

DOCKETED	
Docket Number:	20-TRAN-01
Project Title:	Reliable Electric Mobility Infrastructure
TN #:	232248
Document Title:	Presentation - REMI Innovative Mobility Service Demonstrations with Zero-Emission Vehicles
Description:	REMI Official Deck
Filer:	Christina Cordero
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	2/27/2020 2:40:04 PM
Docketed Date:	2/27/2020



Reliable Electric Mobility Infrastructure (REMI)

Innovative Mobility Service Demonstrations with Zero-Emission Vehicles

Pre-Solicitation Workshop

February 26, 2020 (10 a.m. to 2 p.m.)

Shaun Ransom, Tiffany Hoang

Housekeeping

- Housekeeping/Logistics
 - Emergency Procedures
 - Restrooms
- WebEx Participants
- Sign-in sheet / Business card sheet
- Updates on solicitation documents including this presentation will be posted on our docket.
- <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=20-TRAN-01>



Commitment to Diversity

The Energy Commission adopted a resolution strengthening its commitment to diversity in our funding programs. We continue to encourage disadvantaged and underrepresented businesses and communities to engage in and benefit from our many programs. To meet this commitment, Energy Commission staff conducts outreach efforts and activities to:

- Engage with disadvantaged and underrepresented groups throughout the state.
- Notify potential new applicants about the Energy Commission's funding opportunities.
- Assist applicants in understanding how to apply for funding from the Energy Commission's programs.
- Survey participants to measure progress in diversity outreach efforts.



Diversity Survey

- The information supplied will be used for public reporting purposes to display anonymous overall attendance of diverse groups.
- Please use this link to take the [Diversity Survey](https://www.surveymonkey.com/r/KL7JNXH):
<https://www.surveymonkey.com/r/KL7JNXH>

Thank you for your time!



Clean Transportation Program (CTP)



- AB 8 (Perea, Chapter 401, Statutes of 2013) extends CTP through January 1, 2024.
- Receives up to \$100 million per year to:
 - ✓ Transform California's transportation market into a diverse collection of alternative fuels and technologies and reduce California's dependence on petroleum.
 - ✓ Develop and deploy innovative technologies that transform California's fuel and vehicle types to help attain the state's climate change policies.



Agenda

Introduction to Innovative Mobility & REMI

10 a.m. to 10:30a.m.

Projects that REMI can support &
CARB presentation on innovative mobility projects

10:30 a.m. to 11:00 a.m.

Pre-solicitation concepts

11:00 a.m. to 11:30 a.m.

Discussion & questions

11:30 a.m. to 12 p.m.



Solicitation Purpose and Goals

- REMI is a competitive solicitation designed to support innovative electric mobility projects
- Focused on community-based shared mobility projects
- Support new mobility projects with vehicles and charging infrastructure or exiting mobility projects with a demonstrated need for support / expansion.
- REMI will focus on priority population communities i.e. Disadvantaged, low-income and CA Native Tribal Communities.



Shared Mobility REMI



Source: Abrams Mobility Advisors

Shared Mobility

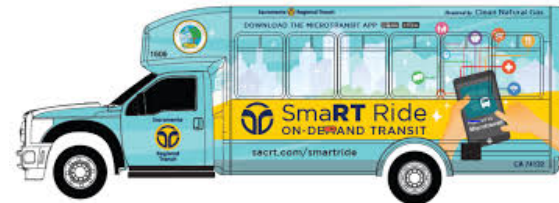
Shared Mobility refers to the shared use of a vehicle, bicycle, or other transportation mode



Micro Mobility



Ride Hailing



Transit



Van Pooling & Car sharing

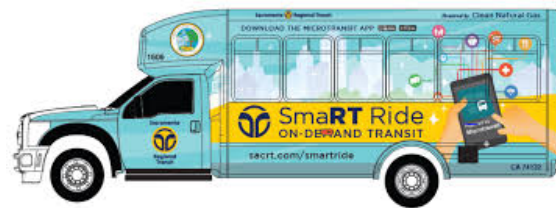
Electric Shared Mobility Community Benefits

- Pollution and emission reductions
- Fills public transportation gaps by connecting first to last miles
- Transportation cost reductions
- Provides job opportunities



Discussion – Shared Mobility

What shared mobility modes or mobility mode combinations would best serve your community?



