

Washington State Department of Transportation

In partnership with:

Atlas Public Policy City of Bellevue City of Seattle/Seattle City Light King County-Cities Climate Collaboration King County Metro Transit Washington State Departments of Commerce & Enterprise Services Puget Sound Clean Air Agency / Western Washington Clean Cities Coalition

Proposal for:

1535-1516 "Reaching an EV Tipping Point in Washington State"

In response to:

Funding Opportunity Announcement (FOA) Number: DE FOA 0001535Fiscal Year (FY) 2016 Vehicle Technologies Multi-Topic Funding OpportunityArea of Interest 3: Alternative Fuel Vehicle Community Partner Projects

Sponsored by:

U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE) Vehicle Technologies Office (VTO)

Project Overview

The Washington State Department of Transportation is partnering with the City of Bellevue, City of Seattle, King County-Cities Climate Collaboration, King County Metro, Seattle City Light, Washington State Departments of Commerce & Enterprise Services, Puget Sound Clean Air Agency / Western Washington Clean Cities Coalition, and Atlas Public Policy to implement a statewide, community-based plug-in electric vehicle (EV) and charging initiative that positions the state to achieve its goal of 50,000 EVs on its roads by 2020.

Background

With longer range, more affordable EVs being introduced in the market, now is the time for Washington to complete a comprehensive fast charging network to advance adoption and use of electric vehicles and to demonstrate new ways to expand the beneficiaries of transportation electrification.

With this EERE grant, Washington is poised to be the first state to reach the tipping point for EV adoption. Washington's low-cost, low-carbon electrical grid makes it an ideal location to demonstrate the full benefits of transitioning away from petroleum in the transportation sector. Washington has the fourth largest EV deployment per capita in the country, and the fifth largest EV market overall. In addition, Washington has the seventh largest number of public charging stations per capita and the fourth largest publicly available charging network.

To truly transition the transportation sector at scale, electric vehicles need to be accessible to everyone, everywhere. With this project, Washington aims to achieve widespread EV adoption by leveraging the EERE grant funding to complement its vibrant EV-related programs at the state and local level, including a valuable vehicle sales tax exemption in place until 2019. The Project Team will also establish an advisory group to gather feedback and guidance from key stakeholders, including industry experts, public officials, and members of the advocacy community, and help sustain project activities after the project ends.

The Project Team has been working to advance EVs in innovative ways since automakers introduced mass market EVs in late 2010. The Project Team consists of public agencies at all levels of government, representing urban, suburban, and rural populations throughout Washington, and is uniquely positioned to execute on this ambitious project:

- A robust policy framework in place including a valuable vehicle incentive, significant electric utility engagement, and an ambitious public fleet electrification program.
- Experience deploying fast charging infrastructure through the West Coast Electric Highway.
- Demonstrated support from state leadership, including the governor and legislature, to take concrete steps to make EVs accessible to all Washingtonians.
- Significant number of active programs in support of EVs at all levels of government and through private sector leaders in the electric utility and shared use mobility industries.
- Experience deploying clean energy technologies in ways that benefit diverse populations.
- Strong support from the business community throughout Washington to advance EVs.
- Established working relationships on a number of issue areas that complement EV activities.

The project lead, **Washington State Department of Transportation** (WSDOT) has considerable experience organizing statewide activities related to EVs for several years. Beginning in 2010, Washington worked with Oregon and California transportation partners to deploy the country's first electric corridor – the West Coast Electric Highway. Since deploying that critical fast charging infrastructure, WSDOT has been a national leader in the promotion of best practices for infrastructure deployment. Most recently, WSDOT was selected by the Washington State Legislature to administer the state's new and innovative program to encourage public-private partnerships for EV charging projects.

The **City of Seattle** is a **Climate Action Champion** designated under DOE's Request for Applications DE-FOA-0001189 (RFA). Seattle is committed to a deeply decarbonized transportation sector that is not reliant on petroleum and which gives residents a high quality of life and increased mobility. In March, 2016, Seattle Mayor Ed Murray launched Drive Clean Seattle, a comprehensive and sector-wide initiative to electrify transportation at scale and transition the region away from oil as a key step toward citywide carbon neutrality. A key component of Drive Clean Seattle is to promote environmental and economic equity through the electrification of transportation so that the clean air benefits and reduced costs of electric transport are available to all residents regardless of race or class. Starting in 2017, **Seattle City Light**, a municipal electric utility in Seattle and several outlying suburbs, will begin installing 20 public DC fast charging stations within its service territory. City Light will own and operate the charging infrastructure and has budgeted \$2.1 million of capital funding and \$500,000 of O&M funding for the project.

King County Metro Transit—the largest transit provider in the state—has long been at the forefront of environmentally friendly transportation. Metro operates the largest public rideshare program in the nation, providing van-sharing services that connect employees traveling from rural, suburban and urban areas to their workplaces across western and central Washington, including beyond King County's borders. Metro Rideshare Operations is already committed to electrifying shared vehicles and innovative public transportation alternatives by offering customers 100 percent electric, zero-emission vehicles known as metropools.

The **City of Bellevue** was an early adopter of EV infrastructure and is a growing tech center in the Puget Sound region, with a diverse, technologically sophisticated resident base interested in transitioning to electric vehicles and taking advantage of new car sharing modes of transport. The City of Bellevue has made both policy and capital expenditure commitments to support the development of EV infrastructure. Bellevue has also adopted a policy in its Comprehensive Plan to allow for the siting of EV charging stations in the right-of-way, and currently has two on-street charging stations in its downtown.

The **Puget Sound Clean Air Agency** is the regional air quality planning and management agency for the central Puget Sound area, including King, Kitsap, Pierce, and Snohomish counties. The Agency works to protect public health, improve neighborhood air quality and reduce greenhouse gases throughout our region. The Agency also hosts and houses the **Western Washington Clean Cities Coalition**. The Coalition is dedicated to expanding the use and availability of alternative fuels and advanced vehicle technologies in the Pacific Northwest.

The **Washington State Department of Commerce** (Commerce) is the lead state agency charged with enhancing and promoting sustainable communities and economic vitality in Washington.

The agency administers a diverse portfolio of more than 100 programs and several state boards and commissions, and plays the crucial role of convening numerous local, state, regional and federal partners and stakeholders, both public and private. In 2011-12, Commerce coordinated the initial Washington PEV Task Force that prepared a PEV Readiness Plan for the state. More recently, the agency developed and is coordinating implementation of alternative fuel and vehicle procurement rules for agencies and local governments.

The **Washington State Department of Enterprise Services** (DES) is a central services agency uniquely suited to coordinating the state's transition to an EV fleet. DES manages procurement, sets policy for the entire state vehicle fleet, and serves as a bridge across multiple, diverse state agencies, both for policy and implementation. DES is also home to the office of State Efficiency and Environmental Performance, the team directly charged by Gov. Inslee to dramatically reduce greenhouse gas emissions from state government operations. Besides its leadership role on climate, Washington is a nationally recognized leader in applying lean process-improvement tools in the public sector.

The **King County-Cities Climate Collaboration** (K4C) is a voluntary, formal partnership of local governments in Western Washington working to coordinate and enhance the effectiveness of local climate and sustainability action. K4C jurisdictions represent more than 1.5 million Washingtonians. The K4C was recognized in 2016 by the U.S. Environmental Protection Agency with a Climate Leadership Award for Innovative Partnerships. The K4C is not requesting direct funding, but K4C is committed to the overall success of the project and will support the project by helping to coordinate and accelerate EV action across the region.

Atlas Public Policy is a nationally recognized leader in innovative approaches to advancing the EV market. Atlas has created a nationwide network of government, private industry, and non-profit stakeholders to advance EVs through innovative approaches to policy that leverage public dollars to spur significant private sector investment.

Other strategic public and private partners are contributing to the success of this project:

- Washington State Governor Jay Inslee expressed in his commitment letter the state's strong commitment to advancing electric vehicles through state and local investment including Washington's EV Fleet Initiative.
- The Washington State Legislature, encouraged by a non-partisan EV legislative caucus, has passed several bills to advance electric vehicles including a \$22 million sales tax exemption on purchases of new clean cars, a \$33 million alternative fuel commercial vehicle tax credit, state law directing state and local agencies to transition to electric vehicles, and \$1 million to create an EV Charging Infrastructure Pilot Program with private and public partners. The latter action is being used as cost share in this project.
- **EVgo**, an electric vehicle charging service provider, has committed to install four DC fast charging stations valued at \$500,000 in Washington during the project period.
- **car2go**, a transportation network service provider, has committed to provide staff time and advice, valued at more than \$10,000, to the Washington team for development of electric car sharing services and the supporting charging infrastructure.

Project Goal

The project goal is to accelerate the deployment of mass market EVs and charging infrastructure through community-based partnerships among state and local governments and the private sector. The Project Team will advance EVs through three focus areas: 1) expand access to publicly available charging for all communities, 2) improve access to EVs for low and moderate income families in urban centers, and 3) electrify work travel for many suburban residents. Combined, these activities will complement the significant efforts by the state to advance technology resulting in a comprehensive EV program that will demonstrate how EV adoption can reach a tipping point for mainstream consumers in any community.





With the nation's lowest carbon emitting electricity generation portfolio, Washington is poised to demonstrate the potential of reducing greenhouse gas emissions from transportation through greater electrification. In addition, the project will show how other states can accelerate petroleum displacement, increase local fuel diversification, and catalyze the adoption of clean transportation technologies through the sharing of best practices and the collection and sharing of data. After the EERE funding is expended, Washington will sustain the community-based partnerships without federal assistance. For example, several of the pilot projects, such as affordable housing EV car share and access to transit pilot projects, will demonstrate viability and proof of concept to governments and the private sector to spur continued investment.

DOE Impact

EERE funds will be used to complement the extensive EV-related programs already funded by local and state public agencies in Washington. Specifically, EERE funds will allow WSDOT to deploy more fast charging infrastructure through public-private partnerships and help the state realize its objective to connect all major destinations through a robust fast charging network for all-electric vehicle drivers. EERE funds will equip the Project Team with the resources to attract significantly more engagement from the private sector for infrastructure as WSDOT's program is premised on leveraging public funds to attract private investment.

In addition, EERE funds will complement the activities in Seattle focused on increasing access to EVs for low and moderate-income families through shared-use mobility pilots and infrastructure deployment in underserved communities. The city will use EERE funds to grow its relationships with private companies in the shared-use mobility space and lay the groundwork for these companies to bring and/or expand EV-related services to Seattle.

Finally, the EERE funds will help electrify the commutes of Washingtonians in the region around Seattle. Funds will be used by King County's commuting program, the nation's largest publicly owned VanPool, to expand its fleet electrification efforts. The program will use EERE funds to offset the additional costs of EVs for its innovative metropool program, an all-EV fleet

to allow commuters to experience EVs daily. With these activities, King County will be able to focus more of its resources on electrifying larger vehicles, including its own VanPool.

Project Description

Relevance and Outcomes

WSDOT and the Project Team seek to implement a comprehensive statewide strategy to address EV and charging access issues in urban, suburban, and rural communities statewide. The Project Team is well-positioned to successfully engage with stakeholders statewide.



Washington currently has one of the most successful EV markets in the United States due to a combination of supportive public policies, capable and innovative public agencies, a forward-thinking population, and electric utility leadership. Figure 3 provides context for EV and charging infrastructure deployment in Washington. While EVs are driven in and around the Puget Sound, EVs are operating in rural regions statewide and concentrations of EVs exist in every major population center. The current charging network provides access to major parts of the state along Interstate 5, State Route 2, and parts of Interstate 90; large sections of the state, however, are still inaccessible due to inadequate publicly available infrastructure.

In 2015, the state government took steps in a bipartisan fashion to continue its support for EVs. First, the state extended its EV sales tax exemption into 2019 and expanded its eligibility to include plug-in hybrids while lowering eligibility to vehicles that cost under \$35,000. Second, the state created an EV Charging Infrastructure Pilot Program that aims to demonstrate the potential of using innovative public-private partnerships to improve the financial performance of publicly available charging projects. With these actions, Washington demonstrated its commitment to EV technology and belief that EVs are a worthy public investment.

In addition, below are other key considerations and activities in Washington that will complement this project:

• Car manufacturers including **GM** and **Nissan** have publicly acknowledged that Washington state is an important market for electric vehicle deployment and sales.

- The Washington Utilities and Transportation Commission is encouraging investor-owned utilities such as Puget Sound Energy and Avista to take a leadership role in EV charging infrastructure.
- Project partners will work with the tribal transportation, metropolitan, and rural transportation **planning organizations** on EV fleet acquisition and charging station installations.
- Nonprofit organizations including **Plug In America** and the **Seattle Electric Vehicle Association** are very active in Washington and support this project.

Figure 3: EV Registrations and Charging Station Deployment in Washington





Washington EV registrations as of December 2015

Existing and Planned Expansion of West Coast Electric Highway network

This project aims to complement ongoing activities in the state to build a bridge from today to a period where government intervention can begin to phase out as EVs become accessible to the mainstream consumer.

The project's comprehensive focus addressing challenges faced by all Washingtonians is necessary in order for the state to achieve its goal of 50,000 EVs by 2020. The Project Team will accomplish this objective by using EERE funds to focus on three areas: 1) expand access to publicly available charging for all communities, 2) improve access to electric mobility services in urban centers, and 3) electrify work-related travel for many suburban residents.

By leveraging Washington's existing EV policies and programs, this project will enable Washington to reach a tipping point for EV adoption and demonstrate for the rest of the country how concentrated efforts by policymakers at the state and local level, combined with direct engagement with communities and leaders in the private sector, can create a vibrant, sustainable EV market that will continue to grow beyond the initial federal investment. Specifically, the Project Team will:

• **Build community-based public-private partnerships**: WSDOT is implementing the nation's first statewide program aimed at encouraging innovative public-private partnerships for EV charging, known as the EV Charging Infrastructure Pilot Program. Working with key private sector partners, the pilot aims to encourage project developers to incorporate the indirect value of EV charging into project financing, resulting in a significant improvement to the financial performance of a charging project and attracting more private sector investors.

