



COMMUNITY ENGAGEMENT SUMMARY
FUTURE TRANSPORTATION ELECTRIFICATION
PROGRAMS AND SERVICES
MULTIFAMILY & FLEET AND COMMERCIAL

CONTENTS

1. Executive Summary	3
Overview	3
Key findings	3
Next steps	3
2. Community Engagement Process	4
Community engagement outcomes and goals	4
Community engagement process.....	6
Compensation	7
Engagement participants.....	7
3. Feedback	9
CBO engagement	9
Multifamily engagement.....	9
Fleet and Commercial Engagement.....	18
4. Conclusion	26
Key findings	26
Limitations of this work and lessons learned.....	26
Next steps	28
5. Appendixes	29
Appendix A: Engagement participants.....	29
Appendix B: CBO Mural boards	31
Appendix C: Focus group Mural boards	34
Appendix D: Workshop Mural boards	37
Appendix E: Multifamily provider survey results	39
Appendix F: Lummi Nation Multifamily user survey results.....	43
Appendix G: TEP factsheets and fliers	62

ACRONYMS

ACRONYM	FULL NAME
BIPOC	Black, Indigenous, and People of Color
CBO	Community-based Organization
DEI	Diversity, Equity and Inclusion
EV	Electric Vehicle
EVSE	Electric Vehicle Supply Equipment
FC	Fleet and Commercial
MF	Multifamily
PSE	Puget Sound Energy
TE	Transportation Electrification
TEP	Transportation Electrification Plan
WUTC	Washington Utilities and Transportation Commission
CETA	Clean Energy Transformation Act

1. EXECUTIVE SUMMARY

OVERVIEW

In May 2019, Puget Sound Energy (PSE) and Hopelink co-hosted an electric mobility workshop with South King County mobility stakeholders, which led to the creation of eight equity-focused Transportation Electrification (TE) pilots with community-based service providers throughout PSE's service area. As PSE expands these pilots into future programs and services, they sought input from highly impacted communities, vulnerable populations, and their service providers on multifamily (MF), and fleet and commercial (FC) use cases to understand the benefits and barriers they may face when it comes to TE and how future programs and services can alleviate these barriers and maximize the desired benefits.

From August 2021 through November 2021, PSE engaged 34 organizations, agencies and tribes and 106 residents in interviews, focus groups, workshops, and surveys to hear directly from them what would be most beneficial as PSE develops TE programs and services.

KEY FINDINGS

Through the engagement process, MF and FC participants shared common threads of feedback:

- **Cost** was highlighted as one of the most significant barriers. The cost of electric vehicles (EVs), Electric Vehicle Supply Equipment (EVSE), and potential loss of parking were all cited as notable hurdles to TE.
- **Education and outreach** were cited as barriers to access, a key factor in building support among boards and leadership teams, and an important precursor to communities being able to meaningfully engage and provide input.
- **EV availability** was also shared as a barrier to TE, particularly for participants that serve individuals with disabilities, and for those who drove larger vans or vehicles on rural roads.
- **Range** was flagged as a concern for individuals who wanted to use vehicles all day and may not have time to charge, or for individuals who were looking to travel long distances.
- **Access to charging infrastructure** was noted as a key barrier to overcome, particularly for employees with non-traditional schedules who may not be able to access workplace charging, renters who may not be able to access consistent charging, and rideshare drivers for whom charging during work hours means a loss of profit.
- **Flexibility of programs and services** was underscored by participants. Participants asked for flexible programs and services (e.g., with lease-to-own models) to help overcome the cost barrier and enable them to choose the TE infrastructure that best fit their organization, agency, and tribe.

NEXT STEPS

This report serves as the summary of community engagement for Phase I of the next round of TE programs, focused on multifamily and fleet and commercial services. This summary will be used to inform the draft filing of TE programs and services, which will be shared with the Utilities and Transportation Commission (UTC) Stakeholder Group in Q1 2022, and formally filed with the UTC in the first half of 2022. If approved, TE programs and services will launch in 2023. PSE will also share this summary and the filings with all tribes, organizations, and agencies who provided their perspective during the community engagement process, in addition to sharing the dates for public comment on the UTC filing.

2. COMMUNITY ENGAGEMENT PROCESS

The community engagement process began in August 2021 and concluded in November 2021. The sections below outline the development of the process, from the creation of goals and objectives to the prioritization of audiences, to the development of engagement tools.

COMMUNITY ENGAGEMENT OUTCOMES AND GOALS

In August 2021, PSE in collaboration with their community engagement consultants Maul Foster & Alongi and Triangle Associates, developed the following community engagement outcomes, goals, and participant criteria:

- **Outcomes**

- Establish a roadmap for the equitable acceleration of widespread TE that includes the voices of the diverse communities in PSE's electric service area.
- Position the region as a leader in the transition to a cleaner energy future by advancing electrified transportation in Washington State among highly impacted communities, vulnerable populations, and their service providers.
- Remove barriers related to equity and inclusion as stated by community members, with community co-created programs that provide TE access to all customers.
- Solicit feedback from highly impacted communities and vulnerable populations who are interested in using potential TE programs and services, particularly as it relates to ownership preferences, cost share of electric vehicle infrastructure, education and outreach needs, customer acquisition and enrollment, and benefits and barriers to programs and services.

- **Goals**

- **Goal 1: Diversity, equity, and inclusion**

DEI energizes everything we do at PSE. It's about transparency and shining light across all our activities and must be part of how we connect in the community and serve our customers.

- Promote procedural equity by giving future customers of these TE programs— highly impacted communities, and vulnerable populations and their service providers—a seat at the design table.
- Compensate participants for sharing their expertise, stories, and experiences.
- Apply community engagement outcomes towards program design, with the goal of maximizing benefits and minimizing barriers to accessing the programs.
- Ensure community feedback is representative of the geographic and demographic diversity of our electric service area.
- Identify future customers of programs, particularly from highly impacted communities, vulnerable populations, and their service providers in PSE's electric service area.
- Determine how to more effectively deliver and market these programs to improve engagement and utilization.

- **Goal 2: Customers and community**

We have to partner with our customers and our communities. We don't have all the answers when it comes to creating a clean energy future. Instead, we want to get there in partnership with our customers and do so in a way that involves all voices and prioritizes historically underserved communities. We will use the following approach to continue to support communities in need and help remove barriers:

- Utilize the outcomes of this community engagement process to create and file TE programs that maximize benefits and minimize barriers.
- Serve as a conduit between PSE and community members (individuals or groups) to create and strengthen relationships.
- Manage and meet expectations of external and internal stakeholders throughout this process, keeping stakeholders (including the UTC) updated and informed as the feedback and engagement process moves forward.

- **Participant criteria**

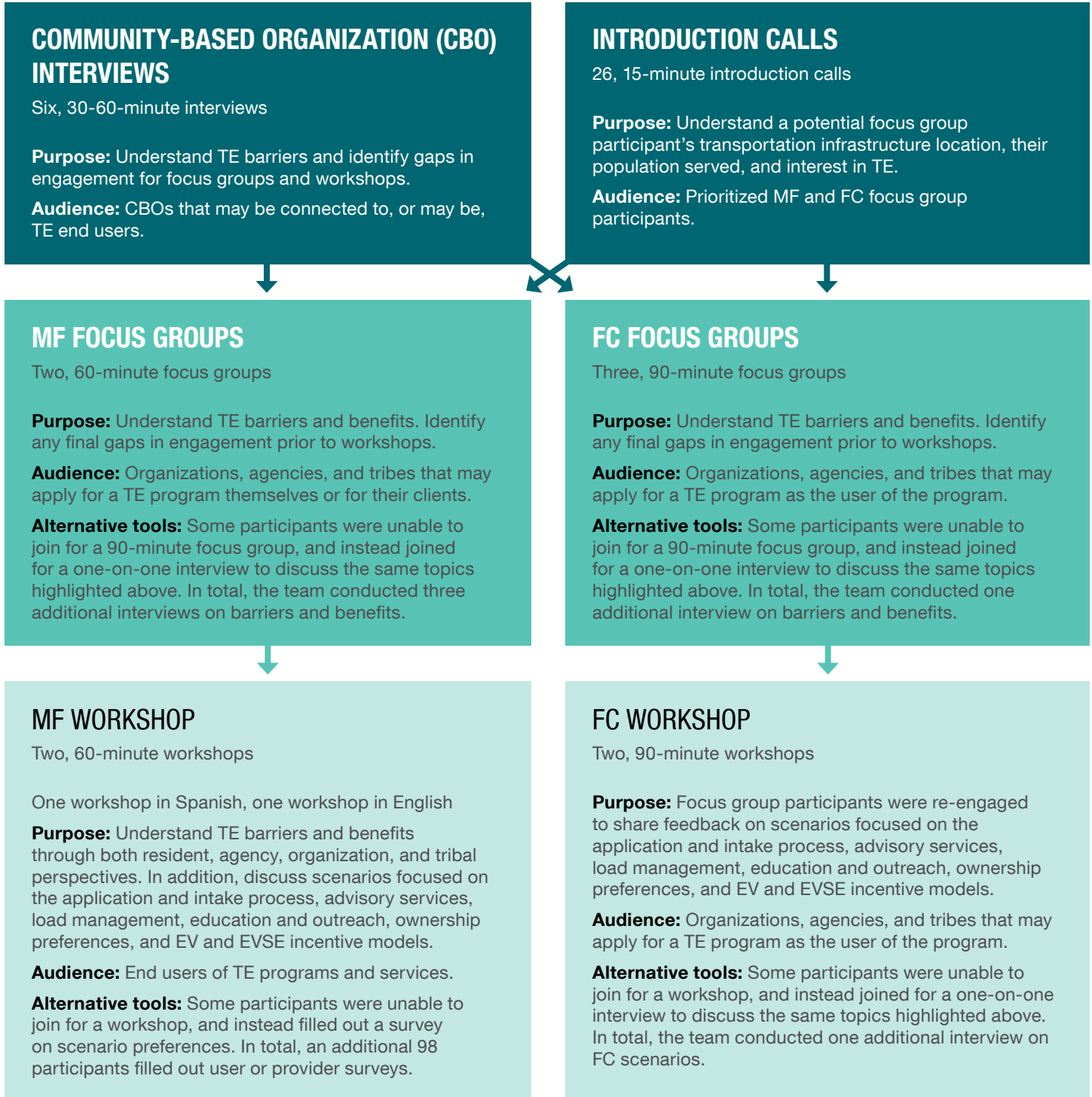
To achieve the above-stated goals, we worked with agencies, organizations, and tribes to ensure inclusion of a diverse set of voices from across PSE's electric service area. The following participant criteria helped guide our invitations for engagement:

- Located in PSE's electric service area.
- Wants to use TE programs and services but may experience barriers to access (e.g., access to charging stations, language or cultural barriers, income).
- For FC: Is a non-residential PSE customer and currently has a vehicle fleet or provides a mobility service to the community.
- Additionally, we prioritized communities who would have barriers to accessing TE without additional financial or advisory support. These communities include:
 - Black, Indigenous, and People of Color (BIPOC) communities
 - Limited English Proficiency community members
 - Communities with higher environmental health disparities, specifically air pollution levels, as defined by the [Department of Health Environmental Health Disparities Map](#)¹
 - Persons with disabilities and special access needs
 - Youth (teens, high school age)
 - Rural communities with limited access to transit
 - Communities with a large customer base without existing DEI pilots (Kitsap, Pierce, and Thurston counties)

¹ [Department of Health Environmental Health Disparities Map](#): While many of the communities with the largest health disparities lie outside of PSE's electric service area, SW King County, areas near Puyallup, areas near Olympia and areas near Ellensburg have significant health disparities that will be prioritized for feedback. See "[Engagement participants](#)" for a list of organizations, agencies, and tribes/county that participated.

COMMUNITY ENGAGEMENT PROCESS

After the development of the objectives, goals, and participant criteria listed above, the team prioritized organizations, agencies, and tribes to participate in the engagement process (full list in Appendix A). The flow chart below describes the cascading nature of the engagement process and how PSE and its consultant team moved from interviews to focus groups to workshops. As each engagement tool was used, the team synthesized feedback and incorporated it into the next stage of engagement to inform the questions asked and dive continually deeper with participants on the barriers and benefits of TE, in addition to potential TE scenarios.



COMPENSATION

To reduce engagement barriers for communities who PSE most needs to hear from in the design process, compensation was offered to participants for sharing their expertise, stories, and experiences.

All interview, focus group and workshop participants were compensated \$50/hour for their time. For example, those who attended a 90-minute workshop received \$75, whereas those who attended a 30-minute interview received \$25. There were two scenarios where a total of \$150 was offered for participation. This compensation was provided to an organization and family with more than two participants in an engagement activity.

All survey participants were given a \$25 Visa gift card for survey completion.

Participants received compensation through a donation to their organization or Visa gift cards. It is important to note that not all participants accepted compensation.

ENGAGEMENT PARTICIPANTS

PSE’s engagement aligned with the community engagement goals, prioritizing geographic and demographic diversity.

Participant	Population served	Counties served in PSE electric service area	CBO/MF/FC
El Centro de la Raza*	Latino community including seniors, veterans, youth and low-income	King	CBO
HopeSource	Houseless, low-income	Kittitas	
Multi-Service Center	Houseless, low-income	King	
Pacific Mobility Group	Consumers, private businesses, and public entities	Bainbridge Island and greater Pacific Northwest	
Puget Sound Regional Council	Residents of King, Pierce, Snohomish, and Kitsap counties	King, Pierce, Snohomish, Kitsap	
Thurston Regional Planning Committee	Thurston County residents	Thurston	
Washington Education Association	Teachers and education employees	Thurston, Kitsap, King, Snohomish, Kittitas, Whatcom, Island	
Bellingham & Whatcom County Housing Authority	Houseless, low-income	Whatcom	MF
Community Life Foundation	Seniors and low-income	King, Thurston	
Compass Housing Alliance	Low-income, people with disabilities, houseless	King	
HERO House	People with disabilities	King	
Homeownership Center Tacoma	Low-income	Pierce	
Housing Authority of Thurston County	Houseless, low-income	Thurston	
Housing Kitsap	Houseless, low-income	Kitsap	
King County Housing Authority	Houseless, low-income	King	
Lummi Nation Housing Authority	Lummi Nation, low-income	Whatcom	
Muckleshoot Housing Authority	Muckleshoot Indian Tribe, low-income	King	
Renton Housing Authority	Houseless, low-income	King	
Teamsters Local 117	Rideshare and truck drivers	Thurston, King, Snohomish, Whatcom, Kittitas, Island	

* While El Centro de la Raza was not engaged in the CBO interview process due to the simultaneous engagement of the Clean Energy Implementation Plan Equity Advisory Group, El Centro de la Raza was instrumental in recruiting participants for a multifamily Spanish workshop, as noted in the [multifamily section below](#).

Participant	Population served	Counties served in PSE electric service area	CBO/MF/FC
Auburn School District	Youth	King	FC
Child Care Action Council	Youth	Thurston and Kitsap	
FISH Foodbank	Low-income, rural	Kittitas	
Hopelink	Houseless, low-income	King and Snohomish	
Kent School District	Youth	King	
Kitsap Community Resources	Low-income	Kitsap	
Kitsap Transit	Kitsap County residents	Kitsap	
Muckleshoot Tribal Transit	Muckleshoot Indian Tribe, low-income	King	
Northwest Harvest	Low-income	King	
Opportunity Council	Houseless, low-income	Island and Whatcom	
Rainier Foothills Wellness Foundation	Low-income	King	
Samish Indian Nation	Samish Indian Nation	Skagit	
Sound Generations	Seniors, people with disabilities	King	
Whatcom Transit Authority	Whatcom County residents	Whatcom	
Youth Experiential Training Institute	Youth	Kitsap	

3. FEEDBACK

CBO ENGAGEMENT

The project team conducted six, 30 to 60-minute interviews with CBOs to learn more about the organization, their service base, their demographics, and their level of familiarity with TE. Participants were interested in TE and the transition to clean energy, and about one third of the organizations had already incorporated TE into their operations by installing charging stations or piloting the use of an electric vehicle.

Organizations shared insights on the best TE models for their communities, how to connect and share information with their service base, and perceived barriers to TE access. Three key themes heard throughout the interviews were **cost, access, and education**.

- **Cost:** The cost of EVs, charging infrastructure, and in some cases, the loss of parking, were all notable barriers.
- **Access:** Common concerns included the perceived lack of convenience, limited range for EVs and larger electric shuttles, and the need for reliable charging, particularly for the following populations:
 - Employees with non-traditional schedules (e.g., teachers, shift workers) who would not be able to access workplace charging.
 - Renters who may lack consistent access to charging.
 - Employees who drive for a living (e.g., Uber, Lyft, and other rideshare drivers). For this subset, the amount of time spent charging directly impacts their earning potential.
- **Education and outreach:** Participants emphasized the importance of education and identified it as a barrier to access. They noted that increased education would allow communities to provide informed input on programs. Interviewees suggested using the trusted messenger model or partnering with local organizations and trusted service providers to help share information about TE.

MULTIFAMILY ENGAGEMENT

INTRODUCTION CALLS

Prior to being invited to focus groups and workshops, Multifamily participants were first engaged through 15-minute introduction phone calls. Out of the 21 contacted, 12 participated in introduction calls. Potential participants who were contacted included: community and social service providers, low-income housing providers, and tribes. In these brief calls, the project team covered the following topics:

- Location in the PSE electric service area
- Organizational values and goals
- Demographics served, including highly impacted communities and vulnerable populations
- Information about current transportation infrastructure and any existing TE experience
- Potential barriers to TE access for themselves or their residents

After participants were determined eligible for focus group participation, the interviewer provided information about the TEP and the next steps in the engagement process. Information collected through these phone calls was used to help frame the design of both the focus groups and subsequent workshops.

BARRIERS

Participants briefly identified TE barriers during the 15-minute introduction calls. While these barriers were explored in further detail during the focus groups, they were consistent across all sectors and geographies for the majority of those engaged.

- **Cost:** The cost of a new EV presented a barrier to their residents who are often low-income with higher energy burdens. Providers also experience cost barriers when it comes to funding charging infrastructure installation.
- **Range:** Access to charging and the limited range of EVs was also a primary concern. Specific comments included “range anxiety,” the lack of nearby charging stations, and fear of charging logistics during longer trips.
- **Education and awareness:** TE was an existing topic of conversation for some, but not all providers. While it is not often a topic discussed in residential communities, interviewees stressed the importance of continued education and awareness around TE options to make the topic relevant for MF residents.

FOCUS GROUPS

Following the introduction calls, organizations, agencies, and tribes were invited to participate in a virtual one-hour focus group designed to understand TE barriers and benefits, and education and outreach best practices. A total of eight participants joined one of two focus groups and three additional stakeholders participated through one-on-one interviews to discuss the same topics. This section summarizes the overarching themes heard during MF focus groups.

For each meeting, PSE began engagement efforts by:

- Providing an overview of the TEP and related outreach activities to date
- Level-setting on EVSE and EV types and availability

Each focus group included a question-and-answer period and concluded with a next steps discussion, including how participant feedback would be used to inform future tariff filings and program design.

BARRIERS

In focus group conversations around barriers, similar themes from the introduction conversations and CBO interviews emerged. This included **cost, range and access, and education and outreach**. Participants shared barriers that providers and residents experience, as well as suggestions to address or alleviate those barriers.

Participant type	Cost	Range and access	Education and outreach
Providers	<ul style="list-style-type: none"> • Cost of charger installation • Loss of parking • Low incentive to buy new vehicles as depreciation schedules of current vehicles and fleets are set 	<ul style="list-style-type: none"> • Lack of charging infrastructure • Charging service in more rural areas • Vehicle range and capabilities 	<ul style="list-style-type: none"> • Understanding EV range and capabilities
Residents	<ul style="list-style-type: none"> • Cost of individual or personal vehicles • Financial hardship and disposable income to purchase EVs 	<ul style="list-style-type: none"> • Access to reliable charging, particularly for renters • EV range and capabilities • Transit or transportation may be too far away to access • Unstable housing makes it difficult to depend on charging at home 	<ul style="list-style-type: none"> • Embracing a new mindset towards EVs entails a cultural shift • Lack of culturally relevant education and awareness • Understanding EV range and capabilities

Cost continued to be a significant barrier for both residents and providers. Some suggestions participants made to alleviate this barrier were:

- Prioritize programs that improve access to public transportation for residents who cannot afford a personal vehicle, as many residents experience unstable housing or financial hardship and rely on public transportation.
- Provide access to non-federal grants or funds to build out charging infrastructure and install charging stations.
- Facilitate affordable ways to experience EVs through rental fleets, public transportation, or shuttle programs.

Participants commented that range anxiety was a concern, exacerbated by lack of charging infrastructure. They specifically highlighted how installation barriers limit provider ability to offer charging options for their residents. Some ways to address these barriers include:

- Plan for TE infrastructure in new developments. Participants commented that it is often difficult to install charging stations at existing locations with outdated infrastructure.
- Consider landscaping and installation barriers, such as loss of parking, distance from the charger to the building, and other physical barriers that might increase the cost of installation and prevent providers from installing charging stations.

