image of this graph as a customized thumbnail.)</p>
<p>The adoption rate in Santa Clara County is three times higher than that of the whole state of California. Let’s keep this momentum going. Learn more about EVs.</p> <p>https://www.sccgov.org/sites/osp/Pages/net_zero.aspx</p>	<ul style="list-style-type: none"> Status Seeking Singles Couples with Clout Platinum Prosperity 	<p>(link thumbnail)</p> 

Facebook Post Content	Audience Groups	Photo/Thumbnail
<p>The largest public electric vehicle charging center in California is right here in Santa Clara!</p> <p>http://santaclaraca.gov/Home/Components/News/News/5036/3171</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Couples with Clout ▪ Platinum Prosperity 	 <p>(link thumbnail)</p>
<p>The state of California has 31% of the charging stations in the US. Thinking of getting an EV? Learn more:</p> <p>https://www.sccgov.org/sites/osp/Pages/net-zero.aspx</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Couples with Clout ▪ Platinum Prosperity 	<p>(link thumbnail)</p> 
<p>Electric vehicle drivers can use the HOV lanes without any additional passengers (single occupancy), just as long as their vehicle displays a Clean Air Vehicle Decal.</p> <p>https://arb.ca.gov/msprog/carpool/carpool.htm</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Couples with Clout ▪ Platinum Prosperity 	
<p>A quarter of hybrid and EV car owners are millennials. A few perks for owners are the savings and performance.</p> <p>https://www.carmax.com/articles/hybrid-electric-2017-survey-results</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles 	 <p>(link thumbnail)</p>
<p>In 2017, almost 200,000 electric vehicles were sold in the US. That's more than a 25% increase compared to 2016. Not surprisingly, Tesla is on top.</p> <p>https://arstechnica.com/cars/2018/01/2017-was-the-best-year-ever-for-electric-vehicle-sales-in-the-us/</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Couples with Clout 	 <p>(link thumbnail)</p>

Facebook Post Content	Audience Groups	Photo/Thumbnail
<p>A new report from the Union of Concerned Scientists found that EV owners save an average of \$800 a year, even considering that 80% of the charging happens in-house. https://www.citylab.com/transportation/2017/11/where-it-pays-to-drive-electric/546956/</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Platinum Prosperity 	 <p>(link thumbnail)</p>
<p>Did you know that some utility companies offer rate discounts if you own an electric vehicle? Contact your utility to learn about your electricity rate options.</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Couples with Clout ▪ Platinum Prosperity 	
<p>Interested in purchasing an electric vehicle? There are a range of rebates available as well as financial incentives for setting up charging sites at home. Learn more: https://www.sccgov.org/sites/osp/Pages/net_zero.aspx</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Couples with Clout ▪ Platinum Prosperity 	<p>(link thumbnail)</p> 
<p>A new study found that electric vehicles have the lowest cost of ownership compared to traditional gasoline powered vehicles. https://cleantechnica.com/2018/02/05/new-study-finds-electric-vehicles-offer-lowest-total-cost-ownership/</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Platinum Prosperity 	 <p>(link thumbnail)</p>
<p>There are over 4,000 charging stations in California, and over 14,000 charging outlets! Find the nearest charge to you using the @energygov's Alternative Fueling Station Locator map. https://www.afdc.energy.gov/locator/stations/</p>	<ul style="list-style-type: none"> ▪ Couples with Clout ▪ Platinum Prosperity 	

Facebook Post Content	Audience Groups	Photo/Thumbnail
<p>The newest Tesla Model S offers the longest range of all electric vehicles at a max of 315 miles. That means you can drive to Santa Barbara on a full charge. Many other EVs are not far behind either.</p> <p>https://cleantechnica.com/2017/12/24/10-electric-cars-driving-range/</p>	<ul style="list-style-type: none"> Couples with Clout 	 <p>(link thumbnail)</p>
<p>A recent survey found that electric vehicle owners not only love their EVs, but they spend less than \$100 on maintenance costs each year.</p> <p>https://www.carmax.com/articles/hybrid-electric-2017-survey-results</p>	<ul style="list-style-type: none"> Platinum Prosperity 	 <p>(link thumbnail)</p>