Discussion – Community Needs

What feedback have communities provided on shared mobility projects?



Charging Infrastructure to Support Shared Mobility

Level 2 – typically for workplace or destination

Can support carsharing or where vehicles are stationary for an extended amount of time, e.g. multi-unit dwellings

DC Fast Chargers – typically for corridors or fleet charging

Can support mobility-on-demand services or located at a charging hub that supports transit or floating fleets

AC Level 2



VOLTAGE:

208V or 240 V 1-Phase AC

AMPS:

12-80 Amps (Typ. 32 Amps)

CHARGING LOADS:

2.5 to 19.2 kW (Typ. 6.6 kW)

CHARGE TIME FOR VEHICLE:

10-20 Miles of Range Per Hour

DC Fast Charge



VOLTAGE:

208V or 480V 3-Phase AC

AMPS:

<200 Amps (Typ. 60 Amps)

CHARGING LOADS:

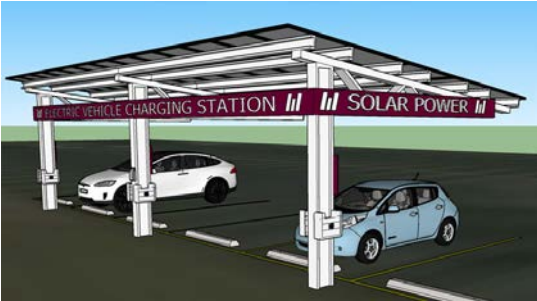
<150 kW (Typ. 50 kW)

CHARGE TIME FOR VEHICLE:

80% Charge in <30 Minutes



Charging infrastructure Innovative Use Cases



Solar charging in rural areas



Mobile charging to offset costly installations



Street light charging to utilize existing community resources.

E.g. Leveraging excess capacity available from LED upgrades



Discussion – Charging Infrastructure

What types of charging infrastructure would best support shared mobility in your community?



Project Examples by Density & Land Use



Rural Regions

Rural Ride-hailing, Cantua Creek

Electric vehicles

Level 2 charging

Available as car-sharing during the weekends



Suburban

Car-sharing at Affordable Housing MUDs, Sacramento

Electric vehicles

Dedicated Level 2 charging



Urban

Transformative Climate Communities Program, Fresno

Electric vehicles and e-bikes

DC Fast Charger deployment



Examples of Innovative Mobility Projects that REMI can Support

- Car sharing
- Ride sharing
- Ride Hailing
- Van Pooling
- E-bikes and scooters
- Transit
- Mobility Hubs



Presentation from CARB

- Innovative mobility projects
 - Current
- Clean Mobility Options
 - Up and coming projects



Reliable Electric Mobility Infrastructure

REMI



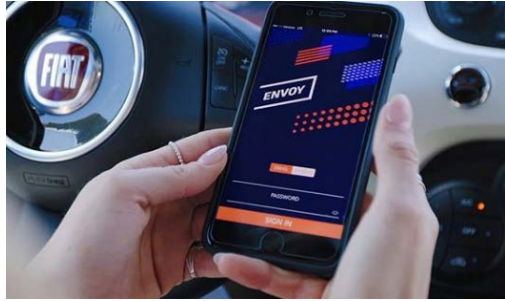
Agenda: Pre-solicitation Concepts



- Background
- Purpose and Goals
- Eligible Projects
- Community-based Organizations
- Priority Populations
- Proposed Regions
- Funding
- Education and Outreach