Participants also noted that education and outreach would help address barriers and made suggestions for implementation, including:

- Advertise the different EV options that are available, including those with more range and different capabilities (e.g., all-wheel drive).
- Clearly articulate the reduced cost of maintenance throughout the lifetime of the EV.
- Find low-resistance ways to help communities experience EVs, such as promoting public transportation, sharing information at community centers or gathering places, and offering incentives to participants.
- Begin conversations around TE early to help familiarize community members so they are prepared to purchase when EVs become more affordable.
- Partner with trusted organizations and messengers to share information.
- Focus on alleviating the stress of transitioning to a new type of vehicle by making it comfortable and accessible through demonstrations and hands-on learning.
- Create culturally relevant education by offering materials in various languages, and in-language or multilingual experiences.

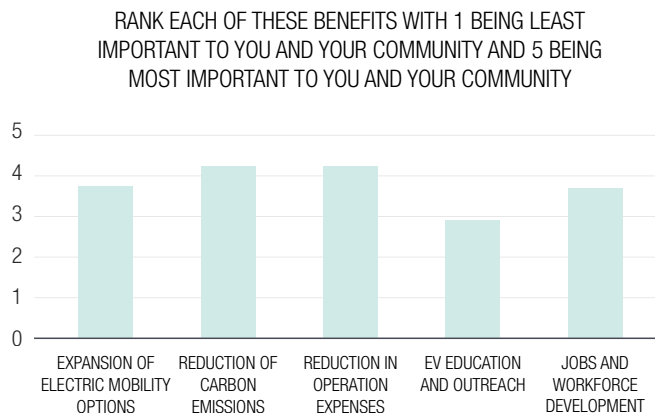
“Will I make it to the next station, and will there be a spot available for me?”

BENEFITS

During each focus group, participants were asked to rank the following TE benefits, with 1 being least important and 5 being most important, via a virtual Mentimeter survey:

- Expansion of electric mobility options
- Reduction in carbon emissions
- Reduction of operations expenses
- EV education and outreach
- Jobs and workforce development

Participants ranked reduction of carbon emissions and reduction in operations expenses the highest, followed by expansion of electric mobility options, jobs and workforce development, and lastly, education and outreach.



Overall, participants wanted to move towards electrification to achieve lower carbon emissions and reduce operations expenses over time. Expanding access to electric mobility through cars, bikes, scooters, and transportation was also raised as a community benefit for consideration. Participants agreed that education and outreach will continue to be an important element of the transition to TE, highlighting that while providers may have a stronger focus on building out services first, the need for robust and equitable education and outreach to occur simultaneously, particularly for residents, is foundational for TE success.

WORKSHOPS WITH HOUSING AND SOCIAL SERVICE PROVIDERS

Following the focus groups, housing and social service providers, who are most likely to initiate TE programs and services on behalf of their clients, were asked to share feedback on potential scenarios for **application and intake process, advisory services, load management, education and outreach, EV incentives, and EVSE ownership and incentive**.

To accommodate schedules and maximize the number of providers who were able to participate, the team created a survey to gather feedback on the potential scenarios. For each feedback category, participants were presented with a range of scenarios. They were asked to select or rank scenarios that were preferable, then were prompted to share what they liked most, what they liked least, and what was missing. Survey participants also participated in focus groups or one-on-one calls prior to taking the survey. Eight providers completed the survey and one provider participant shared feedback during the English workshop.

APPLICATION AND INTAKE PROCESS

PSE asked participants to identify which respective scenarios were equitable.

Scenario	Application and intake process scenarios	Participants who thought the scenario would be equitable*
1	Applicants are considered on a first-come, first-served basis.	15%
2	Eligible applicants are prioritized based on the total number of customers served by the project.	56%
3	Eligible applicants are prioritized based on whether they operate in areas of high carbon emissions.	43%

* Total exceeds 100% as participants were able to vote for more than one option.

More respondents selected scenarios 2 and 3 as more equitable than scenario 1, and scenario 2 was selected by the most participants. Participants thought that scenario 1 would favor potential participants with more staff capacity and resources rather than smaller participants who would benefit from additional assistance and funds.

Respondents offered the following additional suggestions for the application and intake process:

- PSE should prioritize underserved areas by adding socioeconomic demographics as an application and intake factor to prioritize BIPOC communities, which tend to be more impacted by climate change and environmental factors.
- Include rideshare drivers.
- Prioritize areas that lack equitable transportation options.
- Set an application deadline and include target populations or demographics in the application, where potential participants can outline how the project or funds will serve those communities.
- Provide support to potential participants with limited resources or budgets to help them complete their applications.

ADVISORY SERVICES

PSE asked participants to select the scenarios that would work best for their organization, if offered.

Scenario	Advisory services scenarios	Participants who thought the advisory service would work best for their organization, if offered*
1	PSE provides vehicle availability tools and calculators to help customers assess the cost of EV ownership.	66%
2	PSE partners with customers to create a long-term electrification plan.	100%
3	PSE prepares and provides presentations to customers' critical stakeholders (e.g., board members).	16%

* Total exceeds 100% as participants were able to vote for more than one option.

Most respondents preferred either scenario 1, scenario 2, or a combination of the two. These options would allow PSE to build partnerships with communities and create space for customer feedback on education and program materials. Responses highlighted the importance of communication and relationship-building and pointed to the historical success of one-on-one engagement for past projects with other groups.

Respondents did not feel that having PSE present information to boards or stakeholders (scenario 3) would be as necessary or result in much action.

“The best scenario is to provide as much access to information as possible through multiple methods.”

LOAD MANAGEMENT

PSE asked participants to select the option they would prefer, if offered.

Scenario	Load management scenarios	Participants who would prefer the service, if offered*
1	PSE partners with the organization to create a customized charging plan that prioritizes off-peak charging.	66%
2	Pricing at the charger changes dynamically based on when charging occurs. Off-peak charging costs approximately four times less than on-peak charging.	50%
3	Customers are provided with an incentive of up to \$10 per charger per month. The incentive amount is reduced based on the number of on-peak charges that occur.**	16%

* Total exceeds 100% as participants were able to vote for more than one option.

** Incentive values listed are not necessarily reflective of what will be included into the tariff filing.

Responses varied when it came to load management and depended on service provider needs and preferences. **Overall, most participants preferred either scenario 1**, where PSE works with the participant to create a customized plan, **or scenario 2**, where price varies dynamically based on time of charging.

Those who preferred **scenario 1** liked the partnership aspect and suggested that PSE work with participants to create customized plans to **create transparency around charging and costs**. Those who preferred **scenario 2** felt it was the most **straightforward and easy to explain**.

Respondents who did not choose **scenario 2** felt it would negatively impact customers by penalizing them for charging during peak hours. They also noted that it would require fleet drivers without a central charging facility, such as rideshare drivers, to charge off-peak, despite not have control over their charging schedules or needs. Most respondents felt that **scenario 3** was overly complicated.

EDUCATION AND OUTREACH

PSE asked participants to select all education and outreach programs that would work best for themselves and their residents.

Scenario	Education and outreach scenarios	Participants who thought the method would work best, if offered*
1	PSE co-creates materials for the customer to distribute to their clients or constituents.	50%
2	PSE hosts on-site trainings for customers once the charging installation is installed.	66%
3	Customers can attend local ride and drives to test EVs.	66%

*Total exceeds 100% as participants were able to vote for more than one option.

Respondents preferred **scenarios 1, 2, or a combination of the two**, and shared the following suggestions:

- PSE should work closely with participants to co-create materials that are appropriate for their audiences and effectively communicate with their customers.
- Utilize web or mobile engagement to reduce the amount of paper or mail sent to customers.

Scenario 3 also received positive feedback. Respondents felt local ride and drives would help a broader swath of customers experience EVs, especially those community members with lower incomes who are not traditionally marketed to for EVs. However, some respondents noted that asking customers to attend an additional event or commitment places an added burden on them. **All respondents noted the importance of combining education with hands-on experience.**

EVSE OWNERSHIP AND INCENTIVE

PSE shared three scenarios with MF providers and asked for feedback on the associated charger selection, incentive, and maintenance options.

	Scenario 1	Scenario 2
Charger selection	Customer must select from a pre-determined list.	Customer can select any charger.
For an L2 (assume \$10,000 per port), customer pays**:	\$0	\$5,000 per port
Maintenance	PSE maintains all infrastructure.	Customer maintains EVSE and behind the meter. PSE maintains the front of the meter.
Participants who would use the program if offered*	83%	0%

* None of the above was also included as an option.

** Incentive values listed are not necessarily reflective of what will be included into the tariff filing.

Most respondents **preferred scenario 1 because it streamlines options, reduces confusion, and is most affordable for customers.** Respondents also felt more comfortable having PSE own the infrastructure to reduce the maintenance burden for providers. **Those who answered “none of the above” preferred a combination of the two scenarios or a hybrid option, meaning that scenario 2 was not entirely discounted.**

One barrier surfaced was the variety in charging options; participants hoped for universal charging in the future. Participants also indicated a preference for a mechanism that would allow providers to monitor charging time, or alert residents once EVs were fully charged, to better distribute the resource among residents.

“Scenario 1 would allow organizations without industry experts to participate in the program.”

EV INCENTIVES

PSE offered three scenarios to providers that outlined funding and incentive options for EVs or electric multimodal options.

Scenario	EV incentive scenarios	Participants who thought the scenario would work best, if offered*
1	PSE helps customers locate state, federal, or private grants and provides letters of support.	33%
2	PSE provides a flat rebate upfront for 50% of EV. **	83%
3	PSE provides a rebate for 50% of purchase price, after purchase. **	33%

*Total exceeds 100% as participants were able to vote for more than one option.

**Incentive values listed are not necessarily reflective of what will be included into the tariff filing.

Some respondents preferred all three scenarios, but **most respondents preferred scenario 2** because it would direct funds back into the organization to grow transportation programs and provides participants with upfront funds to purchase an EV, alleviating cash flow barriers. Respondents noted that scenario 1 may not be successful due to administrative barriers such as writing grant content or sustaining active communication with PSE via emails and phone calls, and that while scenario 2 makes the most sense, it may be difficult for participants to gather the necessary funds to cover remaining costs after the incentive as cost will always remain a consistent barrier.

WORKSHOPS AND SURVEY WITH RESIDENTS

Following the focus groups, participants were also invited to virtual one-hour workshops in English and in Spanish to provide feedback on resident-focused TE and education and outreach scenarios. In addition to recruiting participants for workshops through focus groups, PSE collaborated with El Centro de la Raza to distribute fliers and spread the word about the Spanish workshop. All but one of the Spanish workshop participants who attended were notified of the workshop by El Centro.

A survey was also distributed in partnership with the Lummi Nation Housing Authority. The survey was distributed to tenants in coordination with the Lummi Nation Housing Authority. PSE developed a flier to share information and Lummi Housing Advocates helped provide support for tenants to complete the survey through iPads and designated times to complete the survey in their buildings. The survey was open for approximately one month.

There was a total of 16 workshop participants and 90 survey respondents. Given that some affordable housing providers or public housing authorities provide both multifamily and single family options, there were both multifamily and single family residents who engaged in the workshops and surveys, with a total of 59% living in multifamily housing and 41% living single family housing, noting that three participants did not share information about their housing. Given the excitement shown by residents to participate in these conversations, PSE did not want to remove any single family residents from the activities, especially given that some barriers and benefits are shared by both groups. PSE will continue conversations with single family residents in future TE engagement.

At the beginning of each workshop, participants shared their existing TE experiences to get to know one another. Residents shared that low maintenance costs, low fuel costs, and reduced noise pollution were the most important TE benefits to them. Some of the barriers identified in this upfront discussion were limited range, lack of available charging stations, increased electricity bills, more expensive vehicles, EVs being difficult or intimidating to use, and additional wait time to charge the car.

For each feedback category, residents were presented with a range of scenarios. They were asked to select or rank scenarios that were preferable, then prompted to discuss what they liked most, what they liked least, and what was missing.

The following outlines feedback from the two resident workshops and the Lummi Nation survey. Please note, that with the differences in collection method, feedback is aggregated as closely as possible.

RESIDENT-FOCUSED TE SCENARIOS

Scenario	TE option	Application	Charging	Payment*
1	Access to charging and a rebate to purchase a new or used electric vehicle.	Self-certify that they meet income requirements.	Shared charging with other residents.	\$5,000 rebate provided after purchasing the vehicle.
2	Access to a shared vehicle owned and managed by the housing provider.	Must be a resident with a valid driver's license and a driving record in good standing.	Shared use of the EV with other residents.	Pay based on number of miles driven.
3	Access to multiple electric bikes and scooters.	Must be a resident of the housing provider.	Shared use of bikes and scooters with other residents.	Pay \$2/month to participate in the program.

* Incentive values listed are not necessarily reflective of what will be included into the tariff filing.

BARRIERS

Participants identified barriers to each of the three scenarios and their subcomponents listed above and some offered solutions:

- **Scenario 1:** The **income requirement** for the application process was the biggest barrier and participants thought applicants may not have enough disposable income to purchase the vehicle, or their incomes may be too low to meet requirements.

- **Scenario 2: Sharing a car with others (e.g., potential schedule conflicts)** was the biggest barrier. Survey participants thought it would be difficult to accommodate schedules and had concerns about sharing cars with others during COVID-19 or having a vehicle available when needed. In the English workshop, participants suggested a centralized reservation system to make this scenario work but noted that it would still be less reliable than owning a car. In the Spanish workshop, participants noted that this model would be difficult for users who have a work schedule and need a car or transportation at a specific time.
- **Scenario 3:** Participants in both workshops and the survey thought there would be barriers for **people with disabilities or people with children**. Participants in the English workshop thought that scooters may be a good option to reach nearby locations for older populations with limited mobility, such as those who cannot ride bicycles yet can stand or sit on a scooter.

BENEFITS

Participants also identified benefits from each of the three scenarios and their subcomponents:

- **Scenario 1:** Most users felt this scenario provides the most benefits. The financial incentive would benefit users by reducing the cost barrier, and many participants preferred to drive their own vehicles. Participants found this option to be **more accessible** and liked the security of having a car whenever they need one. Nearly **75% of Lummi Nation survey participants said they would be more likely to purchase a new EV** with an additional incentive and suggested that recipients have the option to try out the EV before buying.
- **Scenario 2:** Participants enjoyed the **low maintenance costs and a lower level of commitment**. Participants in the Spanish workshop thought this scenario could be useful for group destinations and vanpools or trips. About 70% of Lummi Nation survey participants said they would be likely or somewhat likely to participate in this scenario.
- **Scenario 3:** Participants in the English workshop and the Lummi Nation survey thought that scenario 3 was **a good alternative to driving to reach nearby destinations and provided a lower-cost option for residents with limited physical mobility or those who do not have cars**. About 80% of Lummi Nation survey participants said they would be very likely or somewhat likely to use electric bicycles or scooters if they were available to reach nearby destinations or connect to public transit and noted the environmental benefits. Spanish workshop participants did not call out many benefits in this scenario.

“¡Ahora que se de los beneficios, quizás me animaría a probar un vehículo eléctrico!”

“Now that I know about the benefits, maybe I’ll try an electric vehicle!”

EDUCATION AND OUTREACH

Workshop and Lummi Nation survey participants also shared feedback on effective education and outreach and the best ways to connect with customers who may be new to TE. Participants reacted to the following scenarios:

Scenario	Education and outreach scenarios	How participants would like to hear about a program, if offered*
1	Receive information from housing providers.	65%
2	Receive information from other residents who use the program.	32%
3	Attend on-site ride and drives or trainings.	22%
4	Receive emails or texts from PSE about the program.**	42%

* Percentages taken from the Lummi Nation survey. Workshops provided verbal feedback for each scenario. Total exceeds 100% as participants were able to vote for more than one option.

** This option was only presented to survey participants.

- **Scenario 1:** English and Spanish workshop participants suggested that residents have the option to choose between scenarios 1 and 2.
- **Scenario 2:** Spanish workshop participants thought this scenario could help foster a sense of community among residents.
- **Scenario 3:** English and Spanish workshop participants also preferred the option to participate in test drives, and Spanish workshop participants suggested offering incentives for participation.
- **Scenario 4:** About half of survey participants reported they would like to receive emails or texts from PSE about the program.

Key education and outreach suggestions included:

- **Experience:** Offer test drives or low-cost ways to experience an EV in person. Participants identified tactile user experience as important to understanding EV and electric transportation options.
- **Easy, digestible information:** Make TE program information easy to understand with accessible materials that are easy to read, available in multiple languages, and include lots of visuals.
- **Combine education and experience:** Create opportunities that allow residents and new drivers to experience EVs and learn about broader TE topics at the same time to reduce participation barriers. For example, offer a workshop that provides a TE learning session and information on PSE TE programs, followed by EV test drives.
- **Use community connections:** Find ways to bring the community together by organizing community meetings, classes, or events that are culturally relevant.
- **Provide incentives to encourage users to learn more:** Offer test drives or stipends for taking a course on TE.

While providers highlighted the importance of implementing programs in parallel with education and outreach, it is important to note that residents appear more likely to participate in programs if they have the user experience and knowledge behind them.

“Give users confidence in the car and how it works...change is scary.”

FLEET AND COMMERCIAL ENGAGEMENT

INTRODUCTION CALLS

Prior to being invited to participate in focus groups and workshops, Fleet and Commercial stakeholders were first engaged through 15-minute introduction phone calls. Out of the 37 contacted, 14 participated in introduction calls. Potential participants who were contacted included: community service organizations, transportation agencies, and tribes. Participants' existing transportation fleets ranged from one to more than ten vehicles, and included low, medium and heavy-duty models. In these brief calls, the project team covered the following topics:

- Location in the PSE electric service area
- Organizational values and goals
- Demographics served, including highly impacted communities and vulnerable populations
- Information about current transportation infrastructure and any existing TE experience
- Potential barriers to TE access

After participants were determined eligible for focus group participation, the interviewer provided information about the TEP and the next steps in the engagement process. Information collected through these phone calls was used to help frame the design of both the focus groups and subsequent workshops.

BARRIERS

Participants briefly identified TE barriers during the 15-minute introduction calls. While these barriers were explored in further detail during the focus groups, they were consistent across all sectors and geographies for the majority of those engaged.

- **Cost:** Most interviewees cited the cost of EVs and charging stations as a significant barrier to electrifying their transportation fleet.
- **EV availability and range:** Interviewees shared that themselves and their communities require unique transportation needs, such as ADA accessible vans. Comments referenced "range anxiety" or the lack of nearby charging stations and having to charge during longer car trips.
- **Education and outreach:** Interviewees expressed that targeted and interactive engagement is necessary to demystify negative conceptions about TE.
- **Infrastructure improvements:** Many interviewees noted that in addition to purchasing EVs, additional utility infrastructure is needed to accommodate charging stations.
- **Leadership buy-in and community alignment:** Interviewees communicated that it was important that their leadership teams be invested in electrifying their transportation fleets, in both the short and long term.

FOCUS GROUPS

Following the introduction calls, organizations, agencies, and tribes were invited to participate in a virtual 1.5-hour focus group designed to understand TE barriers and benefits and education and outreach best practices. A total of 11 participants attended one of three focus groups while one additional stakeholder participated through a one-on-one interview on the same topics. This section summarizes the overarching themes heard during the FC focus groups.

For each meeting, PSE began engagement efforts by:

- Providing an overview of the TEP and related outreach activities to date
- Level-setting on EVSE and EV types and availability

Each focus group included a question-and-answer period and concluded with a next steps discussion, including how participant feedback would be used to inform future tariff filings and program design.

BARRIERS

In focus group conversations around barriers, similar themes from the introduction conversations emerged. These included cost, EV availability and range, and education and outreach. Participants shared barriers that they experience, as well as suggestions to address or alleviate those barriers.

Cost	EV availability and range	Education and outreach
<ul style="list-style-type: none">• Cost of EV and charger installation• Inability to aside grant funds for capital expenditures• Cost of utility infrastructure improvements	<ul style="list-style-type: none">• Lack of specialized EVs (e.g., ADA accessible vans) for purchase• EV range• Access to reliable charging	<ul style="list-style-type: none">• Lack of straight-forward, digestible information about TE• Misconceptions about EVs and charging capabilities• Lack of buy-in from leadership

A majority of participants indicated that cost (for both EVSE and EV purchase) was a significant barrier to electrifying their respective fleets. Participants suggested the following ideas to address the cost barrier:

- Facilitate collaboration among participants so that an agency, organization, or tribe with the ability to fund capital improvements might host an EV charger, and a qualifying participant with less financial resources could help support the cost in exchange for shared use.
- Offer flexible incentive programs that participant could use in tandem with other funding opportunities.
- Install higher voltage lines in parking lots where EVs are stored to maximize charging capabilities and EV use, as this could encourage the purchasing of EVs.
- Offer an EV leasing program so that a qualifying participant can purchase the EV and benefit from the tax credit and then lease to a non-profit that is unable to benefit from the tax credit.
- Provide financial incentives for both EVSE and EVs.