Twitter Posts

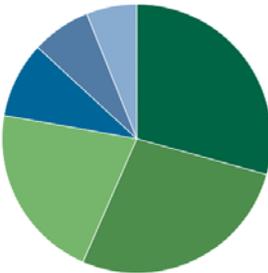
Use these sample Twitter posts to help promote EVs to potential consumers. Twitter posts should be short and concise and less than 280 characters. The use of hashtags and tagging/mentioning other Twitter accounts is highly recommended. Relevant hashtags have already been included in the suggested posts, and helps to increase visibility to your posts for anyone specifically looking for posts with those hashtags. The appropriate “handle” (Twitter account name, which begins with the @ symbol) for specific accounts has not been laid out for each post, only a few as an example.

Note: The website URL https://www.sccgov.org/sites/osp/Pages/net_zero.aspx will likely change, depending on the outcome of the website. This means the thumbnail associated with this post may also change.

Audience 1: Consumers

Twitter Post Content	Links	Photo/Thumbnail
<p>Roughly a quarter of all #hybrid and #EV car owners are #millennials. Hop on the #electrical bandwagon! https://www.carmax.com/articles/hybrid-electric-2017-survey-results</p>	<ul style="list-style-type: none"> ▪ Status Seeking Singles 	
<p>CA @govpressoffice is serious about curbing #carbon #pollution – he wants 5 million #zeroemission vehicles in CA by 2030. Let’s help CA be the leader in #EVs!</p>	<ul style="list-style-type: none"> ▪ Status Seeking Singles ▪ Couples with Clout 	
<p>In 2017, almost 200,000 #EVs were sold in the US. That’s more than a 25% increase compared to 2016. Not surprisingly, #Tesla is on top. https://arstechnica.com/cars/2018/01/2017-was-the-best-year-ever-for-electric-vehicle-sales-in-the-us/</p>	<ul style="list-style-type: none"> ▪ Status Seeking Singles ▪ Couples with Clout 	 (link thumbnail)
<p>A new report from the @UCSUSA found that #EV owners #save an average of \$800 a year, even considering that 80% of the #charging happens in-house. #electricvehicles https://www.citylab.com/transportation/2017/11/w-here-it-pays-to-drive-electric/546956/</p>	<ul style="list-style-type: none"> ▪ Status Seeking Singles ▪ Couples with Clout 	 (link thumbnail)

Twitter Post Content	Links	Photo/Thumbnail
<p>Did you know that some #utility companies offer rate discounts if you own an #EV? Contact your utility to learn about your #electricity rate options. #electricvehicles</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Couples with Clout ▪ Platinum ▪ Prosperity 	
<p>A new study found that #electricvehicles have the lowest cost of ownership compared to traditional #gasoline powered vehicles. https://cleantechnica.com/2018/02/05/new-study-finds-electric-vehicles-offer-lowest-total-cost-ownership/</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Platinum ▪ Prosperity 	 <p>(link thumbnail)</p>
<p>#DYK there are over 4,000 #charging #stations in #California, and over 14,000 charging #outlets! Find the nearest charge to you using the @energygov's #Alternative #Fueling Station Locator map. #EVs #electricvehicles https://www.afdc.energy.gov/locator/stations/</p>	<ul style="list-style-type: none"> ▪ Couples with Clout ▪ Platinum ▪ Prosperity 	
<p>The newest #Tesla #ModelS offers the longest #range of all #electricvehicles at a max of 315 miles. That means you can drive to #SantaBarbara on a full #charge. Many other #EVs are not far behind either. https://cleantechnica.com/2017/12/24/10-electric-cars-driving-range/</p>	<ul style="list-style-type: none"> ▪ Couples with Clout 	 <p>(link thumbnail)</p>
<p>A recent survey found that #electricvehicle owners not only love their #EVs, but the majority spend less than \$100 on #maintenance costs each year. https://www.carmax.com/articles/hybrid-electric-2017-survey-results</p>	<ul style="list-style-type: none"> ▪ Platinum ▪ Prosperity 	 <p>(link thumbnail)</p>