- **Deploy more than 300 EVs** through the Washington Electric Fleets Initiative, an effort started by Governor Inslee to see that 20 percent of state vehicle purchases are EVs.
- **Create model policies and procedures** by distributing guidebooks to local governments on how to develop and implement EV community partnerships with private businesses.
- Leverage smart mobility by coordinating with car sharing services and transportation network companies in Seattle such as car2go, Uber, Lyft, and ReachNow to provide charging solutions and encourage use of electric car sharing.
- **Convene the Washington EV Partnership** to advise the Project Team throughout the grant period and sustain project-related activities at the conclusion of the project.
- Identify and implement an innovative low-income multi-unit housing EV program that will bring EVs to residents of affordable housing units in Seattle and other urban communities. The Project Team will evaluate multiple approaches to improved access to EVs by working with its Washington EV Partnership, affordable housing providers, community-based organizations, and shared mobility service providers.
- Share best practices and templates for success by documenting and sharing lessons learned with other states, significantly improving the project's impact on the national EV market. The Project Team will build a blueprint of the state's approach to improving access to EVs by urban, suburban, and rural communities through community partnerships.

Other strategic partners include community-based organizations, major employers, EV charging providers, auto manufacturers and dealers, public and private fleets, shared mobility transportation services, electric vehicle supply equipment providers, housing authorities, transit agencies, tribes, and electric utilities.

Feasibility

The Washington State Joint Transportation Committee study on business models for financially sustainable EV charging networks demonstrated that private and public sector participation is required to ensure the sustained development of EV infrastructure in the state. With public support, including this EERE grant, the private sector can be the predominant source of funding for publicly available commercial charging stations within approximately five years. Through the competitive application process for charging infrastructure deployment, one of the evaluation criteria for selection will be long-term sustainability.

The Project Team will establish an external advisory group to provide guidance and feedback on all aspects of the project and sustain project activities after the performance period. The Washington EV Partnership will consist of leading companies in the EV industry, public officials, and members of the advocacy community. Companies in the EV industry include automakers, charging service providers, car sharing and related mobility service providers, and electric utilities. The Washington EV Partnership will provide a formal mechanism for companies and the advocacy community to provide feedback to the Project Team on project-related activities throughout the project period, and upon completion of the project continue to serve as the lead public-private trade association working to advance EV policies and adoption throughout the state. The group will meet virtually in most cases, with in-person meetings taking place at key points in the project as schedules permit.

The Project Team will make electric transportation more accessible to low-income families to help EVs reach a tipping point. The Project Team is committed to a deeply decarbonized

transportation sector that's not reliant on petroleum. As the most populous region in Washington, transitioning the Puget Sound region's transportation sector at scale is an important step and requires a vibrant and sustainable electric vehicle ecosystem that is accessible to everyone, including low-income families. Because those most affected by environmental burdens must produce solutions and take ownership of what happens in their communities, the Project Team will convene a community-based workgroup to help design specific solutions. This mitigates risk that solutions designed for low-income populations wouldn't appeal to the target population or otherwise would not be successful.

To coordinate effectively, the Project Team will hold frequent meetings and create an internally-focused website to share information and collaborate on project materials. The Project Team is a diverse group of public entities representing cities, counties, and state government agencies covering most of Washington. Biweekly online meetings will allow the team to share information verbally and visually using screen-sharing where appropriate. The Project Team will also setup and maintain a Microsoft SharePoint site to improve the efficiency of collaborating on project materials. The SharePoint site will be a central repository for meeting notes, documents, presentations, etc. SharePoint supports simultaneous editing of documents, a valuable feature for the geographically dispersed team.

Innovation and Impacts

WSDOT will use EERE funds to supplement its innovative public-private partnership program to award competitive grants to non-profit organizations and government agencies and contract with vendors to install EV fast charging stations along I-5, I-90, US 2, US 101, and other key corridors connecting mid-size communities and major tourist destinations. Corridor fast charging gives existing and prospective electric vehicle drivers the confidence that they can recharge when driving long distances along a highway. The state's enhanced DC fast charging network will enable interregional and interstate travel by electric vehicles. WSDOT is collaborating with such government agencies as cities, towns, counties, transit agencies and tribes to partner with the private sector to install electric vehicle charging along key transportation corridors in Washington State. The Project Team believes that work-related travel is a major opportunity to advance EVs and effectively introduce the technology to more Washingtonians. King County Metro Rideshare Operations currently operates more than 1,500 vehicles that carry groups of people on a shared commute to and from work. Rideshare vehicles travel from rural, suburban and urban destinations to workplaces at private, government and non-governmental organizations across Central and Western Washington. The Project Team, led by King County, seeks to leverage the extensive rideshare vehicle fleet and existing relationships with businesses, communities and governments to offer commuters from all regions the opportunity to ride in, drive, charge and experience the benefits of EVs and plug-in hybrid electric vehicle (PHEV) technologies (see Table 1Error! Reference source not found.).

Туре	Average Miles/Year/ VanPool	Average MPG	Estimated Average Gallons/Year/Vehicle	Estimated MTCO2/Year/ Vehicle	% Annual Reduction in GHG/Vehicle**
ICE	10,800	17.5	617	7.0	
PHEV	10,800	80	135	1.5	79%
EV	10,800	0	0	Negligible 0-2*	100%

Table 1: Estimated Fuel and Greenhouse Gas Savings with EV and PHEV Rideshare

*Dependent on electricity source. ** Larger greenhouse gas emission benefit results from King County rideshare's role in reducing private vehicle travel and traffic congestion.

The Project Team believe hands-on access to EVs, user education and employer outreach will help Washington State overcome barriers to EV vehicle ownership, put more EVs on the road and achieve an EV tipping point. King County Rideshare customers, who travel as far as 270 miles round trip per day using Washington's key transportation corridors, and thousands of state employees on the roads every day, will showcase public EV use over a 36-month pilot program aimed at jump starting a large-scale transition to EVs.

With EERE funding, the Project Team will create a pilot program to provide access via an electric vehicle to Sound Transit Link light rail or Rapid Ride bus lines for residents of the most highly impacted communities. The Puget Sound Clean Air Agency has identified specific areas within the region that are classified as "highly impacted communities" based on their combined disparate burden of air pollution and racial-socioeconomic inequities. Often, many of these communities are poorly served by transit and have even more limited access to frequent rapid transit like light rail or bus-rapid transit. As a result of this project, many low-income residents will have better access to frequent transit, the area will have cleaner transportation, and many more people will reap the benefits of locally accessible electric transportation.

The Project Team will leverage existing state commitments to adopt EVs to allow more EVs to be purchased by other state agencies, as well as colleges and universities, local governments, and local school districts. DES has well-established mechanisms and a strong track record in successfully negotiating contracts that use the group purchasing power of state and local agencies to ensure access to a wide range of vehicles at favorable prices. DES has already engaged with an array of state agencies to promote EV adoption and gained their agreement to buy or lease over 75 long-range Chevy Bolts (with advance availability guaranteed through agreement with GM). These initial vehicles, scheduled for delivery before the grant period begins, will be used as demonstration models and proofs-of-concept in a wide range of applications, and are expected to lead to substantially more purchases. As additional long-range EV options come to market over the 3-year grant period, DES will continue to act aggressively to ensure cost-favorable access to these vehicles, get the right vehicles in use in the right applications, and scale-up purchases wherever appropriate.

The Project Team will use an innovative approach to engaging with and educating the broader EV community throughout the project. The Project Team will create a public-facing website to serve as a hub to track project activities and share results. To improve the likelihood of success the Project Team will engage with the broader EV community early on through the website to solicit feedback on the team's approach to each task; this approach will ensure the Project Team captures ongoing activity and experience inside and outside of Washington. The website will also host a "blueprint for success" consisting of two case studies aimed at replicating success in Washington nationwide; one case study will focus on a project funded by the EV Charging Infrastructure Pilot Program and the other will assess a project aimed at improving access to EVs for low and moderate income families. The blueprint will be online and interactive, consisting of outreach materials and data dashboards for use by stakeholders in Washington and elsewhere (see Figure 4).

Figure 4: Example interactive dashboards for the Blueprint

Source: Atlas Public Policy analysis of data from the Washington Department of Transportation



Work Plan

Project Objectives

The goal of the project is to increase accessibility of EVs for urban, suburban, and rural communities throughout Washington, enabling EVs to reach a tipping point towards mainstream consumer acceptance. The Project Team will accomplish this objective by leveraging many existing EV-related programs in the state and using EERE funds to focus on three areas: 1) expand access to publicly available charging for all communities, 2) improve access to electric mobility services in urban centers, and 3) electrify work-related travel for many suburban residents.

Project Scope Summary

Performance Period #1 begins in April 2017 (M1) and ends in March 2018 (M12). During this period, the Project Team will initiate the three main project activities in support of EVs statewide. Highlights from this period include the convening of the Washington EV Partnership, WSDOT issuing grants for DC fast charging station projects that use innovative public-private partnerships, the City of Seattle installing Level 2 charging for residents without dedicated parking, and King County and DES electrifying a number of vehicles for work travel.

During Performance Period #1, **Go/No-Go Decision Points** will be evaluated for vehicle electrification efforts in King County based upon the alignment of price estimates, county budget approval, and the interest of metropool program participants.

Performance Period #2 begins in April 2018 (M13) and ends in March 2019 (M24). During this period, the Project Team will continue EV charging access activities through WSDOT and the City of Bellevue, the City of Seattle will initiate its work on increasing access to mass transit and

begin evaluating EV car share concepts, and DES and King County will continue to advance work-travel electrification efforts.

During Performance Period #2, **Go/No-Go Decision Points** will be evaluated for the EV car share pilot in Seattle through feedback from the Community Partners Steering Committee. EV purchases by King County for commuting purposes will depend upon the alignment of price estimates and vehicle commercial availability.

Performance Period #3 begins in April 2019 (M25) and ends in March 2020 (M36). In the final project period, the Project Team will complete the charging access projects led by WSDOT, greatly improving access to regions of the state for all communities. The City of Seattle will complete its EV car share pilot and improve access to mass transit. DES will complete its deployment of about 300 EVs. Finally, the Project Team will work with the Washington EV Partnership to guide ongoing programmatic efforts following completion of the project.

During Performance Period #3, **Go/No-Go Decision Points** will be evaluated for the transit access project in Seattle through feedback from the Community Partners Steering Committee.

Work Breakdown Structure (WBS) and Task Description Summary

Task 1. Project Management and Washington EV Partnership (M1-M36)

Task Summary: The Project Team will collaborate throughout the project period via frequent meetings and the use of collaborative technology. The Project Team will also convene a group of experts to advise on the project. The deliverables for this task are:

- D 1.1: Internal Focus Website
- D 1.2: Regular Progress Reports to DOE (12 quarterly reports)

Task Details: WSDOT will provide quarterly reports on progress to DOE, compose and execute on subcontracts, and conduct periodic reviews of the project plan to ensure the Project Team is making sufficient progress on all objectives. Atlas Public Policy will serve as a project manager throughout the project period and will assist WSDOT with the running of team meetings as well as the maintenance of the project schedule and other project-related materials.

Subtask 1.1 Manage Project Team communication and collaboration (M3-M36) Subtask Summary: In order to coordinate effectively throughout the project period, the Project Team will hold frequent meetings and create an internally-focused website to share information and collaborate on project materials.

Subtask Details: To keep all partners informed on progress, the Project Team will hold biweekly online meetings. The Project Team will also setup and maintain a Microsoft SharePoint site to improve the efficiency of collaborating on project materials.

Milestone 1.1.1: All interagency and sub-recipient agreements executed (M3) **Milestone 1.1.2**: Project Team kick-off meeting (M4)

Subtask 1.2 Convene the Washington EV Partnership (M4-M36)

Subtask Summary: The Project Team will establish an advisory group to gather feedback and guidance from key stakeholders, including industry experts, public officials, and members of the advocacy community, and help sustain project activities after the performance period.

Subtask Details: The Project Team will establish an external advisory group consisting of leading companies in the EV industry, public officials, and members of the advocacy community. The group will meet virtually in most cases, with in-person meetings at key points in the project as schedules permit. A key objective is to build relationships and secure the resources necessary for the Partnership to serve as the lead public-private trade association working to advance EV policies and adoption throughout the state.

Milestone 1.2.1: Kickoff meeting for Washington EV Partnership (M6)
Milestone 1.2.2: Incorporate Partnership as an independent trade association (M10)
Milestone 1.2.3: Hire Executive Director under contract to Commerce (M12)
Milestone 1.2.4: Planning meeting for post-project continuity (M27)

Task 2. Outreach and Stakeholder Engagement (M3-M36)

Task Summary: The Project Team, led by Atlas Public Policy, will design and implement two outreach activities to seek outside advice, and promote and share project learnings. The deliverables for this task are:

- D 2.1: Public facing website
- D 2.2: Interactive data dashboard for public facing website
- D 2.3: Blueprint case study #1
- D 2.4: Blueprint case study #2

Task Details: The Project Team will use its existing network to solicit input from a variety of stakeholders on all activities of the project. The Project Team will use this feedback to improve project outcomes. The Project Team will also use its network to promote project findings.

Subtask 2.1 Create a blueprint for success (M3-36)

Subtask Summary: The blueprint for success will be a critical product of the project, enabling other communities to learn from the experience of Washington and adapt the techniques used in the project to other regions.

Subtask Details: The Project Team will build a blueprint of the state's approach to improved access to EVs for urban, suburban, and rural communities. The blueprint will consist of two case studies aimed at replicating success in Washington nationwide; one case study will focus on a project funded by the EV Charging Infrastructure Pilot Program and the other will assess a project aimed at improving access to EVs for low and moderate income families. The blueprint will be online and interactive, consisting of outreach materials and data dashboards for use by stakeholders in Washington and elsewhere.

Milestone 2.1: Blueprint completed (M30)

Subtask 2.2 Create and promote a public website (M3-M36)

Subtask Summary: The public website will be a repository for all products created through the project. The website will also provide a way for the public to engage with the Project Team.

Subtask Details: The Project Team will create a public-facing website to serve as a hub to track project activities and share results. The website will also contain technology that makes it easy for the public to engage with the Project Team. In addition, the Project Team will promote and raise awareness of the project through each organization's website and social media accounts, including Twitter and Facebook where applicable.

Task 3. Expand Access to Publicly Available Charging for All Communities (M3-M36)

Task Summary: Through community public-private partnership projects, WSDOT will strengthen and expand the West Coast Electric Highway network of DC fast charging stations and develop a Level 2 community charging program to increase the availability of publicly-accessible electric vehicle charging equipment within communities and tourist destinations. The deliverables for this task are:

- D 3.1: Solicit proposals/applications for DC fast charging stations
- D 3.2: Announce awards and execute contracts for DC fast charging stations
- D 3.3: Replace and enhance EV infrastructure in a suburban community, Bellevue, WA

Task Details: The Project Team, led by WSDOT will use EERE funds to build off its effort to promote public-private partnerships and encourage greater private sector investment in EV charging. WSDOT will lead a comprehensive process to identify the most valuable use of the funds as defined in the following two tables.