Many participants shared concerns that EV availability and range presented barriers to transitioning away from gas-powered vehicles. Suggestions to alleviate these barriers included:

- Make chargers readily accessible and unify charging systems, allowing different types of EVs to charge with the same charger.
- Ensure chargers are maintained and that in the event of a malfunction, PSE offers a reliable and responsive contact who can assist with the issue in a timely manner.
- Alleviate range anxiety with effective community outreach and engagement that speaks to both existing and planned charging infrastructure.
- Provide access to charging infrastructure in multiple different locations, as in some cases vehicles may not return to the same central location at the end of the day.

Broader education for community members and participants' leadership was cited as an important step in accessing TE. Participants suggested the following ideas to address the education and outreach barrier:

- Offer live demonstrations that would allow communities to experience EVs and ask questions about capabilities, features, and cost (e.g., showcase electric trucks at the Ellensburg Rodeo to promote use for individuals residing in rural areas).
- Offer presentations, hosted by PSE to staff, to leadership teams and board members as the credibility of PSE as a third party may help facilitate both leadership and community buy-in.
- Provide outreach materials that are digestible and can be easily translated at an elementary-grade level.
- Customize outreach to small business owners by focusing on how they might integrate EVs into their business model.
- Brand EV buses as electric to maximize awareness.

“Use real people and have them tell the stories. Use community members to share their experiences.”

BENEFITS

During each focus group, participants were asked to rank the following TE benefits, with 1 being least important and 5 being most important to them and their communities, via a virtual Mentimeter survey:

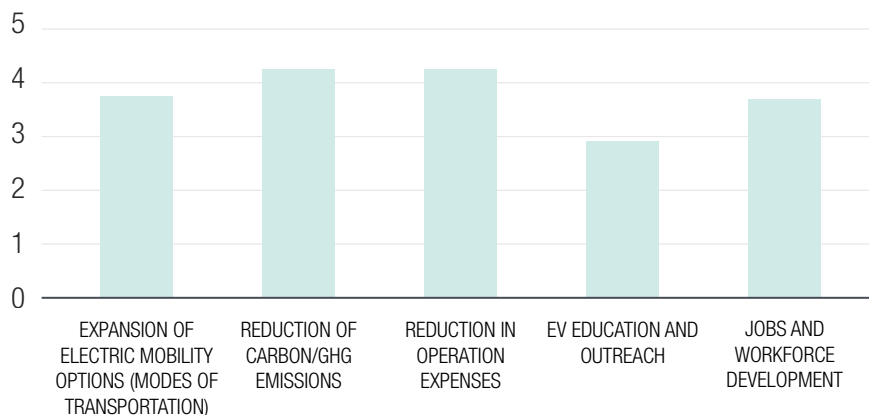
- Expansion of electric mobility options
- Reduction of carbon/greenhouse gas emissions
- Reduction in operations expenses
- EV education and outreach
- Jobs and workforce development

Participants ranked **reduction in operations expenses** and **reduction of carbon/greenhouse gas emissions** as the most important transportation electrification benefits. Participants ranked **EV education and outreach**, and **jobs and workforce development** as the least important benefits.

In line with the barriers listed in the previous section, focus group participants shared that short term and long-term cost was most important when weighing the decision to invest in fleet electrification. Reducing their carbon footprint was also an integral factor in pursuing TE, as it positively impacts the communities they serve and resonates with their respective leadership teams' long-term plans.

While EV education and outreach and jobs and workforce development were ranked the least important benefits, most participants stated that these benefits were beneficial but could only be achieved if the reduction in operations expenses was first addressed.

RANK EACH OF THESE BENEFITS WITH 1 BEING LEAST IMPORTANT TO YOU AND YOUR COMMUNITY AND 5 BEING MOST IMPORTANT TO YOU AND YOUR COMMUNITY



“Education and outreach are important, but without a reduction in expenses, it is tough to move forward”

In addition to ranking these benefits, participants suggested that the following be added or considered by PSE:

- Health benefits, specifically a reduction in respiratory issues
- Reduce noise pollution to appropriate levels
- Promotion of collaboration and information sharing amongst organizations, tribes and service providers when investing and planning for transportation electrification
- Promotion of electric multi-modal transportation in community spaces and schools

WORKSHOPS

Following the focus groups, participants were invited to a virtual 1.5-hour workshop to provide feedback on potential scenarios for the **application and intake process, advisory services, load management, education and outreach, EVSE ownership and incentives, and EV incentives**. A total of ten participants attended the two FC workshops and one additional participant participated in a one-on-one interview on the same topics.

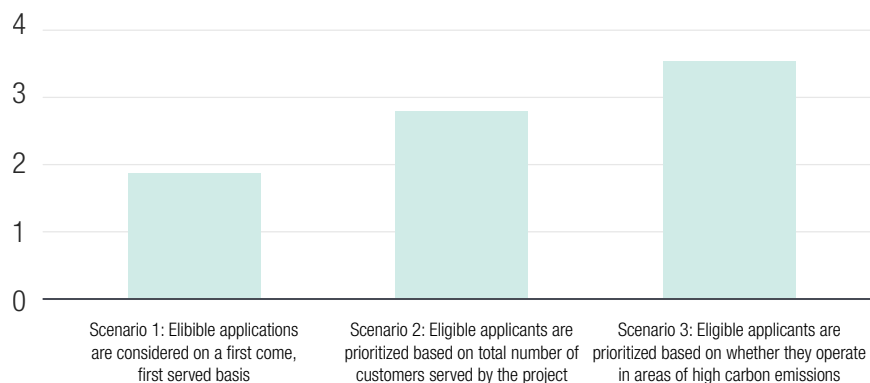
For each feedback category, participants were presented with a range of scenarios. They were asked to select or rank scenarios that were preferable, then prompted to discuss what they liked most, what they liked least, and what was missing.

Each scenario aims to address fleet electrification barriers highlighted by participants in the introduction calls and focus groups.

APPLICATION AND INTAKE PROCESS

PSE asked participants to rank each scenario on a scale of 1 – 5, with 1 being the least equitable and 5 being the most equitable.

APPLICATION AND INTAKE PROCESS SCENARIOS



On average, participants ranked **scenario 3** as the most equitable option presented. Participants expressed that targeting areas with higher carbon emissions would enhance other benefits, like health and air quality improvements.

Participants ranked **scenario 1 as the least equitable**. Participants shared that a lack of resources and capacity might prohibit potential participants from being able to submit competitive applications in a timely manner.

Participants ranked **scenario 2** in the middle. Participants noted that the number of customers does not necessarily undermine the importance of the project for that community and that the populations served might still be highly impacted communities or vulnerable populations, even if at a smaller number. One participant noted that scenario 2 would be particularly disadvantageous for those in rural areas, as populations tend to be smaller.

Participants suggested that the following elements be added or considered for the list above:

- Prioritize projects that focus on infrastructure improvements as opposed to EV acquisition as it is more difficult to obtain capital project funding.
- Measure carbon emissions on a per-capita basis.
- Prioritize projects based on demographics of the populations served.

ADVISORY SERVICES

PSE asked participants to select the scenarios that their organization would likely use, if offered.

Scenario	Advisory services scenarios	Participants that who use the service, if offered*
1	PSE provides vehicle availability tools and calculators to help customers assess the total cost of EV ownership.	80%
2	PSE partners with customer to create a long-term transportation electrification plan.	100%
3	PSE prepares and provides presentations to customers' critical stakeholders (e.g., board members).	90%
4	Receive emails or texts from PSE about the program.**	42%

* Total exceeds 100% as participants were able to vote for more than one option.

Overall, most participants indicated that if offered, they would utilize all advisory services, as each of the three scenarios addressed concerns about having the capacity to conduct their own TE planning and analysis. One participant expressed that while **scenario 1** was helpful, they felt that it would overlap and be included with the other services offered. For **scenario 2**, participants shared that long-term planning assistance was critical to understanding how their planning efforts coincide with PSE's planned infrastructure improvements. Almost all participants saw value in **scenario 3**, as it would address concerns about board and leadership buy-in while also strengthening relationships with PSE.

Participants suggested that the following elements be added or considered in the list above:

- PSE should be transparent about the costs associated with each service (if any exist).
- PSE may facilitate collaboration and mentorship opportunities between those who have successfully electrified, those in the process of electrifying their fleets, and those just starting the process.

“Relationship-building on a formal scale will plant seeds of respect that will grow over time.”

LOAD MANAGEMENT

PSE asked participants to select which scenario would best meet the needs of themselves and their community, if offered.

Scenario	Load management scenarios	Participants who indicated that the service described met the needs of themselves and their community
1	PSE partners with organizations to create a customized charging plan that prioritizes off-peak charging.	60%
2	Pricing at the charger changes dynamically based on when charging occurs. Off-peak charging costs approximately four times less than on-peak charging.	20%
3	Customers are provided with an upfront incentive of \$10 per charger per month. The incentive amount is reduced, based on the number of on-peak charge events incurred.	10%

Most participants shared that **scenario 1** best met the needs of their community given their variable fleet needs. Many participants expressed that their programs and services do not have the flexibility to shift service hours based on staff and volunteer availability and as a result, charging plans would need to be flexible. In addition, some participants noted that, depending on delivery method, it may be more complicated to manage a \$10 incentive in their respective accounting departments and instead requested on-bill credits. Participants from transit agencies also added that their operations and services may be able to accommodate both **scenarios 1 and 2**.

Participants suggested that the following elements be added or considered in the list above:

- Offer programs with flat rates or “not to exceed” stipulations.

EDUCATION AND OUTREACH

PSE asked participants to select all education and outreach programs that would benefit themselves or their community.

Scenario	Education and outreach scenarios	Participants who indicated that the service described met the needs of themselves and their community *
1	PSE co-creates educational materials for the customer to distribute to their clients or constituents	80%
2	PSE hosts on-site trainings for customers once the charging station is installed	50%
3	Customers can attend local ride and drives to test EVs	70%

* Total exceeds 100% as participants were able to vote for more than one option.

The majority of participants felt that **scenario 1** would help facilitate and promote TE in their communities. Participants shared that to be effective, materials would need to be adaptive to community needs and framed in an accessible and digestible way. Many participants thought that **scenario 2** would be beneficial, but only once they had access to charging station infrastructure. Most participants liked **scenario 3** as it could demystify concerns about TE and showcase cost-saving benefits in an interactive environment.

Participants suggested that the following elements be added or considered in the list above:

- Organizing events can put a strain on community service providers that lack capacity; logistical assistance would be required from PSE.
- Consider including other organizations, agencies, and tribes with TE experience (in addition to PSE) to help with training and general promotion.

“It’s less teaching the benefits, but instead teaching away the fears”

EVSE OWNERSHIP AND INCENTIVE

PSE shared three scenarios with participants and asked for feedback on the associated charger selection, incentive, and maintenance options.

	Scenario 1	Scenario 2
Charger selection	Customer must select from a pre-determined list.	Customer can select any charger.
For an L2 (assume \$10,000 per port), customer pays*:	\$0	\$5,000 per port
For an L3 (assume \$150,000 per charger), customer pays*:	\$0	\$75,000 per charger
Maintenance	PSE maintains all infrastructure.	Customer maintains EVSE and behind the meter. PSE maintains front of the meter.
Participants who indicated that the service described met the needs of their organization/ community	50%	40%

* Incentive values listed are not necessarily reflective of what will be included into the tariff filing.

Half of the workshop participants selected **scenario 1**, expressing that with costs already presenting a significant barrier, it would be difficult to rationalize paying more upfront. Many participants that selected scenario 1 also shared that they would be more likely to obtain buy-in from their leadership or board if they were to present an option that did not require significant short-term or long-term capital investment.

Proponents of **scenario 2** preferred the option because it offered flexibility and ownership. These priorities were most important to those whose fleets have unique needs for both vehicle type and usage. Some participants who selected scenario 2 shared that their access to capital dollars influenced their decision and that choosing the second option would ensure reliability in the case of an outage or maintenance issue at the EVSE.

Participants suggested that the following elements be added or considered in the list above:

- Allow for the opportunity to transition from one scenario to the other as participant gains the capacity to own the EVSE.
- Offer a lease-to-own model with a more affordable monthly fee.
- Consider making charging stations and infrastructure available for both program participants and public use.
- Ensure reliable access to maintenance services in the instance of an EVSE outage or malfunction.

EV INCENTIVES

PSE offered three scenarios to providers that outlined EV incentives and participants were asked to select the option that would best meet the needs of themselves and their community. Please note that the scenarios presented in workshop #2 were updated to reflect feedback from workshop #1, which included requests to remove dollar figures from incentive models for clarity as participants shared that costs for desired EVs may vary depending on their needs. It should be noted that the scenarios did not specify if an EV was light, medium or heavy duty.

WORKSHOP #1

Scenario	EV incentive scenarios	Participants who indicated that the incentive described met the needs of themselves and their community
1	PSE helps customers locate state, federal or private grants and provides letters of support.	20%
2	PSE provides a flat rebate of \$25,000 per EV.*	0%
3	PSE provides a sliding scale rebate for 50% of purchase price, up to \$35,000.*	80%

* Incentive values listed are not necessarily reflective of what will be included into the tariff filing.

The majority of workshop #1 participants selected **scenario 3**, as it offered the most funding. Many participants expressed that the EVs they would need to purchase to serve their communities would exceed \$25,000, and until more affordable models are available, they would need to maximize external funding sources. Participants shared that regardless of the incentive option, **scenario 1** should be offered as a supplementary program in all instances.

“With upfront costs being such a barrier already, I’m not sure how we could choose the more expensive option”

WORKSHOP #2

Scenario	EV incentive scenarios	Participants who indicated that the incentive described met the needs of themselves and their community
1	PSE helps customers locate state, federal or private grants and provides letters of support.	20%
2	PSE provides a flat rebate upfront for 50% of EV. *	60%
3	PSE provides a rebate for 50% of purchase price, after purchase. *	20%

* Incentive values listed are not necessarily reflective of what will be included into the tariff filing.

In line with the results of workshop #1, participants in workshop #2 selected **scenario 2**, noting that lower up-front costs would be preferable. Participants also noted that **scenario 2** would provide a degree of certainty that would be helpful for long-term financial planning. Many participants also expressed interest in receiving both incentives and letters of support from PSE (as indicated in **scenario**

Participants suggested that the following elements be added or considered in the list above:

- Work with dealerships to offer a lease-to-own program with a catalogue of EV options.
- Allow incentives to be used towards leased EVs, not just EVs purchased outright
- PSE to purchase multiple EVs in a single order to maximize cost savings.

4. CONCLUSION

KEY FINDINGS

Through interviews, focus groups, workshops, and surveys, MF and FC participants identified five common threads of feedback:

- **Cost:** Cost was highlighted as a significant barrier consistently throughout engagements. The cost of EVs, charging infrastructure, and the potential loss of parking were all cited as notable hurdles to TE.
 - **MF participants** often focused more on EV costs while **FC participants** stressed the need for EVSE and EV incentives to make TE feasible.
 - **When choosing scenarios, both MF and FC participants** selected options with the lowest upfront costs, commenting that it was the most attainable option to present to their leadership team.
 - Participants commented that while many public agencies do have the capacity to raise capital, this may be more difficult for non-profits and tribes.
- **Education and outreach:** The importance of education and outreach was a consistent thread that connected most conversations, but the comments were nuanced in MF and FC focus groups and workshops. While both MF and FC participants commented on the fact that education and outreach would help demystify EVs for new and potential future users:
 - **MF participants** focused on education and outreach as foundational for project success and in building support among the individuals they serve. MF participants commented on the importance of sharing consistent, culturally appropriate, translated, and easy-to-understand information through as many avenues as possible. MF providers preferred program options that allow participants and PSE to collaborate and co-create materials for TE education and outreach. MF participants also emphasized the importance of combining program awareness with hands-on user experiences.
 - **FC participants** noted that education and outreach was important, particularly for leadership buy-in and connecting with others who have been successful at TE, but felt that it was contingent on first overcoming the cost barriers of TE.
- **EV availability:** EV availability was also shared in FC focus groups and workshops as a barrier to electrifying fleets, particularly for those that served individuals with disabilities or specialized access needs, and for those who drive larger vehicles on rural roads.
- **Range:** Range was an additional concern raised in nearly all engagements as a concern for those who need to use vehicles all day and may not have time to charge, or for individuals who were looking to travel long distances.
- **Charging infrastructure:** MF and FC participants shared that improving access to chargers for both residents and providers would help reduce barriers to TE adoption. This was especially noted for employees with non-traditional schedules who may not be able to access workplace charging, renters who may not be able to access consistent charging and rideshare drivers for whom charging during work hours means a loss of profit.
- **Flexibility of programs and services:** Both MF and FC participants in surveys and workshops highlighted the importance of flexibility.
 - When faced with a choice, participants typically chose the least cost scenario but shared that if cost was not a barrier, they may be more interested in ownership of EVSE infrastructure.
 - Allowing for lease-to-own programs for both EV and EVSE, or the ability to use EV incentives towards leased EVs may help organizations, agencies and tribes expand their TE programs.

LIMITATIONS OF THIS WORK AND LESSONS LEARNED

While PSE was able to connect with a variety of organizations, agencies, and tribes across PSE’s electric service area and within each of our prioritized [participant criteria](#), it is important to note that the scale of engagement was too small and the data collection methods too diverse for key findings to be considered statistically significant. Also, participant feedback may be based on hyper-local experiences.

In addition, the following limitations and lessons learned were either addressed during this round of engagement or will be addressed in future rounds of TE engagement.

Limitation	Lessons learned
<p>Reaching PSE’s electric service audiences: Some organizations, agencies, and tribes serve communities that stretch beyond the limits of the PSE electric service area.</p>	<p>When engaging with these organizations, agencies, and tribes, it was important to be specific in communication materials and email requests as to which communities we were prioritizing for engagement. It was also important to convey engagement opportunities in a way that did not overpromise or under-deliver in the event that participants were not PSE electric service customers.</p>
<p>Different stages of the TE transition: Each of our participants were at different stages of the TE transition. While this led to engaging conversation and sharing of lessons learned among participants, it also may mean that some feedback, particularly in the workshops, was limited given the lack of direct experience with the technology.</p>	<p>This barrier will likely continue in the early stages of the TE transition but can continue to be addressed through:</p> <ul style="list-style-type: none"> • Intro calls: These calls were key to building relationships and understanding where a participant was at in their TE transition and can be used to help add technical context, where needed. • Introductions to focus groups and workshops: The introduction was used to help all participants approach the conversation with a similar level of TE knowledge and can continue to be used to ensure participants have a similar knowledge base prior to sharing feedback. • Partnership opportunities: Some participants noted that it would be helpful to have a mentorship program or networking event where participants further along in their TE transition could partner with participants that were earlier in their journey.
<p>Capacity: Community engagement primarily took place during September and October, after young people went back to school for the first time since March 2020. Many stakeholders were at, or over, capacity and may not have had the space to engage.</p> <p>Expanding our reach: As noted in our engagement process overview section, we did reach each of the prioritized communities listed in our participant criteria, but there were select communities in which we may have only reached a few participants. These included rural communities and service providers that work with people with disabilities or youth.</p>	<p>Flexibility of tools: At the beginning of engagement, we primarily relied on 90-minute focus groups and workshops to engage participants. Given the capacity constraints communicated by stakeholders, the team learned to be flexible and adaptable in their approach, shifting to surveys and one-on-one interviews, when needed. To expand our reach in upcoming TE community engagement, the team recommends offering surveys more frequently to expand reach and accommodate capacity constraints.</p> <p>In addition, flexibility was also incorporated into the following lessons learned:</p> <ul style="list-style-type: none"> • Compensation: Compensation was offered to focus group, workshop, and survey participants through a donation to their organization or a Visa gift card. Given that some individuals don’t have safe access to mailboxes, the project team learned that emailing gift cards was often more accessible to participants. • Mobile compatibility: During our focus groups and workshops, the project team ensured that all tools were mobile compatible but learned that it could be difficult to switch from the Zoom screen to the Mentimeter screen if participants were joining Zoom on their phones. As engagement progresses, the team would recommend looking into Zoom polls and additional polling options that provide the option of not switching screens for those who use their phone to participate. • Translation: The team offered translations, on request, and was able to facilitate a workshop in Spanish. Through interviews, the team also learned that as engagement continues, there may be translation needs beyond the top five languages in the service area. For example, communities who PSE is looking for feedback from – like Uber and Lyft drivers – may speak predominantly East African dialects.

While the team incorporated some of these lessons learned into the process in real time, these lessons can continue to be further expanded upon as TE engagement continues.

NEXT STEPS

As PSE moves forward with filing tariffs for Phase I of its future TE programs and services, the project team anticipates the following next steps:

- **Mid-November – Q1 2022:** PSE incorporates feedback captured in this summary into the draft filing for Phase I TE programs and services.
- **Q1 2022:** PSE shares this report with community engagement participants and other internal and external stakeholders.
- **Q1 2022:** The UTC Stakeholder Group reviews and comments on the draft filing of phase I future TE programs and services. PSE shares the draft filing with community engagement participants.
- **Late Q1 – early Q2 2022:** PSE files Phase I TE programs and services with the WUTC. PSE shares the filing link with community engagement participants with option to provide public comment.
- **2023:** If approved, the application process for programs and services begins.

5. APPENDIXES

APPENDIX A: ENGAGEMENT PARTICIPANTS

The table below details all who were contacted during this engagement process.

