



Joint Office of  
**Energy and  
Transportation**

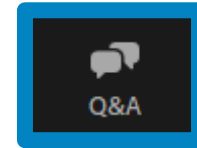
# **Centering Equity in Community-Based E-Mobility Projects: An Expert Panel**

11/8/2023

[driveelectric.gov](https://driveelectric.gov)

# Zoom Tips and Housekeeping

- Controls are located at the bottom of your screen. If they aren't appearing, move your cursor to the bottom edge.
- Submit questions using the “Q&A” window



# Disclaimer

**Notice:** This webinar is being recorded and may be posted on the Joint Office website or used internally.

If you speak during the webinar or use video, you are presumed to consent to recording and use of your voice or image.

# Agenda

---

**Introduction** from the Joint Office

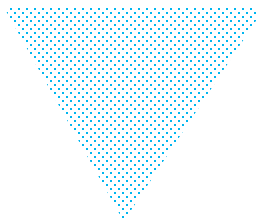
**Brief Presentations** from panelists

**Panel Discussion**

**Audience Q&A**



# Mission and Vision



## Mission

To accelerate an electrified transportation system that is affordable, convenient, equitable, reliable, and safe.

## Vision

A future where everyone can ride and drive electric.

# BIL Programs Supported by the Joint Office

The Joint Office will provide unifying guidance, technical assistance, and analysis to support the following programs:



## **National Electric Vehicle Infrastructure (NEVI) Formula Program (U.S. DOT)**

\$5 billion for states to build a national electric vehicle (EV) charging network along corridors



## **Charging & Fueling Infrastructure (CFI) Discretionary Grant Program (U.S. DOT)**

\$2.5 billion in community and corridor grants for EV charging, as well as hydrogen, natural gas, and propane fueling infrastructure



## **Low-No Emissions Grants Program for Transit (U.S. DOT)**

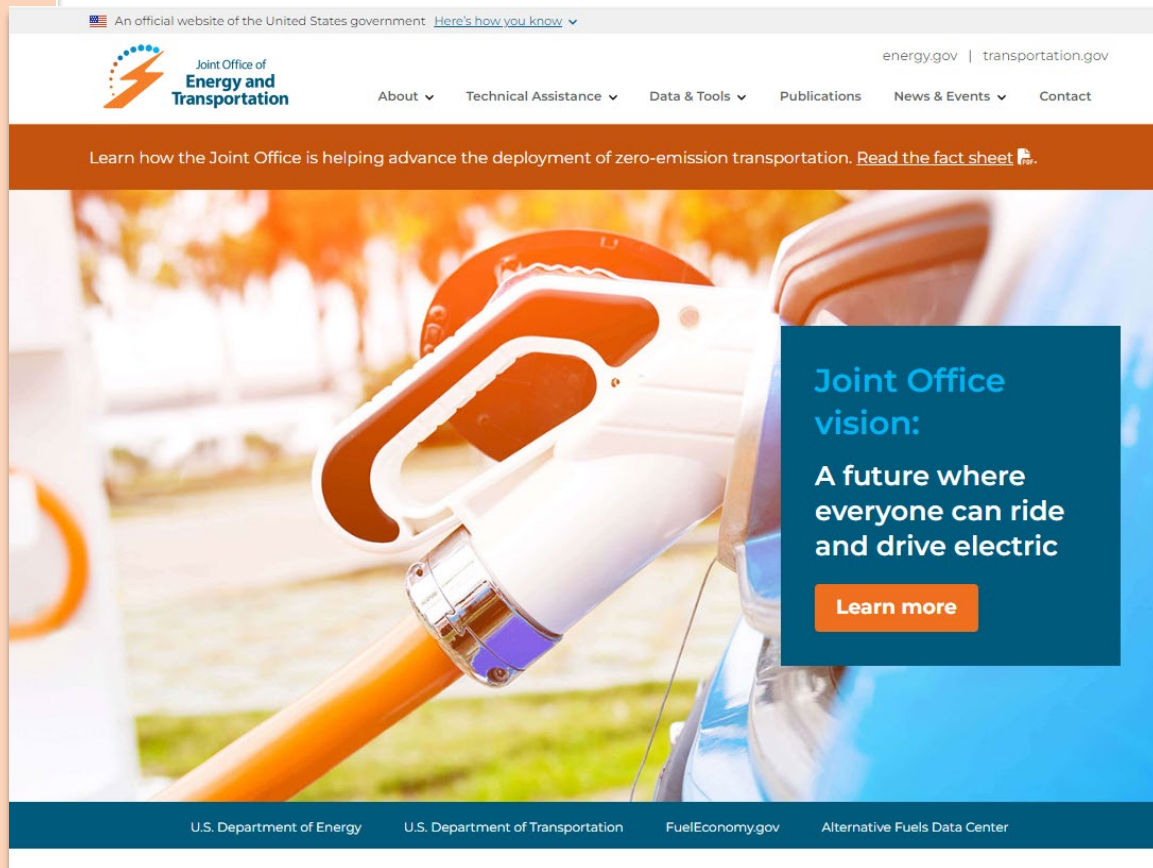
\$5.6 billion in support of low- and no-emission transit bus deployments



