



# Seattle Electric Vehicle Outreach and Engagement Campaign

## Final Report

Prepared by ECOSS



Sustainable Solutions for All

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In Partnership with Forth and Drive Clean Seattle



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## Summary of Scope

The goal of the project was to carry out a clean mobility outreach and awareness campaign focused on underserved communities within the greater Seattle area. This campaign was funded by Drive Clean Seattle, lead by Forth and implemented by ECOSS. Although ECOSS is a pioneer in environmental education and outreach to diverse and underserved communities, this campaign presented an opportunity to expand the organization’s knowledge and services into clean energy, specifically electric vehicles (EVs).

Forth invited ECOSS to support the project by delivering outreach and engagement to local underserved communities. ECOSS relied on its vast networks and multicultural outreach experience to engage with members of the Latino/a, Somali, Chinese, Ethiopian, Eritrean, Vietnamese and Cambodian communities.

The project consisted of three main components which were planned and implemented in April and May of 2018:

- 1) Connect, educate, and gather feedback from underserved community members, immigrants and refugee residents on their current transportation situation and the benefits of electric vehicles (EVs) in their communities;
- 2) Facilitate two (2) “listening sessions” designed for residents of an affordable housing community, with the second session open to a broader audience;
- 3) Compile and summarize the data collected in a report that can be used to develop future EV and shared mobility projects in Seattle.



Picture 1: Forth training ECOSS Staff

## Introduction

The 2017 Drive Clean Seattle Implementation Strategy states, *“In 2013, the City of Seattle set a goal to be carbon neutral by 2050. Transportation is the largest single source of climate and air pollution in Seattle, which disproportionately impacts communities of color and lower income residents.”*<sup>i</sup> This can be read as hopeful, and almost positive, since it acknowledges the health inequities that are present in Seattle. The implementation strategy later expands into a section titled *“Racial Equity Analysis”*<sup>ii</sup>, where it is clear environmental justice is the City’s focus. ECOSS is hopeful that the findings of this project, in partnership with Forth, will provide perspective into future programs focused on equity in electric and shared transportation. ECOSS supports the City of Seattle as they continue their environmental justice focus by engaging communities in a partnership centered on inclusion and collaboration.



Picture 2: Showcasing plug-in hybrid electric car to Mt. Baker residents

During the planning stages of the campaign ECOSS worked to identify potential communities to educate. ECOSS has a number of existing partnerships in communities of color and chose to focus on those as that is where a relationship of trust had already been established. The language demographics of the target communities were diverse. ECOSS worked with Forth to translate EV 101 materials to additional languages in order to reduce barriers.

Forth staff provided training to ECOSS staff ahead of the implementation of the outreach campaign. The training provided an overview of EVs and shared transportation. Upon completing the training with Forth, the campaign focus was expanded to also include information about community members’ challenges with transportation. This information would help to provide a better understanding of how EVs would fit into community members’ current transportation situation. A simple two-part survey was created to collect data from participants and included sections dedicated to transportation and to EVs.

Additionally, ECOSS hosted focus groups and educational sessions, tabled at community events, and conducted two listening sessions.



Picture 3: Tabling Event at El Centro de La Raza

## Methodology

Forth and ECOSS aimed to gather both qualitative and quantitative data. The quantitative data was gathered through short paper surveys administered by ECOSS staff. Surveys were distributed to participants during the focus groups, tabling events and at one of the listening sessions. Each participant was offered a \$10.00 gift card as an incentive for completing the survey.

Qualitative data was collected through oral discussion and conversation during focus groups, listening sessions and tabling interactions. The qualitative data allowed for participants to more openly express their opinion and tell their story while the quantitative data provided clear information about participant demographics and transportation.

The format of the focus groups consisted of an EV 101 presentation, EV discussion facilitation, and survey completion. EV 101 flyers and surveys were translated to Amharic, Vietnamese and Somali. The Chinese version was provided by Forth and reviewed by ECOSS' staff.