KEY

Participated in intro call, focus group and/or workshop
Did not respond or chose not to participate

Stakeholder	CBO/MF/FC
El Centro de la Raza	CBO
HopeSource	
Multi-Service Center	
Pacific Mobility Group	
Puget Sound Regional Council	
Thurston Regional Planning Committee	
Washington Education Association	
Community Transportation Association of the Northwest	CBO
Federal Way Black Collective	
Pierce County Community Connections	
Transportation Choices Coalition	
Bellingham & Whatcom County Housing Authority	MF
Community Life Foundation	
Compass Housing Alliance	
HERO House	
Homeownership Center Tacoma	
Housing Authority of Thurston County	
Housing Kitsap	
King County Housing Authority	
Lummi Nation Housing Authority	
Muckleshoot Housing Authority	
Renton Housing Authority	
Teamsters Local 117	
Housing Authority of Skagit County	
Imagine Housing	
Nisqually Indian Tribe	
Nooksack Indian Tribe	
Pierce County Housing Authority	
Port Gamble S'Klallam Tribe	
Sea Mar Community Health Centers	
Suquamish Tribe	
Swinomish Indian Tribal Community	

Stakeholder	CBO/MF/FC
Auburn School District	FC
Child Care Action Council	
FISH Foodbank	
Hopelink	
Kent School District	
Kitsap Community Resources	
Kitsap Transit	
Muckleshoot Tribal Transit	
Northwest Harvest	
Opportunity Council	
Rainier Foothills Wellness Foundation	
Samish Indian Nation	
Sound Generations	
Whatcom Transit Authority	
Youth Experiential Training Institute	
Catholic Community Services	FC
City of Sumner	
Cle Elum Senior Center	
Des Moines Food Bank	
Envoy America	
Fishline	
Helping Hands Foodbank	
King County Metro	
Meridian School District	
MV Transportation	
Nisqually Indian Tribe	
Northshore Senior Center	
Paratransit Services	
PeaceHealth	
Puget Sound Educational Service District	
Sauk-Suiattle Indian Tribe	
Skagit Transit	
Snoqualmie Indian Tribe	
Snoqualmie Valley School District	
Snoqualmie Valley Transportation	
Thurston County Foodbank	
VA Puget Sound	

APPENDIX B: CBO MURAL BOARDS







CBO Transportation Electrification Dialogue





CBO
Transportation Electrification Dialogue

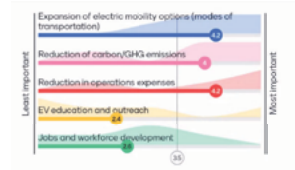




APPENDIX C: FOCUS GROUP MURAL BOARDS



Fleet and Commercial Stakeholders Transportation Electrification Dialogue Fleet & Commercial Focus Group #1



How to alleviate cost barrier

Electrification lowers operating costs for personal transportation in addition to assisting with transition (similar to learnings with weatherization). Folks who go out to evaluate on weatherization could also evaluate on transportation and what households are eligible for.

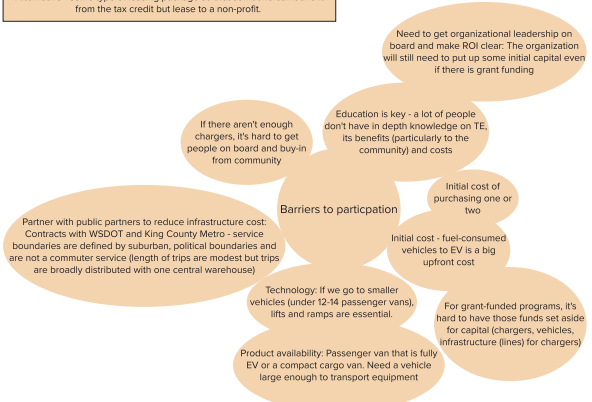
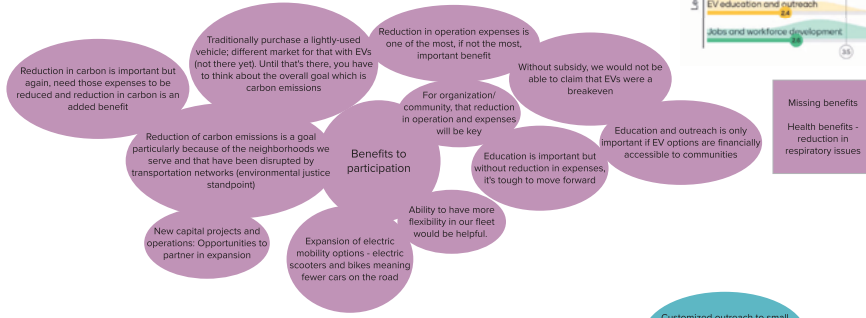
Can't raise prices for operational income. Entirely funded by county, state and federal governments so reliant on innovative programs that would help us fund this. May be opportunities for partnership with PSE and Cities on the eastside (ex. Redmond) that want to expand service. Need a combo of funding streams to make it happen.

If PSE could provide discount on chargers or vehicles, that would help. Also adding chargers so that vehicles can charge during home visits would help as well.

Grant program (similar to green power grant program) that organizations could use to leverage other funding, that would be helpful because it's hard to secure funding for capital.

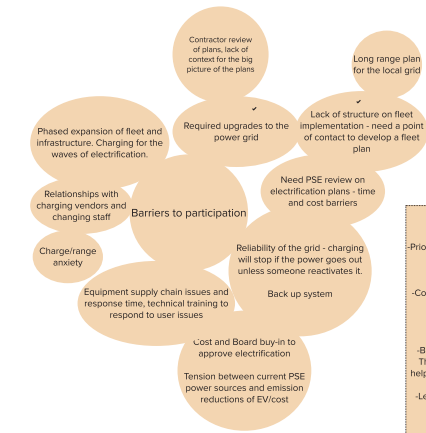
Non-profits cannot benefit from government incentives. If there are ways to advocate for different types of incentives.

Alternative - some type of leasing package so that someone can benefit from the tax credit but lease to a non-profit.





Fleet and Commercial Stakeholders Transportation Electrification Dialogue Fleet & Commercial Focus Group #2



How to alleviate barriers

-Fuel cells can help address grid issues/outages

-Prioritize transportation agencies during emergency and power response

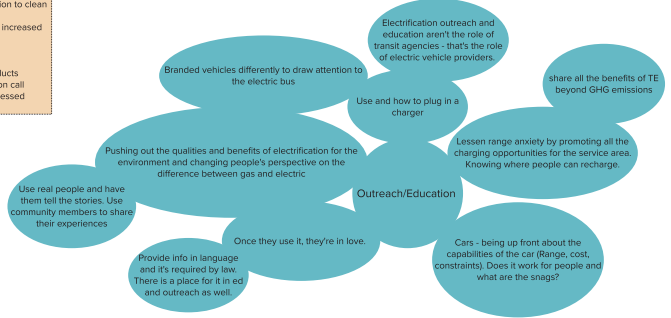
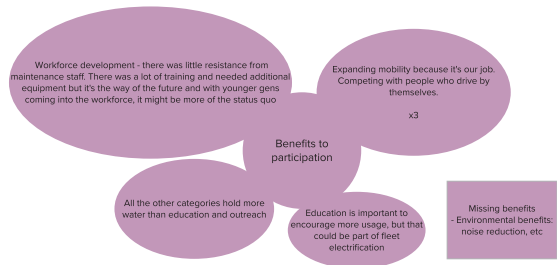
- Solar cells to reduce impact on the grid (will follow up with more information)
- Potential partnerships to install solar at TOD/park and rides with local engineering department. Maybe a directory?
- Make chargers readily accessible and unify charging systems. Consistency and reliability.
- Fast chargers available in rural areas

-Board buy in - everything that Mackenzie mentioned would be great. There are calculators, but a PSE one would be good. One pager are helpful, presentations to the board. Provide info about transition to clean energy

- Level of commitment from PSE about the transition and the increased demand.

Infrastructure Maintenance

- Lease with PSE alleviates need to purchase new products
- Who is responsible for fielding user issues? Have PSE on call
- Ownership - more ability to ensure that issues are addressed



Are you looking to partner with transportation agencies? We see it more as grant funding and service providers and fleet managers can work with who they want.

Lynden - door to door vehicle service with a potential to electrify the vehicle, is that something that PSE could fund?

Yes - those are the types of projects that we're looking towards. Not sure what the utility role is in vehicle purchasing. Part of pilots and hopeful that will continue as part of the tariff.

The only mention of electric bicycles is Amazon delivery vehicles. Bikes and electric bikes are a big piece of the puzzle to help alleviate the impact. That would be could be much more beneficial than a shared car.

That's been a question for a MF focus groups as a program to react to and there is interest in including bikes. Working on early stage programs with MF housing providers to put out surveys to their residents to gauge car share bike share or scooter share.

Working with a community that is working to lower their carbon footprint - enhanced bus stops with bike shares and are including electric charging at the new park and rides. To kick it off, chargers and power are free. We cover the electrical bill. There's a growing interest in the community to add secure facilities at transit destinations.

How to mitigate use of charging equipment at the facilities?

The only way we has addressed it is putting in extra chargers to meet additional use needs.

"Build it and they will come."

If we contributed to clean expansion of the grid, would we be compensated?



Fleet and Commercial Stakeholders Transportation Electrification Dialogue Fleet & Commercial Focus Group #3



Alleviating barriers

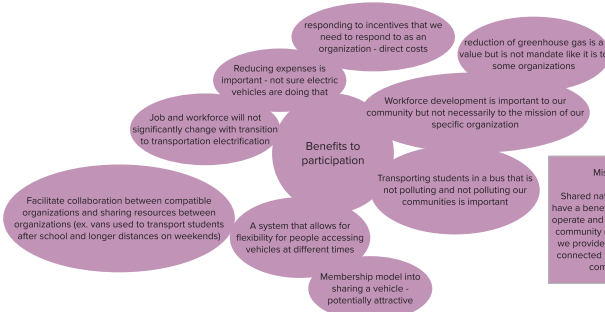
Facilitate collaboration among organizations and cost model between organizations (ex. non-profit renting spaces in school district parking lots)

Funding is the major way - opportunities for grants.

Charging stations
Own as little as possible (if someone else can be called, that's great)

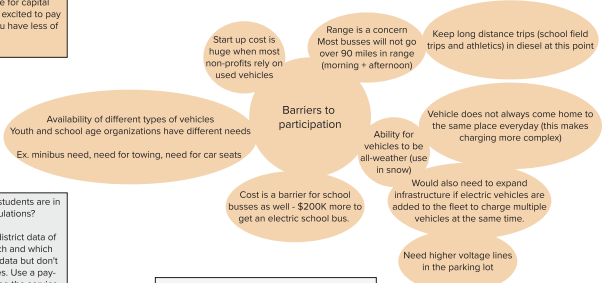
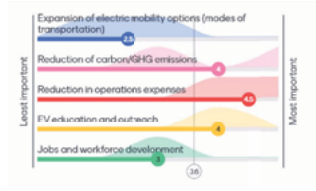
Have some experience with a compressor lease with PSE; PSE helped with construction costs and outsource maintenance

In non-profit space, it is easier to fundraise for capital expenses (ex. excited to fund kayaks vs. not excited to pay for ongoing costs like gas). With electric, you have less of the ongoing costs



Missing benefits

Shared nature of charging - can have a benefit of how organizations operate and provide services to our community could change the way we provide services as we are all connected to the grid, similar to a community space)



What factors do you use to determine if students are in highly impacted or vulnerable populations?

Metrics of where to serve - use school district data of who qualifies for free and reduced lunch and which languages are spoken at home. Ask for data but don't make it a condition for receiving services. Use a pay-what-you-can model - let person receiving the service dictate the amount they need.

School district uses free and reduced lunch demographics which requires the family to fill out the form so we may not be capturing everyone. Could also be test scores by school.

When figuring out where to put electric vehicles, Dept. of Ecology gave a map of diesel pollution and said that the money needed to be spent in these areas.

Another vision of implementation of this product would be carsharing in communities that don't typically have a second car to experience green space/outdoors.

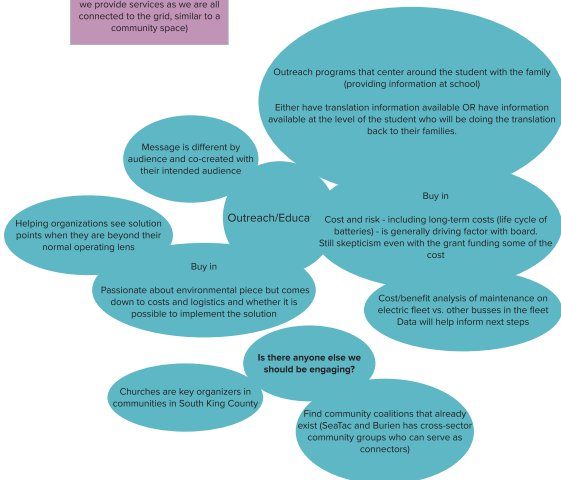
WA Dept of Ecology had a grant specific to school buses

Place for bike shares or scooter shares?

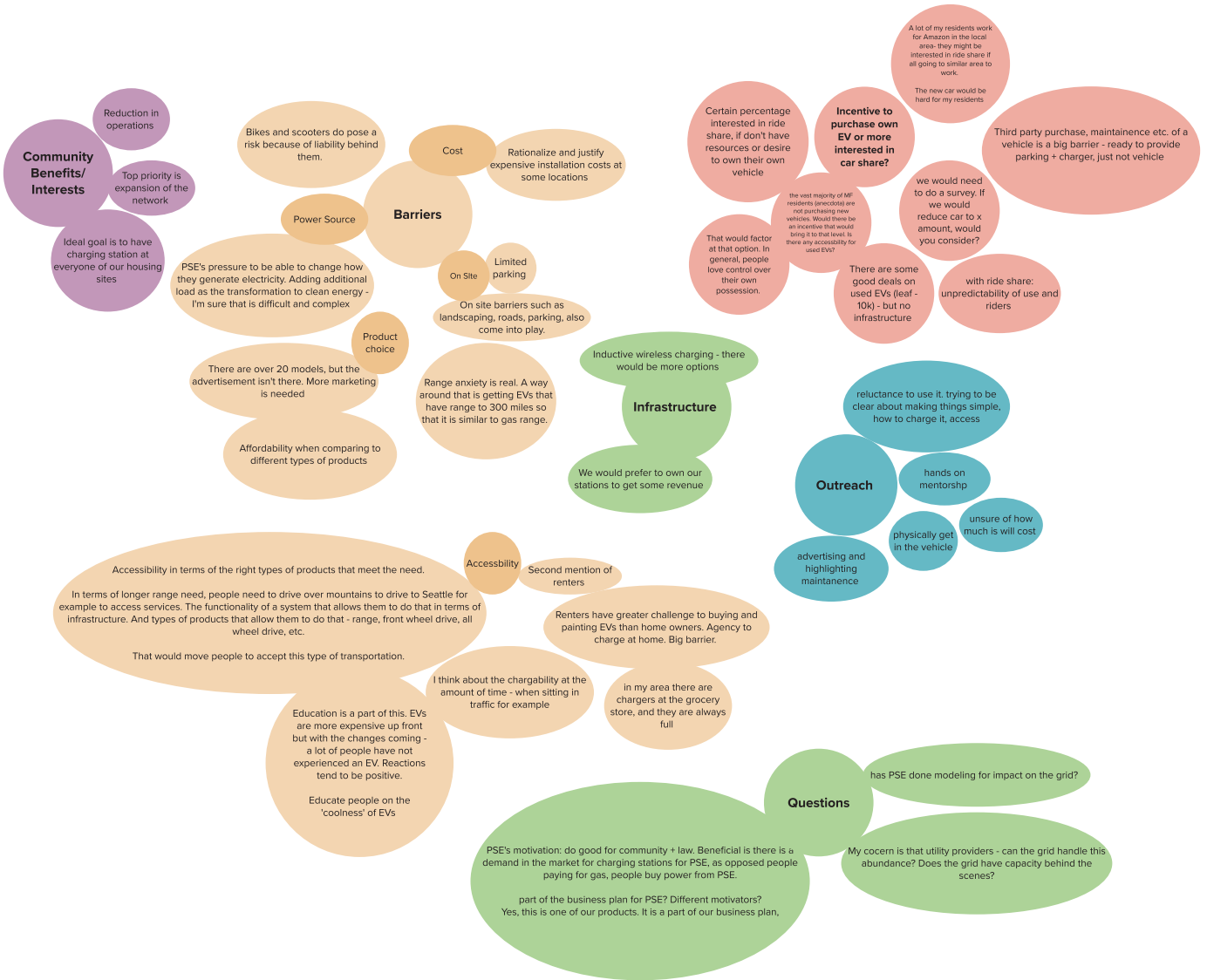
Getting the bike as an asset and is reliable is something we work to overcome: heartburn over it getting stolen

Still not very connected bike master planning in South King County (tension between bike paths and industrial space)

School district is not going to get involved in bike shares and scooter shares. SPS just signed a contract with Cascade Bicycle Club for elementary school kids to do bicycle education.

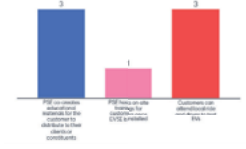
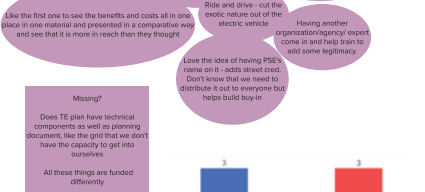
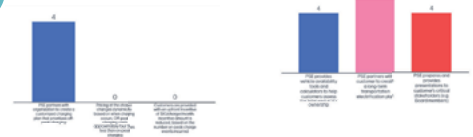
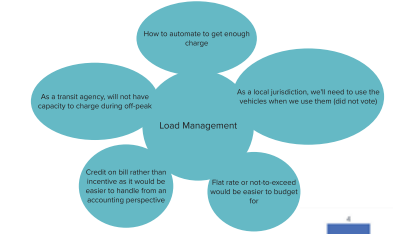
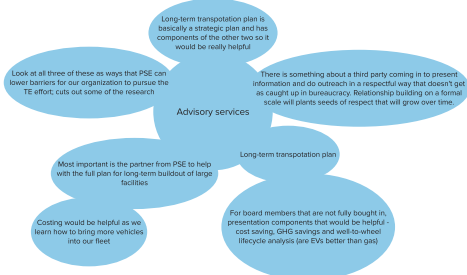
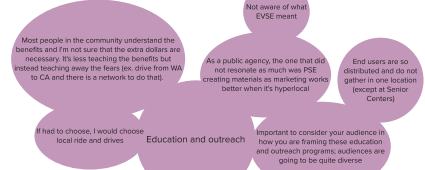
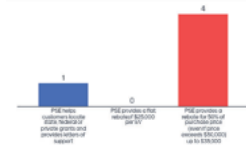
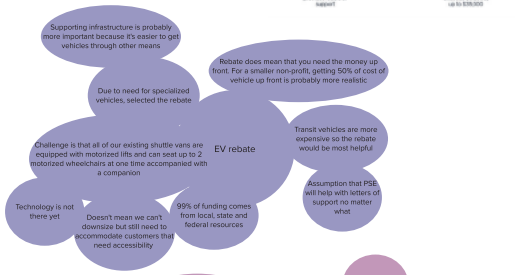
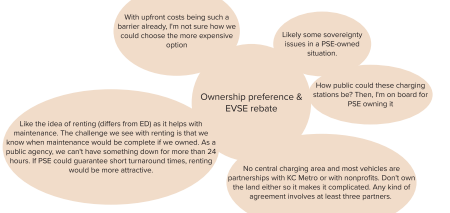
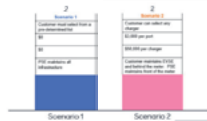






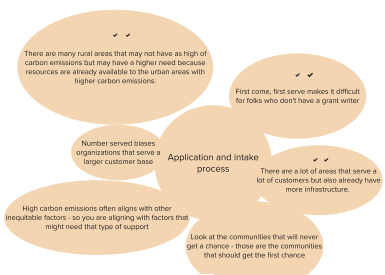
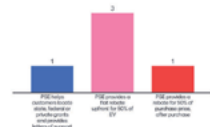
APPENDIX D: WORKSHOP MURAL BOARDS

Fleet and Commercial Stakeholders Transportation Electrification Dialogue Workshop #1





Fleet and Commercial Stakeholders Transportation Electrification Dialogue Workshop #2

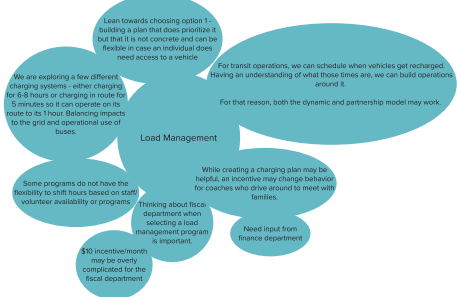
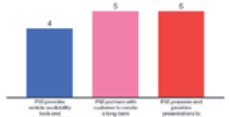
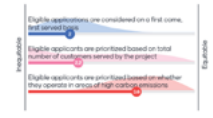
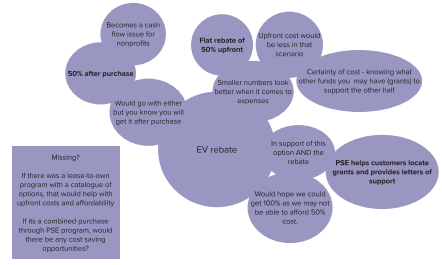
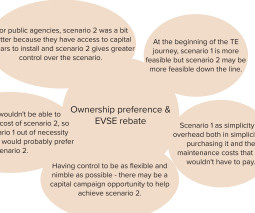


Missing?
Tier out different grant availability. In the smaller tier, they put less requirements knowing that they will be smaller organizations with less capacity.