## **Clean School Bus Program (U.S. EPA)**

\$5 billion in support of electric school bus deployments

Visit  
**DriveElectric.gov**  
to learn more

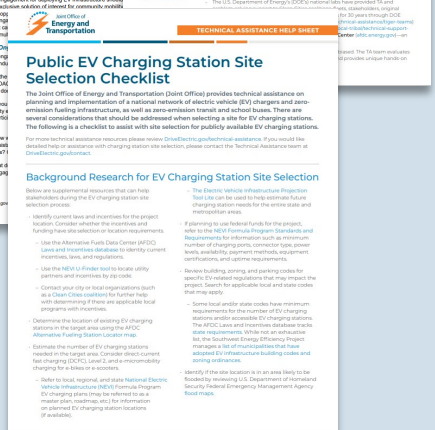
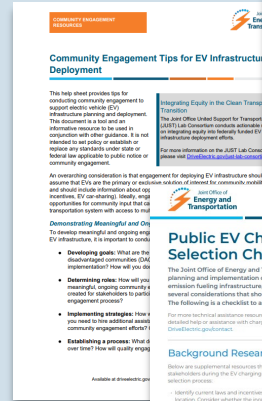
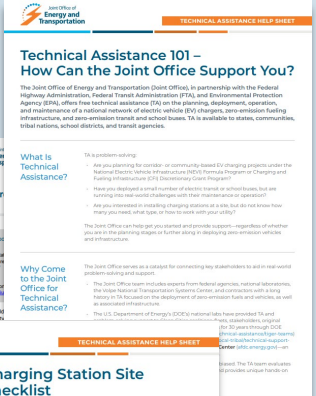
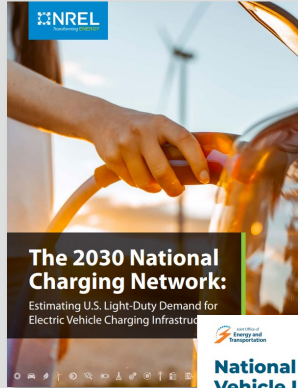
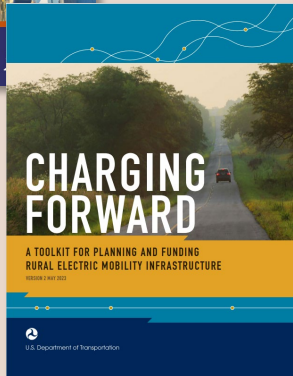
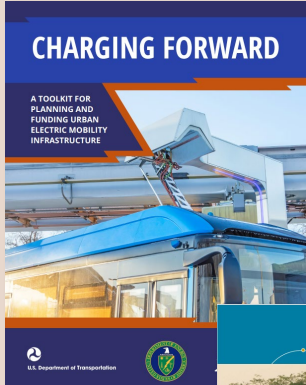


The screenshot shows the top portion of the DriveElectric.gov website. At the top left, there is a small American flag icon followed by the text "An official website of the United States government" and a link "Here's how you know" with a dropdown arrow. To the right of this is the "Joint Office of Energy and Transportation" logo, which features a stylized lightning bolt icon. Further right are navigation links: "energy.gov | transportation.gov", "About" with a dropdown arrow, "Technical Assistance" with a dropdown arrow, "Data & Tools" with a dropdown arrow, "Publications", "News & Events" with a dropdown arrow, and "Contact". Below the navigation is a dark blue horizontal bar with white text that reads: "Learn how the Joint Office is helping advance the deployment of zero-emission transportation. [Read the fact sheet](#)". The main content area features a large background image of an orange and white electric vehicle charging nozzle. Overlaid on the right side of this image is a dark blue rectangular box containing the text "Joint Office vision:" in white, followed by "A future where everyone can ride and drive electric" in white, and a white "Learn more" button with an orange border. At the bottom of the page, a dark blue footer bar contains four white links: "U.S. Department of Energy", "U.S. Department of Transportation", "FuelEconomy.gov", and "Alternative Fuels Data Center".

# Rural and Urban EV Toolkits

# Forecasts and Reports

# Help Sheets and Checklists





# Technical Assistance Strategies

- Specialized assistance for **states, communities, Tribal Nations, transit agencies, and school districts**
- **One-on-one meetings** with states
- **Concierge service** (phone, email, web form) to efficiently route technical assistance requests
- Technical assistance support team has **50 staff members across 10 organizations.**

## Technical Assistance

The Joint Office of Energy and Transportation (Joint Office) provides technical assistance on planning and implementation of a national network of electric vehicle chargers and zero-emission fueling infrastructure as well as zero-emission transit and school buses.

### States and Communities

The Joint Office provides technical assistance for [states and communities](#) creating and executing [state plans](#) under the National Electric Vehicle Infrastructure Formula Program and the Charging and Fueling Infrastructure Discretionary Grant Program.

### Tribal Nations

The Joint Office provides technical assistance to [tribal nations](#) electrifying their transportation systems. Learn more about zero-emission transportation [funding opportunities for tribal nations](#).

### School Districts

The Joint Office provides technical assistance to [school districts](#) applying for or receiving funding through the U.S. Environmental Protection Agency's Clean School Bus Program.

### Transit Agencies

The Joint Office provides technical assistance to [transit agencies](#) applying for or receiving funding through the Federal Transit Administration's Low or No Emission Vehicle Program.

[driveelectric.gov/technical-assistance](https://driveelectric.gov/technical-assistance)

Concierge Service Contact Methods: 833-600-2751 | [doe-dot.io.ta@nrel.gov](mailto:doe-dot.io.ta@nrel.gov) | [driveelectric.gov/contact/](https://driveelectric.gov/contact/)

- Request assistance via online form

- Initial response within 48 hours

- General questions and feedback welcome!

The screenshot shows the 'Contact Us' page. At the top, there is a navigation bar with the logo and menu items: About, Technical Assistance, Data & Tools, Publications, News & Events, and Contact. The main heading is 'Contact Us'. Below it, a paragraph explains the form's purpose: 'Use this contact form to submit a media inquiry, ask a general question about Joint Office of Energy and Transportation resources and activities, or request technical assistance for states, tribal nations, or clean school buses or transit buses.' To the right, there is a 'Find Us on Social' box with icons for LinkedIn and YouTube. The form itself has a note: 'Required fields are marked with an asterisk (\*)'. It includes a dropdown for 'Inquiry type \*', text boxes for 'Name \*', 'Email \*', and 'Subject \*', and a large text area for 'Message \*'. A blue 'Send' button is at the bottom left.

[driveelectric.gov/contact](https://driveelectric.gov/contact)

The screenshot shows the 'Subscribe to News and Updates' page. The navigation bar is identical to the contact page. The heading is 'Subscribe to News and Updates'. Below it, a sub-heading says 'Subscribe to news and updates from the Joint Office of Energy and Transportation.' There are three radio buttons for 'News', 'Webinars', and 'Subscribe'. A text box for 'Sign up for news alerts \*' contains the placeholder 'name@example.com'. Below that is a checkbox for 'By checking this box, you consent to our data privacy policy \*'. A blue 'Next' button is at the bottom.