## Results

### Summary of Events

During the two month project duration, ECOSS facilitated outreach and the engagement of:

- 2 tabling events
- 6 focus groups
- 81 surveys completed in 6 different languages
- 2 listening sessions with more than 85 participants combined
- 273 community members educated (approximately)

## Focus Groups, Tabling and Listening Sessions (Table 1)

- SPIARC (South Park Information and Resource Center). Interacted with a group of Latina women who hold leadership roles within the community.
- The Cantonese Association at the University of Washington. Engaged with a group of students.
- Somali Community Members. Interacted with a group of Somali women in partnership with the Somali Family Safety Task Force at New Holly Community Center and with a group of Somali men at Alnoor Mosque in South Seattle. Several attendees mentioned being for-hire drivers (Uber and Lyft).
- Ethiopian Community Center. Presented at a monthly meeting with over 60 in attendance. Several attendees mentioned being for-hire drivers (Uber and Lyft).
- Vietnamese Community Members of South Rainier. Engaged with families and young adults.
- Community Event Tabling. ECOSS tabled at “5 de mayo” hosted by el Centro de la Raza and at the Ethiopian Community Center.
- Listening Sessions. Hosted at Mt. Baker Village Housing and El Centro de La Raza. Both organizations offer low-income housing and social services for residents.
  - More than 60 community members attended the Mt. Baker listening session. The presentation was conducted in English with simultaneous interpretation in Vietnamese and Khmer. The majority of the community members were senior citizens. Many live on only \$700 a month and don’t have a driver’s license.
  - About 20 participants attended the listening session at El Centro de La Raza. Most of the attendees were interested in viewing the electric cars and their components. Surveys were collected on a 1 to 1 basis.



Picture 4: Focus Group at UW Seattle

Table 1: Summary of engagement activities and characteristics of the audience

Date	Event	Number of Attendees	Characteristics of participants	Number of surveys completed
4/4/2018	Latina Focus Group (Spanish)	15	Staff/Employees; Women	15
5/1/2018	Chinese Focus Group (Cantonese)	18	Young adults	18
5/2/2018	Education Session with presentation and tabling with Eritrean Community (English)	30	Children; Families with children; Other; Students; Young adults	0
5/4/2018	Somali Focus Group (Somali)	15	Seniors; Students; Young adults; Uber and Lyft Drivers	6
5/5/2018	Tabling event @ El Centro de la Raza (primarily Spanish)	25	Children; Families with children; Other; Seniors; Students; Young adults	10
5/5/2018	Somali Focus Group (Somali)	15	Families with children; Pregnant Women; Seniors; Students	5
5/6/2018	Ethiopian Focus Group (English and Amharic)	60	Children; Families with children; Seniors; Young adults; Uber and Lyft Drivers	3
5/6/2018	Vietnamese Focus Group	10	Families with children; Students; Young adults	10
5/19/2018	Listening session at Mount Baker (Khmer and Vietnamese)	65	Children; Families with children; Seniors; Students; Young adults; low income and affordable housing residents	0
5/20/2018	Listening session at El Centro de la Raza (English and Spanish)	20	Children; Families with children; Staff/Employees; Students; Young adults; low income and affordable housing residents.	14

**Total** **273** **81**



Picture 5: Listening Session at Mt. Baker Housing.

### Survey Results

**Demographics:** 44% of surveyed participants live in multifamily housing and 54% live in single family homes. Most survey participants lived in the South Seattle area, primarily the Beacon Hill, Rainier Valley, and White Center neighborhoods. These neighborhoods are among the most diverse in Seattle. 27% of the surveys were completed in English, 23% in Spanish, 14% in Somali, 13% in Chinese and 4% in Amharic (Figure 1).

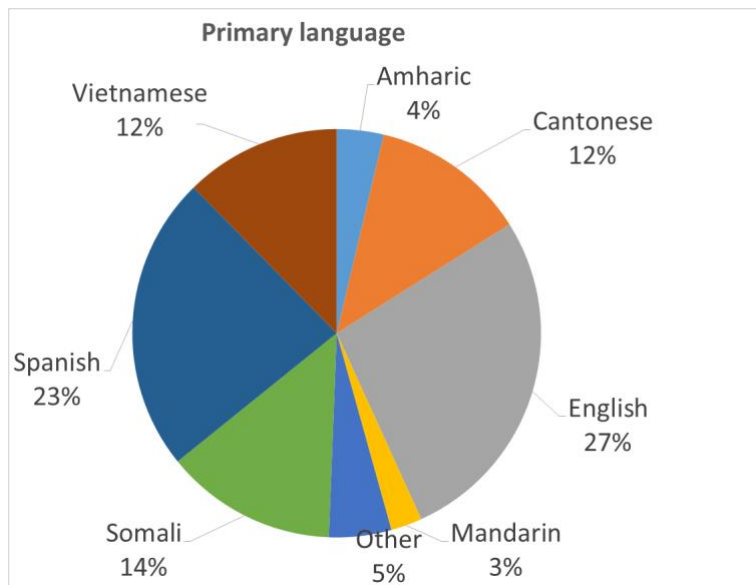


Figure 1: Language spoken by interviewees



**Purpose of Transportation:** The predominant purpose for transportation was work (23%), followed by grocery shopping (21%), medical appointments (17%), and general recreation (14%) (Figure 2).