Other grant applications ask what organizations you are working with. It starts to facilitate collaboration of larger organizations with smaller organizations.

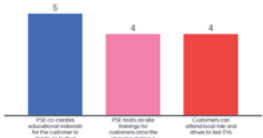
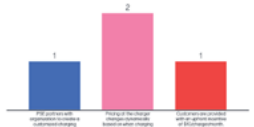
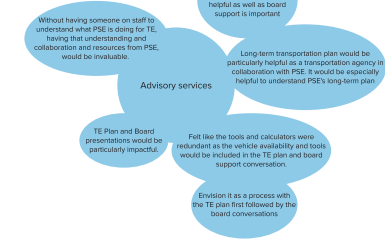
Ideal scenario
Opportunity to transition from one to the other as organization has the capacity to own it.

Lease-to-own model (monthly affordable fee) that is more manageable



Missing?
Meeting with other organizations that had been through that process.

Mentorship and referrals



Missing?
Meeting with other organizations that had been through that process.

Mentorship and referrals



User Scenarios

1 Access to a charging vehicle and a rebate to purchase a new or used electric vehicle.

State also provides EVs	People like owning their own cars	What's the income qualification
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2 Access to a shared electric vehicle owned and managed by your housing provider.

flexibility of administrator is important	Abstractive driving record and limited driving history	It was an easy process a cost about \$10-20
May want for some people, but in a way it's limited	Benefits are that you are sharing the car	You have to have a central place of control
At least, you have someone who checks you in and checks you out	Whenever you have multiple EVs you need multiple charging stations	Charging per mile is not that expensive, no need research on what cost per mile is
This is low cost / no maintenance	Can be unreliable	

3 Access to multiple shared electric bikes or scooters

Scooters interesting because limited mobility	I like this idea, benefits with low cost
Scooter would be nice to go closer locations	Scooters would be a great addition

What else would you like to know about transportation electrification?

If a new facility was built (LEED), this would be an advantage

What scenario are you most/least interested in, and why?

Most interested in this one. The rebate is enticing.	Rebate is very important to low income folks to justify getting a new/used vehicle	Least interested - not reliable enough. What if you really need the car	I cannot ride a bicycle, but the scooter is a good idea
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Are there barriers to participation or the application process?

Income requirements would have been more helpful than others	Spending cost of EV is not much, and performance is not much	I can't ride a bicycle, but the scooter is a good idea	If it is reported that it's not correct between people	Time limit can be barrier	If you have a disability and need a wheelchair for a longer time	People with disabilities - cannot access this scenario
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What payment options work best for you? What are the barriers?

insurance is covered by housing provider - no liability	With \$60 a year a payment plan isn't necessary. But payment plans could be beneficial	Including in rent is better - what if they go by mileage and you went over the budget	In rent, you could prepare for it
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What other programs or options should we consider? What's missing?

People that travel to Seattle - program for them to use electric scooters/bike. Prohibit use here	This would be a great idea for people that use public transport	Parking issues at train station
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How would you prefer to learn about using transportation electrification?

owners manual are too dense	Whoever is providing the vehicle, offering scenario 1 and 2	PowerPoint presentation for the visuals	Accelerates fast	Translated materials
It is the role of the housing provider to offer educational materials	Video materials as well	Call to number if you have help/issue	Combining test drives and educational trainings and material	Letting people know about other brands that are not Tesla
If I mention EVs cost comes to mind first, doesn't seem possible	I think test driving EVs is important	easy to access information on the car		

★ Metrics for success

Questionnaire for people to use - not too long 2 minute long	Need to get data from housing providers
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Provider Scenarios

What scenario is most equitable, and why?

1 How the children will benefit from the program	2 Use community influence	3 This should be prioritized
rated last	Concentrate on businesses and consider citizens last	Should be attacking the point source of the emission
	Convince people of the change	Would affect most benefit community and have greatest overall impact
		Could be expensive - could be a pushback

Ownership preference and rebate model

1 Individually low cost for user	2 is the \$K per hour a rental cost?	3 Can you control the charging cost?	4 Would allow the company to change the rates
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Advisory services

1 People won't take the time to do this	2 Like - shows partnership	3 Have chargers available throughout	4 At or near gas stations
Important to have board/balancing decision	Would have to work with local governments	Most important because we have to partner with local and city governments	

Load management

1 Spread out number of chargers	2 People go to the pumps on days they are paid	3 People are money conscious - they will go for incentive
		Increase incentive amount

Education methods

1 People don't like things that take time out of their day	2 Online video/ mailing campaign	3 Convince people that they need to make their decision	4 Easy accessible and on their own time
2 People have to take time out of their day	3 Not practical	4 Eliminating barriers and creating access	5 Make it part of the owner manual
3 Too much on the customer			

Group Discussion

The cost of EVs tends to be more - the used EV market is starting to grow but it's not big yet.	Need rebates and incentives	building relationships with dealerships	better communicate state/federal levels exist as well	Multifamily : a management team to control the car-share	I believe that education, and knowledge around EVs is important. Educational test-drives and we can go from there	Gas is expensive and its expensive to maintain a vehicle - so glad this is happening	Are there thoughts to making EV usage more affordable
there is constant active research on this issue. So things are going to be happening near future	Resident of senior living facility. Has a Leaf car which I can use for personal use. They have a car available for residents to use for free. Retired	We have charging stations. I see cars being charged where I work from time to time.	I have a vision it's going to take one automobile brand will stop making gas and go completely electric. and that will turn it around	Future: create a program where every vehicle and vendors would make all their products electric with incentives	PSE should consider public areas first- gas stations can offer a charging station at the pump, like diesel		



User Scenarios

What scenario are you most/least interested in, and why?

1	2	3
You'd have a car when you need it without having to wait for your turn	Could be useful for seniors or people who are all going to the same destination (hospitals, drs appointments)	It wouldn't work for me because I have kids and I can't take them anywhere on a bike or a scooter
The reimbursement would benefit me in the long run	Imagine if you needed your care at a certain time and it wasn't available	
More accessible	Not reliable	
Overall fear of new things/ concepts	Difficult for people who need to work/ with work schedules	

What other programs or options should we consider? What's missing?

Has there been thought around making EVs rentable for longer trips? this could help bigger families get behind purchasing one	Give programs more exposure - I didn't know you were doing this program	Lack of information
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How would you prefer to learn about using transportation electrification?

I need to experience how it works	I also want to learn about the benefits and advantages of the car	I'm interested in trying the car	Offer a class about electric vehicles for the community	I want to learn but it should be simple and easy, not too much reading
Information about how to use the car and how to charge	Opportunities to drive the car, see how it feels, learn how to charge it	Prefer learning from other residents, could be a way to bring the community together	Need more information to really understand something new	Use community centers
				Incentives for learning about the program/car - 1 hour test drive with your family

What else would you like to know about transportation electrification?

I think of Tesla when I think of electric cars - more information about the different options	More communication about programs and options	Perception that it's expensive and difficult to have an electric car
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What would make you more likely to use the program?

Give users confidence in the car and how it works	Reduce the fear of trying new things
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What payment options work best for you? What are the barriers?

Credit card works best

★ Metrics for success

Ask users how their experience was	Ask users what the barriers were	Rely on client experience rather than quantitative metrics
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Questions/General Comments

Will you have to charge your own car in your house? \$	Now I'm thinking about how it could benefit me
Won't the electricity bill go up?	You can go more places and it'll be less expensive with an electric car
More economical	It's good to learn about this to help change opinions
Will electricity prices increase in the future?	A life change is always a risk
There is a program where you can rent an electric car (good2go) and I'm thinking about doing that to try and test drive it	

Group Discussion

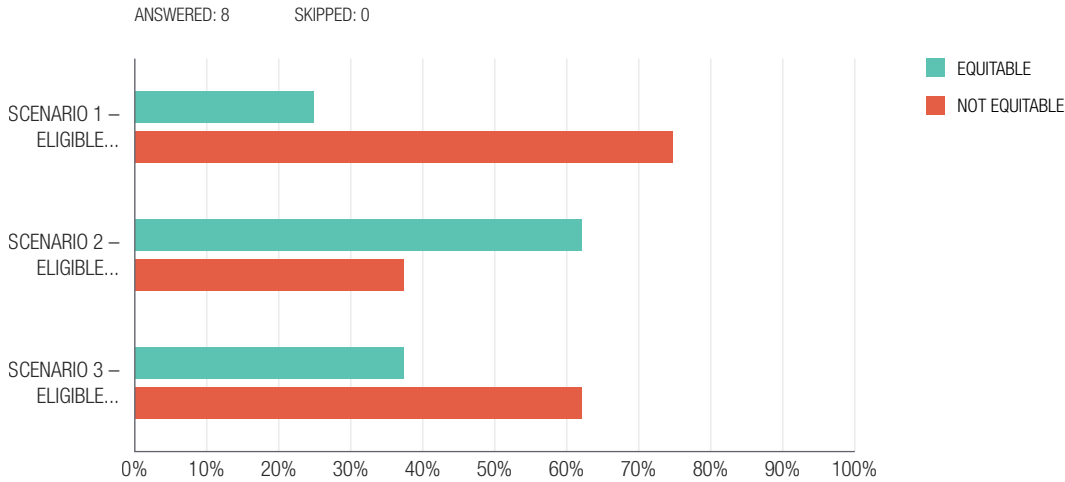
It's easy - there are no oil changes, no filter changes, or other mechanical issues	There aren't enough charging stations	Know someone with an electric car - their electric bill isn't much more but the car battery goes down when you charge your phone, use air conditioning, etc	You can only use the car for a few hours	Save gas with hybrid or eco cars	You'd save gas, and prices are rising	You have to wait to charge it	I know someone with an electric car
It's hard to find charging stations	You'd use a lot of energy by using the radio or the air conditioning	It would be good for short trips	An EV wouldn't work for us on our longer car trips	Minimal noise, but I've never tried/driven in one	I've never used an electric car	I've thought about buying an electric car but I don't have a place to charge it	I don't understand how my neighbor charges her car at home - wouldn't it use a lot of electricity?
I don't understand the range I could drive an electric cars	I've never used one so I'm skeptical	Shared locations of charging stations in the area (Safeway, Walgreens, Fred Meyer)					

APPENDIX E: MULTIFAMILY PROVIDER SURVEY RESULTS

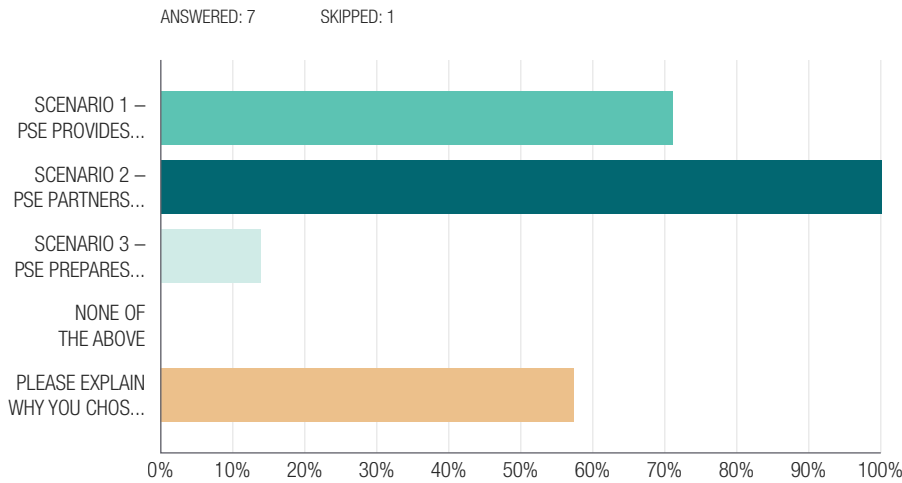
PUGET SOUND ENERGY TRANSPORTATION ELECTRIFICATION PLAN

MULTIFAMILY PROVIDER SURVEY RESULTS

1. WHICH APPLICATION AND INTAKE SCENARIO IS MOST EQUITABLE, AND WHY?



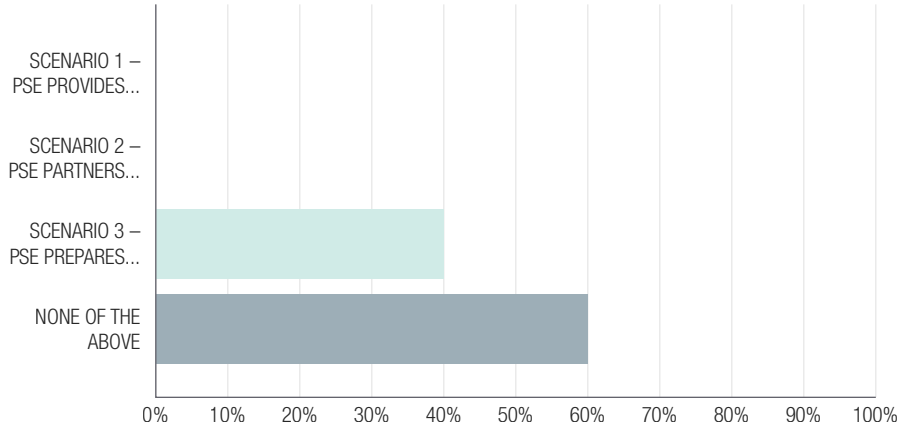
2. WHAT ADVISORY SERVICES WOULD BE BEST FOR YOUR ORGANIZATION?



3. WHICH ADVISORY SERVICE SCENARIOS WOULDN'T WORK?

ANSWERED: 5

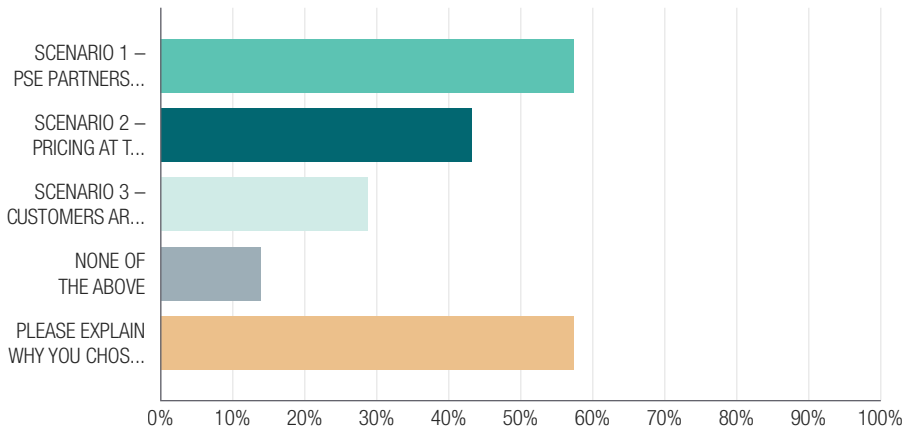
SKIPPED: 3



4. WHAT LOAD MANAGEMENT SCENARIO(S) WOULD YOUR ORGANIZATION PREFER?

ANSWERED: 7

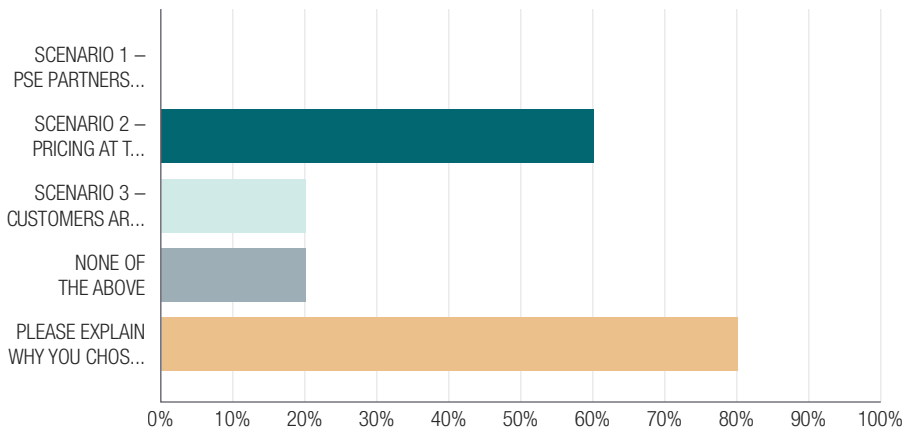
SKIPPED: 1



5. WHAT LOAD MANAGEMENT SCENARIOS DO YOU NOT LIKE?

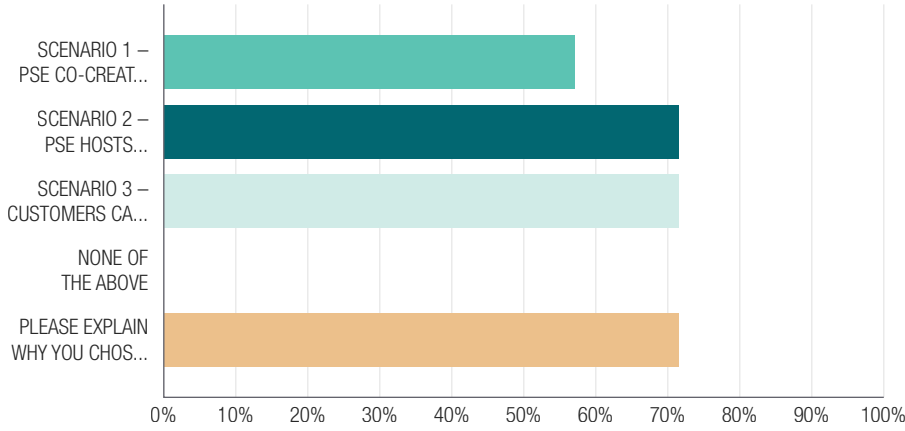
ANSWERED: 5

SKIPPED: 3



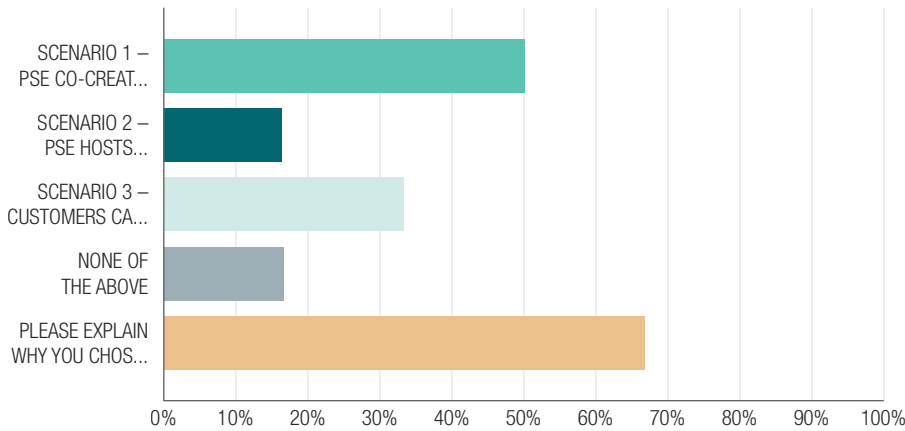
6. WHAT EDUCATION METHODS WORK BEST FOR YOU AND YOUR RESIDENTS?

ANSWERED: 7 SKIPPED: 1



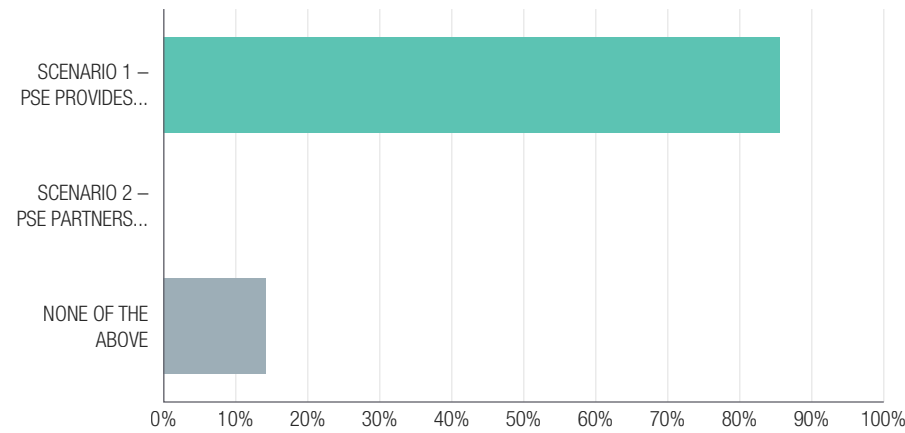
7. WHAT EDUCATION AND OUTREACH SCENARIOS DO YOU NOT LIKE/WOULDN'T WORK FOR YOUR COMMUNITY?