[driveelectric.gov/subscribe](https://driveelectric.gov/subscribe)



# **Intro from Executive Director Gabe Klein and Polling Questions**

# Panelists



**Patricia Weikersheimer**  
*Argonne National Laboratory*



**Robert Blake**  
*Native Sun Community Power Development*



**Dr. Shelley Francis**  
*EVNoire*



**Christine Corrales**  
*San Joaquin Council of Governments*



**Bree Swenson**  
*California Air Resources Board*



**Rachel Fishman**  
*New York State Energy Research and Development Authority*



**Andrew Satchwell**  
*Lawrence Berkeley National Laboratory*



# Centering Equity in Community-Based E-Mobility Projects: An Expert Panel

**Patricia Weikersheimer,  
Argonne National Laboratory**

# JOINT OFFICE UNITED SUPPORT FOR TRANSPORTATION (JUST) LAB CONSORTIUM

## JUST Lab Consortium Focus Areas

EVSE Case Studies | Justice40 Benefits Methods | Analysis Capabilities and Pilots for Equitable EVSE Deployment | Community Engagement Techniques | Review of Energy & Transportation Justice Frameworks

## JUST Resources

- [Community Engagement Tips for EV Infrastructure Deployment](#) 
- [Webinar: Community Engagement in Transportation](#)
- [Webinar: Minority-Owned Business Outreach and Partnerships for EV Infrastructure](#)

- [Argonne National Laboratory](#)
- [National Renewable Energy Laboratory](#)
- [Lawrence Berkeley National Laboratory](#)

<https://driveelectric.gov/just-lab-consortium>

# FIVE CASE STUDIES AND A PRINCIPLES REPORT

www.argonne.gov

**ELECTRIC NATION: AN UPPER MIDWEST INTER-TRIBAL ELECTRIC VEHICLE CHARGING COMMUNITY NETWORK**

The Upper Midwest Inter-Tribal Electric Vehicle Charging Community Network (ELECTRIC NATION) has been created by tribal leaders to bring project partners and tribal representatives to a national and state-wide partnership to coordinate a national and state-wide network to advance electric vehicle (EV) use and reduce barriers to electric vehicle transportation in the Upper Midwest. The network, affordable transportation for tribal members, North Dakota, and 21 other tribal nations in Minnesota, North Dakota, and South Dakota. The project's high-level objectives are to bring clean, affordable transportation options to underserved tribal communities while also bringing the affordability of EVs on an on-road, on-site alternative that meets community-level objectives including community connectivity to essential services (e.g., health care, education, government), leading to a more equitable and sustainable access to transportation of all ages and abilities, and a more secure and resilient energy system.

Community Power Development (CPD) and financing Rock (SAGE) Transportation Energy Grid Authority (TEGA) are the leading project partners. The American Indian Mobility Center for Energy & Environment, Argonne National Laboratory, U.S. Department of Energy, Minnesota Pollution Control Agency, U.S. Energy Information Administration, and U.S. Department of Energy are also project partners. The project team, led by H2E2P and community-led efforts, has developed and executed related to EV charging and other transportation-related projects. The project's high-level objectives are to bring clean, affordable transportation options to underserved tribal communities while also bringing the affordability of EVs on an on-road, on-site alternative that meets community-level objectives including community connectivity to essential services (e.g., health care, education, government), leading to a more equitable and sustainable access to transportation of all ages and abilities, and a more secure and resilient energy system.

www.argonne.gov

**EVNOIRE ADVANCES EQUITY FOR THE MID-ATLANTIC ELECTRIFICATION PARTNERSHIP**


Lead by Virginia Clean Coal, the Mid-Atlantic Electrification Partnership (MAEP) seeks to realize a regional network of electric vehicle (EV) charging stations, transportation network companies, and convenors. This includes three-year electric infrastructure projects, including the District of Columbia, Maryland, Virginia, and West Virginia, and other infrastructure for power generation (e.g., ports and airports), passenger mobility (e.g., electric vehicle charging, ride-sharing), and other services (e.g., electric vehicle charging, ride-sharing), and other services (e.g., electric vehicle charging, ride-sharing).

MAEP is a partnership between Virginia Clean Coal, the District of Columbia, Maryland, Virginia, and West Virginia, and other infrastructure for power generation (e.g., ports and airports), passenger mobility (e.g., electric vehicle charging, ride-sharing), and other services (e.g., electric vehicle charging, ride-sharing).

www.argonne.gov

**THE STOCKTON MOBILITY COLLECTIVE**  
*Bringing Low-Carbon Shared Mobility to Underserved Communities*

The Stockton Mobility Collective (SMC) is a pilot project of the San Joaquin Council of Governments (SJCOC) leader (SJCOC). The SMC seeks to meet the community's needs for affordable, accessible, and equitable transportation options in underserved communities. The SMC seeks to meet the community's needs for affordable, accessible, and equitable transportation options in underserved communities.



www.argonne.gov

**CALIFORNIA'S SUSTAINABLE TRANSPORTATION EQUITY PROJECT (STEP)**

California has a well-developed tradition for setting policies to combat climate change and providing financial assistance to transportation. California's Sustainable Transportation Equity Project (STEP) is a multi-agency effort to address transportation equity issues across the state. The project's high-level objectives are to bring clean, affordable transportation options to underserved communities while also bringing the affordability of EVs on an on-road, on-site alternative that meets community-level objectives including community connectivity to essential services (e.g., health care, education, government), leading to a more equitable and sustainable access to transportation of all ages and abilities, and a more secure and resilient energy system.



**BACKGROUND AND PROJECT OF THE STEP**

The STEP project is funded by the U.S. Department of Energy, U.S. Department of Transportation, and U.S. Department of Justice. The project's high-level objectives are to bring clean, affordable transportation options to underserved communities while also bringing the affordability of EVs on an on-road, on-site alternative that meets community-level objectives including community connectivity to essential services (e.g., health care, education, government), leading to a more equitable and sustainable access to transportation of all ages and abilities, and a more secure and resilient energy system.

www.argonne.gov

**THE BRONX IS BREATHING: REIMAGINING A CLEANER HUNTS POINT**

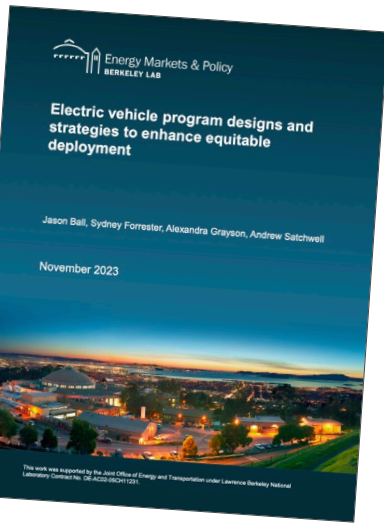
The Bronx Hunt's Point area in the South Bronx is home to 15,000 residents. 90% of the area is currently the property of the U.S. Army. The area is currently the property of the U.S. Army. The area is currently the property of the U.S. Army. The area is currently the property of the U.S. Army.