Activity	Month
Develop evaluation process and scoring criteria	M4-M6
Release solicitation	M6
Host application/pre-bidders conference	M6
Solicit proposals/applications	M6-M7
Evaluate and select projects	M8
Announce awards and execute contracts	M9
Site preparation, construction and commissioning of EV fast chargers	M10-M18
Host ribbon-cutting events and ride and drives	M19-M23
Operate and maintain charging sites	M19-M36
Report on station usage and fuel savings	M33-M36
Share best practices	M33-M36

Table 3: Level 2 Charging Station Process

Activity	Month						
Define evaluation criteria for EV community partner Level 2 charging stations							
Document selection process	M6						
Select community partners	M7-M27						
Installation and commission Level 2 charging stations	M7-M33						
Conduct media relations and public outreach	M7-M33						
Report on station usage and fuel savings	M33-M36						
Share best practices	M33-M36						

Subtask 3.1 Highway Corridor DC Fast Charging (M4-M36)

Subtask Summary: WSDOT will use EERE funds to supplement its existing program to award competitive grants to non-profit organizations and government agencies and contract with vendors to install EV fast charging stations along I-5, I-90, US 2, US 101, and other key corridors connecting mid-size communities and major tourist destinations.

Subtask Details: Grant applicants are encouraged to partner with the private sector to develop and implement projects. WSDOT may also contract directly with EV charging service providers. Funding will be used for:

- host site identification, analysis and screening
- negotiation, legal review and execution of leases
- dual-port DC fast charging equipment
- co-located Level 2 electric vehicle supply equipment
- utility upgrades and interconnection
- equipment installation, commissioning, operating, and maintenance

Milestone 3.1.1: Program Guidelines Completed (M6) Milestone 3.1.2: Projects Selected and Awarded (M9) Milestone 3.1.3: Stations Commissioned (M23) Milestone 3.1.4: Final Results Reported (M36)

Subtask 3.2 Community Partner Level 2 Charging (M4-M36)

Subtask Summary: WSDOT will use EERE funds to provide an incentive program for installing Level 2 charging equipment in public places such as parks, tourist destinations, ferry terminals, small businesses, communities, and local government to make charging available for local electric vehicle drivers and visitors.

Subtask Details: Businesses and local governments can apply for Level 2 equipment or funding assistance on a rolling basis throughout the project period. WSDOT will coordinate with EV stakeholders to develop program guidelines and eligibility criteria.

Milestone 3.2.1: Program Guidelines Completed (M6) Milestone 3.2.2: Projects Selected and Awarded (M9) Milestone 3.2.3: Stations Commissioned (M23) Milestone 3.2.4: Final Results Reported (M36)

Subtask 3.3 Replace and Enhance EV Infrastructure in Bellevue, WA (M4-M24) Subtask Summary: The City of Bellevue will use EERE funds to replace its aging EV infrastructure, which is expected to become obsolete in 2017-2018, and expand its infrastructure in targeted areas not well served by public transit or EV charging facilities.

Subtask Details: The City of Bellevue will use EERE funds to replace stations as they fail and expand EV infrastructure to targeted areas. The City is also seeking to partner with an EV car share provider to designate some of the stations for car share vehicles.

Milestone 3.3.1: Memorandum of understanding with EV car share provider (M6)

Milestone 3.3.2: Locations for new stations identified (M12) Milestone 3.3.3: Partnership with electric car share provider finalized (M13) Milestone 3.3.4: Install new EV equipment (M24)

Task 4. Improve Access to Electric Mobility Services in Urban Centers (M4-M36)

Task Summary: As project partners, the City of Seattle and Puget Sound Clean Air Agency (PSCAA) will create several pilot projects to demonstrate replicable models of EV deployment which provide the environmental, economic, and racial justice benefits of electric transportation to communities that bear the combined disparate burden of poor air quality and other environmental burdens and racial-socioeconomic inequities. The deliverables for this task are:

- D 4.1: Organize and convene community-based steering committee to help design and implement electric mobility accessibility projects.
- D 4.2: Install 40-60 Level 2 electric vehicle charging stations in and around affordable housing properties and study usage patterns to learn how access to charging changes behavior.
- D 4.3: Design and launch pilot project to explore electric vehicle car sharing for affordable housing projects.
- D 4.4: Design and launch pilot project to increase access to transit for underserved communities by using electric vehicles.

Task Details: Reaching an EV Tipping Point means advancing solutions which make electric transportation more accessible to low-income families. The Project Team will address this challenge through three broad approaches, one of which will be in coordination with King County-led effort in Task 5.

Subtask 4.1: Convene Community Partners Steering Committee (M5-M36) Subtask Summary: The Project Team will convene a Community Partners Steering Committee to help design solutions to challenges being addressed in this effort.

Subtask Details: The Project Team recognizes that equity barriers must be overcome for environmental benefits to reach all people. Therefore, the pilot projects funded through this grant will reflect Seattle's newly created Equity & Environment Agenda to address environmental inequities and create opportunities for communities of color, refugees, people with low incomes, and limited-English proficiency individuals to be leaders in Seattle's environmental movement. The steering committee will receive presentations about challenges and solutions, and will help guide the Project Team toward project outputs with the greatest potential for success. The City of Seattle and PSCAA have cost share budgeted to support this work.

Milestone 4.1.1: Kickoff meeting for Community Partners Steering Committee (M5)

Subtask 4.2: Install EV infrastructure (M6-M15)

Subtask Summary: The Project Team will use EERE funds to increase access to charging by installing Level 2 charging stations for residents of affordable housing units without dedicated parking space.

Subtask Details: The declining cost of EVs and the increasing number of pre-owned EVs in the market are lowering the cost of entry for EV ownership. Many housing agencies in the region offer affordable housing solutions to residents with various income levels. Access to charging would help some of these residents feel comfortable choosing an EV for their next car – including many professional drivers who come from refugee, immigrant, and other communities of color and low income communities who would benefit from having an electric vehicle as their ride-hail vehicle but who lack access to charging. With EERE funds, the City of Seattle will administer a grant program to qualified housing agencies to install public Level 2 charging stations for use by residents, staff, agency fleets, car share companies, or other members of the general public. The program will be designed to give grants for most or all of the cost of the installation to housing agencies in Seattle and King County with a majority of the money being distributed to agencies in Seattle. The Project Team will consult with the Washington EV Partnership on effective ways to use these funds for charging deployment as part of a grant program.

Milestone 4.2.1: Launch Level 2 charging station grant program (M7)

Subtask 4.3: Increase Access to Transit (M13-M36)

Subtask Summary: With EERE funding, the Project Team will create a pilot program to provide access via an electric vehicle to Sound Transit Link light rail or Rapid Ride bus lines for residents of the most highly impacted communities.

Subtask Details: The City of Seattle will partner with King County Metro to implement a pilot project which expands Metro's electric vehicle service to connect Seattle's most highly impacted communities in the Duwamish Valley with bus rapid transit or light rail stations.

Milestone 4.3.1: Final recommendation on pilot project for Access to Transit subtask. (M24) **Milestone 4.3.2**: Launch *Access to Transit* pilot project in partnership with King County Metro. (M33)

Go/No-Go Decision Point 4.3.1: Agreement from the Community Partners Steering Committee that this pilot project serves the needs of the communities the project partners seek to serve. (M24)

Subtask 4.4: Launch affordable housing EV car share pilot (M7-M36) Subtask Summary: The Project Team will establish a pilot project for EV car share in lowincome communities.

Subtask Details: This pilot project will look specifically at the opportunity provided by affordable housing projects to bring the benefits of electric shared vehicles to their residents and to help solve their unique challenge of reducing parking demand and lowering overall costs. Funding from this grant will help design and execute a pilot project at a limited number of sites in Seattle and throughout King County. Design of the pilot project will be in collaboration with community partners and the technical advice and expertise of an experienced shared-use mobility organization to build a replicable model that could be sustained with public and private sector partners and would build broad participation for EV car share among low income populations. The Project Team will work with the Washington EV Partnership to identify the best pathway toward electric car share for housing agencies.

Milestone 4.4.1: Finalize scope of work for technical advisor for EV car share pilot (M7) Milestone 4.4.2: Launch Affordable Housing EV Car share pilot project. (M18) Go/No Go Decision Point 4.4.1: Agreement from the Community Partners Steering Committee that this pilot project serves the needs of the communities the project partners seek to serve. (M12)

Task 5. Electrify Work-Related Travel (M4-36)

Task Summary: The Project Team will help electrify a significant share of work-related travel throughout the Puget Sound region, including the daily commutes of drivers in all sectors and business travel by state employees. Led by King County, the Project Team will work to electrify the largest public VanPool program in the United States. And led by the Washington State Department of Enterprise Services (DES), the Project Team will assist the state as it electrifies at least 20 percent of its vehicle fleet. The key deliverables for this task are:

- D 5.1: A "Year-one EV technology evaluation report" will assess future procurement opportunities based on available vehicle technology and the impacts of existing EV procurement, and identify key routes for EV program expansion.
- D 5.2: Pilot Project Summary Report: "Best practices for EV and PHEV use in public rideshare operations: Lessons learned in Washington State."
- D 5.3: A full set of standards and "How To" guides to facilitate other government and private entities in making the transition to decarbonized transportation systems.

Task Details: The Project Team will work with the City of Seattle, King County and Puget Sound Clean Air Agency to use an expanded electric rideshare service to provide access to frequent rapid transit for residents of the most highly impacted communities in Seattle. The Project Team, led by DES, will also make EVs a significant and growing part of the state's fleet of well over 10,000 vehicles.

Milestone 5.1: Complete state fleet purchase of model year 2017 vehicles and installation of associated EVSE (M9)

Milestone 5.2: Complete state fleet purchase of model year 2018 vehicles and installation of associated Level 2 charging stations (M21)

Milestone 5.3: Complete state fleet purchase of model year 2019 vehicles and installation of associated Level 2 charging stations (M32)

Subtask 5.1 Strategic EV Rideshare Action Plan (M5)

Subtask Summary: Led by King County, the Project Team will develop a Strategic EV Rideshare Action Plan that will set goals and identify internal management objectives and responsibilities to achieve those goals.

Subtask Details: The plan will identify partnership opportunities and information sharing objectives with partners, customers, and the general public.

Milestone 5.1.1: Strategic EV Rideshare Action Plan completed (M5) Go/No-Go Decision Point 5.1.1: King County Metro biennium budget approval (M5)

Subtask 5.2 Pilot Project Phase 1 Vehicle Procurement (M4-M15)

Subtask Summary: King County will expand Metro Transit's all-electric metropool fleet by adding five five-passenger EVs with an all-electric range of 140 miles or greater.

Subtask Details: In 2017, King County Metro Transit will procure 112 new seven-passenger vehicles. Currently, these vehicles are planned to be traditional internal combustion vehicles. In addition to these vehicles, with EERE funding, King County Metro will add five additional longer-range EVs to the metropool program.

Milestone 5.2.1: Phase 1 EVs in service (M11)

Go/No-Go Decision Point 5.2.1: Five additional metropool groups required (M5) **Go/No-Go Decision Point 5.2.2**: Vehicle price point alignment with estimate (M5)

Subtask 5.3 Pilot Project Phase 2 Vehicle Procurement (M15-M27)

Subtask Summary: Led by King County, the Project Team will evaluate EV technology suitability and effectiveness in VanPool service. King County will purchase additional longer-range EVs to replace end-of-life metropool vehicles and, if a suitable seven-passenger PHEV is commercially available, purchase a significant number of PHEVs to replace internal combustion vehicles in the VanPool program.

Subtask Details: King County will evaluate metropool vehicle effectiveness on longer routes, solicit feedback from customers who are using EV technology, and assess the impact of early rideshare EVs on affected workplace charging infrastructure. King County will also evaluate the cost effectiveness of EV technology in comparison to conventional vehicles on similar routes.

Based on a go/no-go decision based on the criteria above, King County will decide on Phase 2 (2018) procurement of 20 long-range, five-passenger EVs and at least 67 seven-passenger PHEVs.

- *Option 1 (default):* If commercially available, King County Rideshare Operations will purchase at least 67 seven-passenger PHEVs for use in the VanPool program.
- *Option 2 (alternative)*: If a seven-passenger PHEV is not commercially available in 2018, King County Metro will evaluate metropool demand and the need to further expand the metropool program by purchasing additional longer-range five-passenger EVs.

Milestone 5.3.1: Phase 2 EVs in service in the metropool program (M21) Go/No-Go Decision Point 5.3.1: Vehicle commercially available for Phase 2 (M15) Go/No-Go Decision Point 5.3.2: Vehicle price point alignment with estimate (M15)

Subtask 5.4 Education, outreach and coordination to put ridesharing EVs everywhere (M13-M36)

Subtask Summary: The Project Team will advance the understanding of EV ridesharing through outreach and a published report.

Subtask Details: The Project Team will provide rideshare customers and employers with EV education, conduct outreach to existing and new rideshare customers to encourage EV use, and encourage workplace charging at key employers throughout Washington. The Project

Team, led by King County, will also publish a report on best practices for EV and PHEV use in public rideshare operations based on (1) user feedback, (2) vehicle performance and charging, (3) operational effectiveness and cost across urban, suburban, and rural routes and in service to low income communities, and (4) environmental impacts.

Milestone 5.4.1: Publish report on best practices for EV and PHEV use in public rideshare operations (M36)

Subtask 5.5 Vehicle Procurement (M4-M36)

Subtask Summary: The Project Team will support DES in providing all public entities in the state with access to an expanding selection of EVs, and assist state agencies in procuring at least 300 battery electric vehicles, which is a cost share from DES.

Subtask Detail: While the 300 vehicles referenced in the DES cost share will be strictly those vehicles purchased by DES for its own use and the use of the many state agencies that lease vehicles from DES Fleet Services, DES' work will allow many more EVs to be purchased by other state agencies, as well as colleges and universities, local governments, and local school districts. The Project Team will coordinate vehicle purchases, a cost share from DES, with other activities in Tasks 3 and 4 to maximize the benefit of these new EVs. The Project Team will also support DES in leading the change management effort necessary to ensure successful adoption and use of EVs by a wide range of drivers in a diverse array of state agencies. DES will develop a detailed marketing and outreach plan, which will include individual outreach to new EV drivers to ensure positive experiences and gather feedback to continuously improve the driver experience. Finally, the Project Team will report on successes so others can replicate and expand on DES' work nationwide.