Twitter Post Content	Links	Photo/Thumbnail
<p>Did you know, #transportation is among the largest contributors to #greenhousegas #emissions in the US! #Electricvehicles offer a viable #alternative to conventional #automobiles. https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Couples with ▪ Clout ▪ 	<p>2015 U.S. GHG Emissions by Sector</p>  <p>(No thumbnail, but if possible, add the image of this graph as a customized thumbnail.)</p>
<p>The adoption rate in #SantaClara County is three times higher than that of the whole state of #California. Let's keep this momentum going. Learn more about #EVs. #electricvehicles https://www.sccgov.org/sites/osp/Pages/net_zero.aspx</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Couples with ▪ Clout ▪ Platinum ▪ Prosperity 	 <p>(link thumbnail)</p>
<p>The largest public #electricvehicle #charging center in #California is right here in #SantaClara! http://santaclaraca.gov/Home/Components/News/News/5036/3171</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Couples with ▪ Clout ▪ Platinum ▪ Prosperity 	 <p>(link thumbnail)</p>
<p>The state of #California has 31% of the #charging stations in the US. Thinking of getting an #EV? Learn more: https://www.sccgov.org/sites/osp/Pages/net_zero.aspx</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Couples with ▪ Clout ▪ Platinum ▪ Prosperity 	<p>(link thumbnail)</p> 
<p>#Electric vehicle drivers can use the #HOV lanes without any additional passengers, just as long as their vehicle displays a #CleanAir Vehicle Decal. https://arb.ca.gov/msprog/carpool/carpool.htm</p>	<ul style="list-style-type: none"> ▪ Status Seeking ▪ Singles ▪ Couples with ▪ Clout ▪ Platinum ▪ Prosperity 	

LinkedIn Posts

Use these sample LinkedIn posts to help promote EVs to potential charging station hosts. It is highly recommended to tag or mention other accounts on LinkedIn where appropriate. This can oftentimes lead to organic cross-promotion where the tagged account shares your post.

These posts can also be repurposed for Facebook, if a specific campaign is being used to target designated professionals (i.e. property managers, business owners, HR representatives, etc.).

Note: The website URL https://www.sccgov.org/sites/osp/Pages/net_zero.aspx will likely change, depending on the outcome of the website. This means the thumbnail associated with this post may also change.

Audience 2: Charging Station Hosts

LinkedIn Post Content	Links	Photo/Thumbnail
<p>Governor Brown is serious about curbing carbon pollution and recently upped the ante – he wants to see 5 million zero-emission vehicles in California by 2030, up from 1.5 million by 2025. You can help California be the leader in EVs by hosting a charging station! Learn more about the various funding options and how you can get started:</p> <p>https://www.sccgov.org/sites/osp/Pages/net_zero.aspx</p>	<ul style="list-style-type: none"> ▪ Employers ▪ Property Managers 	<p>(link thumbnail)</p> 
<p>Electric vehicles are on the rise. In 2017, almost 200,000 electric vehicles were sold in the US. That's more than a 25% increase compared to 2016. This means more of your employees could be choosing to commute by EV. Providing charging stations on site can benefit both you and your eco-conscious employees, improving both recruitment and retention. Contact us to learn more.</p> <p>https://arstechnica.com/cars/2018/01/2017-was-the-best-year-ever-for-electric-vehicle-sales-in-the-us/</p>	<ul style="list-style-type: none"> ▪ Employers 	 <p>(link thumbnail)</p>
<p>The adoption rate in Santa Clara County is three times higher than that of the whole state of California. You can help keep this momentum going by hosting a charging station. Learn more about the various funding options and how you can get started:</p> <p>https://www.sccgov.org/sites/osp/Pages/net_zero.aspx</p>	<ul style="list-style-type: none"> ▪ Employers ▪ Property Managers 	 <p>(link thumbnail)</p>