The Bronx Hunt's Point area in the South Bronx is home to 15,000 residents. 90% of the area is currently the property of the U.S. Army. The area is currently the property of the U.S. Army. The area is currently the property of the U.S. Army. The area is currently the property of the U.S. Army.

www.argonne.gov

**PROGRAM DESIGN**

The program design is a multi-agency effort to address transportation equity issues across the state. The project's high-level objectives are to bring clean, affordable transportation options to underserved communities while also bringing the affordability of EVs on an on-road, on-site alternative that meets community-level objectives including community connectivity to essential services (e.g., health care, education, government), leading to a more equitable and sustainable access to transportation of all ages and abilities, and a more secure and resilient energy system.



# **Electric Nation: An Upper Midwest Inter-Tribal Electric Vehicle Charging Community Network**

**Robert Blake,  
Native Sun Community Power Development**



# Upper Midwest Inter-Tribal EV Charging Community Network

Native-led public-private partnership addressing  
plug-in electric vehicle (PEV) barriers for Tribal members on 23 Reservations



NATIVE SUN  
COMMUNITY  
**P O W E R**  
DEVELOPMENT

P.I. - Robert Blake  
Native Sun Executive Director



Co-P.I.  
Joseph McNeil  
SAGE General Manager

November 8, 2023

*Creating fast-charging infrastructure to connect Tribal Reservations with job centers,  
economic centers, medical providers, and other critical services*

# Project Goals & Challenges: Upper Midwest Inter-Tribal EV Charging Community Network

**Timeline:** 3/1/22 – 5/31/25 (39 months)

**Budget:** \$13.9M Total Project; \$6.7M DOE Funding, \$7.2M Cost Sharing  
DOE Funding through August 23: \$1.2M

**Goals:** Leveraging real world data and lessons learned from Tribal communities to develop, demonstrate, and deploy a replicable program to expand clean and sustainable electrified transportation to underserved communities with Plug-in EVs & EVSE, data analysis, education, and outreach



**Challenges:** *Historically under-resourced & underserved rural communities; limited access to PEVs suitable for cold weather*



**Leads:** Robert Blake, Principal Investigator;  
Joseph McNeil, Co-Principal Investigator; Lisa Daniels, Project Director

**Key Partners:** Native Sun, Standing Rock (SAGE) Renewable Energy Power Authority, American Lung Association/MN & ND Clean Cities, Connexus Capital, eFormative Options, Minnesota Center for Energy & Environment

**Supporting Partners:** Minnesota Pollution Control Agency, Minnesota Power, OtterTail Power, Xcel Energy, ZEF Energy

## Community Partners:

- Grand River Casino & Resort
- McLaughlin Cenex-Farmer's Union
- Ponemah Boys & Girls Club
- Prairie Knights Casino
- Redby Community Center
- Red Lake Agricultural Department
- Red Lake Family & Children Services
- Red Lake Immersion School
- Red Lake Nation Fisheries
- Red Lake Oshkiimaajitahdah Workforce Center
- Red Lake Seven Clans Casino & Hotel
- Red Lake Trading Post
- Sitting Bull College
- Standing Rock Public Transit

[www.electriconation.info](http://www.electriconation.info)





## Project Approach and Outcomes

- BP 1: Launch, Engagement
- BP 2: Implementation & Testing
- BP 3: Analysis & Community Outreach



*Create a sustainable ecosystem to expand equitable access to clean, affordable EV transportation and improve **fuel diversity**, increase **local resiliency**, and reduce **GHG emissions** for rural, historically under-resourced, and underserved Upper Midwest Tribes with:*

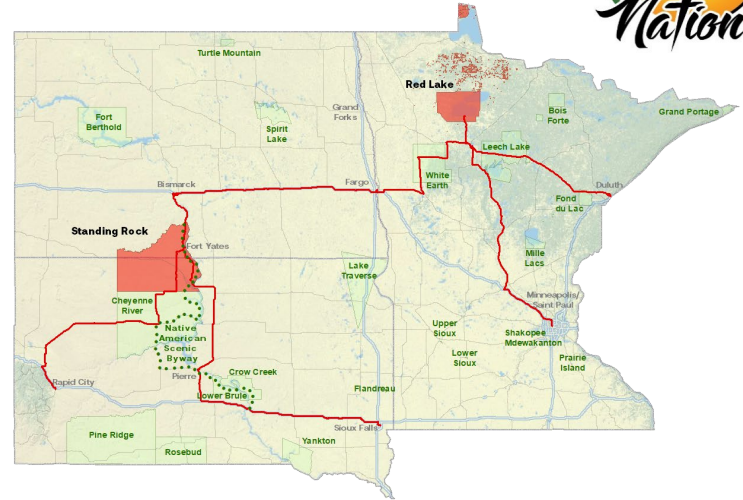
<b>Project Objectives</b>	Address PEV barriers for Upper Midwest Tribal members, advancing equitable access to clean, affordable transportation in multi-family housing and rural, underserved Tribal communities facing harsh winters	Demonstrate PEVs in Tribal communities and provide access to advanced vehicles and EVSE to community members disproportionately affected by transportation inequities
<b>Impact</b>	Through installation of charging infrastructure, “connect” Standing Rock Sioux Tribe, Red Lake Nation, and 21 other Reservations with vital medical providers, job/economic centers, and government services	Lower burden of transportation costs and creating systems of clean mobility across rural MN, ND, and SD, improving access to long-distance destinations and new job opportunities
<b>Key Outcomes</b>	Deploy 19 commercial, residential, and transit PEVs plus related equipment to demonstrate their potential on rural Reservations and cold climates, catalyze energy self-determination, and expand access to benefits of electrified transportation	Install 55 DCFC and 60 Level 2 EVSE, providing at least one Level 2 to all 23 Native Nations in ND/SD/MN; 52 events over 3 years reaching >10,000 attendees