ANSWERED: 6 SKIPPED: 2



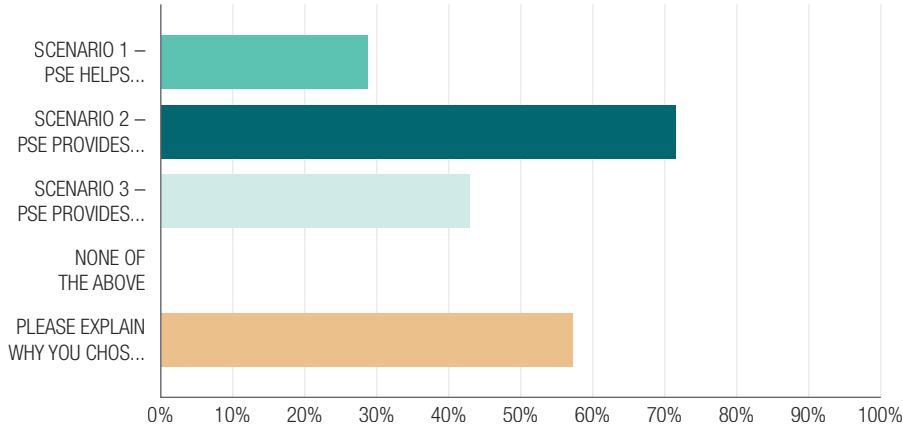
8. WHAT OWNERSHIP PREFERENCE AND REBATE MODEL WORKS BEST FOR YOU ?

ANSWERED: 7 SKIPPED: 1



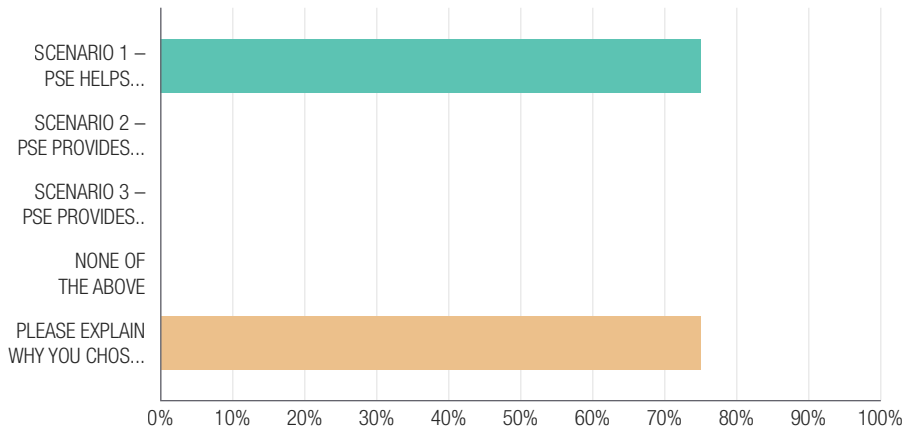
9. WHAT EV REBATE MODEL WORKS BEST FOR YOU, AND WHY?

ANSWERED: 7 SKIPPED: 1



10. ARE THERE ANY MODELS YOU DISLIKE ?

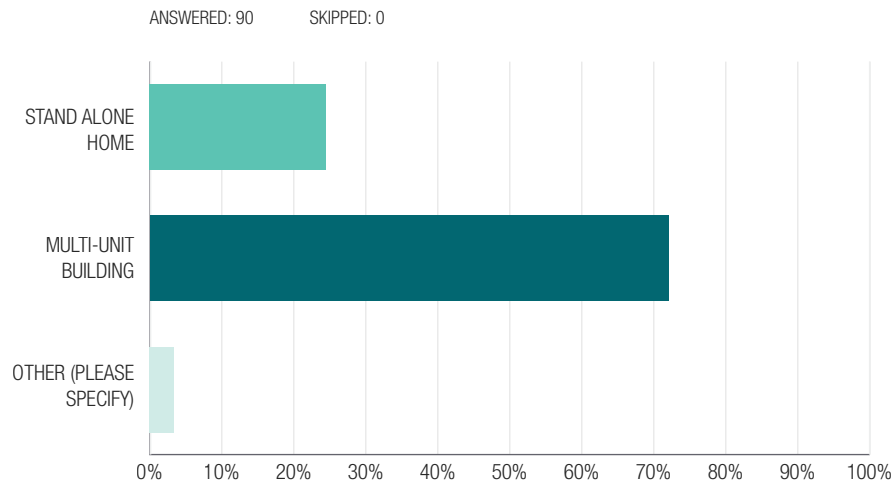
ANSWERED: 4 SKIPPED: 4



APPENDIX F: LUMMI NATION MULTIFAMILY USER SURVEY RESULTS

ELECTRIC VEHICLE (EV) SURVEY - LUMMI NATION

Q1 I LIVE IN A...

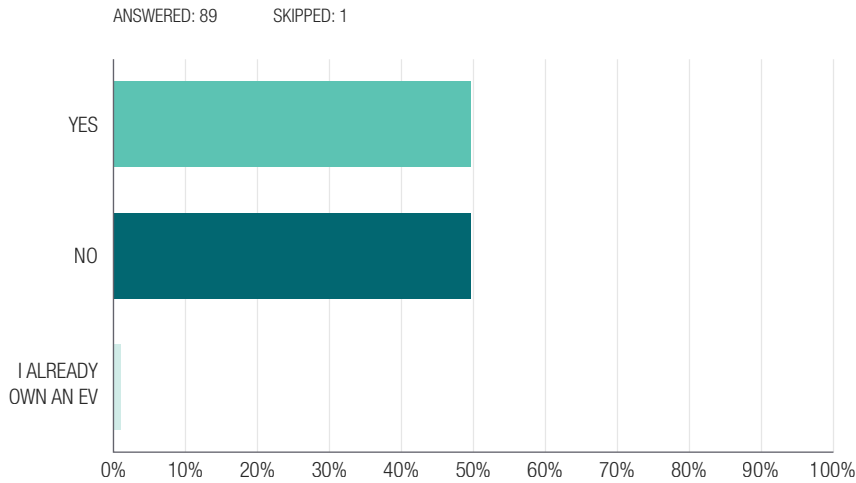


ANSWER CHOICES	RESPONSES	
Stand alone home	24.44%	22
Multi-unit building	72.22%	65
Other (please specify)	3.33%	3
TOTAL		90

#	OTHER (PLEASE SPECIFY)	DATE
1	Single unit	11/22/2021 1:43 PM
2	Apartment	11/17/2021 9:14 AM
3	House	11/12/2021 3:17 PM

ELECTRIC VEHICLE (EV) SURVEY - LUMMI NATION

Q2 ARE YOU INTERESTED IN OWNING AN ELECTRIC VEHICLE (EV)?



ANSWER CHOICES	RESPONSES	
Yes	49.44%	44
No	49.44%	44
I already own an EV	1.12%	1
TOTAL		90

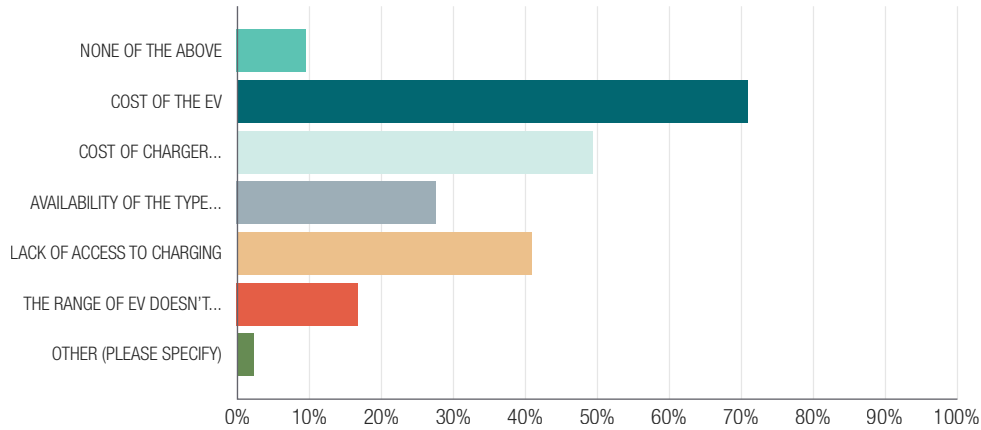
#	WHY OR WHY NOT?	DATE
1	Economic	12/13/2021 3:05 PM
2	Good for the environment	12/10/2021 3:20 PM
3	Not familiar	12/10/2021 3:14 PM
4	It would be nice	12/10/2021 3:01 PM
5	To go green	12/10/2021 10:24 AM
6	I don't live here, I'm a student from out of state	12/9/2021 11:53 AM
7	Environment	12/9/2021 11:41 AM
8	not having to pay the ridiculous fuel costs	12/9/2021 10:20 AM
9	Maybe	12/9/2021 8:44 AM
10	Better for the environment	12/9/2021 8:34 AM
11	Cheaper to own. Better for the environment	12/8/2021 5:12 PM
12	I don't know any information	12/8/2021 5:03 PM
13	Probably be more efficient for me	12/8/2021 4:53 PM
14	Too expensive	12/8/2021 3:27 PM
15	Eventually I would get an eclectic vehicle	12/8/2021 2:38 PM
16	I couldn't afford one	12/8/2021 2:30 PM
17	Price	12/6/2021 1:45 PM
18	Save on gas	12/2/2021 3:13 PM

#	WHY OR WHY NOT?	DATE
19	Cause I feel like it would be expensive to fix if broke down	12/1/2021 4:45 PM
20	Better for environment	12/1/2021 4:45 PM
21	I have a suv	12/1/2021 4:37 PM
22	Would be easier to do gas be better for environment	12/1/2021 4:35 PM
23	Electric cars are more efficient and better for the environment.	12/1/2021 4:34 PM
24	I have another car already	12/1/2021 4:21 PM
25	The savings on fuel and the reliability of the vehicle would pay off in the long run.	12/1/2021 2:11 PM
26	Just not interested	12/1/2021 2:11 PM
27	Zero carbon emissions!	12/1/2021 1:40 PM
28	Tesla	11/29/2021 6:09 PM
29	To much	11/29/2021 2:56 PM
30	Worried it will break down	11/22/2021 2:27 PM
31	I don't know enough about electric vehicles	11/22/2021 1:59 PM
32	Best for the economy	11/22/2021 1:43 PM
33	Not enough money	11/19/2021 10:02 AM
34	Can't afford it as of now	11/18/2021 1:15 PM
35	Can't afford it as of now	11/18/2021 1:02 PM
36	Too expensive to repair	11/17/2021 11:55 AM
37	A hybrid one day	11/17/2021 11:54 AM
38	Better for the environment	11/17/2021 11:46 AM
39	Can't afford it	11/17/2021 11:45 AM
40	No battery charging stations	11/17/2021 11:29 AM
41	Because I don't have extra money to get one.	11/17/2021 9:14 AM
42	I have hybrid and I love it	11/12/2021 3:35 PM
43	Nothing I'm intrested in	11/12/2021 3:17 PM
44	Never considered owing one	11/12/2021 1:46 PM
45	Too much money	11/12/2021 1:37 PM
46	Saving our world by powerd up vehicles	11/12/2021 1:22 PM
47	They're good on gas and good for the environment	11/12/2021 12:49 PM
48	They're good on gas and good for the environment	11/12/2021 12:30 PM
49	EV are better for the environment and also save money on gas.	11/10/2021 5:37 PM
50	EV are better for the environment and also save money on gas.	11/10/2021 5:21 PM
51	I wouldn't cause it's alot of work to find charges	11/10/2021 5:09 PM
52	I wouldn't cause it's alot of work to find charges	11/10/2021 5:04 PM
53	Electric cars are better for the environment and they also save money not having to pay for gas.	11/10/2021 5:02 PM
54	I like trucks.	11/10/2021 11:54 AM
55	To help with the environment & also my friend has one & it's pretty cool	11/10/2021 11:16 AM
56	save money on gas, better for the environment	11/9/2021 3:58 PM
57	Better for the environment	11/9/2021 3:19 PM
58	To save money on fuel	11/9/2021 2:12 PM

ELECTRIC VEHICLE (EV) SURVEY - LUMMI NATION

Q3 FOR YOU, WHAT BARRIERS EXIST TO EV OWNERSHIP?

ANSWERED: 83 SKIPPED: 7



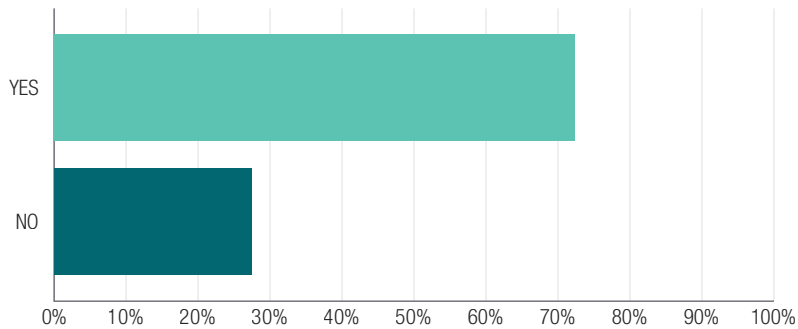
ANSWER CHOICES	RESPONSES	
None of the above	9.64%	8
Cost of the EV	71.08%	59
Cost of charger installation at my home	49.40%	41
Availability of the type of vehicle I want	27.71%	23
Lack of access to charging	40.96%	34
The range of EVs doesn't meet my needs	16.87%	14
Other (please specify)	2.41%	2
TOTAL RESPONDENTS: 83		

#	OTHER (PLEASE SPECIFY)	DATE
1	Cost of buying a EV	11/11/2021 9:16 AM
2	Already financing a car	11/10/2021 11:21 AM

ELECTRIC VEHICLE (EV) SURVEY - LUMMI NATION

Q4 IF YOU WERE PROVIDED A \$5,000 REBATE FOR PURCHASING A NEW OR USED EV, WOULD THAT MAKE YOU MORE LIKELY TO BUY ONE?

ANSWERED: 80 SKIPPED: 10



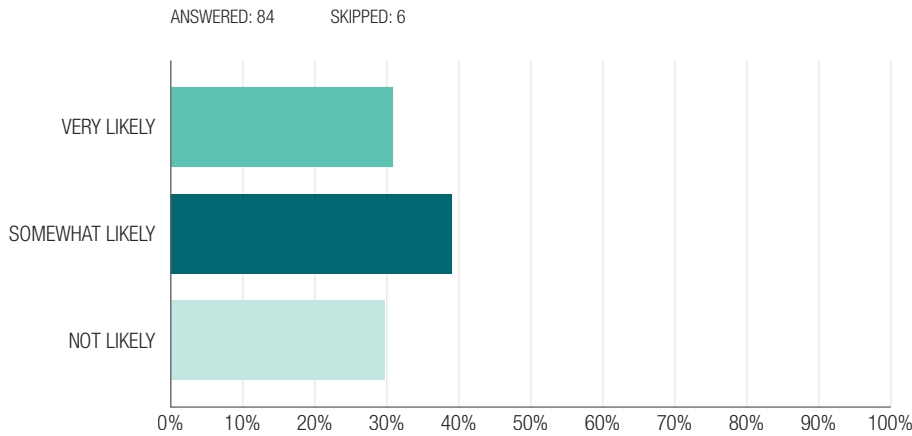
ANSWER CHOICES	RESPONSES	
Yes	72.50%	58
No	27.50%	22
TOTAL		80

#	WHY OR WHY NOT?	DATE
1	Affordable	12/10/2021 3:16 PM
2	It would be awesome	12/10/2021 3:04 PM
3	Maybe, but probably not till I graduate and move back home	12/9/2021 11:56 AM
4	Money	12/9/2021 11:43 AM
5	If it isn't more than \$20k	12/9/2021 11:35 AM
6	ev's are pretty expensive	12/9/2021 10:24 AM
7	Maybe	12/9/2021 8:46 AM
8	I don't think I'd have enough money	12/8/2021 5:05 PM
9	Looking for a second car	12/8/2021 4:58 PM
10	Maybe I would	12/8/2021 2:41 PM
11	Price	12/6/2021 1:52 PM
12	I have a family suv	12/1/2021 4:39 PM
13	I would like to check it out and see if it's different than a regular vehicle	12/1/2021 4:38 PM
14	The rebate would be helpful I would try to get an EV to be more proactive saving the earth.	12/1/2021 4:37 PM
15	Tesla	11/29/2021 6:12 PM
16	Worried of it breaking down	11/22/2021 2:30 PM
17	Because I can get a decent ev for that price	11/22/2021 1:49 PM
18	Depending on what is available that I could actually afford	11/17/2021 12:00 PM
19	Maybe	11/17/2021 11:59 AM
20	Only I'f I had help with purchasing	11/12/2021 3:27 PM
21	can not afford to buy one	11/12/2021 1:57 PM

#	WHY OR WHY NOT?	DATE
22	can not afford to buy one	11/12/2021 1:56 PM
23	can not afford to buy one	11/12/2021 1:54 PM
24	can not afford to buy one	11/12/2021 1:50 PM
25	It's really hard to save money to put on a vehicle right now	11/12/2021 12:55 PM
26	The rebate would be helpful I would try to get an EV to be more proactive saving the earth.	11/10/2021 5:39 PM
27	The rebate would be helpful I would try to get an EV to be more proactive saving the earth.	11/10/2021 5:28 PM
28	I don't know if I would be able to pay for a electric car with the rebate but I would like to try.	11/10/2021 5:12 PM
29	Still need more charging station	11/10/2021 5:08 PM
30	Maybe	11/10/2021 12:10 PM
31	Because I like trucks.	11/10/2021 12:02 PM
32	Yes because I've always like electric cars but I already financed a car	11/10/2021 11:21 AM
33	A rebate would be awesome	11/9/2021 2:16 PM

ELECTRIC VEHICLE (EV) SURVEY - LUMMI NATION

Q5 IF A SHARED ELECTRIC CAR THAT YOU COULD RESERVE FOR BLOCKS OF TIME WAS AVAILABLE TO YOUR COMMUNITY, HOW LIKELY WOULD YOU BE TO USE IT?



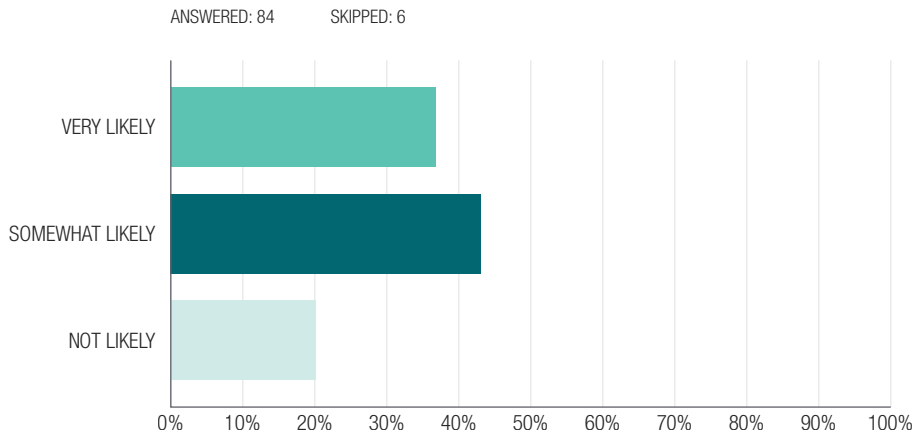
ANSWER CHOICES	RESPONSES	
Very likely	30.95%	26
Somewhat likely	39.29%	33
Not likely	29.76%	25
Availability of the type of vehicle I want	27.71%	23
Lack of access to charging	40.96%	34
The range of EVs doesn't meet my needs	16.87%	14
Other (please specify)	2.41%	2
TOTAL		84

#	WHY OR WHY NOT?	DATE
1	Sometimes I wish I had a car but not all the costs associated with it	12/9/2021 11:56 AM
2	that would be very beneficial to everyone living paycheck to paycheck helping with fuel costs	12/9/2021 10:24 AM
3	A little cautious of sharing	12/8/2021 4:58 PM
4	Would require too much planning to schedule my life	12/8/2021 3:31 PM
5	Wouldn't want to be the one driving when broke	12/1/2021 4:52 PM
6	It would be interesting in see how they run compare to a regular vehicle	12/1/2021 4:38 PM
7	It would be hard to have a shared vehicle due to the amount of people in need of a vehicles.	12/1/2021 4:37 PM
8	Don't like sharing	11/29/2021 6:12 PM
9	So I won't burn fuel	11/22/2021 1:49 PM
10	Dose that mean the community , while community all have access then it would be less time top use it's	11/12/2021 3:27 PM
11	I have a vehicle	11/12/2021 1:57 PM
12	I have a vehicle	11/12/2021 1:56 PM
13	I have a vehicle	11/12/2021 1:54 PM
14	I have a vehicle	11/12/2021 1:50 PM

#	WHY OR WHY NOT?	DATE
15	Already have a car	11/12/2021 1:41 PM
16	I don't have a vehicle and it would be nice to get when I need it	11/12/2021 12:55 PM
17	It would be hard to have a shared vehicle due to the amount of people in need of a vehicles.	11/10/2021 5:39 PM
18	It would be hard to have a shared vehicle due to the amount of people in need of a vehicles.	11/10/2021 5:28 PM
19	It would be hard to work around through people's schedules.	11/10/2021 5:12 PM
20	Would have my own vehicle.	11/10/2021 12:02 PM
21	Maybe i don't know. I don't like sharing lol	11/10/2021 11:21 AM
22	I have a job that I would need access to it at all times	11/9/2021 2:16 PM

ELECTRIC VEHICLE (EV) SURVEY - LUMMI NATION

Q6 IF SHARED ELECTRIC BIKES THAT YOU COULD TAKE ON A FIRST-COME, FIRST-SERVED BASIS WERE AVAILABLE TO YOUR COMMUNITY, HOW LIKELY WOULD YOU BE TO USE THEM?