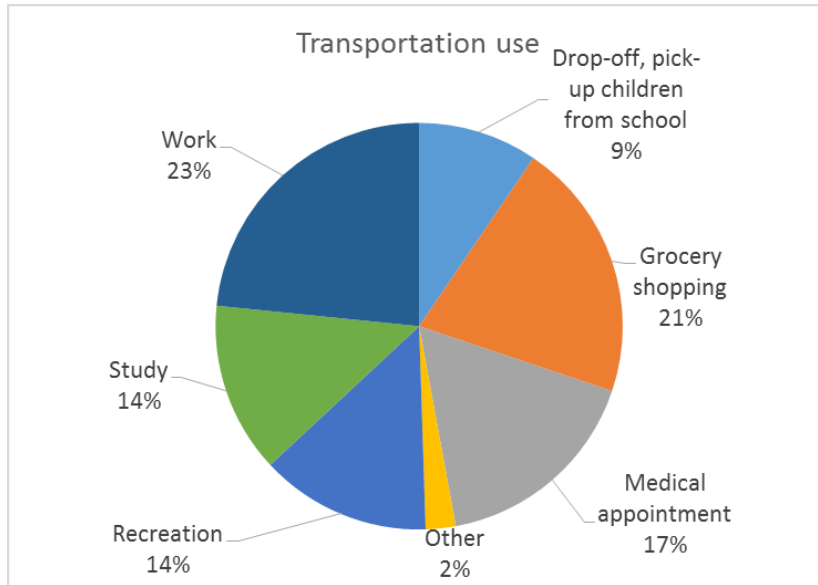


Figure 2: “What do you use transportation for?”

**Method of Transportation:** The predominant choice was cars (37%), followed by public transportation (26%) and walking (15%) (Figure 3).

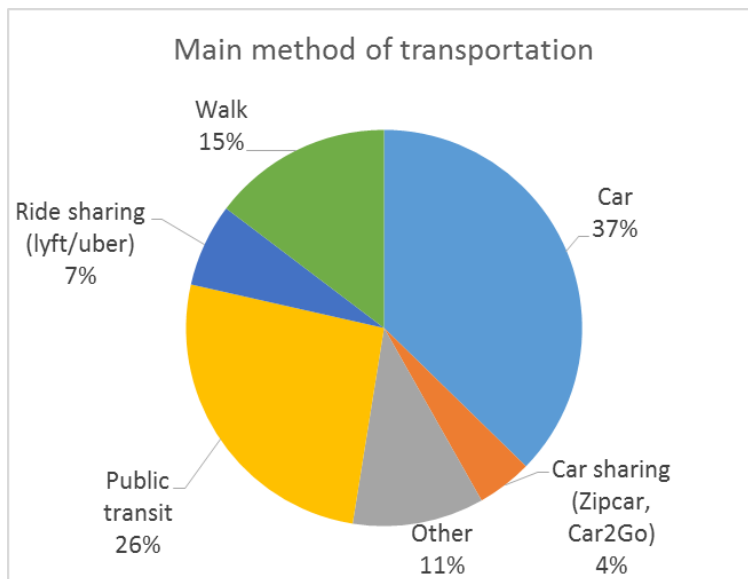


Figure 3: “What is your main method of transportation?”

### Number of cars and drivers in household

Most participants had one car (29%) with at least two drivers in the household (44%). Additionally, 16% of interviewees had 3 cars in the household, and 13.5% did not have cars.

### **Driver's license?**

91% of the participants answered "Yes." 9% did not have a driver's license

### **Average weekly commuting time, weekly cost, and length of one-way commute?**

Most participants responded that they spend more than six hours per week (26%) commuting. 18.5% spend 1-2 hours and 17% of participants spend less than 30 minutes. Interviewees spend between \$10 to \$50 in an average week (accounting for 73% of answers). When asked about length of one-way commute, 24% of participants said between 1 to 5 miles, 25% between 5 to 15 miles, and 17.5% more than 20 miles.