**Next steps: Document energy savings/emissions reductions & Tribal impacts and develop pathway to fossil fuel-free economy**

## Key Takeaways: Contributions to Energy Equity and Environmental Justice



- ✓ Project team working earnestly to ensure Upper Midwest Tribes are **leading**, not “left behind” in the transition to clean energy
- ✓ Two new **workforce training** programs for Red Lake Nation and Standing Rock Reservations
- ✓ PEVs and related equipment will include 2 solar trailers for **pow-wows and educational events** plus 3 freezer cubes for transporting Red Lake fish to markets
- ✓ PEVs will be utilized in **Tribal fleets** for Family & Child Services, agriculture, tribal college, buses for culture and language immersion school, and community shuttle service



- ✓ **Lessons learned:** Engage maintenance and building managers early to plan around weather, snow removal concerns, site construction, and control panel load capacity; supply chain delays and higher-than-expected EVSE **installation costs** on Reservations
- ✓ Electric Nation’s thoughtful legal agreements can facilitate **replication** on Tribal land in additional geographic areas and with additional technologies





# **EVNoire Advances Equity for the Mid-Atlantic Electrification Partnership**

**Dr. Shelley Francis,  
EVNoire**



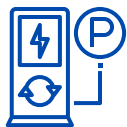
Mid-Atlantic Electrification Partnership

# BEST PRACTICES: MID-ATLANTIC ELECTRIFICATION PROJECT



 EVNO:RE





## **E-Mobility Best Practice**

### **E-Mobility Diversity, Equity & Inclusion**



**EVNoire envisions a world where easily accessible electric vehicles empower communities of color and low-income communities to rid their neighborhoods of toxic air pollution, grow their economies, and help address climate change.**

**Our mission is to engage diverse communities with EVs, advocate for EV solutions in underserved communities, and shift the narrative about EVs to be more inclusive of diverse populations.**

# Leadership Team



Dr. Shelley Francis  
Co-founder and  
Managing Partner



Terry Travis  
Co-founder and  
Managing Partner



Kyersten Siebenaler  
Manager of Strategy and  
Innovation



Brenna Rivett  
National Policy Manager



Alexis Blomqvist  
Data and Research Manager



Coletone Whitaker  
Senior Lead, Special Projects  
and Initiatives



Rhonda Simpson  
Monitoring and Evaluation  
Manager



Danielle Cherry  
Project Manager



Brandon Oldham  
Infrastructure and EV Solutions E-Mobility Fellowship Program  
Lead



Tená V. Baker  
E-Mobility Fellowship Program  
Lead



Brandon Smith  
EV Program Support  
Implementation Specialist in  
Western Region



Cayce Tiedemann  
Programs Team



Carlos Aggabao  
Programs Team



Alex Baad  
Mid-Atlantic & North East  
Program Manager

Our team of industry thought leaders include; Marketing Professionals • Engineers  
EV Charging SMEs • EV/AV SMEs • Researchers/Data Analyst • and more..

Electric + Connected + Shared + Autonomous



# PROJECT GOAL

---

## PROJECT OVERVIEW

- EVNoire is serving as Education and Outreach Technical Lead in collaboration with the Department of Energy. The purpose of this project is to support and foster a regional EV ecosystem in VA, DC, MD, and WV.
- Together this region will allow all sizes of EVs to be used for fleets, Transportation Network Companies (TNC), and consumers. EVNoire will work towards this effort by engaging a diverse community of stakeholders, acknowledge past injustices, identify and address gaps in transportation and mobility while exploring economic and workforce development opportunities.



# OUR APPROACH | CENTERING COMMUNITY



WHY ENGAGE PEOPLE MOST AFFECTED BY PROBLEMS BEING ADDRESSED?

Those who are closest to the PROBLEM are also closest to the SOLUTION

WHAT ARE THE BEST WAYS TO ADDRESS THE NEEDS OF THESE COMMUNITIES?

Listen to better understand the causes of the problem, barriers to solutions, and ideas for solutions

HOW DO ORGANIZATIONS POSITIVELY IMPACT OUTCOMES FOR THESE COMMUNITIES?

Engage communities to advocate, legislate, and dictate for themselves in the long run

# APPROACH

- 1 Landscape Assessment
- 2 Use Data to refine strategy
- 3 Outreach & Engagement
- 4 Evaluation



# OUTCOMES - KEY FINDINGS

---



**375 Charging  
Stations**



**25 Educational  
Events**



**\$14.6 Million  
Project Budget**



**25 Project  
Partners**

# PROJECT TEAM

---

## WEBSITE

[www.evnoire.com](http://www.evnoire.com)

Ph: **888.MOB.ILTY**



Danielle Cherry-Hoover Project  
Manager  
[danielle@evnoire.com](mailto:danielle@evnoire.com)



Dr. Shelley Francis  
Advisor [shelley@evnoire.com](mailto:shelley@evnoire.com)



Technical Alex Baad  
Atlantic Manager  
[Alex@evnoire.com](mailto:Alex@evnoire.com)



Dr. Mint Khan  
Outreach  
Manager [Mint@evnoire.com](mailto:Mint@evnoire.com)





# **The Stockton Mobility Collective: Bringing Low-Carbon Shared Mobility to Underinvested Communities**

**Christine Corrales,  
San Joaquin Council of Governments (SJCOG)**

San Joaquin Council of Governments'

# STOCKTON MOBILITY COLLECTIVE



# Project Goals & Approach

## Project Area



**What is Stockton Mobility Collective?** Established by the San Joaquin Council of Governments (SJCOC), SMC is comprised of several partners with the mission of increasing transportation options and access in Stockton with a focus on assisting the disadvantaged and low-income communities.

**Who does it benefit?** Stockton residents looking for convenient, clean and affordable ways to travel.

**What are the goals?** To increase mobility, advance social justice and provide clean transportation for residents traveling to jobs, schools, health care appointments, grocery stores, and other key destinations.