Milestone 5.5.1: Complete change management effort and market and outreach plan (M15) **Milestone 5.5.2:** Share lessons learned for accelerating the transformation of a state vehicle fleet from conventional to electric (M36)

Subtask 5.6 Level 2 Charging Station Procurement and Installation (M4-M36) Subtask Summary: The Project Team will support DES in making a Level 2 charging solution available to all government entities in the state, and assist with the purchase and installation of at least 150 dual-head Level 2 charging stations for state agencies, which is a cost share from DES.

Subtask Detail: DES is already in the process of working with vendors to identify a comprehensive, cost-effective Level 2 charging station system for use statewide. Led by DES, the Project Team will work with the Washington EV Partnership to keep up with technology and market changes throughout the grant period, and ensure the state's Level 2 charging system stays up-to-date and cost-effective. The Project Team will coordinate charging station deployment, a cost share from DES, with other activities in Tasks 3 and 4 to maximize the benefit of these charging installations.

Task	Task or Subtask Title	Туре	M#	estone or Go/No Go Description Milestone Verification Process		Date	Q
1.1	Manage Project Team Communication and Collaboration	Т	1.1.1	All interagency and sub-recipient agreements executed	Project Team via Biweekly Meetings	M3	Q1
1.1	Manage Project Team Communication and Collaboration	Т	1.1.2	Project Team kick-off meeting	Project Team via Biweekly Meetings	M4	Q2
1.2	Convene the Washington EV	Т	1.2.1	Kickoff meeting for Washington EV Partnership	Project Team via Biweekly Meetings	M6	Q2
	Partnership	Т	1.2.2	Incorporate Partnership as an independent trade association	Project Team via Biweekly Meetings	M10	Q4
		Т	1.2.3	Hire Executive Director for Partnership	Project Team via Biweekly Meetings	M12	Q4
		Т	1.2.4	Planning meeting for post-project continuity	Project Team via Biweekly Meetings	M27	Q9
2	Outreach and Stakeholder Engagement	Т	2.1	Blueprint completed	Project Team via Biweekly Meetings	M30	Q10
3.1	Highway Corridor DC Fast	Т	3.1.1	Program Guidelines Completed	Project Team via Biweekly Meetings	M6	Q2
	Charging	Т	3.1.2	Projects Selected and Awarded	Project Team via Biweekly Meetings	M9	Q3
		Т	3.1.3	Stations Commissioned	Project Team via Biweekly Meetings	M23	Q8
		Т	3.1.4	Final Results Reported	Project Team via Biweekly Meetings	M36	Q12
3.2	Community Partner Level 2	Т	3.2.1	Program Guidelines Completed	Project Team via Biweekly Meetings	M6	Q2
	Charging	Т	3.2.2	Projects Selected and Awarded	Project Team via Biweekly Meetings	M9	Q3
		Т	3.2.3	Stations Commissioned	Project Team via Biweekly Meetings	M23	Q8
		Т	3.2.4	Final Results Reported	Project Team via Biweekly Meetings	M36	Q12
3.3	Replace and Enhance EV Infrastructure in Bellevue,	Т	3.3.1	Memorandum of understanding with EV car share provider	Project Team via Biweekly Meetings	M6	Q2
	WA	Т	3.3.2	Locations for new stations identified	Project Team via Biweekly Meetings	M12	Q4
		Т	3.3.3	Partnership with electric car share provider finalized	Project Team via Biweekly Meetings	M13	Q5
		Т	3.3.4	Install new EV equipment	Project Team via Biweekly Meetings	M24	Q8
4.1	Convene Community	Т	4.1.1	Kickoff meeting for Community Partners Steering	Project Team via Biweekly Meetings	M5	Q2
	Partners Steering Committee			Committee			
4.2	Install EV infrastructure	Т	4.2.1	Launch Level 2 charging station grant program	Project Team via Biweekly Meetings	M7	Q3
4.3	Increase Access to Transit	Т	4.3.1	Final recommendation on pilot project for Access to Transit subtask.	Project Team via Biweekly Meetings	M24	Q8
		Т	4.3.2	Launch Access to Transit pilot project in partnership with King County Metro.	Project Team via Biweekly Meetings	M33	Q11
		G/NG	4.3.1	Agreement from the community partners steering committee that this pilot project serves the needs of the communities we seek to serve.	Project Team and DOE	M24	Q8

Milestone and Go/No-Go Decision Points Summary (T=Technical, G/NG = Go/No-Go)

4.4	Launch affordable housing EV car share pilot	Т	4.4.1	Finalize scope of work for technical advisor for EV car share pilot	Project Team via Biweekly Meetings	M7	Q3
		Т	4.4.2	Launch Affordable Housing EV Car share pilot project.	Project Team via Biweekly Meetings	M18	Q6
		G/NG	4.4.1	Agreement from the community partners steering committee that this pilot project serves the needs of the communities the City of Seattle seeks to serve.	Project Team and DOE	M12	Q4
5	Electrify Work-Related Travel	Т	5.1	Complete state fleet purchase of model year 2017 vehicles and installation of associated EVSE	Project Team via Biweekly Meetings	M9	Q3
		Т	5.2	Complete state fleet purchase of model year 2018 vehicles and installation of associated Level 2 charging stations	Project Team via Biweekly Meetings	M21	Q7
		Т	5.3	Complete state fleet purchase of model year 2019 vehicles and installation of associated Level 2 charging stations		M32	Q11
5.1	Strategic EV Rideshare	Т	5.1.1	Strategic EV Rideshare Action Plan Completed	Project Team via Biweekly Meetings	M5	Q2
	Action Plan	G/NG	5.1.1	King County Metro biennium budget approval	Project Team and DOE	M5	Q2
5.2	Pilot Project Phase 1 Vehicle	Т	5.2.1	Phase 1 EVs in service	Project Team via Biweekly Meetings	M11	Q4
	Procurement	G/NG	5.2.1	5 additional metropool groups required	Project Team via Biweekly Meetings	M5	Q2
		G/NG	5.2.2	Vehicle price point alignment with estimate	Project Team and DOE	M5	Q2
5.3	Pilot Project Phase 2 Vehicle	Т	5.3.1	Phase 2 EVs in service in the metropool program	Project Team via Biweekly Meetings	M21	Q7
	Procurement	G/NG	5.3.1	Vehicle commercially available for Phase 2	Project Team and DOE	M15	Q5
		G/NG	5.3.2	Vehicle price point alignment with estimate	Project Team and DOE	M15	Q5
5.4	Education, outreach, and coordination to put ridesharing EVs everywhere	Т	5.4.1	Publish report on best practices for EV and PHEV use in public rideshare operations	Project Team via Biweekly Meetings	M36	Q12
5.5	Vehicle Procurement	Т	5.5.1	Complete change management effort and market and outreach plan	Project Team via Biweekly Meetings	M15	Q5
		Т	5.5.2	Share lessons learned for accelerating the transformation of a state vehicle fleet from conventional to electric	Project Team via Biweekly Meetings	M36	Q12

Project Schedule

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1. Project Management & WA EV Partnership	1	36																																
1.1 Manage Project Team Communication	3	36			M1. 1.1	M1 .1.2																												
1.2 Convene the Washington EV Partnership	5	36						M1. 2.1				M1 .2.2	M1 2.3	-											l	м1. 2.4								
2. Outreach and Stakeholder Engagement	3	36																																
2.1 Create a Blueprint for Success	3	33																											M	2. .1				
2.2 Create and Promote a public website	3	36																																
3. Expand Access to Public Charging	4	36																																
3.1 Highway Corridor DC Fast Charging	4	36						M3. 1.1]	M3. 1.2												M3. 1.3											M3 .1.4
3.2 Community Partner Level 2 Charging	4	36						M3. 2.2]	M3. 2.2												M3. 2.3											M3 .2.4
3.3 Replace/Enhance EV Infrastructure in Bellevue	4	24						M3. 3.1					M3 3.2	.M3	3								1	М3. 3.4										
4. Improve Access to E-Mobility Services	4	36																																
4.1 Convene Community Steering Committee	5	36					M4. 1.1																											
4.2 Install EV infrastructure	6	15							M4 .2.1																									
4.3 Increase Access to Transit	13	36																					1	M4. 3.1								M4 3.2		
G/NG: Community partners committee support	24	24																																
4.4 Launch affordable housing EV car share pilot	7	36							M4 .1.1]	M4. 42															
G/NG: Community partners committee support	12	12																																
5. Electrify Work-Related Travel	4	36									M5. 1										M5 2										M: 3	ș.		
5.1 Strategic EV Rideshare Action Plan	4	4					M5. 1.1																											
G/NG: King County biennium budget approval	5	5																																
5.2 Pilot Project Phase 1 Vehicle Procurement	4	15										M 2	15. 1																					
G/NG: 5 additional metropool groups required	5	5																																
G/NG: Vehicle price alignment with estimate	5	5																																
5.3 Pilot Project Phase 2 Vehicle Procurement	15	27																			M5 3.1	•												
G/NG: Vehicle commercially available	15	15												ĺ										ĺ										
G/NG: Vehicle price alignment with estimate	15	15																																
5.4 Education/outreach for ridesharing	13	36																																M5 .4.1
5.5 Vehicle Procurement	4	36														M5. 5.1																		M5 .5.2
5.6 Level 2 Charging Station Installation	4	36																												T				

Project Management Plan

Washington State Department of Transportation will lead the overall project, including overseeing all project activities and coordinating all Project Team engagement. Further information about the qualifications of each member of the Project Team is found in the Technical Qualifications and Resources section.





The Principal Investigator (PI), Tonia Buell, and the Project Team have the knowledge and experience to successfully implement the project plan. Tonia is a nationally recognized leader on EV charging infrastructure along highway corridors. She co-created the West Coast Electric Highway, the nation's first and most robust multi-state DC fast charging network. Tonia developed strong partnerships with her counterparts in Oregon, California, and British Columbia, coordinating on branding, equipment specifications, and highway signage. Tonia collaborated with more than 50 EV stakeholders to develop the Washington State Electric Vehicle Action Plan with recommendations on policies and programs for increasing the sale and use of EVs. In addition to managing Washington's segment of the West Coast Electric Highway, Tonia is leading the development of the state's new EV Charging Infrastructure Pilot Program.

Should this proposal be selected for funding, WSDOT intends to contract with Atlas Public Policy as the firm has exclusive domestic capability and unique qualifications for successfully performing this work. Atlas has proprietary data and technical expertise specific to <u>Assessing the Electric Vehicle Charging Network in Washington State</u>. Through a competitive bidding process, Atlas founder Nick Nigro was selected to lead the Washington State Legislature's Joint Transportation Committee's \$250,000 March 2015 <u>Study of Business Models to Sustain Electric Vehicle Charging Station Networks</u>. Nick Nigro directed the work of the advisory committee consisting of legislators and staff, utilities, charging service providers, car manufacturers, Western Washington Clean Cities Coalition, WSDOT, Commerce, electric vehicle advocates, and other community stakeholders. The concepts and recommendations from the study lead to development of the EV Charging Infrastructure Pilot Program and this grant application.

Atlas Public Policy will leverage its extensive project management experience and assist Tonia in conducting project-related meetings and managing content created by the Project Team.

Figure 5 is an organizational chart for the Project Team, highlighting partners at the city, county, and state level. Table 4 lists the major responsibilities for each project partner.

Other strategic public and private partners are contributing to the success of this project:

- Washington State Governor Jay Inslee expressed in his commitment letter the state's strong commitment to advancing electric vehicles through state and local investment, including Washington's EV Fleet Initiative.
- The Washington State Legislature, encouraged by a non-partisan EV legislative caucus, has passed several bills to advance electric vehicles including a \$22 million sales tax exemption on purchases of new clean cars, a \$33 million alternative fuel commercial vehicle tax credit, state law directing state and local agencies to transition to electric vehicles, and \$1 million to create an EV Charging Infrastructure Pilot Program with private and public partners. The latter action is being used as cost share in this project.
- **EVgo**, an electric vehicle charging service provider, has committed to install four DC fast charging stations valued at \$500,000 in Washington during the project period.
- **Car2Go**, a transportation network service provider, has committed to provide staff time and advice, valued at more than \$10,000, to the Washington team on developing electric car sharing services and the supporting charging infrastructure.