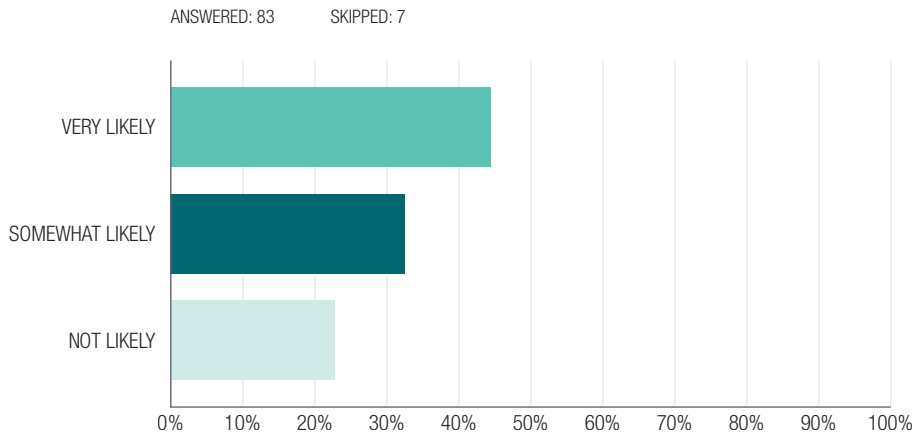
ANSWER CHOICES	RESPONSES	
Very likely	36.90%	31
Somewhat likely	42.86%	36
Not likely	20.24%	17
TOTAL		84

#	WHY OR WHY NOT?	DATE
1	would bring down the pollution	12/9/2021 10:24 AM
2	Probably just to ride about for a bit	12/8/2021 4:58 PM
3	Not very safe riding bikes in my community	12/8/2021 3:31 PM
4	Sounds fun	12/1/2021 4:52 PM
5	Would be easier to rent a electrical bike than walking or catching the bus	12/1/2021 4:38 PM
6	I live close by places that I go to often that I could use the bike to ride too.	12/1/2021 4:37 PM
7	Bikes are not possible for me.	11/30/2021 8:45 PM
8	Seattle has them	11/29/2021 6:12 PM
9	Need the the motivation	11/22/2021 1:49 PM
10	Ya sure , it would be nice	11/12/2021 3:27 PM
11	Just to try it for an activity	11/12/2021 1:57 PM
12	Just to try it for an activity	11/12/2021 1:56 PM
13	Just to try it for an activity	11/12/2021 1:54 PM
14	Just to try it for an activity	11/12/2021 1:50 PM
15	It'd be easier to make it around	11/12/2021 12:49 PM
16	I live close by places that I go to often that I could use the bike to ride too.	11/10/2021 5:39 PM
17	I live close by places that I go to often that I could use the bike to ride too.	11/10/2021 5:28 PM

#	WHY OR WHY NOT?	DATE
18	I live close by a few places that I go to that I would use the bike to ride too.	11/10/2021 5:12 PM
19	I'm currently looking into purchasing a ebike	11/10/2021 5:08 PM
20	I like to ride a bicycle but don't have one at the moment.	11/10/2021 12:02 PM
21	I already have a bike that I don't ride lol	11/10/2021 11:21 AM
22	I don't bike and have babies	11/9/2021 3:22 PM
23	I have physical limitations	11/9/2021 2:16 PM

ELECTRIC VEHICLE (EV) SURVEY - LUMMI NATION

Q7 IF SHARED ELECTRIC SCOOTERS THAT YOU COULD TAKE ON A FIRST-COME, FIRST- SERVED BASIS WERE AVAILABLE TO YOUR COMMUNITY, HOW LIKELY WOULD YOU BE TO USE THEM?



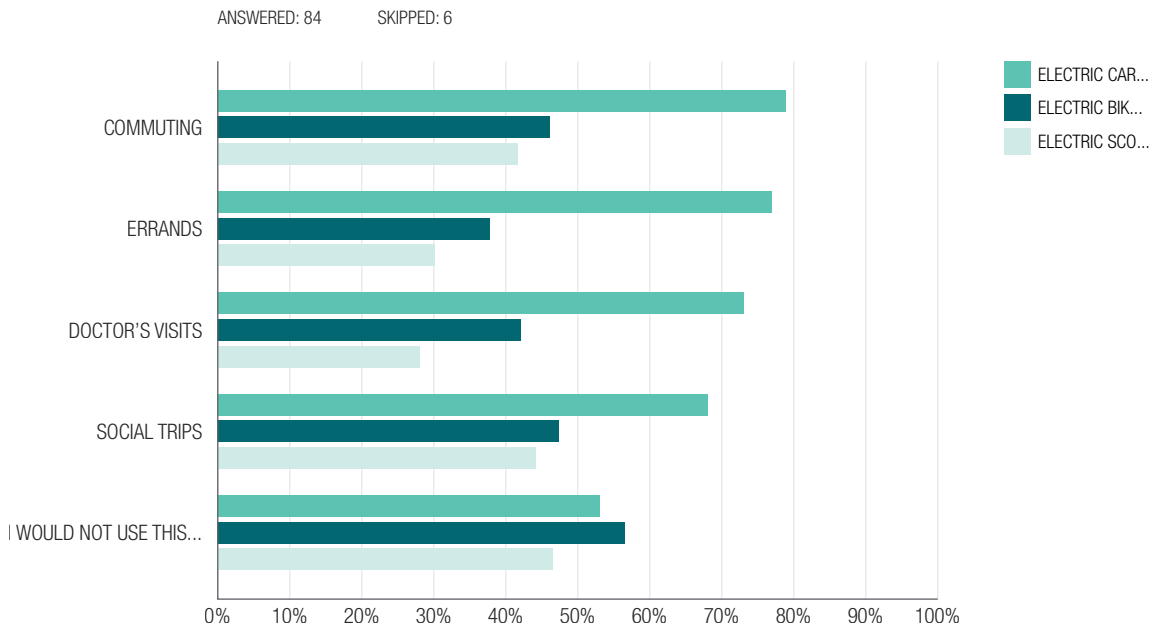
ANSWER CHOICES	RESPONSES	
Very likely	44.58%	37
Somewhat likely	32.53%	27
Not likely	22.89%	19
TOTAL		83

#	WHY OR WHY NOT?	DATE
1	same would bring down the pollution in the air	12/9/2021 10:24 AM
2	Less friendly with reservation roads/walkways	12/8/2021 4:58 PM
3	Sounds fun	12/1/2021 4:52 PM
4	Would be easier to walk or catching the bus	12/1/2021 4:38 PM
5	Having a scooter would save on gas and be better for the environment.	12/1/2021 4:37 PM
6	Fun	11/29/2021 6:12 PM
7	Best for the economy	11/22/2021 1:49 PM
8	It would be nice to have the access	11/12/2021 3:27 PM
9	not interested	11/12/2021 1:57 PM
10	not interested	11/12/2021 1:56 PM
11	not interested	11/12/2021 1:54 PM
12	not interested	11/12/2021 1:50 PM
13	I don't know how to use it	11/12/2021 12:55 PM
14	Sometimes but thats mostly because I don't even know how to use them	11/12/2021 12:49 PM
15	Having a scooter would save on gas and be better for the environment.	11/10/2021 5:39 PM
16	Having a scooter would save on gas and be better for the environment.	11/10/2021 5:28 PM
17	It would beneficial to use the scooters to save on gas and help the environment.	11/10/2021 5:12 PM

#	WHY OR WHY NOT?	DATE
18	Easier way to get around places.	11/10/2021 12:02 PM
19	I love scooters	11/10/2021 11:21 AM
20	Too old to be driving a scooter	11/9/2021 2:16 PM
21	I already have a bike that I don't ride lol	11/10/2021 11:21 AM
22	I don't bike and have babies	11/9/2021 3:22 PM
23	I have physical limitations	11/9/2021 2:16 PM

ELECTRIC VEHICLE (EV) SURVEY - LUMMI NATION

Q8 WHAT WOULD YOU USE SHARED ELECTRIC TRANSPORTATION PROGRAMS LIKE THESE FOR?

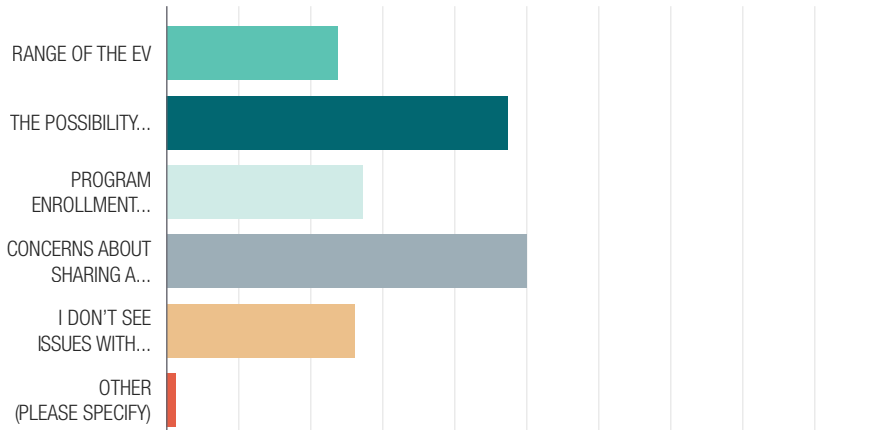


	ELECTRIC CAR SHARE	ELECTRIC BIKE SHARE	ELECTRIC SCOOTER SHARE	TOTAL RESPONDENTS
Commuting	79.10% (53)	46.27% (31)	41.79% (28)	67
Errands	77.27% (51)	37.89% (25)	30.30% (20)	66
Doctor's visits	73.44% (47)	42.19% (27)	28.13% (18)	64
Social trips	68.25% (43)	47.62% (30)	44.44% (28)	63
I would not use this program	53.33% (16)	56.67% (17)	46.67% (14)	30

ELECTRIC VEHICLE (EV) SURVEY - LUMMI NATION

Q9 WHAT WOULD MAKE IT DIFFICULT TO USE SHARED PROGRAMS LIKE THESE?

ANSWERED: 84 SKIPPED: 6

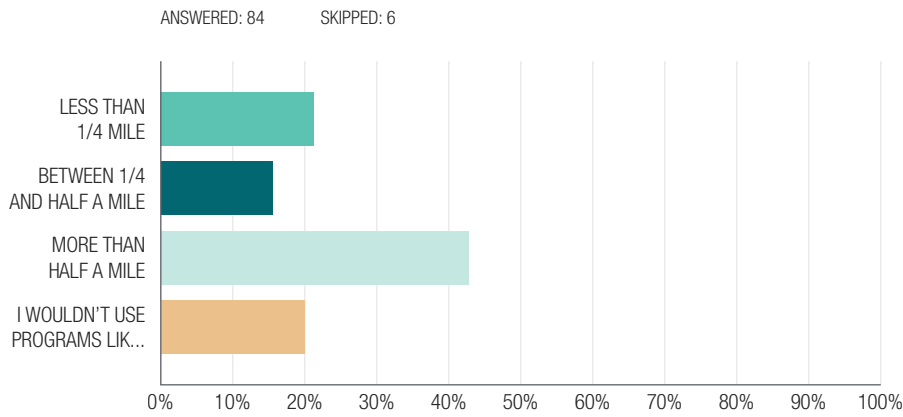


ANSWER CHOICES	RESPONSES	
Range of the EV	23.81%	20
The possibility of an EV not being available right when I need it	47.62%	40
Program enrollment requirements (example: driver's license and driving record check)	27.38%	23
Concerns about sharing a vehicle with others during COVID-19	50.00%	42
I don't see issues with these programs	26.19%	22
Other (please specify)	1.19%	1
TOTAL RESPONDENTS: 84		

#	OTHER (PLEASE SPECIFY)	DATE
1	The drug addicts	12/1/2021 4:23 PM

ELECTRIC VEHICLE (EV) SURVEY - LUMMI NATION

Q10 HOW FAR WOULD YOU TRAVEL TO ACCESS PROGRAMS LIKE THESE?

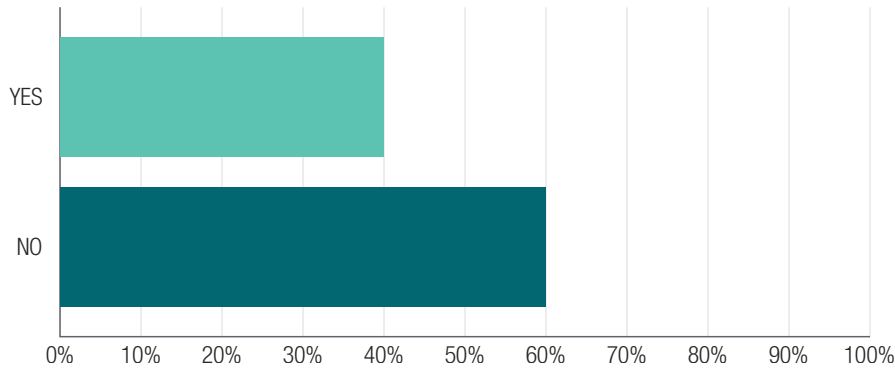


ANSWER CHOICES	RESPONSES	
Less than 1/4 mile	21.43%	18
between 1/4 and half a mile	15.48%	13
More than half a mile	42.86%	36
I wouldn't use programs like these	20.24%	17
TOTAL		84

ELECTRIC VEHICLE (EV) SURVEY - LUMMI NATION

Q11 WOULD YOU PAY TO ACCESS SHARED TRANSPORTATION PROGRAMS LIKE THESE?

ANSWERED: 84 SKIPPED: 6

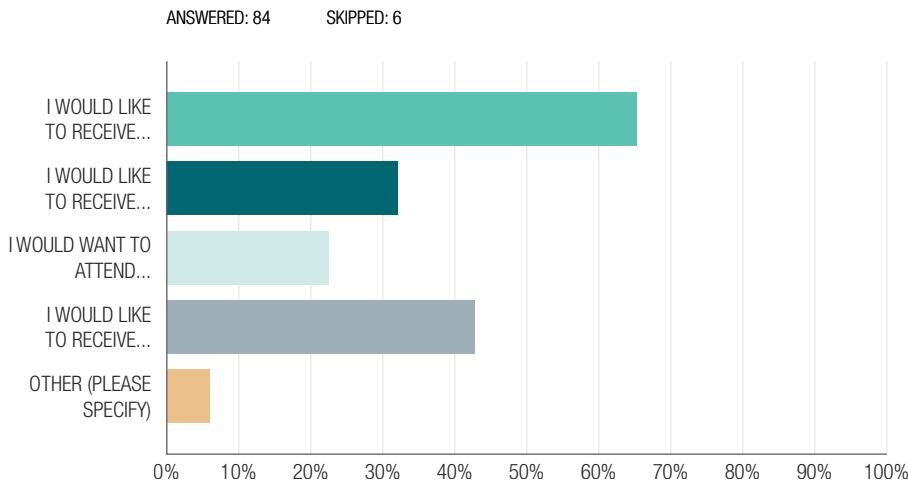


ANSWER CHOICES	RESPONSES	
Yes	40.48%	34
No	59.52%	50
TOTAL		84

#	IF YES, WHAT WOULD YOU BE WILLING TO PAY PER MONTH?	DATE
1	\$50-100	12/9/2021 11:56 AM
2	\$5	12/9/2021 11:43 AM
3	ldk. As long as it's a fair price	12/8/2021 4:58 PM
4	If price is reasonable	12/8/2021 2:41 PM
5	50	12/2/2021 3:14 PM
6	ldk	12/1/2021 4:39 PM
7	Not sure something affordable	12/1/2021 4:38 PM
8	120	12/1/2021 2:16 PM
9	20	11/30/2021 8:45 PM
10	Yes	11/22/2021 2:03 PM
11	5	11/19/2021 10:04 AM
12	\$15	11/17/2021 11:49 AM
13	If it was affordable	11/12/2021 1:13 PM
14	If it was affordable	11/12/2021 12:55 PM
15	If it was cost efficient	11/12/2021 12:49 PM
16	Depends on the amount of time using ebike or ev	11/10/2021 5:08 PM
17	Oh geez I'm not sure. Never heard of these programs before. Hard to say	11/10/2021 11:21 AM

ELECTRIC VEHICLE (EV) SURVEY - LUMMI NATION

Q12 IF PROGRAMS LIKE THESE WERE AVAILABLE, HOW WOULD YOU WANT TO HEAR ABOUT IT?



ANSWER CHOICES	RESPONSES	
I would like to receive information from my housing provider	65.48%	55
I would like to receive information from other residents who use the program	32.14%	27
I would want to attend on-site ride and drives or trainings	22.62%	19
I would like to receive and email or text from PSE about the program	42.86%	36
Other (please specify)	5.95%	5
TOTAL RESPONDENTS: 84		

#	OTHER (PLEASE SPECIFY)	DATE
1	Community meetings	12/10/2021 3:23 PM
2	Community meetings	12/10/2021 8:23 AM
3	flyer on campus	12/9/2021 11:56 AM
4	From a friend	11/29/2021 6:12 PM
5	I wouldn't like to hear about it	11/12/2021 1:41 PM

ELECTRIC VEHICLE (EV) SURVEY - LUMMI NATION

Q13 ANYTHING ELSE YOU'D LIKE TO SHARE WITH US ABOUT YOUR INTEREST IN ELECTRIC VEHICLES?

ANSWERED: 45

SKIPPED: 45


#	RESPONSES	DATE
1	Would help save money	12/13/2021 3:08 PM
2	I would enjoy using them	12/10/2021 10:28 AM
3	No	12/10/2021 8:23 AM
4	N/A	12/9/2021 2:01 PM
5	I think this program would be perfect for us students who are here from out of state and just need a vehicle at least sometimes.	12/9/2021 11:56 AM
6	No	12/8/2021 5:05 PM
7	No	12/8/2021 4:58 PM
8	No	12/8/2021 10:39 AM
9	No	12/6/2021 1:52 PM
10	I just think it is a fun idea	12/1/2021 4:52 PM
11	Not really	12/1/2021 4:50 PM
12	None	12/1/2021 4:48 PM
13	No	12/1/2021 4:39 PM
14	I think it would be beneficial for our community to have access to more transportation especially if it helps the environment.	12/1/2021 4:37 PM
15	No	12/1/2021 4:33 PM
16	No	12/1/2021 4:33 PM
17	No	12/1/2021 4:23 PM
18	They're great vehicles but the initial purchase price can be fairly high.	12/1/2021 2:16 PM
19	No	12/1/2021 1:57 PM
20	Happy to hear the ideas	12/1/2021 1:42 PM
21	No	11/30/2021 8:45 PM
22	I want a Tesla roadster please	11/29/2021 6:12 PM
23	N/a	11/29/2021 1:24 PM
24	Be nice if they were affordable	11/22/2021 2:30 PM
25	No thanks	11/22/2021 1:49 PM
26	N/A	11/18/2021 1:16 PM
27	N/A	11/18/2021 1:06 PM
28	No	11/17/2021 11:59 AM
29	It's where the future is going and we all have to do our part to save the planet	11/17/2021 11:49 AM
30	No comments	11/17/2021 9:17 AM
31	Why all questions about electric vehicle	11/12/2021 3:27 PM
32	I think it would be a great option for those who dont have working vehicles	11/12/2021 1:41 PM
33	Why should I get an electric car?	11/12/2021 1:13 PM
34	Besides it being convenient, why should I use community electric vehicles?	11/12/2021 12:55 PM

#	RESPONSES	DATE
35	Besides it being convenient, why should I use community electric vehicles?	11/12/2021 12:49 PM
36	No	11/12/2021 10:06 AM
37	It would be great to see this in the near future	11/11/2021 9:16 AM
38	I think it would be beneficial for our community to have access to more transportation especially if it helps the environment.	11/10/2021 5:39 PM
39	I think it would be beneficial for our community to have access to more transportation especially if it helps the environment.	11/10/2021 5:28 PM
40	I think if people had a program that helped them to buy an electric car there would be more of a difference.	11/10/2021 5:12 PM
41	No	11/10/2021 5:10 PM
42	No	11/10/2021 5:08 PM
43	Not at the moment	11/10/2021 3:52 PM
44	I would just like to know when more EV are coming out?	11/10/2021 12:02 PM
45	I think the scooter one would be awesome	11/10/2021 11:21 AM

APPENDIX G: TEP FACTSHEETS AND FLIERS


Get ready to electrify your ride

Summer 2021



Get ready to electrify your ride

There are more than 1.8 million electric vehicles (EVs) on the roadways in the United States. Washington state has the third biggest market for EVs, with more than 76,000 registered as of June 2021. As part of PSE's commitment to be a Beyond Net Zero Carbon company by 2045, we're supporting communities in getting more EVs on the road by making it easier for customers to charge an EV at home, at work and in public.