LinkedIn Post Content	Links	Photo/Thumbnail
<p>You can help your employees save on their commute while improving employee satisfaction and retention by hosting a charging station. Not only will employees be able to charge at work, electric vehicle drivers can use the HOV lanes without any additional passengers (single occupancy), possibly saving them time on their commute. Contact us to learn more. https://arb.ca.gov/msprog/carpool/carpool.htm</p>	<ul style="list-style-type: none"> ▪ Employers 	<p>(no thumbnail)</p>
<p>Looking for ways to attract and retain customers? Hosting a charging station may be the answer for you. A case study by the EV charging infrastructure company ChargePoint found that installing charging stations can increase customer dwell-time by an average of 50 minutes per customer. https://www.chargepoint.com/files/casestudies/cs-retail.pdf</p>	<ul style="list-style-type: none"> ▪ Property Managers 	<p>(no thumbnail)</p>
<p>Curious about hosting a charging station? Visit our website to learn more: https://www.sccgov.org/sites/osp/Pages/net_zero.aspx</p>	<ul style="list-style-type: none"> ▪ Employers ▪ Property Managers 	<p>(link thumbnail)</p> 
<p>There are a range of funding options available for deploying a charging station, from federal grants to tax credits. We can help you navigate the steps. https://www.sccgov.org/sites/osp/Pages/net_zero.aspx</p>	<ul style="list-style-type: none"> ▪ Employers ▪ Property Managers 	<p>(link thumbnail)</p> 

Appendix E: Upcoming Events

Event	Details	Opportunity
Santa Clara County: Certified Farmers' Markets (year-long)	Consumer segments identified in this plan will likely attend weekend farmers' markets.	<ul style="list-style-type: none"> On-site booth or table during weekend
Santa Clara Parks and Recreation Department: Adult Sports Leagues (year-long)	Softball and basketball leagues attract over 3,000 participants.	<ul style="list-style-type: none"> On-site booth or table during championship events Leave-behind collateral Posters
Silicon Valley Energy & Sustainability	<p>Sunnyvale, Monthly basis</p> <p>A platform of 600+ members bringing together professionals in the clean technology and sustainability space to discuss the industry's newest trends and latest developments. The events will take place on a monthly basis at the Plug and Play Tech Center.</p> <p>Hear from experts about a range of topics including:</p> <ul style="list-style-type: none"> Battery technologies Energy efficiency Sustainability Etc. 	<ul style="list-style-type: none"> Participate in a monthly meeting to inform members on EVs Leave behind collateral
G-50 Global Smart City Summit	<p>Cupertino & Santa Clara, Apr 6-8, 2018</p> <p>Perfect opportunity to understand Tesla and its standard, and see what interests Tesla for its customers, suppliers. Discuss smart city projects with university researchers and learn how to engage effectively with residents to increase civic participation.</p>	<ul style="list-style-type: none"> Participate in a collaborative workshop
Mission College's 10th Annual Eco Fair	<p>Mission College, Apr 19, 2018</p> <p>The event hosts booths from various environmental agencies</p> <p>Attendees can check out electric vehicles, bikes, and scooters, learn about environmental issues through the poster display contest.</p>	<ul style="list-style-type: none"> Exhibit Have electric vehicles on-site Leave-behind collateral at booth
Earth Day & Arbor Day Festival	<p>Cupertino, April 21, 2018</p> <p>Interactive community event for everyone to learn about</p>	<ul style="list-style-type: none"> Social media messaging On-site booth or table Eblast mentioning participation