Project Partner	Major Responsibilities
Washington State	Principal investigator
Department of	• Coordinate interagency and sub-recipient agreements.
Transportation	• Oversee schedule, budget, and deliverables for all tasks.
	• Lead project partner for Task 3
City of Seattle	Lead project partner for Task 4
	• Facilitate and streamline participation by city departments across tasks. Ex. SDOT and City Light
	• Convene environmental equity steering committee to design Task 4 pilot projects
	• Lead outreach and engagement efforts to regional housing agencies and members of the communities we seek to serve
King County	• Lead Partner for Task 5
	Place metropool and VanPool EVs and PHEVs into the hands of Washington commuter
	 Develop and share "Best practices for EV and PHEV use in public rideshare operations"
	• With grant partners and county partners, conduct outreach and provide affordable and equitable EV access to lower income communities.
City of Bellevue	• Lead Partner for Task 3.3
	• Identify locations for new EV charging stations and manage installation process
	• Establish a partnership with an EV car share provider and an arrangement to use public EV infrastructure for charging
Washington State	• Lead Partner for Task 1.2
Department of	• Guide Washington EV Partnership through initial formation, incorporation,
Commerce	recruitment and hiring of first Executive Director, and transition of program
	components following project completion.
	• Coordinate efforts with the public sector Alternative Fuels & Vehicles Technical
	Advisory Group, and interagency EV Coordinators policy forum.
Washington State	• Negotiate cost-effective procurement accessible by all parties
Department of Enterprise	• Ensure proactive collaboration among state agencies (and other partners wherever possible)
Services	• Find solutions to any bureaucratic obstacles that arise
	Document best practices

 Table 4: Major Responsibilities for Each Project Partner

Puget Sound Clean Air Agency	 Project partner for Task 4 Convene environmental equity steering committee to design Task 4 pilot projects Partner with City of Seattle on outreach and engagement efforts to regional housing agencies and members of the communities we seek to serve
K4C	 Assist King County and Seattle with Tasks 4 and 5 Partner with WSDOT and King County in strategic deployment of EV infrastructure and metropool and VanPool EVs and PHEVs across K4C cities. Coordinate project with K4C's fourteen local governments, including sharing best practices developed by all project partners, such as Task 4 work to improve access to electric mobility services in affordable housing projects.
Atlas Public Policy	 Create blueprint for success Manage biweekly meetings and internal Project Team content collaboration Convene and facilitate Washington EV Partnership Develop and maintain public-facing website

The Project Team members will have interdependencies. WSDOT will be responsible for making sure Project Team members are on schedule, have the information they need for their work, and that any issues are identified and addressed effectively. The following table describes strategies the Project Team will employ to address interdependencies and risks for each task:

Task	Interdependencies and Risk Mitigation
1	Atlas Public Policy will facilitate the bi-weekly project meetings and lead the convening of the Washington EV Partnership. Atlas will ensure each Project Team member has access to meeting note for each meeting and is able to access all materials for the project as they are being created.
2	Atlas Public Policy will coordinate outreach and stakeholder engagement through the public-facing website and Washington EV Partnership. Atlas will ensure each Project Team member has the ability to contribute to website content and social media outreach. Finally, Atlas will ensure that Project Team members provide input into the process of standing up the Washington EV Partnership and has access to all meeting materials.
3	WSDOT utilizes current practices to successfully deliver capital construction projects as promised, on schedule, and on or under budget. WSDOT's project management process includes methods, tools, and templates to enhance both pre-construction and construction project management. As part of ongoing improvements in project management, WSDOT implemented the Project Management and Reporting System (PMRS) to assist with managing and reporting the status of capital transportation project delivery.
4	The Project Team will mitigate risk by working with the community to design pilot projects envisioned for this task. With community-led decision making, the pilot projects are more likely to reflect the needs of the communities the project intends to serve and therefore are more likely to be successful. The project budget includes this flexibility and each project is intended to be scalable to meet the needs of the community. The City of Seattle will also work closely with King County and King County Metro on the <i>Access to Transit</i> subtask to ensure the desired solution is practical and achievable and leverages existing and concurrent programs and projects. To manage risk from the car share activity, ensure good coordination, and maximize our ability to be flexible to the rapidly changing EV ecosystem, the Project Team intends to contract with a technical advisor to help design and execute the affordable housing EV car share project.
5	The Project Team will mitigate risk related to EV purchasing for work travel by King County by completing annual assessment on the alignment of price estimates and vehicle commercial availability. In addition, Seattle's Office of Sustainability will facilitate participation in this task by Seattle City Light and Seattle Department of Transportation to streamline work and permitting as part of this task.

WSDOT has a long history managing complex projects involving stakeholders from across Washington, successfully deploying EV technology throughout the state. In addition, WSDOT has extensive experience working with each Project Team member along with other key stakeholders statewide. As a project manager, WSDOT develops and implements projects by developing a broad knowledge of the details of the project, determining project resource requirements and preparing a practical budget that accounts for those requirements. WSDOT regularly reevaluates needs in reference to resources and budget limitations, accurately tracks expenditures, and adjusts allocation of resources accordingly. WSDOT establishes clear, realistic, measurable goals and objectives to ensure others understand the direction, deadlines, and expected outcomes or products. WSDOT also develops reasonable performance standards and means of evaluating outcome quality.

Technical Qualifications and Resources

Unique Qualifications of the Project Team

WSDOT, lead applicant, has a proven track record for deploying public electric vehicle charging infrastructure and transitioning fleets to plug-in electric vehicles. WSDOT successfully created, implemented, and oversaw the <u>West Coast Electric Highway</u> network of publicly-accessible DC fast chargers along Interstate 5 and other major corridors. The Principal Investigator (PI) was the project development manager for the original 12 DCFC stations deployed with a \$1.6M grant through the USDOE State Energy Program in 2011/2012. The PI also led the development of the State's <u>EV Action Plan</u>. Based on its successful efforts to advance EVs, the Washington State Legislature provided WSDOT with \$1M to create an <u>Electric Vehicle Charging Infrastructure Pilot Program</u> to deploy EV charging through public-private partnerships.

Washington State Departments of Transportation, Commerce, and Enterprise Services and the office of Gov. Jay Inslee have collaborated on electric vehicles since 2008. The state's EV Coordinators meet twice per month and the Alternative Fuels and Vehicles Technical Advisory Group meets bimonthly. Through Washington's Electric Fleets Initiative, the Department of Enterprise Services is leading an effort to transition passenger fleets of the 12 state agencies and 4 universities that account for nearly 99% of state agency fuel consumption to 20% EVs. The state is investing more than \$10 million in electric vehicle supply equipment and incremental costs for acquiring more than 300 light and medium-duty electric vehicles annually. The state also negotiates and manages online bulk purchasing contracts for state and local agencies to purchase commercially-available vehicles from passenger plug-in electric vehicles to 60-foot allelectric transit buses. Gov. Inslee's <u>Results Washington</u> program is a national leader in applying lean continuous improvement principles to public policy; that process provides a format for regular, high-level, interagency review of progress on EVs.

The **Puget Sound Clean Air Agency** is the regional air quality planning and management agency for the central Puget Sound area, including King, Kitsap, Pierce, and Snohomish Counties. The Agency works to protect public health, improve neighborhood air quality and reduce greenhouse gases throughout our region. The Agency also hosts the **Western Washington Clean Cities Coalition**, a not-for-profit membership organization dedicated to expanding the use and availability of alternative fuels and advanced vehicle technologies in the Pacific Northwest. The Coalition collaborates with its membership, industry partners, and affiliated national laboratories to advance petroleum reduction initiatives.

The **City of Seattle** is a leading electric vehicle hub. According to the International Council on Clean Transportation's 2015 City Electric Vehicle Profile Project, the Seattle region has the fifth highest electric vehicle share among major U.S. metropolitan areas (with a BEV share 4 times the U.S. average) with one of the most extensive public charging infrastructure networks in the

country. However, much of this success has been achieved with relatively little promotional activity or organized utility or local and state government incentive programs.

In March 2016, Seattle Mayor Ed Murray announced a major new initiative to tackle climate change at the local level and take meaningful action to reduce greenhouse gas emissions. A sector-wide transportation initiative, Drive Clean Seattle is a key piece of the City's climate action agenda, is one of the most comprehensive plans in the country to electrify transportation at scale, and sets us on a path to transition away from oil.

Two-thirds of Seattle's core greenhouse gas emissions come from the transportation sector. Seattle's climate goal of carbon neutrality by 2050 means we must rapidly transition the transportation sector away from oil. In developing Drive Clean Seattle, we are building on the innovation and environmental legacy of **Seattle City Light** – our carbon neutral municipal electric utility. Drive Clean Seattle includes several key components:

- Drive Clean Seattle calls for 30% of the registered vehicles in Seattle to be electric by 2030.
- Drive Clean Seattle leads by example by investing in transforming the City of Seattle fleet by reducing emissions 50% by 2025 and purchasing over 400 new electric vehicles.
- Drive Clean Seattle promotes environmental and economic equity through the electrification of transportation so that the clean air benefits and reduced costs of electric transport are available to all residents regardless of race or class.
- Drive Clean Seattle signals to the private sector that central Puget Sound is open for business and welcomes private investment in clean transportation.

Atlas Public Policy has been on the forefront of electric vehicle policy, relying on publicly available data to develop tools, policy frameworks, and business models to accelerate electric vehicle and charging infrastructure deployment. Atlas has created a nationwide network of stakeholders in government, private industry, and the non-profit community to advance EVs through innovative approaches to policy that leverage public dollars to spur significant private sector investment. Atlas works with this network on new ways to share and collect information to equip policymakers and businesses to make strategic, informed decisions. Atlas is currently convening leading EV-related companies to identify and advance state priorities for the industry over the next three years. Atlas is also co-leading a multi-state effort of state transportation departments and the federal highway administration to address barriers to EV charging infrastructure. Atlas has extensive experience with project management, working nationwide with state and federal agencies, industry, researchers, and the advocacy community.

King County Metro Transit—the largest transit provider in Washington State with over 125 million passenger boardings in 2015—is committed to efforts to significantly reduce the environmental impacts of transportation and to confront climate change. That is why in 2015, Executive Constantine announced the <u>2015 Strategic Climate Action Plan</u>, King County's five-year blueprint for action to reduce greenhouse gas emissions and prepare for the impacts of climate change. The Executive also set a goal for Metro to increase transit service through 2020 with no net increase in greenhouse gas emissions and identified key targets at a variety of scales:

• Reduce countywide sources of greenhouse gas emissions, compared to a 2007 baseline, by 25 percent by 2020, 50 percent by 2030, and 80 percent by 2050.

- In Metro Transit's vehicle operations, King County will reduce normalized energy use by at least ten percent by 2020, compared to a 2014 baseline.
- Across all vehicle operations, King County will increase the usage percentage of alternative fuels in its fleets by ten percent by 2025, compared to a 2014 baseline.

The **King County-Cities Climate Collaboration** (K4C) is a voluntary, formal partnership of local governments in Western Washington working to coordinate and enhance the effectiveness of local climate and sustainability action. K4C partners include King County and the cities of Bellevue, Burien, Issaquah, Kirkland, Mercer Island, Normandy Park, Redmond, Renton, Sammamish, Seattle, Shoreline, Snoqualmie, and Tukwila that together represent more than 1.5 million Washingtonians. The K4C was recognized in 2016 by the U.S. Environmental Protection Agency with a Climate Leadership Award for Innovative Partnerships. Thirteen K4C partners have signed on to a set of Joint County-City Climate Commitments which include actions focused on reducing transportation emissions and promoting vehicle electrification. The K4C is not requesting direct funding but is an important partner as several K4C members are direct project participants and the K4C is committed to the overall success of the project will support the project by helping to coordinate and accelerate EV action across the region.

The **City of Bellevue** is a leader in sustainability efforts amongst the smaller communities in the Puget Sound region, and works closely with King County, City of Seattle, Clean Cities, and other neighboring jurisdictions on climate and sustainability programs. The City represents a prime example of a suburban community with a large daytime population, seeking to support the transition to electric vehicles as a strategy for reducing greenhouse gas emissions from the transportation sector. The city has installed 23 public electric vehicle charging stations, is partnering with the Bellevue Downtown Business Association to attract a car share provider to Bellevue, and is participating in the DOE EV Everywhere Workplace Charging Challenge.

Name, Position, Organization	Key Qualifications	Avail. (%)
Tonia Buell, Project Development Manager, WSDOT	 Nationally recognized leader on electric vehicle charging infrastructure along highway corridors. Co-creator and project manager of Washington's segment of the West Coast Electric Highway. Communications and public involvement specialist. 	50%
Anthony Buckley, Director of Innovative Partnerships, WSDOT	Project and budget oversightAuthorizing signatory for expenditures	20%
Chris Bast, Climate and Transportation Policy Advisor, Seattle Office of Sustainability & Environment	 City lead for transportation electrification work including the design and execution of the Mayor's signature climate initiative: Drive Clean Seattle. Experienced climate and clean energy advocate and coalition builder with extensive knowledge in public policy campaigns and strategy development. 	25%
Nick Nigro, Founder, Atlas Public Policy	 Nationally recognized leader on alternative fuel vehicle financing, policy and technology. Led the development of several complex financial and policy analysis tools, convened large groups of diverse stakeholders nationwide, and has expert knowledge in web and other computer-related technology. 	25%

Alex Adams, Climate and Energy Coordinator, Director's Office King County Department of Transportation	 King County electric vehicle program lead DOT Coordinator for countywide Strategic Climate Action Plan implementation and reporting Leader of King County's alternative fuels and clean technology team 	10%
Jennifer Ewing, Environmental Stewardship Program Manager, City of Bellevue	 Leads Bellevue's climate and sustainability efforts and manages Bellevue's EV infrastructure 10 years of experience advising cities on climate and sustainability policies and programs 	10%
Peter Moulton, Energy Policy Section Manager, Washington Department of Commerce	 Led development of alternative fuel and vehicle procurement rules for state agencies, universities and local governments. Facilitator of Alternative Fuels & Vehicles Technical Advisory Group, and EV Coordinators policy forum. 	10%
Staff, Energy Division, Washington Department of Commerce	• New hire will work closely with Washington EV Partnership to guide formation, recruitment of Executive Director, and outreach and fundraising efforts.	50%
Daniel McConnon, Director, DES	• Oversight of Washington State Fleet's EV Initiative	5%
Kimberley Cline, Coordinator, Partnerships, Policy & Outreach, Puget Sound Clean Air Agency	Coordinator of Western Washington Clean Cities Coalition.	5%
Matt Kuharic, Senior Climate Change Specialist, King County Department of Natural Resources and Parks	 Co-chair of the King County-Cities Climate Collaboration (K4C) Lead for King County's Strategic Climate Action Plan County Climate Action Subject Matter Expert since 2007 	5%
Alexander Walsh, Policy Analyst, Atlas Public Policy	 Experience and knowledge in transportation electrification, public policy, and technology. Experience with motivating stakeholder engagement in transportation electrification through policy and data analysis of national and regional markets. 	25%

Prior and Current Collaboration with Team Partners

- Through the <u>Pacific Coast Collaborative</u>, Governor Inslee and Seattle Mayor Murray pledged to work together and with other West Coast colleagues to bolster the regional charging corridor and advance the use of clean fueled vehicles. Washington state has joined other west coast states aiming for 10% EV market share on the purchase of passenger vehicles through <u>West Coast Electric Fleets</u>.
- Nick Nigro from Atlas Public Policy led a <u>study for the Washington State Legislature</u> in 2015 that resulted in the creation of the EV Charging Infrastructure Pilot Program. Mr. Nigro also worked with WSDOT, the Federal Highway Administration, and six state transportation departments in 2012 on defining the role of these agencies in the EV market.
- The Cities of Seattle and Bellevue are members of the King County Cities Climate Collaboration (K4C) – a partnership between the County and cities to coordinate and enhance the effectiveness of local actions to fight climate change. Earlier this year, the K4C was awarded a 2016 Climate Leadership Award by the EPA for their leadership in Innovative Partnerships.
- Since 2013, the Alternative Fuels & Vehicles Technical Advisory Group has been meeting bimonthly to facilitate implementation of public sector procurement rules. A subgroup, the EV Coordinators, meets twice a month to guide policy development.

Appendix

The appendix contains Project Team Resumes followed by Letters of Commitment.