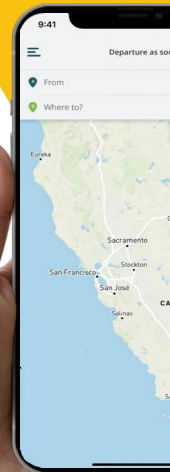
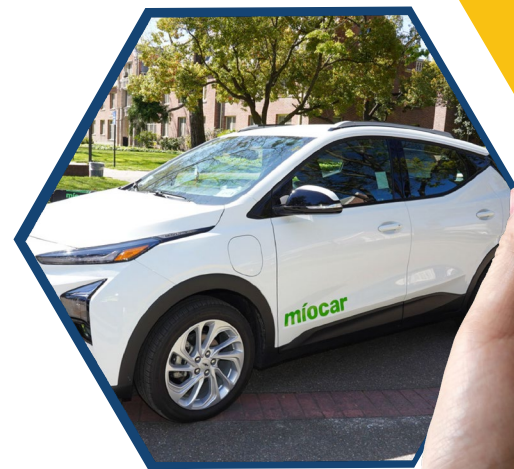
### Approach:

- Provide access to 100% electric carsharing and bikesharing.
- Integrate shared mobility in Vamos EZHub MaaS app.
- Offer incentives to reduce transportation cost burden.



# Challenges, Successes, Outcomes

Challenges	Successes	Outcomes
<ul style="list-style-type: none"> <li>ID Miocar station locations</li> </ul>	<ul style="list-style-type: none"> <li>Community input guided implementation</li> </ul>	<ul style="list-style-type: none"> <li>Primary focus on affordable housing locations.</li> <li>High utilization by residents within walking distance of the station.</li> </ul>
<ul style="list-style-type: none"> <li>Site host readiness and coordination</li> </ul>	<ul style="list-style-type: none"> <li>Working with site partners with existing and/or planned EVSE</li> </ul>	<ul style="list-style-type: none"> <li>Strong partnership with the Housing Authority of County of San Joaquin, which will host five Miocar stations. Three stations currently live to date.</li> </ul>
<ul style="list-style-type: none"> <li>Delays through agreements, permitting, utility</li> </ul>	<ul style="list-style-type: none"> <li>Identified and addressed barriers with local jurisdiction for EVSE installs and permitting on city owned property.</li> </ul>	<ul style="list-style-type: none"> <li>Due to significant delay, city owned Miocar stations may not be completed within grant term.</li> <li>Due to delay with utility, two Miocar stations have yet to launch.</li> </ul>
<ul style="list-style-type: none"> <li>Higher than anticipated construction costs</li> </ul>	<ul style="list-style-type: none"> <li>Identified non-STEP funds</li> <li>Working with site partners with existing and/or planned EVSE</li> </ul>	<ul style="list-style-type: none"> <li>Due to high costs, grant funds will likely pay for 1-2 EVSE stations (compared to anticipated 10-20) by end of grant term.</li> </ul>
<ul style="list-style-type: none"> <li>Supply chain for vehicle procurement</li> </ul>	<ul style="list-style-type: none"> <li>Found some flexibility for budget with purchasing previously owned EVs</li> </ul>	<ul style="list-style-type: none"> <li>To date, 25 out of 30 vehicles procured for the program. Out of the fleet, 13 are currently in service at three Miocar stations.</li> </ul>
<ul style="list-style-type: none"> <li>Vamos app to Miocar app integration</li> </ul>	<ul style="list-style-type: none"> <li>Coordination of technology vendors and software upgrades</li> </ul>	<ul style="list-style-type: none"> <li>Miocar station discovery available on Vamos app with reservations facilitated by deeplink to Miocar booking app.</li> </ul>
<ul style="list-style-type: none"> <li>Vamos trip chain</li> </ul>	<ul style="list-style-type: none"> <li>Facilitate transit access to Miocar stations</li> </ul>	<ul style="list-style-type: none"> <li>Miocar station access ranges widely from walking, transit, ride hailing or drop off.</li> </ul>



# Key Takeaways

- To ensure the project addresses needs, identify transportation challenges of potential users.
- Focus on a few site hosts with possibility for implementation at multiple property locations in the project area.
- Prioritize community engagement and membership drives in areas where there is high transit use and/or transport disadvantaged populations.
- Anticipate significant staff time on problem solving, partnership development, stakeholder engagement, and customer service.
- Incorporate data collection and evaluation as part of the project scope.



VISIT: [SJCOG.ORG/SMC](https://www.sjco.org/smc)



# California's Sustainable Transportation Equity Project (STEP)

**Bree Swenson,  
California Air Resources Board (CARB)**



# **CARB's Sustainable Transportation Equity Project (STEP)**

Bree Swenson

Air Pollution Specialist

[breanna.swenson@arb.ca.gov](mailto:breanna.swenson@arb.ca.gov)

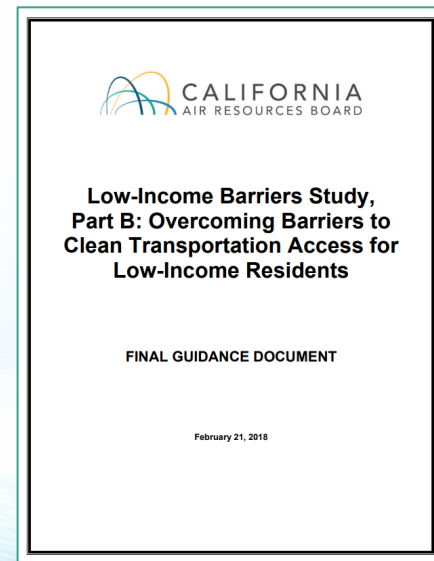
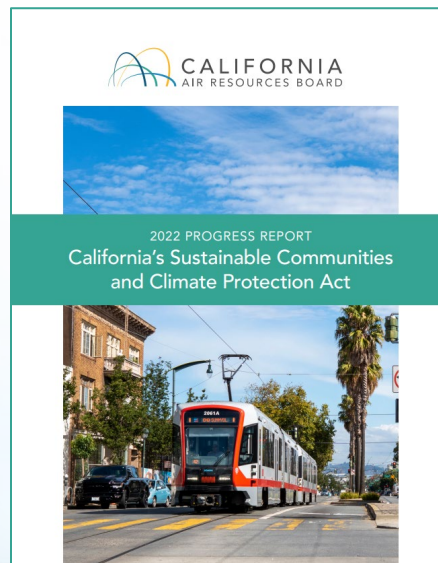
# The Challenges