### **Familiarity with with electric vehicles?**

40% responded "not at all", 52% responded "somewhat," and 9% responded "a lot".

### **What are the barriers and/or obstacles in regards to transportation?**

Most participants mentioned concerns about increasing **traffic** congestion in the city, followed by **public transportation challenges**; such as infrequent bus times and the lack of bus routes. The third most mentioned barrier was the increasing **cost of gas**, followed by the lack of **parking available** and road conditions.

### **How could current transportation/commutes be improved (open question)**

Most participants say that **more public transportation** availability is needed including; more buses, routes, light rails, and or small shuttle, followed by **increased carpooling**, and limiting car usage.

### **Would you like to see more electric vehicles in your community? If so, why?**

92% of interviewees responded "Yes". The most predominant reason mentioned was that EVs are "**good for the environment**" and "**avoid air pollution.**" They noted, in order of priority, that EVs help "**save money on maintenance and gas,**" and overall "**they are good for our health.**" 1% responded "no" and 7% responded "not sure".

### **Do you have concerns about electric vehicles?**

The top concern had to do with **price and affordability**, followed by **uncertainty on where cars could be charged**, as well as **range reliability**. Other concerns had to do with the cost of sharing and the **durability of an electrical battery**.



Picture 5: Collecting surveys at El Centro de la Raza listening session

### General Audience Feedback

Focus groups and listening sessions provided a platform for participants to voice their concerns and questions regarding transportation and electric vehicles. All participants at the focus groups and listening sessions were people of color and predominantly low-income. The following summarizes the most discussed themes:

- **Affordability and accessibility of electrical vehicles:** A common concern in all the focus groups and listening sessions was affordability. Participants expressed a deep concern about the cost of an EV. One comment included: *“Some of us live within the poverty line guidelines, and mostly rely on public transportation to get around the city, how do you expect us to even begin to think of owning an EV?”*. Participants at the Mt. Baker listening session were mostly low-income senior immigrants. Many expressed concern that they live in affordable housing and don’t have a driver’s license. They understand the benefits of EVs to the environment but they don’t believe prices are affordable.
- **Car sharing program:** Many residents voiced support of a community car sharing program. They mentioned having an EV in the community accessible to all residents could be beneficial not only for people in case of emergencies but also to increase awareness of how EVs function.
- **Cost associated with owning an EV:** Participants shared concerns about the extra costs that they thought may be associated with owning an EV such as their electricity bill, additional maintenance and battery replacement. There was a lot of concern around the battery. Participants asked how long they last and how much it would cost them to replace it. Many pointed out that they can only afford used cars.
- **Multifamily complexes and charging stations:** Participants had concerns about charging at multifamily complexes. Some of the questions included: *“Will my landlord allow me to charge my EV? What if my apartment is far from the parking lot, what outlet would I plug the charger into? Would we have to worry about people stealing charging cables?”*

- **Safety of electric vehicles:** Participants asked questions regarding the safety of EVs, especially because they are so quiet. One participant noted: *Isn't that also dangerous for folks that are walking the street?* Another question around safety involved the battery. Someone asked: *Does an EV battery ever get overheated to the point that it could catch on fire or explode?*
- **Charging stations and range:** Somali and Amharic participants shared that they drive for Uber and Lyft. They had concerns about charging range: *How long would they be able to drive before they'd need to charge again and how long would charging take?* They like that the City is investing in more charging stations but none of them knew where charging stations were located in their South Rainier neighborhood.



Picture 6: Group photo at El Centro de la Raza listening session

## Conclusions and Recommendations

The Race and Equity Analysis section of the Drive Clean Seattle Initiative states that *“A race and social justice lens is essential to ensure the benefits of transportation electrification accrue to those most impacted by the negative effects of a fossil fuel based transportation system and to ensure transportation electrification strategies do not exacerbate existing inequities.”*<sup>iii</sup> Global warming emissions and climate change hit low-income communities and communities of color first and worst because these communities disproportionately live near busy roads and freeways. They are exposed to dangerous levels of emissions and increased illness and health cost, amongst other impacts. Increasing EV access in communities most impacted by poverty and pollution is an indispensable obligation not only to meet the carbon neutral goals set by the Drive Clean Seattle Initiative, but also to reverse a long history of environmental injustice and disinvestment in communities of color. It is ECOSS’s intention to make recommendations that are based on the communities that have been reached during the campaign, the literature and material available on EVs and the Drive Clean Seattle Initiative, as well as ECOSS’s position as a community-based organization facilitating and encouraging the voice of underserved communities.