Project Team Resumes

Name	Organization
Tonia Buell	Washington State Department of Transportation
Anthony Buckley	Washington State Department of Transportation
Christopher Bast	City of Seattle
Nick Nigro	Atlas Public Policy
Alex Adams	King County Department of Transportation
Jennifer Ewing	City of Bellevue
Peter Moulton	Washington State Department of Commerce
Daniel McConnon	Washington State Department of Enterprise Services
Kimberley Cline	Western Washington Clean Cities Coalition / Puget Sound Clean Air Agency
Matt Kuharic	King County Department of Natural Resources and Parks
Alexander Walsh	Atlas Public Policy

Letters of Commitment

Organization
Washington State Governor Jay Inslee
Washington State Department of Enterprise Services
City of Seattle Mayor Edward Murray
King County Executive Dow Constantine
Washington State Department of Commerce
King County Department of Transportation
EVgo
car2go
City of Bellevue
Western Washington Clean Cities Coalition / Puget Sound Clean Air Agency
Puget Sound Energy

Tonia Buell

Washington State Department of Transportation

310 Maple Park Ave, SE; Olympia, WA; 98504 • 360-936-0312 • <u>buellt@wsdot.wa.gov</u> www.linkedin.com/in/toniabuell

Selected Employment History

Project Development Mgr., Innovative Partnerships, WSDOT, Olympia, WA 2009 - Present

- Co-created and manages Washington's segment of the <u>West Coast Electric Highway</u>, an electric vehicle (EV) fast charging network along I-5 and other major roadways. Instrumental in the electric highway project from conception to implementation. Co-developed the project scope, helped secure \$1.6 million in seed funding, spearheaded the branding and marketing, and coordinated with British Columbia, Oregon, and California to create a unique electric vehicle driving experience through consistent signage, equipment and outreach.
- Managed the contract with AeroVironment for the installation, operation, and maintenance of the DC fast charging in 12 communities. Oversaw the work plan, budget, and timeline.
- Conducted marketing and communications and served as agency's lead spokesperson for highway electric vehicle charging. Organized ribbon-cuttings and special events.
- As directed through Washington Gov. Inslee's EO 14-04, led the development of the state's <u>Electric Vehicle Action Plan</u> to help the state reach its goal of 50,000 PEVs by 2020. In collaboration with stakeholders, recommended targeted strategies and policies to encourage adoption and use of electric vehicles including financial incentives, infrastructure funding mechanisms, and building codes.
- Leads the development and implementation of a \$1 million public-private program for electric vehicle charging infrastructure in communities along highway corridors.

Communications and Public Involvement Manager, WSDOT, Olympia, WA 2002 – 2009

- Led communications strategy for multimodal transportation programs including Freight, Passenger Rail, Public Transportation, and Commute Trip Reduction.
- Directed Amtrak *Cascades* advertising campaign. Organized a media event featuring WA Governor and BC Premier for rollout of Amtrak *Cascades* international train service.
- Created Freight Listserv for state's Emergency Operations Center.
- Managed public outreach for ridesharing programs and a \$50 million transit grant program.

Professional Affiliations

- Plug-In America, Board of Directors
- West Coast Electric Fleets, Co-Chair representing Washington State
- Seattle Electric Vehicle Association, Member
- West Coast Corridor Coalition, Clean, Green, and Smart Steering Committee Member
- Western Washington Clean Cities Coalition, Former Steering Committee Member
- FHWA Alternative Fuel Corridor Pooled Fund Project, Washington Representative

Education

Master of Business Administration, Golden Gate University, San Francisco, California Bachelor of Science, Business/Marketing, California State University, Sacramento, California

Anthony L. Buckley

Washington Department of Transportation

310 Maple Park Ave, SE; Olympia, WA; 98504 • 360-936-0312 • BuckleA@WSDOT.WA.GOV

Selected Employment History

Director of Innovative Partnerships, Washington Department of Transportation, Olympia WA, October 2015 to Present

- Act as the State's chief negotiator for agreements relating to transportation improvements developed under a public-private partnership agreement.
- Provide analysis, assessment and advice regarding innovative financing techniques that could provide significant additional funding (or other benefits) for transportation projects throughout the state.
- Provide counsel and advice to: the Chief Financial Officer and the Secretary of the Department of Transportation; the Governor's Office; and the Legislature on matters pertaining to public-private partnerships and innovative project finance for transportation.
- Develop strategies, business plans and policies that use innovation and partnerships to deliver transportation related projects, programs and priorities.

Chief Financial Officer, Oregon Department of Energy, Salem OR, April 2010 to October 2015

- Provided leadership and direction to staff working with tax credits, grants, energy loans and issuance of general obligation and lottery revenue bonds.
- Provided leadership and direction in the creation and implementation of long term strategies that help identify and assist businesses engaged in projects that reduce energy usage.
- Responsible for identifying emerging areas to focus the State's financial resources.
- Ensured taxpayer dollars are wisely invested in projects that most benefit the state and its citizens.

Debt and Investment Manager, Oregon Department of Transportation (State of Oregon), Salem OR, April 2006 to April 2010

- Participated in developing policies used to educate and provide guidance on issues related to Transportation finance, economic growth through investments in the State's infrastructure.
- Tasked with researching and analyzing issues related to infrastructure financing and investment program policies, as well as developing strategies related to compliance with federal regulations and monitoring the use of restricted funds.
- Developed cash flow reporting model used to track \$2.3 billion bond program spending, repayment and reporting activities.
- Provided guidance to State Treasurer in selection and investment of bond proceeds, resulting in a surplus of over \$200 million in investment earnings.
- Managed funding and grant awards under the states ConnectOregon program.

Education

George Fox University, Newberg, Oregon | Master of Business Administration (2008), 32 credits

Temple University, Philadelphia, Pennsylvania | Bachelor of Business Administration – Finance (1996)

Christopher T. Bast

City of Seattle

700 5th Avenue; Seattle, WA; 98124 • 206-233-7253 • chris.bast@seattle.gov

Selected Employment History

Climate & Transportation Policy Advisor, Seattle Office of Sustainability & Environment, December 2015 – Present

- Responsible for designing projects, developing policies, and building partnerships to reduce pollution from Seattle's transportation sector.
- Designed and manage Mayor Ed Murray's transportation electrification initiatives from concept through implementation. Led internal project teams to accomplish early objectives of Drive Clean Seattle including multimillion-dollar electric vehicle infrastructure projects.
- Build relationships and strategic partnerships with external stakeholders and private sector partners within the transportation electrification ecosystem. Identify and prioritize policies and projects which lead to accelerated deployment of electric transportation solutions and public-private partnerships.

Business Partnerships Manager, Climate Solutions, May 2011 – December 2015

• Provided program management, communications, and policy support for the organization's corporate engagement initiatives and represent Climate Solutions to key external stakeholders within the NGO, government, clean tech, and business community. Voice for Climate Solutions within the clean tech and business communities.

Energy Project Coordinator, Virginia Department of Mines, Minerals and Energy, March 2010 – October 2010

• Implemented and managed all aspects of \$7.5M Recovery Act funded appliance rebate program including contract management and reporting, resource allocation, utility and vendor relations, rebate processing, marketing, policy and strategic development, and supported implementation of other projects as part of over \$100M in ARRA funded grants.

Policy Analyst, Governor's Policy Office, December 2008 - October 2009

- Coordinated Virginia Governor Tim Kaine's Renew Virginia initiative to support energy efficiency, renewable energy production, and environmental conservation and sustainability.
- Advocated to the Virginia General Assembly on behalf of the Governor and communicated the Governor's goals and priorities to senior agency and cabinet-level staff.

Education

Seattle University, Seattle, Washington, Master of Public Administration James Madison University, Harrisonburg, Virginia, Bachelor of Arts, Political Science

Nick Nigro

Atlas Public Policy Washington, DC • (202) 750-4314 • nick.nigro@atlaspolicy.com

Selected Employment History 2015-2016, Atlas Public Policy Founder

Washington, DC

- Founder of startup to empower customers to make strategic, informed decisions through the greater use of technology that aggregates publicly available information.
- Convening major automakers, electric utilities, and charging service providers to develop and implement a state-based strategy to advance electric vehicles.
- Supporting the U.S. Department of Energy EV Everywhere program on program strategy, electric utility engagement, and charging community and corridor development.
- Working with 16 states and non-profit project partners to implement a procurement process that aggregates the purchase of electric vehicles for state and municipal fleets.
- Working with the Connecticut Green Bank to design their transportation program, focused on connecting electric vehicles with residential solar PV.
- Created a web-based application for New York state government that assembles several categories of data on the electric vehicle market to help identify the most effective activities at accelerating electric vehicle adoption.

2010-2015, Center for Climate and Energy Solution

Washington, DC

Waltham, MA

Senior Manager, Transportation Initiatives

- Directed a multi-year initiative on accelerating private investment in the alternative fuel vehicles and fueling infrastructure using innovative business models.
- Created and convened a multi-stakeholder dialogue group on plug-in electric vehicles.
- Wrote a comprehensive plan for electric vehicle deployment and literature review.
- Managed a yearlong research project on reducing greenhouse gas emissions from U.S. transportation.

2001-2007, SigmaTel

Embedded Software Manager

- Served as controls/applications engineer, software architect, project lead, and manager.
- Led a team of software engineers for over five years at a high-tech startup company.
- Directed projects with the largest impact on company revenue and developed a reputation for successful and timely client deliver.

Education

University of California-Berkeley, Goldman School of Public Policy, M.P.P., 2009 Worcester Polytechnic Institute, Electrical and Computer Engineering, B.S., 2001

Alex W. Adams

King County Department of Transportation

201 South Jackson St. Seattle WA 98104 • (206) 477-1461 • alexander.adams@kingcounty.gov

Selected Employment History

Climate and Energy Project/Program Manager III King County Department of Transportation, **Director's Office** (January 2016-Present)

- Managed countywide development of King County's 2015 Strategic Climate Action Plan (SCAP) Annual Report
- King County electric vehicle program lead for policy, program development, stakeholder outreach, and grant acquisitions
- Coordinate implementation of Transportation and Land Use goals and strategy implementation
- Lead renewable fuel and clean technology policy development and implementation
- Analyze and advise on climate and energy investments and budgetary decision-making
- Develop, coordinate and promote countywide SCAP implementation: lead training events, division-focused outreach and support
- Established centralized fuel and emissions reporting program to inform SCAP implementation decisions

Transit Division: Policy Analyst (September-October 2015)

- Policy advisor: researched alternatives, made recommendations on personal body cameras in the workplace
- Policy analyst: evaluated human resources policies to improve employee retention and hiring, made recommendations to reduce barriers, encourage equity and social justice and increase operational efficiency

Director's Office: Market Development Analyst (June-August 2015)

- Developed, analyzed and implemented strategies for the Water Taxi to advance King County's SCAP and Executive's priorities
- Policy analyst: developed Water Taxi policy and market development recommendations for division and County executive leadership
- Managed and secured King County Marine Division's environmental certification process for the "WATERS" passenger vessels program
- Created and implemented a communication plan to promote Marine Division climate actions and achievements
- Established Marine Division greenhouse gas, waste, energy tracking, and reporting procedures
- Created an employee-led Water Taxi "Green Team" and developed no-cost/low-cost environmental strategies

Education

University of Washington: School of Marine and Environmental Affairs, Masters of Marine Affairs, 2011

Wheaton College, Biology, Writing, B.A. 2005

Jennifer Ewing

City of Bellevue, WA

450 110th Ave NE, Bellevue WA 98004 • 425-452-6129 • jewing@bellevuewa.gov

Summary: Jennifer Ewing leads the City of Bellevue's sustainability efforts and has ten years of experience working with cities around the country on climate change mitigation and greenhouse gas emissions data analysis.

Selected Employment History

Environmental Stewardship Program Manager, City of Bellevue, WA. March 2016-present

Responsible for the development of a suite of policies and programs to advance the City's sustainability and climate mitigation goals, including green building policies, stormwater management, tree canopy preservation, EV charging infrastructure, and energy efficiency.

Manage and report on sustainability key performance indicators and greenhouse gas emissions, and accounts for the impact of strategies on greenhouse gas emissions.

Climate and Sustainability Consultant, Seattle, WA. January 2012-March 2016

- West Palm Beach: Updated the City's community greenhouse gas emissions inventory and analyzed changes and trends from the baseline year.
- City of San Antonio: Developed a suite of sustainability performance indicators for the City and supported the development of the City's first sustainability plan.
- New York State Climate Smart Communities: Developed a local government climate certification program with a set of best practice climate mitigation and adaptation strategies and metrics.

Director, Tools and Technical Innovation, ICLEI-Local Governments for Sustainability, New York, NY. September 2008-August 2011

- Built and led a team responsible for the development and delivery of ICLEI's suite of climate and sustainability software tools and technical resources for managing greenhouse gas emissions and measuring sustainability.
- Advised dozens of local governments around the country on strategies to measure and reduce energy use, greenhouse gas emissions, and to improve local sustainability.

Management Consultant, BearingPoint (1999-2003); New Zealand Ministry of Fisheries (2003-2004); and European Meteorological Satellite Organization (2004-2006)

• Business process redesign and software implementation expert for various supply chain optimization, inventory management, and strategic sourcing projects for Fortune 500 companies and international government agencies.

Education

Master of Science in Urban Planning, Columbia University, 2008

Bachelor of Science in Mechanical Engineering, Washington University - St. Louis, MO, 1998

Peter Moulton

PO Box 42525, Olympia WA 98504 • (360) 725-3116 • peter.moulton@commerce.wa.gov

Energy Policy Section, Manager/State Bioenergy Coordinator	2007 - Present
Washington Department of Commerce,	Olympia, WA

- Manage State Energy Office's Policy Section, with a particular focus on renewable energy policy implementation through project development.
- Develop and facilitate implementation of rules regarding procurement of alternative fuels and vehicles by state agencies and local governments.
- Coordinate state bioenergy policy development and implementation, and support for bioenergy research, production, distribution and utilization efforts.
- Oversee grant and loan programs targeting bioenergy infrastructure.
- Represent agency and state on state, regional and national associations and work groups.