Event	Details	Opportunity
	environmental issues and solutions. Attracts over 7,000 attendees and 75 partner organizations. Includes an EV demo.	<ul style="list-style-type: none"> • Sponsorship • Partnership promotions
National Drive Electric Week	Palo Alto, Sept. 16, 2018 Consumers can drive EVs, talk to EV owners and dealer representatives.	<ul style="list-style-type: none"> • Social media messaging • On-site booth or table • Eblast mentioning participation • Sponsorship
Northern California Facilities Expo	Santa Clara, Sept. 26-27, 2018 The event meets the facilities engineering, maintenance and energy management needs of industries such as high-tech manufacturing, government, health care, hospitality, finance, education, information technology, software development, shipping, utilities and many others.	<ul style="list-style-type: none"> • Educational seminar • Exhibit

Appendix F: Funders

Consumer incentives

Incentives for EV consumers are offered at the federal, state, and local levels. These include tax credits, vehicle rebates, carpool lane access, insurance discounts, and charging rate reductions.

Funder	Program Resources	Funding details	Who's eligible
FEDERAL			
Internal Revenue Service	Plug-In Electric Drive Vehicle Tax Credit	\$2,500-7,500, depending upon battery capacity; applies to vehicles acquired after December 31, 2009. Tax credit can be combined with State level rebates.	Individuals
STATE			
California Air Resources Board (ARB)	Clean Vehicle Rebate Program (CVRP)	\$1,500-4,000 ³⁰ for the lease or purchase of new, ARB-certified PEVs. Rebate can be combined with federal PEV tax credit.	Individuals
ARB	Decal for HOV lane exemption List of eligible vehicles	Access to carpool lanes through January 1, 2019 for an unlimited number of BEVs and the first 40,000 PHEV applicants.	Individuals
UTILITY RATE DISCOUNTS			
PG&E	Clean Fuel Rebate	\$500 rebate	PG&E customers
PG&E (Silicon Valley Clean Energy EV rate schedules mirror those of PG&E)	Discounted electricity rate (time of use rate)	Variable	PG&E and Silicon Valley Clean Energy customers
INSURANCE DISCOUNTS			

³⁰ Vehicles purchased on or before March 28, 2016, are eligible for rebates of up to \$5,000. For vehicles purchased on or after March 29, 2016, eligibility for the rebate for individuals is based on gross annual income, as stated on the individual's federal tax return. Individuals with a gross annual income above the following thresholds are *not* eligible for PEV rebates: \$250,000 for single filers, \$240,000 for head-of-household filers, and \$500,000 for joint filers. For individuals with low and moderate household incomes of less than or equal to 300% of the federal poverty level, rebates are increased by \$1,500, for a total rebate amount of up to \$6,500.

Funder	Program Resources	Funding details	Who's eligible
Farmers Insurance	Planning Ahead Discounts	10% discount on all major coverages	Those who drive hybrids and other alternative fuel vehicles
Travelers Insurance	Hybrid/Electric Vehicle Discount	Save on Travelers auto insurance	Those who own or lease a hybrid car
PARKING DISCOUNTS			
San Jose	ParkSJ: Clean Air Program	Park free at all City of San Jose parking meters, participating ParkSJ garages, and City of San Jose Parks and Recreation facilities	Those displaying a valid Clean Air Permit

Property owners/managers and employer incentives:

Funder	Program Resources	Funding details	Who's eligible
FEDERAL			
Internal Revenue Service	Plug-In Electric Drive Vehicle Tax Credit	\$2,500-7,500, depending upon battery capacity; applies to vehicles acquired after December 31, 2009. Tax credit can be combined with State level rebates.	Businesses
STATE			
Bay Area Air Quality Management District	Visit: Charge! Program View: Program flyer	Grant award: \$10,000 to \$500,000 Awards are based on number and type of chargers proposed and installed. Deadline: March 9, 2018	Public agencies, non-profits, and private businesses
California Capital Access Program (CalCAP) Electric Vehicle Charging Station (EVCS) Financing Program	Visit: CalCAP EVCS Financing Program View: Program brochure	Borrowers may be eligible for a 10-15% rebate of the enrolled loan amount.	Small businesses