Three reasons to electrify your ride

- 1 They're healthier for our planet because they don't produce tailpipe emissions. EVs reduction in emissions holds true during use and in the production of the electricity powering it.**

2020 COMPARABLE MODEL	2020 CHEVROLET BOLT
4.4 TONS ANNUAL CO2 EMISSIONS	2.2 TONS ANNUAL CO2 EMISSIONS

EMISSIONS ESTIMATES BASED ON PSE'S POWER GENERATION SOURCES. INDIVIDUAL RESULTS MAY VARY.
- 2 They require less maintenance and cost less to fuel.** EVs have far fewer moving parts to maintain and fix, and you don't have to buy gasoline.

2020 comparable model	Range	Yearly fuel cost
Full tank of gas 16.5-gallon tank -\$3.25/gallon*	478.5 miles 29 miles/gallon in city	\$1,681 15,000 miles/year
\$53.63		
2020 Nissan Leaf®	Range	Yearly fuel cost
Full charge \$0.09/kWh**	149 miles 123 miles/gallon in city	\$362 15,000 miles/year
\$3.60		

* Average price of gallon of gas in December 2019 in Washington state.
** Based on \$0.09/kWh average in Washington state.

PSE PUGET SOUND ENERGY

Three reasons to electrify your ride (cont.)

- 3 Charging is no big deal, with a little planning.** Charging can be done at home or on the go, and modern EV ranges will easily cover the daily needs of most drivers.

 - Level 1: Home**
2-5 miles of range per hour
Drivers typically plug in when they get home and charge overnight.
 - Level 2: Home/work/public**
25 miles of range per hour
A convenient option for drivers looking for a quicker charge, no matter where they might be.
 - DC Fast Charge: Public**
Full charge in around an hour
A driver can plug in and come back to almost a full charge after a quick errand or coffee break!

Why host a PSE charging station?

- Promotes sustainability values and a commitment to protecting the environment.
- Charging stations and car shares are a great amenity at multifamily properties.
- Public charging stations bring more foot traffic to businesses and can increase purchasing opportunity.
- Reduces total cost of ownership for fleet vehicles.

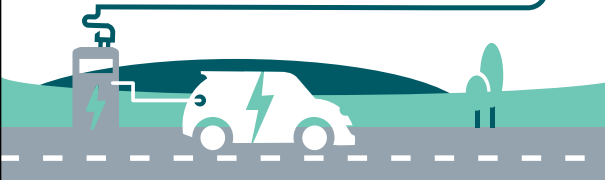
Supporting communities in electrifying their rides

To support our customers' growing need to access more charging stations, we rolled out a new EV program in 2019: PSE Up & Go Electric. We're partnering with communities, businesses and multifamily properties to install more EV charging stations across our service area. Our charging programs are an easy, cost-effective way to bring EV charging to residents and customers.

As part of our Up & Go Electric program, we're working with community-based service providers to make EVs more accessible, make electric fueling more affordable and increase access to charging stations.

Interested in learning more about PSE's EV charging programs?


Visit pse.com/electriccars to learn more.



ELECTRIFY YOUR RIDE FACTSHEET

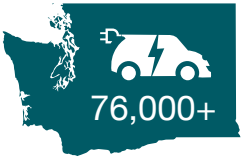
Prepárese para viajar en un vehículo eléctrico

Otño 2021



Prepárese para viajar en un vehículo eléctrico

Hay más de 1.8 millones de vehículos eléctricos (EV) en los caminos de los Estados Unidos. El estado de Washington tiene el tercer mercado más grande de vehículos eléctricos, con más de 76,000 registrados a junio de 2021. Como parte del compromiso de PSE de ser una empresa Beyond Net Zero Carbon (que sobrepasa las cero emisiones netas de carbono) para el año 2045, estamos apoyando a las comunidades para que logren tener más vehículos eléctricos en el camino haciendo más fácil que los clientes carguen sus vehículos eléctricos en casa, en el trabajo y en público.



Tres razones para conducir un vehículo eléctrico

- 1 Son más saludables para nuestro planeta porque no producen emisiones por el tubo de escape. La reducción de las emisiones de los vehículos eléctricos se mantiene durante el uso y la producción de la electricidad que los alimenta.**

MODELO COMPARABLE 2020	CHEVROLET BOLT 2020
4.4 TONELADAS EMISIONES ANUALES DE CO2	2.2 TONELADAS EMISIONES ANUALES DE CO2

ESTAS ESTIMACIONES DE EMISIONES ESTÁN BASADAS EN LAS FUENTES DE GENERACION DE ENERGIA DE PSE, LOS RESULTADOS INDIVIDUALES PUEDEN VARIAR.
- 2 Requieren menos mantenimiento y son menos costosos en combustible.** Los vehículos eléctricos tienen muchas menos partes móviles que hay que mantener y reparar, y no es necesario comprar gasolina.

Modelo comparable 2020	Distancia	Costo anual de combustible
Tanque lleno de gasolina 16.5-gallon tank -\$3.25/gallon*	478.5 millas 29 millas/gallon en ciudad	\$1,681 15,000 millas/año
\$53.63		
Nissan Leaf 2020*	Distancia	Costo anual de combustible
Carga completa \$0.09/kWh**	149 millas 123 millas/gallon eléctrico en la ciudad	\$362 15,000 millas/año
\$3.60		

* Precio promedio del galón de gasolina en diciembre de 2019 en el estado de Washington.
** Basado en un promedio de \$0.09/kWh en el estado de Washington.

PSE PUGET SOUND ENERGY

Tres razones para conducir un vehículo eléctrico (cont.)

- 3 Cargarlo no es gran cosa, con un poco de planificación.** La carga se puede realizar en casa o durante su viaje, y las distancias de los vehículos eléctricos modernos cubrirán fácilmente las necesidades diarias de la mayoría de los conductores.

 - Nivel 1: En casa**
2 a 5 millas de distancia por hora
Generalmente los conductores enchufan sus vehículos cuando llegan a casa y lo dejan cargando durante la noche.
 - Nivel 2: En casa/trabajo/público**
25 millas de distancia por hora
Una opción conveniente para los conductores que buscan una carga más rápida, sin importar dónde se encuentren.
 - Carga rápida de DC: Pública**
Carga completa en aproximadamente una hora
Un(a) conductor(a) puede enchufarlo y volver a tener una carga casi completa después de hacer un mandado rápido o de tomarse un café.

¿Por qué permitir que PSE instale una estación de carga?

- Promueve los valores de sostenibilidad y el compromiso con la protección del medio ambiente.
- Las estaciones de carga y los autos compartidos son un gran servicio en las propiedades multifamiliares.
- Las estaciones de carga públicas atraen más tráfico peatonal a los negocios y pueden incrementar las oportunidades de compra.
- Reduce el costo total de propiedad de los vehículos de la flota.

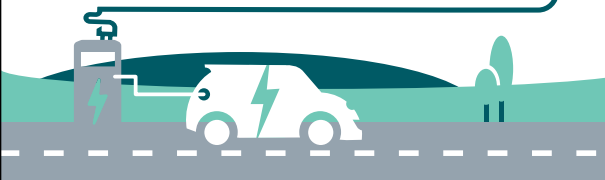
Apoyando a las comunidades para que conduzcan vehículos eléctricos.

Para cubrir la creciente necesidad de nuestros clientes de acceder a más estaciones de carga, implementamos un nuevo programa para vehículos eléctricos en 2019: PSE Up & Go Electric. Estamos colaborando con comunidades, negocios y propiedades multifamiliares para instalar más estaciones de carga de vehículos eléctricos en nuestra área de servicio. Nuestros programas de carga son una forma fácil y rentable de acercar a habitantes y clientes a los cargadores para vehículos eléctricos.

Como parte de nuestro programa Up & Go Electric, estamos trabajando con proveedores de servicios comunitarios para hacer que los vehículos eléctricos sean más accesibles, hacer que el combustible eléctrico sea más asequible y aumentar el acceso a las estaciones de carga.

¿Le interesa obtener más información sobre los programas de carga de vehículos eléctricos de PSE?

Visite pse.com/electriccars para obtener más información.



ELECTRIFY YOUR RIDE FACTSHEET (SPANISH)

Transportation Electrification Community Engagement Plan



Fall 2021

PSE's Transportation Electrification Plan

PSE's **Transportation Electrification Plan** (TEP) is a comprehensive five-year strategic framework for electric vehicle programs and services that will allow PSE to take on a greater role in driving the transition to a cleaner energy future by further advancing electrified transportation in Washington state. This is a key part of PSE's pledge to become a **Beyond Net Zero Carbon company by 2045**.

Diversity, Equity and Inclusion (DEI) pilots

In May 2019, PSE and **Hopelink** co-hosted an electric mobility workshop with South King County non-profit, government and community mobility stakeholders. Workshop participants generated ideas that resulted in the creation of eight pilots.

- **Kittitas County (HopeSource):** Electrification of a fleet vehicle and charging installation for service delivery to low-income households.
- **Skagit County (Housing Authority of Skagit County):** Electrification of a fleet vehicle and charging installation for service delivery to low-income households.
- **South King County (King County Metro):** Electrification of two "Community Van" routes in Pacific and Algona.
- **South King County (Muckleshoot Indian Tribe):** Electrification of a shuttle and charging installation to support the Tribe's free express shuttle service for community members.
- **South King County (Senior Housing Assistance Group):** Providing an electric car share and charging infrastructure to income-eligible seniors in Auburn.
- **Whatcom County (Opportunity Council):** Electrification of a fleet vehicle and charging installation for service delivery to low-income households.
- **Whatcom County (Opportunity Council):** Electrification of a school bus and charging installation to serve income-eligible children.



PSE's Transportation Electrification Plan supports EV charging stations throughout the electric service area.

What is included in the TEP?

- Developing and implementing more electric vehicle programs and services
- Building and changing our utility infrastructure to support increased demand for electric transportation over the next decade
- Partnering with community members and key stakeholders to successfully electrify the transportation system
- Removing barriers to provide electrified transportation access to all customers
- Soliciting feedback from low-income communities, communities of color, non-English speakers, and rural communities throughout our service area that may need additional assistance to access electrification



Next steps

As we expand these pilots into future programs and services, we are seeking customer and community input to understand the barriers communities and their service providers face when it comes to electrifying their transportation. We will seek to have our input and engagement reflect the geographic and demographic diversity of our electric service area, with a particular focus on low-income communities, communities of color that live with disproportionate environmental health impacts, non-English speakers, and rural communities who often have different barriers to transportation electrification than urban communities.

As part of the feedback process, we're convening focus groups of community-based organizations, agencies and individuals living and operating in multi-family or fleet and commercial settings who might host electric vehicles, electric vehicle chargers and/or other modes of electric transportation to discuss:

- Ownership preferences
- Cost share of electric vehicles and necessary electric vehicle infrastructure
- Education and outreach needs related to transportation electrification
- Benefits and barriers to programs and services

When this engagement process is complete, community feedback will be integrated into our filings with the Washington Utilities and Transportation Commission (UTC). We anticipate filing these programs and services for final approval in 2022 in preparation for a 2023 launch.

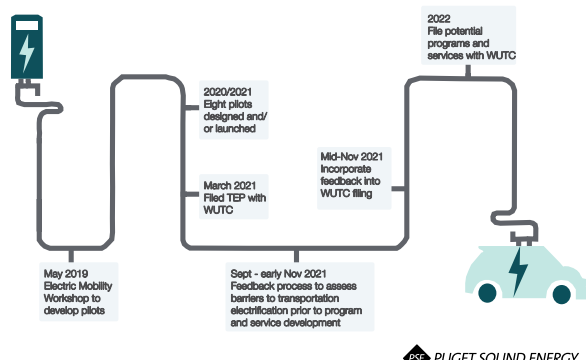
What is an example of programs and services?

As part of PSE's commitment to ensure that all customers have access to transportation electrification programs or services, PSE develops programs that address barriers. This might look like an electric charger and corresponding electric vehicle to create a car share in your neighborhood or the electrification of a fleet vehicle and charger installation for a food bank who might otherwise find the cost of electrification too high.



Timeline

The timeline below is subject to change.



TRANSPORTATION ELECTRIFICATION FACTSHEET

Plan de participación comunitaria para la electrificación del transporte



Otño 2021

Plan para la electrificación del transporte de PSE

El **Plan para la electrificación del transporte** (TEP por sus siglas en inglés) de PSE es una estructura estratégica integral de cinco años para crear programas y servicios de vehículos eléctricos que permitan a PSE asumir un papel más importante en impulsar la transición hacia un futuro con energías más limpias mediante el avance del transporte electrificado en el estado de Washington. Esta es una parte clave de la promesa de PSE de convertirse en una empresa **Beyond Net Zero Carbon** (que sobrepasa las cero emisiones netas de carbono) para el año 2045.

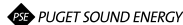
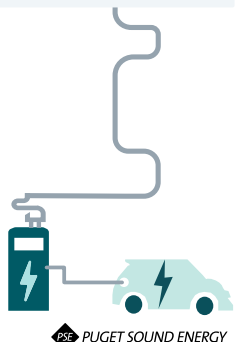
Programas piloto de diversidad, equidad e inclusión (DEI por sus siglas en inglés)

En mayo de 2019, PSE y **Hopelink** organizaron un taller sobre movilidad eléctrica con las partes interesadas en la movilidad que pertenecen a organizaciones sin fines de lucro del sur del condado de King, a agencias gubernamentales y a la comunidad. Los participantes del taller generaron ideas que resultaron en la creación de ocho programas de prueba.

- **Condado de Kittitas (HopeSource):** Electrificación de un vehículo de la flota e instalación de carga para la prestación de servicios a hogares de bajos ingresos.
- **Condado de Skagit (Autoridad de vivienda del condado de Skagit):** Electrificación de un vehículo de la flota e instalación de carga para la prestación de servicios a hogares de bajos ingresos.
- **Sur del condado de King (King County Metro):** Electrificación de los vehículos "Community Van" en dos rutas en Pacific y Algona.
- **Sur del condado de King (tribu Indígena Muckleshoot):** Electrificación de un autobús colectivo e instalación de carga para respaldar el servicio de transporte expreso gratuito de la tribu para los miembros de la comunidad.
- **Sur del condado de King (Grupo de asistencia de vivienda para personas mayores):** Proporcionar un vehículo eléctrico de servicio compartido y la infraestructura para cargarlo para personas mayores que califiquen basándose en sus ingresos en Auburn.
- **Condado de Whatcom (Consejo para las oportunidades):** Electrificación de un vehículo de la flota e instalación de carga para la prestación de servicios a hogares de bajos ingresos.
- **Condado de Whatcom (Consejo para las oportunidades):** Electrificación de un autobús escolar y una instalación de carga para servir a niños con ingresos elegibles.

¿Qué incluye el TEP?

- Desarrollar e implementar más programas y servicios de vehículos eléctricos.
- Construir y cambiar nuestra infraestructura de servicios públicos para soportar una mayor demanda de transporte eléctrico durante la próxima década.
- Colaborar con miembros de la comunidad y partes interesadas clave para electrificar con éxito el sistema de transporte.
- Eliminar obstáculos para proporcionar acceso a todos los clientes al transporte electrificado.
- Solicitar opiniones de las comunidades de bajos ingresos, comunidades de color, de las que no hablan inglés y de las comunidades rurales en toda nuestra área de servicio que puedan necesitar asistencia adicional para acceder a la electrificación.



Próximos pasos

A medida que expandimos estos programas piloto a programas y servicios futuros, buscamos obtener la opinión de los clientes y la comunidad para comprender los obstáculos a los que se enfrentan las comunidades y sus proveedores de servicios cuando se trata de electrificar su transporte. Buscaremos que nuestra opinión y participación reflejen la diversidad geográfica y demográfica de nuestra área de servicio eléctrico, con un enfoque particular en las comunidades de bajos ingresos, las comunidades de color que viven afectadas de manera desproporcionada en la salud ambiental, las personas que no hablan inglés y las comunidades rurales, que a menudo se enfrentan a diferentes obstáculos para la electrificación del transporte que las comunidades urbanas.

Como parte del proceso de recolección de opiniones, estamos organizando grupos focales con organizaciones comunitarias, agencias e individuos que viven y operan en entornos comerciales, de flotas o viviendas multifamiliares que podrían albergar vehículos eléctricos, cargadores de vehículos eléctricos y/u otros modos de transporte eléctrico para hablar sobre:

- Las preferencias de propiedad
- Compartir el costo de los vehículos eléctricos y de la infraestructura necesaria para los vehículos eléctricos
- Las necesidades de educación y divulgación relacionadas con la electrificación del transporte
- Los beneficios y obstáculos a programas y servicios

Cuando se complete este proceso de participación, los comentarios de la comunidad se integrarán en nuestras presentaciones ante la Washington Utilities and Transportation Commission (UTC, Comisión de servicios públicos y transporte de Washington). Anticipamos la presentación de estos programas y servicios para su aprobación final en 2022 en preparación para un lanzamiento en 2023.

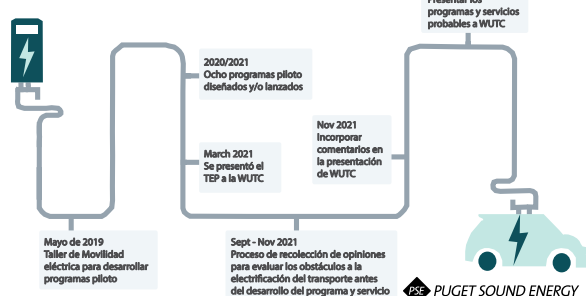
¿Cuál es un ejemplo de los programas y servicios?

Como parte del compromiso de PSE de garantizar que todos los clientes tengan acceso a los programas o servicios de electrificación del transporte, PSE desarrolla programas para encargarse de los obstáculos. Esto podría ser a través de la instalación de un cargador eléctrico y su vehículo eléctrico correspondiente para introducir un auto compartido en su vecindario o la electrificación de un vehículo de flota y la instalación de un cargador para un banco de alimentos que, de lo contrario, podría encontrar



Calendario

El calendario a continuación está sujeto a cambios.



TRANSPORTATION ELECTRIFICATION FACTSHEET (SPANISH)

PSE PUGET SOUND ENERGY

Share your voice in the transition to transportation electrification

Join Puget Sound Energy to discuss transportation electrification and the benefits for your community!

Participate in a discussion about Puget Sound Energy's (PSE) transportation electrification plans and ways to ensure that all customers have access to electric vehicle programs and services.

If interested, please call Lucila Gambino at 786.246.0637 or email at lgambino@triangleassociates.com.

WHEN
Tuesday, November 2
5 - 6:30 p.m.

WHERE
Online Zoom meeting (10-15 participants total). To participate, you will need a computer/laptop and reliable internet service.

Participants receive a \$75 Visa gift card as a stipend for participating.

Interested in learning more about PSE's electric vehicle charging programs? Visit pse.com/electriccars to learn more.



WORKSHOP FLIER

PSE PUGET SOUND ENERGY

Share your voice on electric vehicles

Take our survey on the benefits and barriers of electric vehicles in your community!


You can access the survey using the link or QR code to the right. Your feedback will help ensure that all customers have access to electric vehicle programs and services.

We appreciate your input! For your time, you will receive a \$25 Visa gift card.


If you have any questions, please email Mackenzie Martin at Mackenzie.Martin@pse.com.

WHEN
By Tuesday, November 30

WHERE
Using the QR code or link below. bit.ly/pse-topsurvey



Interested in learning more about PSE's electric vehicle charging programs? Visit pse.com/electriccars to learn more.



FLIER SURVEY ONEPAGER

PSE PUGET SOUND ENERGY

Share your voice in the transition to transportation electrification
Comparta su voz en la transición a la electrificación del transporte

Join Puget Sound Energy to discuss transportation electrification and the benefits for your community!

Participate in a discussion in **Spanish** about Puget Sound Energy's (PSE) transportation electrification plans and ways to ensure that all customers have access to electric vehicle programs and services.

Participate in a discussion **en Español** sobre los planes de electrificación del transporte de Puget Sound Energy (PSE) y las formas de garantizar que todos los clientes tengan acceso a programas y servicios.

WHEN
Wednesday, November 3
5 - 6:30 p.m.

WHERE
Online Zoom meeting (10-15 participants total). To participate, you will need a computer/laptop and reliable internet access.

Participants receive a \$75 Visa gift card as a stipend for participating.

If interested, please call Lucila Gambino at 786.246.0637 or email at lgambino@triangleassociates.com.

¿Cuándo?
Miércoles, 3 de noviembre de 5 - 6:30 p.m.

¿Adónde?
Virtual por Zoom (10-15 participantes en total). Para participar necesitará una computadora/laptop y acceso a un servicio de Internet confiable.

Los participantes recibirán un estipendio de \$75 de Visa por su tiempo.

Para participar, llamen a Lucila Gambino al 786.246.0637 o envíenle un email a lgambino@triangleassociates.com.

Interested in learning more about PSE's electric vehicle charging programs? Visit pse.com/electriccars to learn more.

¿Quieres más información sobre los programas de carga de vehículos eléctricos que ofrece PSE? Visita pse.com/electriccars para aprender más.



WORKSHOP FLIER (SPANISH)