Leadership

- Alternative Fuels & Vehicles Technical Advisory Group Coordinator (2013-present)
- Washington State Energy Strategy: Interagency Coordination (2010-present)
- Washington Bioenergy Coordination Team Leader (2007-present)
- Washington Low-Carbon Fuel Standard Workgroup (2009-2011)
- Western Governors' Association Transportation Fuels Council (2008-2010)

Selected Employment History

Harvesting Clean Energy Program Manager, Climate Solutions, Olympia, WA	2003 - 2007
Environmental Planner III, Washington Department of Ecology, Lacey, WA	1991 - 2001
Program Manager/Technical Specialist III,	1998
Washington Department of Community, Trade & Economic Development, Olymp	oia, WA

Education

The Evergreen State College, Olympia, WA Graduate Coursework: Land Use & Public Policy	1990 – 1991
The Evergreen State College, Olympia, WA Bachelor of Arts: Media Studies & Organizational Development	1980 - 1983
Earlham College, Richmond, IN Major Courses: Communications & Field Ecology	1976 – 1979

Daniel J. McConnon

148 Cormorant Drive, Steilacoom, WA 98388 • (253) 964-2320 • danmcconnon@yahoo.com

Senior Management Experience – Significant local and state program management experience in government and higher education

Legislative Advocacy and Policy Experience – Nineteen years of experience developing policy and legislation. Developed and successfully promoted several significant policy initiatives supporting vulnerable populations, workers and students through the legislative process. Represented programs to local, state, and national governmental bodies

Resource Development – Successfully secured and implemented grants and funding allocations from state, federal and private organizations

Strategic Planning – Led processes at the state and local level to reach consensus around strategic goals among diverse constituents

Selected Employment History

Washington State Department of Enterprise Services, Olympia, WA2015 - presentDirector of State Efficiency and Environmental Performance (2015 - present)Appointed by Governor Inslee to lead a multi-agency effort to reduce energy consumption in
state buildings and fleets. Provide leadership for agency staff supporting the Governor's Energy,

Transportation and Climate Sub-cabinet.

Washington State Department of Commerce, Olympia, WA2009 - 2015Deputy Director/Chief Operating Officer (2013 - 2015)

Responsible for management and oversight of all aspects of agency operations. Managed the agency's strategic planning, outcomes tracking, and LEAN activities. Provided management for significant projects including development of the Health Innovation Center at Pacific Tower in Seattle.

Deputy Director for Community Services and Housing (2010 - 2013)

Managed a division of 150 staff responsible for providing human service and housing programs. Provided leadership for state and federal programs providing low income housing, homeless services, crime victims services, and training for TANF recipients. Developed and led annual legislative agenda for human services and housing issues. Responsible for contracting \$400 million in capital and operating funds to local governments and community organizations annually.

Assistant Director for Community Services (2009 - 2010)

Led a division responsible for human service programs. Responsible for 60 staff and an annual budget of \$90 million.

Education

Completed coursework for Ed.d. in Educational Leadership,	
Gonzaga University, Spokane, WA	1994
Masters in Business Administration, Nova University, Ft. Lauderdale, FL	1985
Bachelor of Science, Eastern Oregon State College, La Grande, OR	1983

Kimberley Cline

Seattle, WA 98103 • Tel: 206-290-0189 • kimberleycline@yahoo.com

Profile

- Nineteen years of achievement in communications, marketing, and public relations spanning government, nonprofit and private sectors.
- Seventeen years of experience with environmental and public health issues, including air quality, climate change, transportation and international development.
- Eight years of experience working with U.S. Department of Energy Clean Cities coalitions in Washington and California.

Professional Experience

Coordinator, Partnerships, Policy & Outreach

Western Washington Clean Cities Coalition / Puget Sound Clean Air Agency

Coordinate partnerships, policy development, and outreach initiatives for the coalition. Projectspecific work focuses on building awareness of, and enthusiasm for, electric vehicles and supporting infrastructure. Also advocate for, and develop, local, state or federal policies to increase use of alternative fuels and technologies and reduce greenhouse gases from transportation.

Communications Specialist

Puget Sound Clean Air Agency

Planned, implemented and managed: public education and outreach programs; budgets up to \$700,000; marketing initiatives; events; and air quality calls-to-action. Oversaw media relations, multiple websites, social media and air quality calls-to-action. Also responsible for the production of outreach materials, such as fact sheets, brochures, annual reports, technical reports, grant proposals, and website content.

Senior Communications Associate	2001 - 2005
Population Action International, Washington, DC	

Served as team leader within the department on select projects, which included coordinating release schedules and press events; developing key messages; writing and editing press materials; planning press events; and implementing overall communications plans.

Associate

Gladstein & Associates, LLC, Santa Monica, CA

Worked with government and regulatory agencies to promote and secure funding for alternative fuel and electric vehicles and supporting infrastructure.

Education

Master of Arts, International Environmental Policy, Monterey Institute of International Studies

Bachelor of Arts, English Literature, German Minor, University of Washington

2014-present

2005 - 2014

1999 - 2000

Matt Kuharic

King County

King County, WA • (206) 477-4554 • Matt.Kuharic@kingcounty.gov

Summary: Matt Kuharic leads King County's climate program and has fifteen years of experience working on climate change science and solutions.

Selected Experience

Senior Climate Change Specialist, King County, WA. 2007-Present.

- Lead King County and Department of Natural Resources and Parks efforts to confront climate change. Example responsibilities include:
- Project manager in developing and implementing King County's Strategic Climate Action Plan
- Develop innovative funding mechanisms to support King County's climate work
- Co-lead the King County-Cities Climate Collaboration (K4C), a regional partnership with 13 King County cities including the Cities of Bellevue and Seattle

Henry Luce Fellow, University of Washington, 2006-2007

• Co-led a team of five University of Washington graduate students to develop and recommend a climate action framework and implementation strategies for the University.

Co-Lecturer; Laboratory Instructor; Research Assistant, Department of Earth and Space Sciences, University of Washington. 2003-2006.

• Conducted long term climate research using glaciology and lake sediment records in Tibet and Mongolia and taught diverse geology and Earth Science classes.

Education

University of Washington, Graduate Certificate in Environmental Management, 2007

Carleton College, Bachelor of Arts in Geology, Northfield, MN, 2002

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M. Alexander Walsh

Atlas Public Policy

Washington, DC • (202) 796-9617 • alexander.walsh@atlaspolicy.com

Selected Employment History

2016, Atlas Public Policy

Policy Analyst

- Conducted a comparative criteria-based analysis of electric utilities to identify utilities for engagement
- Developed a survey and criteria to support regional analysis of potential electric vehicle programs and projects in Connecticut with the Connecticut Green Bank
- Developed principles and helped advance dialogue surrounding the utility's role in EVs and charging infrastructure
- Participated in meetings with New York state government and the EV industry to help advance EV market development
- Produced memo for the Department of Energy's EV Everywhere program highlighting key focus areas for the EV industry based on recent research by the National Labs and Atlas Public Policy

2015-2016, Edison Electric Institute

Electrification Researcher

- Identified benefits of transportation electrification for utility companies
- Collated tools and resources for member companies in online database
- Engaged member company employees to promote fleet electrification and workplace charging
- Developed relational database in Microsoft Excel to track industry stakeholders, and utility electrification projects
- Participated in meetings with Tesla, BWM Group, and GreenLots

2015, Communications Strategic Communications

Washington, DC

Washington, DC

Government Relations Intern

- Tracked legislation in energy, tax, and financial services for clients
- Research focused on natural gas legislation, and reported on developments and implications of policy for GDF Suez
- Specifically focused on appropriations legislation for liquid natural gas export terminals for GDF Suez
- Developed and maintained a tiered list of top energy policy experts and professionals to gauge political influence

Education

St Andrews University, International Relations, M.A. (Honours) International Relations with a focus in Political Economy, 2015

Washington, DC

Letters of Commitment

JAY INSLEE



STATE OF WASHINGTON OFFICE OF THE GOVERNOR P.O. Box 40002 * Dlympia, Washington 98504-0002 * (360) 902-4111 * www.governor.wa.gov

August 22, 2016

The Honorable Ernest Moniz Secretary of Energy U.S. Department of Energy 1000 Independence Avenue SW Washington, DC 20585

Dear Secretary Moniz:

I am writing to express my strongest possible support for Washington State's application for funding under the DE-FOA-0001535, "Fiscal Year (FY) 2016 Vehicle Technologies Multi-Topic Funding Opportunity Announcement."

Washington State is poised to be the first state to reach the tipping point for electric vehicle (EV) adoption. We have the fourth largest EV deployment per capita in the country and the fifth largest EV Market overall. The City of Seattle consistently ranks among the top plug-in EV markets regardless of population. Across the state, our citizens are committed to clean transportation solutions. Washington also founded the West Coast Electric Highway and successfully collaborated with Oregon and California to ensure a fully-connected Interstate 5 corridor for electric vehicles that stretches from our Canadian border in the north to the California-Mexico border in the south.

The State of Washington is on a path to exceed our goal of having 50,000 registered EVs on its roads by 2020. We do not want to rest on this success; we want to build on it. Washington aimsto achieve a breakthrough in widespread EV adoption by leveraging all available resources to complement its vibrant EV-related programs at the state and local level, including a valuable vehicle sales tax exemption in place until 2019.

Given the investment of state funds deployed to incentivize the purchase of electric vehicles and enhance the EV charging infrastructure, Washington State is perfectly poised to take maximum advantage of this federal grant. With federal funding assistance, Washington State will be able to successfully build a comprehensive, statewide EV charging network; ensure EV access for under-served communities; and complete a range of other important steps.

We have built a vibrant partnership across state, local and tribal governments, and we would welcome an enhanced federal presence to help us take our work to the next level. Washington's low-cost, low-carbon electrical grid makes this the ideal location to demonstrate the full benefits



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The Honorable Ernest Moniz August 22, 2016 Page 2

of transitioning away from fossil fuels in the transportation sector. Together, we can demonstrate to the nation what is possible.

Very muly yours, nslee Ŀ Covernor



STATE OF WASHINGTON

DEPARTMENT OF ENTERPRISE SERVICES 1500 Jefferson Street SE, Olympia, WA 98501

August 28, 2016

Office of Vehicle Technologies Office of Energy Efficiency and Renewable Energy U.S. Department of Energy Via EERE EXCHANGE system

RE: #1535-1516 "Reaching an EV Tipping Point in Washington"

Dear DE-FOA-0001535 Review Committee:

The Washington State Department of Enterprise Services (DES) is pleased to be a partner in the Department of Transportation's (DOT) application for funding under DE-FOA-0001535, "Reaching an EV Tipping Point in Washington State".

The Department of Enterprise Services has been working closely with DOT and the Department of Commerce (COM) over the past several years to advance the adoption of EVs in Washington State. The DES efforts have focused on three areas;

- development of master contracts that enable state agencies, education institutions, local governments and non-profit agencies to have access to affordable vehicles and charging stations,
- installation of charging infrastructure at agency locations throughout Washington for use by state fleets, employees, and visitors, and
- policy changes and education efforts to greatly accelerate adoption of EVs by state agencies and their employees.

DES manages the passenger vehicle fleet for the majority of state agencies. We have been charged by Governor Inslee to lead implementation of his "Washington State Electric Fleets Initiative" – a significant commitment to see that 20% of our vehicle purchases will be all electric. One of our central strategies in the initiative has been to work with fleet leaders from DOT and local governments to coordinate installation and use of charging infrastructure. This coordination is the most efficient and quickest path to a comprehensive, statewide network of infrastructure to support EV expansion.

DE-FOA-0001535 Review Committee August 26, 2016 Page 2

DES' ongoing commitment to expanding adoption of EVs is evidenced by our intent to invest significant resources in vehicles and charging infrastructure. Upon execution of an interagency agreement with DOT, DES will provide cost share for the project in the form of 1) the increased cost per vehicle necessary to purchase EVs instead of gasoline sedans, and 2) investments in charging equipment purchases and installation, with a total value of \$3.1 million.

Thank you for your consideration of this important project. Funding this project will leverage investments from state, local and private organizations, accelerating our joint efforts to expand the use of EVs in Washington State.

Sincerely,

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Dan McConnon, Director Washington State Efficiency and Environmental Performance



August 26, 2016

The Honorable Ernest Moniz Secretary of Energy U.S. Department of Energy 1000 Independence Avenue SW Washington, DC 20585

Dear Secretary Moniz:

The City of Seattle is pleased to be a project partner in Washington State's application for funding under the DE-FOA-0001535, "Fiscal Year (FY) 2016 Vehicle Technologies Multi-Topic Funding Opportunity Announcement."

Central Puget Sound is a leading electric vehicle (EV) hub. By making targeted investments within the major regional market for electric vehicles, this proposal further supports the maturation of that market, leverages existing infrastructure and public awareness, and presents the best opportunity for networked effects to reach an EV Tipping Point and transform transportation in the state of Washington.

We are especially excited to accelerate EV deployment in Seattle to take advantage of Seattle City Light's carbon neutral electricity. Replacing oil with clean electricity is a major win for the climate and a critical step toward our goal of citywide carbon neutrality. This March, I announced a new climate initiative: Drive Clean Seattle - a comprehensive and sector-wide initiative to electrify transportation at scale and transition the region away from oil. In addition to strong climate goals, the City of Seattle is passionately committed to race and social justice. We intend to use a portion of this grant funding to address accessibility and equity and to build and demonstrate replicable models of EV deployment which provide environmental, economic, and racial justice benefits of electric transportation to communities who bear a combined disparate burden of poor air quality and other environmental burdens and racial-socioeconomic inequities.

Government has an important role to play in transforming the transportation system. Our commitment to this project includes significant cost share:

- Personnel and fringe costs related to the staff time dedicated to this project.
- Logistical and consulting costs related to the stakeholder engagement work of this project.
- City Light's multi-million dollar investment in fast chargers which can be leveraged to support
 many of the programs within this proposal.

Office of the Mayor Seattle City Hall, 7th Floor 600 Fourth Avenue PO Box 94749 Seattle, Washington 98124-4749

Tel (206) 684-8000 Fax: (206) 684-5360 Hearing Impaired use the Washington Relay Service (7-1-1) www.sesttle.eov/mayor We are happy to make this investment, and other investments in transportation electrification, and we are looking forward to the opportunity to double down on our existing commitment. Seattle is poised to be a global leader in electric vehicles. With your help, we can help chart a path toward a replicable model of a deeply decarbonized transportation sector that's not reliant on petroleum and which gives residents a high quality, efficient, and accessible transportation network.