Funder	Program Resources	Funding details	Who's eligible
California Energy Commission	Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP)	Competitive grant program that provides funding for EVSE infrastructure, light duty PEV deployment, workforce training and development, and regional PEV readiness plans.	Businesses, workforce training partners, fleet owners, consumers, and academic institutions in CA
UTILITY RATE DISCOUNTS			
City of Palo Alto Utilities	EV Charger Rebate for Multi-User Sites	CPAU is now offering a rebate of up to \$30,000 for the installation of EV Chargers at qualified sites, including schools, multifamily dwellings such as apartment complexes and commercial properties.	Businesses
PG&E	Electric Vehicle Charge Network	Program aims to install up to 7,500 EV charging stations at multi-unit dwellings and workplaces that can host more than 10 charging stations, covering the equipment cost up from 25 to 100 percent.	Qualified applicants from service territory.
OTHER			
Electrify America	The Cycle 1 plan will invest in ZEV infrastructure, education, and access activities to support California's effort to increase ZEV adoption in five major metropolitan areas including Los Angeles, San Francisco, San Jose, Sacramento, and Fresno.	The San Jose-Sunnyvale-Santa Clara area has been prioritized for the community charging investment for the Cycle 1 Plan, for which \$45 million (total for all the cities) will be invested in 350 or more charging stations at five major use cases including, MUDs, workplace, commercial/retail, community centers, and municipal lots/garages. ³¹	Businesses

³¹ Electrify America. June 29, 2017. Supplement to the California ZEV Investment Plan Cycle 1. https://www.arb.ca.gov/msprog/vw_info/vsi/vw-zevinvest/documents/california_zev_investment_plan_supplement_062917.pdf

Appendix G: Residential and Commercial Property Owners/Managers

Residential Property Owner/Manager	Contact Information
Alliance	Web Form
Arcadia Companies	<p>The Woods: 300 The Woods Drive San Jose, CA 95136 408-227 3700</p> <p>Cherrywood: 4951 Cherry Avenue San Jose, CA 95118 408-266-8070</p>
Avalon Communities	Web Form
Cambridge Management Company	Web Form
CIM Group	<p>Oakland Office: One Kaiser Plaza, Suite 430 Oakland, CA 94612 510-992-6160</p>
DKD Property Management	<p>Corporate: 255 West Julian Street, Suite 301 San Jose, CA 95110-2406 408-297-7849</p>
Elevate to Sequoia	<p>Web Form 925-945-0900</p>
Equity Apartments	<p>Northern California - Area Office 333 Third Street, Suite 210 San Francisco, CA 94107 415-767-7174</p>
FPI Management	Web Form
Goldrich Kest	<p>Corporate: 5150 Overland Avenue Culver City, CA 90230 310-204-2050 info@goldrichkest.com</p>
Greystar	Web Form
Irvine Company Apartments	855-366-4581
JKL Communities	Web Form
Lyon Living	<p>Corporate: 4901 Birch Street Newport Beach, CA 92660 949-252-9101</p>

Residential Property Owner/Manager	Contact Information
Pinnacle Living	1990 N California Blvd – 8 th Floor, Suite 27 Walnut Creek, CA 94596-7261 925-930-3910
Shea Apartments	Web Form
SRG Living	Web Form
St. Anton Capital	Bay Area Operations: 408-774-9660
UDR	Web Form
Woodmont Rentals	Corporate: 1050 Ralston Avenue Belmont, CA 94002 650-592-3960 info@wres.com

Commercial Property Owner/Manager	Contact Information
Borelli Investment Company	Web Form
CBRE	Contact Info
Cushman & Wakefield	Web Form
Irvine Company Offices	Web Form
Orchard Commercial	Contact Info
Pacific Workplaces	Web Form
PS Business Parks	Web Form
Regus	Web Form for contact listed at bottom of page when clicking (send us an email) 855-400-3575