## ➤ Climate change

- Transportation sector accounts for ~50% of statewide GHG emissions
- Driving alone is the primary mode of travel in California
- Even with transportation electrification, we need to reduce vehicle miles traveled

## ➤ Inequity

- Decisions favoring car travel continue to increase racial and economic injustices
- Barriers include:
  - Understanding the needs of low-income residents and disadvantaged communities
  - Affordability
  - Awareness



# Sustainable Transportation Equity Project (STEP)

**STEP's primary goal is to increase transportation equity by...**

- Addressing community-identified transportation needs
- Increasing access to key destinations and services
- Reducing GHG emissions and vehicle miles traveled

Planning Grants	Implementation Grants
~\$200k	\$3-13 million
Available to local governments, community-based organizations, and tribes	
Focused on disadvantaged and low-income communities in California	
Funds a variety of planning and capacity building projects (e.g., community transportation needs assessments, workforce development, clean transportation planning, and outreach and engagement)	Funds a variety of clean transportation projects (active transportation, fixed-route transit, shared mobility) and supporting projects (e.g., workforce development, outreach and engagement, displacement prevention)

# Outcomes/Successes (Since 2020)

- Awarded 5 Implementation Grants and 8 Planning Grants
  - \$44.5 million invested in disadvantaged and low-income communities
  - 744 electric vehicles and e-bikes purchased
  - 4,800 MTCO<sub>2</sub>e GHG emissions reduced
  - 6 million passenger vehicle miles traveled reduced
  - \$8.3 million saved in travel costs
  - 374 lbs of PM 2.5 reduced
- New Request for Applications just closed
  - Concept Phase was oversubscribed
  - \$216 million requested
  - \$32.65 million available





# **The Bronx Is Breathing: Reimagining a Cleaner Hunts Point**

**Rachel Fishman,  
New York State Energy Research and  
Development Authority (NYSERDA)**





# NEW YORK Clean Transportation Prizes

## Case Study:

## The Bronx Is Breathing: Reimagining a Cleaner Hunts Point



**Clean Neighborhoods**  
*Challenge*



**Electric Mobility**  
*Challenge*



**Electric Truck & Bus**  
*Challenge*

Rachel Fishman, New York State Research & Development Authority  
(NYSERDA)

**November 6, 2023**

# Clean Transportation Prizes Case Study: The Bronx is Breathing

## > **About the Clean Transportation Prizes, administered by NYSERDA**

- Electrify transportation, reduce air pollution, and enhance clean mobility in underserved communities in New York State.
- Awarded 17 planning grants in 2021 up to \$200,000, and 10 grand prize awards in 2022 ranging from \$7-10 million to implement 3-to-4-year projects.
  - The Bronx is Breathing, led by Volvo, is one of the grand prize awardees.

## > **The Bronx is Breathing, Goals & Approach**

- Consists of 10 partners, five of which are local organizations based in the Bronx
- Implement three interdependent and synergistic strategies:
  - Develop a publicly-accessible freight-focused charging hub, paired with onsite solar & storage
  - Launch an Electric Truckers Cooperative that addresses economic barriers to freight EV ownership.
  - Model EV deployment paired with battery electric refrigeration in a food delivery fleet.

# Outcomes & Successes To Date

## > **Planning Phase (2022):**

- From Hunts Point **residents**, heard that economic opportunity was critical
- From an **industry** perspective, acknowledged barriers to transitioning to electric fleets

## > **Implementation Phase(2023 - ):**

- Co-Design Sessions with Hunts Point Community
  - Hosted **community workshop** & co-developed a **Community Benefits Agreement**
  - Targeting workforce development and training for local residents
  - Transparent communication (timeline, construction noise)
- Looking ahead....
  - Steering committee formation
  - Space-planning workshops
  - Wayfinding
  - General Outreach (bike tours, canvassing, tabling)
  - Education, job training & learning panels

# Key Takeaways

## > For Program Designers

- Phased approach yields increased opportunity for community participation
- Provide funds, coaching and training opportunities for small community organizations to build capacity

## > For Project Teams

- Understand community needs/desires first, design solution in partnership with community
- Incorporate community organizations into project teams, and pay them
- Visit the site and meet with people in-person
- Provide multiple pathways for participation
- Piggyback on existing meetings and events
- Set expectations early & often

## > Next up...

- More news & updates from all 10 projects (sign up for e-mails!)
- Dashboard
- Replication Playbooks

# Thank you!

**Web:**

<https://www.nyserda.ny.gov/All-Programs/New-York-Clean-Transportation-Prizes>

**E-mail:**

[cleantransportprizes@nyserda.ny.gov](mailto:cleantransportprizes@nyserda.ny.gov)



# **Electric Vehicle Program Designs and Strategies to Enhance Equitable Deployment**

**Andrew Satchwell,  
Lawrence Berkeley National Laboratory**

## Electric Vehicle Program Designs and Strategies to Enhance Equitable Deployment

---

Andy Satchwell

With contributions from Jason Ball, Sydney Forrester, and Alexandra Grayson

*This work was funded by the Joint Office of Energy and Transportation under Contract No. DE-AC02-05CH11231.*



# A resource describing key themes and principles found to be successful in driving equitable EVSE deployment

---



## Approach and audience

- Summarize common themes and strategies from more than 60 EVSE publications, focusing on equity.
- Provide a resource for policymakers, federal and state officials, community leaders, and program managers.

## Key Finding

Two common, nationwide practices for equity-focused EVSE deployment programs:

1. Customizing design and implementation strategies through community partnerships.
2. Ensuring community participation in the decision-making process.