Sincerely,

10 Edward B. Murray

Mayor, City of Seattle

Office of the Mayor Seattle City Hall, 7th Floor 500 Fourth Avenue PO Box 94749 Seattle, Washington 98124-4749

Tel (206) 684-4000 Fax: (206) 684-5360 Hearing Impaired use the Washington Relay Service (7-1-1) www.seattle.gov/mayor



August 24, 2016

The Honorable Ernest Moniz Secretary of Energy 1000 Independence Ave. SW Washington, DC 20585

Dear Secretary Moniz:

The King County-Cities Climate Collaboration (K4C) is a voluntary partnership to coordinate and accelerate local climate action between its 14 member local governments. The K4C represents more than 1.5 million Washington residents in the cities of Bellevue, Burien, Issaquah, Kirkland, Mercer Island, Normandy Park, Redmond, Renton, Sammamish, Seattle, Shoreline, Snoqualmie, Tukwila, and across unincorporated King County.

K4C partners are excited to partner on Washington State's application for funding under the DE-FOA-0001535, "Fiscal Year (FY) 2016 Vehicle Technologies Multi-Topic Funding Opportunity Announcement." Our commitment to a leadership role in this project includes:

- King County will add at least 5 electric vehicles (EVs) or plug-in hybrid electric vehicles (PHEV) to the metropool program. In a second phase, metropool will be upgraded by replacing 20 end-of-life vehicles with new longer-range EVs. Additionally, contingent upon commercial availability, King County will also purchase several dozen larger EV or PHEV minivans for the VanPool program.
- The City of Seattle plans to build replicable models of EV deployment to communities bearing a combined disparate burden of air pollution and racial-socioeconomic inequities. Seattle's proposal has three parts: first/last mile transit connection, charging infrastructure investment, and affordable housing car share.
- The City of Bellevue is proposing to maintain and enhance public EV infrastructure and pilot EV car share at the Lincoln Center complex, a mixed use, city-owned site.
- Other interested K4C partners will implement similar solutions across other K4C jurisdictions and in partnership with the King County Housing Authority.

This project would build on King County's significant investments in 100 percent electric battery buses, an extensive electric trolley fleet, EV fleet vehicles, and a growing network of public EV charging stations. We have built a vibrant partnership across many levels of government; we would welcome enhanced federal support to take our work to the next level.

Sincerely,

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Dow Constantine King County Executive



STATE OF WASHINGTON

DEPARTMENT OF COMMERCE

1011 Plum Street SE • PO Box 42525 • Olympia, Washington 98504-2525 • (360) 725-4000

www.commerce.wa.gov

August 28, 2016

Office of Vehicle Technologies Office of Energy Efficiency and Renewable Energy U.S. Department of Energy Via EERE EXCHANGE system

RE: #1535-1516 "Reaching an EV Tipping Point in Washington"

Dear DE-FOA-0001535 Review Committee:

The Washington State Department of Commerce is committed to partnering on Washington State's "Reaching an EV Tipping Point in Washington" project proposed for funding under the DE-FOA-0001535, "Fiscal Year (FY) 2016 Vehicle Technologies Multi-Topic Funding Opportunity Announcement, Area of Interest 3: Alternative Fuel Vehicle Community Partner Projects."

As the transportation sector makes up 45 percent of the greenhouse gas emissions in Washington State, our organization is encouraging the adoption and use of cleaner vehicle choices, cleaner fuels, and the supporting infrastructure. We support this comprehensive proposal for increasing the adoption and use of electric vehicles and installation of charging infrastructure. The funding would help Washington State meet its goal of having 50,000 plug-in electric vehicles by 2020 and would make EVs accessible for more people and more places.

Commerce is the lead state agency charged with enhancing and promoting sustainable community and economic vitality in Washington. The agency administers a diverse portfolio of more than 100 programs and several state boards and commissions, and plays the crucial role of convening numerous local, state, regional and federal partners and stakeholders, both public and private. In 2011-12, Commerce coordinated the initial Washington PEV Task Force that prepared a PEV Readiness Plan for the state. More recently, the agency developed and is coordinating implementation of alternative fuel and vehicle procurement rules for agencies and local governments.

As a key contributor for this project, Commerce commits to collaborate with the Washington State project team by providing in-kind staff time to coordinate activities with current alternative fuel and vehicle policy and implement efforts, and support formation of the Washington EV Partnership. We estimate the value of this contribution at \$95,760 over the three-year project period.

Thank you for your consideration of this proposal.

Sincerely,

Peter Moulton Energy Policy Section Manager



August 25, 2016

Office of Vehicle Technologies Office of Energy Efficiency and Renewable Energy U.S. Department of Energy

Via EERE EXCHANGE system

RE: #1535-1516 "Reaching an EV Tipping Point in Washington"

Dear DE-FOA-0001535 Review Committee:

King County Metro Transit is committed to partnering on Washington State's "Reaching an EV Tipping Point in Washington" project proposed for funding under the DE-FOA-0001535, "Fiscal Year (FY) 2016 Vehicle Technologies Multi-Topic Funding Opportunity Announcement, Area of Interest 3: Alternative Fuel Vehicle Community Partner Projects."

As the transportation sector makes up 45 percent of the greenhouse gas emissions in Washington State, our organization is encouraging the adoption and use of cleaner vehicle choices, cleaner fuels, and the supporting infrastructure. We support this comprehensive proposal for increasing the adoption and use of electric vehicles and installation of charging infrastructure. The funding would help Washington State meet its goal of having 50,000 plug-in electric vehicles by 2020 and would make EVs accessible for more people and more places.

King County has long been at the forefront of environmentally friendly transportation and operates a bus fleet that is over 70 percent electric, hybrid-electric or battery powered vehicles with a goal for 100 percent electric or hybrid-electric vehicles by 2018. In addition to buses, King County operates the largest public rideshare program in the nation and provides van sharing services that connect employees to their places of work across Western and Central Washington. Metro has committed to grow transit service through 2020 without increasing operational greenhouse gas emissions, and the utilization of zero emissions technologies is a key strategy to achieve that goal.

Office of Vehicle Technologies August 25, 2016 Page 2

As a key contributor to this project, King County Metro Transit commits to collaborate with the Washington State project team by committing a secured local contribution estimated to equal \$1,297,525 over the three-year grant project period.

Thank you for your consideration of this proposal.

Sincerely. 0

Rob Gannon Interim General Manager

cc: Priscilla Vargas, Manager, Paratransit/Rideshare Operations, King County Metro





Thursday, August 25, 2016

Office of Vehicle Technologies Office of Energy Efficiency and Renewable Energy U.S. Department of Energy Via EERE EXCHANGE system

RE: #1535-1516 "Reaching an EV Tipping Point in Washington"

Dear DE-FOA-0001535 Review Committee:

EVgo supports the State of Washington's application for the Community Partner Projects area of interest in the Department of Energy's grant opportunity, DE-FOA-001535 and is pleased to be a private sector partner with Washington State in this application.

EVgo is the nation's largest network of DC Fast Charging stations, now operating over 700 stations in the country's 50 largest markets. In Washington State, EVgo has made substantial investments over the past two years. We currently operate 11 charging locations, from Ritzville to Renton.

EVgo applauds the State of Washington's vision to reach a tipping point in electric vehicles adoption. Currently, Washington ranks in the top three States for EV ownership per capita. The saturation of publically-accessible fast charging infrastructure, however, is lagging behind other EV markets. The State's innovative EV Infrastructure Pilot Program and the growing engagement of public and private utilities hold great promise for enhancing the EV fast charging infrastructure across the state. EVgo is pleased to be a part of this momentum in Washington.

Our company is committed to develop 4 additional DC fast charging stations during the 2016 calendar year, and will work in conjunction with application partners to increase this investment in 2017. This additional investment represents nearly \$500,000 in private sector support for electric vehicle charging in Washington.

We look forward to Washington's successful application and to engage with application partners to get the Washington State electric vehicle community to a tipping point.

Sincerely,

Scott Fisher Director, Market Development scott.fisher@evgo.com 609-651-7061



Walter Rosenkranz Sr. Business Development Manager car2go N.A., LLC 1717 West 6th Street Suite 425 Austin, TX 78703

Dear Proposal Review Committee,

I am writing to express my support for Washington State proposal to be submitted under U.S. Department of Energy FOA 1535 and my commitment to contribute to this project as a representative of car2go.

Car2go is the leading point-to-point carsharing service in the United States. Operating in nine regions nationwide, car2go has a unique capacity to provide mobility solutions in urban areas. Car2go is also dedicated to reducing its environmental impact as demonstrated by its all-electric pilot project in San Diego from 2011 to 2016.

With this project, car2go commits to collaborate with the Washington State project team by providing advice on point-to-point carsharing, charging infrastructure needs for carsharing, and considerations on the business case of carsharing for low and moderate income families. Car2go will also leverage its extensive experience with all-electric carsharing, share its lessons learned with Washington, and help the state prepare for new electric carsharing offerings in the state.

Car2go will contribute staff resources averaging two hours per month to this project, for a total of 72 hours over the thirty-six month project period. At an hourly rate of \$150 per hour, this commitment is equivalent to an in-kind contribution of \$10,800.

Thank you for your consideration of this proposal.

Walter Rosenkranz



Post Office Box 90012 • Bellevue, Washington • 98009 9012

August 25, 2016

Office of Vehicle Technologies Office of Energy Efficiency and Renewable Energy U.S. Department of Energy Via EERE EXCHANGE system

RE: #1535-1516 "Reaching an EV Tipping Point in Washington"

Dear DE-FOA-0001535 Review Committee:

The City of Bellevue is committed to partnering on Washington State's "Reaching an EV Tipping Point in Washington" project proposed for funding under the DE-FOA-0001535, "Fiscal Year (FY) 2016 Vehicle Technologies Multi-Topic Funding Opportunity Announcement, Area of Interest 3: Alternative Fuel Vehicle Community Partner Projects."

As the transportation sector makes up 45 percent of the greenhouse gas emissions in Washington State and 49 percent in Bellevue, our organization is encouraging the adoption and use of cleaner vehicle choices, cleaner fuels, and the supporting infrastructure. We support this comprehensive proposal for increasing the adoption and use of electric vehicles and installation of charging infrastructure. The funding would help Washington State meet its goal of having 50,000 plug-in electric vehicles by 2020 and would make EVs accessible for more people and more places.

The City of Bellevue has made both policy and capital expenditure commitments to support the development of EV infrastructure in Bellevue. The City of Bellevue used American Recovery and Reinvestment Act (ARRA) funds and installed 18 EV charging stations for public and City fleet usage in 2011 and an additional five stations in 2012 using Clean Cities grant funding. Bellevue has adopted a policy in its Comprehensive Plan to allow for the siting of EV charging stations in the right-of-way, and currently has two on-street charging stations in its downtown.

As a key contributor for this project the City of Bellevue commits to collaborate with the Washington State project team by providing in-kind staff resources for planning and management of EV infrastructure during and following the project duration. We estimate the value of this contribution at \$12,000 over the three-year project period.

Thank you for your consideration of this proposal.

Sincerely,

Mary Kate Berens, Deputy City Manager



Clean healthy air for everyone, everywhere, all the time.

Board of Directors

Bremerton Patty Lent, Mayor

Everett Ray Stephanson, Mayor Paul Roberts, Board Chair

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> Tacoma Ryan Mello, Councilmember

> > Executive Director Craig T. Kenworthy

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Pub Ne. 30-7 RW Revised 5 25 201-

August 26, 2016

Office of Vehicle Technologies Office of Energy Efficiency and Renewable Energy U.S. Department of Energy Via EERE EXCHANGE system

RE: #1535-1516 "Reaching an EV Tipping Point in Washington"

Dear DE-FOA-0001535 Review Committee:

The Puget Sound Clean Air Agency is committed to partnering on Washington State's "Reaching an EV Tipping Point in Washington" project, which is being proposed for funding under the DE-FOA-0001535, "Fiscal Year (FY) 2016 Vehicle Technologies Multi-Topic Funding Opportunity Announcement, Area of Interest 3: Alternative Fuel Vehicle Community Partner Projects."

The Puget Sound Clean Air Agency is the regional air quality planning and management agency for the central Puget Sound area, including King, Kitsäp, Pierce, and Snohomish Counties. We work to protect public health, improve neighborhood air quality and reduce greenhouse gases throughout our region. The collection of projects included in the "Reaching an EV Tipping Point in Washington" proposal support the Agency's strategic goals to reduce emissions of greenhouse gases from transportation.

In Washington State, the transportation sector contributes 45 percent of the greenhouse gas emissions, as well as significant levels of particulates, air toxics, and ozone precursors, which are harmful to human health. We view the adoption and use of cleaner vehicle choices, cleaner fuels, and the supporting infrastructure as important strategies toward improving air quality, reducing climate impacts, and protecting public health. As a result, we are pleased to be a partner in this comprehensive proposal for increasing the adoption and use of electric vehicles and installation of charging infrastructure.

The funding would help Washington State meet its goal of 50,000 plug-in electric vehicles by 2020 and would make EVs accessible for more people and in more places. As a key contributor for this project, the Puget Sound Clean Air Agency commits to collaborate with the Washington State project team by providing in-kind contribution of staff resources. We will also seek matching funding from our Board of Directors in our FY18 budget request.

We strongly support Washington State's grant request and urge the US Department of Energy to fund this project.

Thank you for your consideration of this proposal.

Sincerely,

Andrew Green Director, Air Quality Programs

PUGET SOUND ENERGY

Puget Sound Energy P.O. Box 97034 Bellevue, WA 98009-9734 PSE.com

August 29, 2016

Tonia Buell Washington State Department of Transportation

RE: Puget Sound Energy Letter of Support for Reaching an EV Tipping Point in Washington State, DE-FOA-0001535

Dear Ms. Buell:

We are excited to support Washington State Department of Transportation's application for DE-FOA-0001535, Reaching an EV Tipping Point in Washington State. Puget Sound Energy and Washington State Department of Transportation have successfully partnered numerous times in the past, including in establishing the West Coast Electric Highway. Puget Sound Energy has also partnered with the other named project partners as well as with electric vehicle manufacturers and other utilities to help EV adoption and infrastructure in Washington State.

Reaching an EV Tipping Point in Washington State complements other electric vehicle programs in Washington, including Puget Sound Energy's home charging program. As the largest utility in Washington State, Puget Sound Energy has significant experience in working with customers and employees around electric vehicles. We have hosted meetings and ride-and-drive events for employees and electric vehicle stakeholders and have worked with both residential and commercial customers to support charger installations since 2010.

We look forward to working with Washington State Department of Transportation and the other partners on this exciting initiative.

Sincerely,

Ben Farrow Manager, Product Development