Appendix H: Chambers of Commerce in Santa Clara County

Chamber	Opportunity
Campbell Chamber of Commerce	<ul style="list-style-type: none"> Mixer: 3/15/18 Monthly Luncheon: 3/21/18 Ambassador Meeting: 3/28/18, 4/25/18, 5/23/18, 6/27/18, 7/25/18, 8/22/18, 9/26/18, 10/24/18, 11/28/18, 12/26/18, 1/23/19, 2/27/19, 3/27/19 Banner ad
Cupertino Chamber of Commerce	<ul style="list-style-type: none"> Networking Mixer: 3/14/18, 4/11/18, 5/9/18, 6/13/18, 7/11/18, 8/8/18
Filipino American Chamber of Commerce – Santa Clara County	<ul style="list-style-type: none"> Community Open House & Mixer
Gilroy Chamber of Commerce	<ul style="list-style-type: none"> After-hours Mixer: 3/8/18, 4/12/18 Chamber Breakfast: 3/21/18, 4/18/18 State of the City address: 3/1/18
Los Altos Chamber of Commerce	<ul style="list-style-type: none"> Ambassador Committee Meeting: 3/1/18, 4/5/18, 5/3/18, 6/7/18, 7/5/18, 8/2/18, 9/6/18, 10/4/18, 11/1/18, 12/6/18, 1/3/19, 2/7/19, 3/7/18, Government Affairs Committee Meeting: 3/7/18, 4/4/18, 5/2/18, 6/6/18, 7/4/18, 8/1/18, 9/5/18, 10/3/18, 11/7/18, 12/5/18, 1/2/19, 2/6/19, 3/6/19 Banner ad
Los Gatos Chamber of Commerce	<ul style="list-style-type: none"> Mixer: 2/15/18 Luncheon: 2/27/18 Banner ad
Milpitas Chamber of Commerce	<ul style="list-style-type: none"> Networking mixer: 2/22/18 Connection club: 3/21/18, 5/16/18, 7/18/18, 9/19/18, 11/21/18 Banner ad
Morgan Hill Chamber of Commerce	<ul style="list-style-type: none"> Chamber Breakfast: 3/1/18, 4/5/18 Economic Development Committee Meeting: 3/8/18, 4/12/18 Ambassador Meeting: 3/8/18, 4/12/18 Planning Commission Meeting: 3/13/18, 3/27/18, 4/10/18, 4/24/18 Mixer: 3/15/18, 4/19/18 Banner ad
Mountain View Chamber of Commerce	<ul style="list-style-type: none"> Business ConneXions Leads Group: 3/7/18, 4/4/18, 5/2/18, 6/6/18, 7/4/18, 8/1/18, 9/5/18, 10/3/18, 11/7/18, 12/5/18, 1/2/19, 2/6/19, 3/6/19, 4/3/19 Ambassador Meeting: 3/13/18, 4/10/18, 5/8/18, 6/12/18, 7/10/18, 8/14/18, 9/11/18, 10/9/18, 11/13/18, 12/11/18, 1/8/19, 2/12/19, 3/12/19, 4/9/19 Business Issues & Public Policy Committee: 3/14/18, 4/11/18, 5/9/18, 6/13/18, 7/11/18, 8/8/18, 9/12/18, 10/10/18, 11/14/18, 12/12/18, 1/9/19, 2/13/19, 3/13/19, 4/10/19 Banner ad
Palo Alto Chamber of Commerce	<ul style="list-style-type: none"> Business Referral Network: Every Tuesday
Santa Clara Chamber of Commerce	<ul style="list-style-type: none"> Lunch and learn: 2/16/18 Mixer: 3/15/18 Banner ad
Saratoga Chamber of Commerce	<ul style="list-style-type: none"> Mixer: 2/15/18
Sunnyvale Chamber of Commerce	<ul style="list-style-type: none"> Mixer: 3/15/18
The Silicon Valley Organization	<ul style="list-style-type: none"> Destination: Silicon Valley