Communities of color care about the environment. They support policies that protect the environment and their families from pollution, and most importantly they want to stay in Seattle. They do not want to face gentrification and social exclusion. Unfortunately, as the cost of living in the city increases, so does the wave of displacement of residents that can no longer afford the elevated costs of food, mobility and rent within the city limits. Electric vehicle infrastructure could have a very negative effect on our communities as it is stated, *“without a diverse set of policies in place, simply increasing EV infrastructure in communities could increase rents or other cost of living indicators and increase risks of displacement and gentrification”*.<sup>iv</sup> It is important to include low-income and underserved communities in policy formation to help avoid unintended consequences.

Building and establishing long lasting collaborative community partnerships is fundamentally important. Relationships with communities have roots and those roots are within its leaders and community-based organizations. It is extremely crucial for local government to have relationships with community leaders and to include them in the decision making. The City of Seattle is “leading by example” electrifying all of its fleet. Community-based organizations and non-profits should serve as the connection between communities and government; as they are where community members look for social services.

EV infrastructure could represent an important opportunity to boost local economies for minority owned businesses. Implementing local hiring practices and short-term educational programs targeted to underserved members of Seattle communities will help to provide proper training along with sustainable green jobs. EV policies and initiatives can bring economic benefits to underserved communities while increasing environmentally sustainable practices.

Transportation is often a challenge for low-income families living in urban centers, many of whom do not own cars and sometimes do not have a driver’s license. During outreach with Mt. Baker Village

Housing, members mentioned the need for a program that would help families get where they need to go at an affordable cost, while also helping educate the public about electric vehicles. Residents of Mt. Baker walk across a dangerous intersection near their apartment to get to the grocery store. The addition of a low range community EV could help reduce pedestrian concerns. The El Centro de la Raza community was built to be transit-oriented and even has two Seattle City Light chargers across the street. Many El Centro community members and employees are dependant on their cars. El Centro also oversees numerous community programs and utilizes onsite vans for transportation. The addition of a community EV might help to reduce their transportation costs.

Knowledge of EVs is limited in underserved communities. However, all participants were very interested in learning more about EVs and shared mobility projects in their communities. It is highly recommended to continue with the education and implementation of culturally relevant outreach and engagement strategies; and to connect communities with resources to more alternative and environmentally sustainable transportation options. A comprehensive survey across Seattle communities and demographics to design future programs is needed.

This project gave ECOSSE a unique opportunity to reach out to communities and find out more about their mobility needs and concerns. ECOSSE highly recommends Forth consider expanding this seed project into a second phase.



Picture 7: EV presentation at the Ethiopian Community Center of South Rainier.

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## References

- <sup>i</sup>[https://www.seattle.gov/Documents/Departments/Environment/ClimateChange/Drive\\_Clean\\_Seattle\\_2017\\_Report.pdf](https://www.seattle.gov/Documents/Departments/Environment/ClimateChange/Drive_Clean_Seattle_2017_Report.pdf)
- <sup>ii</sup>[https://www.seattle.gov/Documents/Departments/Environment/ClimateChange/Drive\\_Clean\\_Seattle\\_2017\\_Report.pdf](https://www.seattle.gov/Documents/Departments/Environment/ClimateChange/Drive_Clean_Seattle_2017_Report.pdf)
- <sup>iii</sup>[https://www.seattle.gov/Documents/Departments/Environment/ClimateChange/Drive\\_Clean\\_Seattle\\_2017\\_Report.pdf](https://www.seattle.gov/Documents/Departments/Environment/ClimateChange/Drive_Clean_Seattle_2017_Report.pdf)
- <sup>iv</sup>[https://www.seattle.gov/Documents/Departments/Environment/ClimateChange/Drive\\_Clean\\_Seattle\\_2017\\_Report.pdf](https://www.seattle.gov/Documents/Departments/Environment/ClimateChange/Drive_Clean_Seattle_2017_Report.pdf)