# Key Activity #1 - Cultivating Partnerships

Cultivating effective partnerships allows for the integration of community perspectives and priorities in the planning and implementation of EVSE programs

## Supporting Processes

### Stakeholder & Inter-Agency Engagement

- Prioritize relationship building
- Gather support from policymakers
- Formalize and adopt primary goals, principles, and commitments

### Developing Funding Structures

- Stage financial commitments
- Coordinate funding logistics
- Reduce restrictions on funding uses

### Conducting General Outreach

- Create specific outreach plans
- Provide technology support
- Improve connections among state-level partners



## Key Activity #2 - Identifying a Community's Unique Needs

Equity-focused EVSE programs should recognize existing barriers to EVSE deployment and create alignment between program goals and a community's needs and wants

### Supporting Processes

#### Identifying Preferences and Desired Outcomes

- Identify sites early
- Connect with the local utility early
- Engage in transparent contract negotiations
- Maintain program flexibility when developing policy objectives

#### Defining Equity

- Establish equity principles first
- Use consistent definitions across similar programs and projects
- Use EJ screening tools

#### Designing Incentive Structures

- Create custom energy rates for EVSE
- Use broad distribution channels
- Create separate incentive structures for different targeted populations



# Key Activity #3 - Developing an Iterative Program Design

Planning and implementation of equity-focused EVSE programs should include continuous measurement, evaluation, and improvement

## Supporting Processes

### Program Planning

- Develop plans in parallel with other processes
- Synchronize plans with municipal policy and local action plans
- Create both short- and long-term versions of the same goal

### Project Planning

- Connect with local utilities early
- Understand building codes and permitting constraints
- Develop mechanisms for continuous improvement

### Evaluating and Collecting Metrics

- Engage with partners to identify priority metrics
- Disaggregate existing metrics
- Utilize public engagement questionnaires



# Conclusion

---

- Report can be applied by mapping barriers alongside relevant processes and possible solutions.
- Context matters (!) and determines what solutions are appropriate.
- Consistent finding that meaningful community engagement, particularly in low-income and marginalized areas, is essential for developing and implementing effective, equity-focused EVSE programs.



## Contact

Andy Satchwell | [asatchwell@lbl.gov](mailto:asatchwell@lbl.gov)

## For more information

**Download** publications from the Energy Markets & Policy: <https://emp.lbl.gov/publications>

**Sign up** for our email list: <https://emp.lbl.gov/mailling-list>

**Follow** the Energy Markets & Policy on Twitter: @BerkeleyLabEMP

## Related energy equity publications

[Developing an Equity Framework for State Regulatory Decision-Making](#)

[Assessing the Current State of U.S. Energy Equity Regulation and Legislation](#)



## Disclaimer

This document was prepared as an account of work sponsored by the United States Government. While this document is believed to contain correct information, neither the United States Government nor any agency thereof, nor The Regents of the University of California, nor any of their employees, makes any warranty, express or implied, or assumes any legal responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by its trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or The Regents of the University of California. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof, or The Regents of the University of California.

Ernest Orlando Lawrence Berkeley National Laboratory is an equal opportunity employer.

## Copyright Notice

This manuscript has been authored by an author at Lawrence Berkeley National Laboratory under Contract No. DE-AC02-05CH11231 with the U.S. Department of Energy. The U.S. Government retains, and the publisher, by accepting the article for publication, acknowledges, that the U.S. Government retains a non-exclusive, paid-up, irrevocable, worldwide license to publish or reproduce the published form of this manuscript, or allow others to do so, for U.S. Government purposes





# Panel Discussion



# Questions and Answers

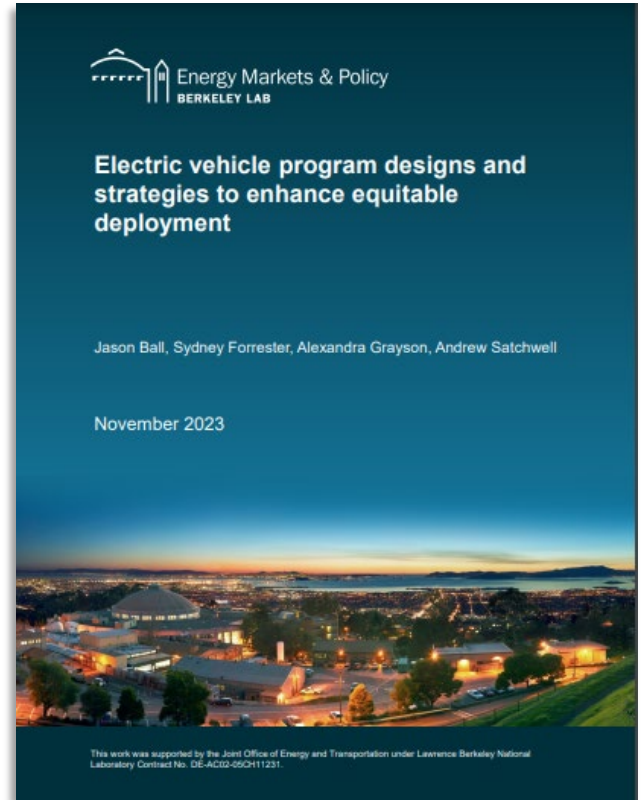


# Resources

## Case Studies (pending)

- “Electric Nation: An Upper Midwest Inter-Tribal Electric Vehicle Charging Community Network”
- “EVNoire Advances Equity for the Mid-Atlantic Electrification Partnership”
- “The Stockton Mobility Collective: Bringing Low-Carbon Shared Mobility to Underinvested Communities”
- “California’s Sustainable Transportation Equity Project (STEP)”
- “The Bronx Is Breathing: Reimagining a Cleaner Hunts Point”

**Principles report:** Electric vehicle program designs and strategies to enhance equitable deployment (pending)





# Upcoming Webinar Topics

**November 15<sup>th</sup> \*** **EV Charging Resources and Technical Assistance for Tribal Nations**

December 5th Ride Electric: The Importance of Multimodal Transportation



**\* *Registration is now open!***

**[driveelectric.gov/webinars](https://driveelectric.gov/webinars)**

*Dates may be subject to change*

# Thank you!

*Today's Presentation:*  
Centering Equity in Community-Based  
E-Mobility Projects: An Expert Panel

Didn't get your question answered?  
Want to learn more about this webinar topic?  
Ask the Joint Office: [driveelectric.gov/contact/](https://driveelectric.gov/contact/)



Sign up for Joint Office news,  
events, and funding opportunities:  
[driveelectric.gov/subscribe](https://driveelectric.gov/subscribe)

The webinar recording and slides will  
be posted within a few weeks here:  
[driveelectric.gov/webinars](https://driveelectric.gov/webinars)