Background: Innovative E-Mobility Projects



Envoy Technologies, Inc. (\$1.5 million)

- Battery-electric vehicle car-sharing program in San Francisco Bay and Sacramento Metro area
- Multi-unit residential locations, including affordable housing developments and units within disadvantaged communities
- \$145,000 for charging infrastructure



CALSTART, Inc. (\$750,000)

- Ride-sharing program with Chevrolet Bolts
- For students attending Fresno City College from the rural Fresno County area



StratosFuel, Inc. (\$750,000)

- Fuel cell electric vehicle car-sharing platform in Riverside and Ontario
- Use mobile applications to reserve and rent fuel cell electric vehicles



Solicitation Purpose and Goals

- Leverage community assets and industry know-how to deploy reliable electric mobility services and charging infrastructure
- Address priority population innovative mobility wants and needs within proposed regions
- Support new and existing innovative mobility projects
- Have projects up-and-running by 2022



Eligible REMI Projects

Eligible	Not Eligible
<ul style="list-style-type: none">• Light-duty electric vehicles• Level 2 and DC fast charging infrastructure	<ul style="list-style-type: none">• Hydrogen fuel cell vehicles• Freight• Public transportation• Hydrogen stations



Discussion – Eligible REMI Projects

What other types of innovative mobility projects should we consider for eligibility?



Community-based Organizations (CBOs)

“A public or private organization that is representative of a community or a significant segment of a community and works to meet community needs.”

-US Department of Health and Human Services



Churches



Affordable housing
advocacy groups



Equity advocates



Regional transportation planning
associations



Discussion – Community-based Organizations

What do you identify as examples of a Community-based Organization?



Community-based Organization's Role in the Application Team



Example of a Project with CBO Involvement

Green Raiteros Rideshare Program



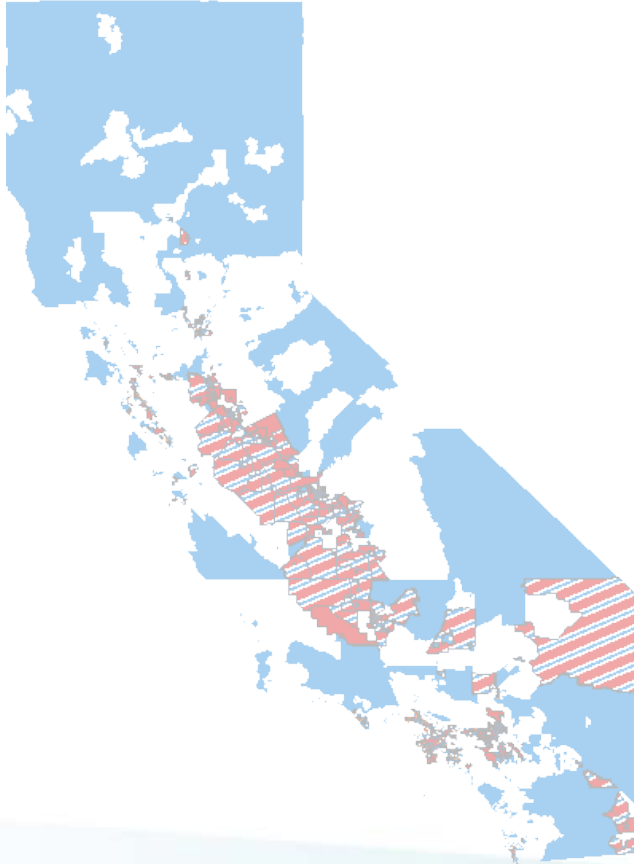
Source: EVgo



Source: Shared-Use Mobility Center



Priority Populations



CalEnviroScreen Disadvantaged Communities
(SB535)

Low-income populations (AB 1550)

CA Native Tribal Communities



Discussion – Priority Populations

Should we be considering other priority population segments (e.g. affordable housing, free lunch programs, California Healthy Places Index)?

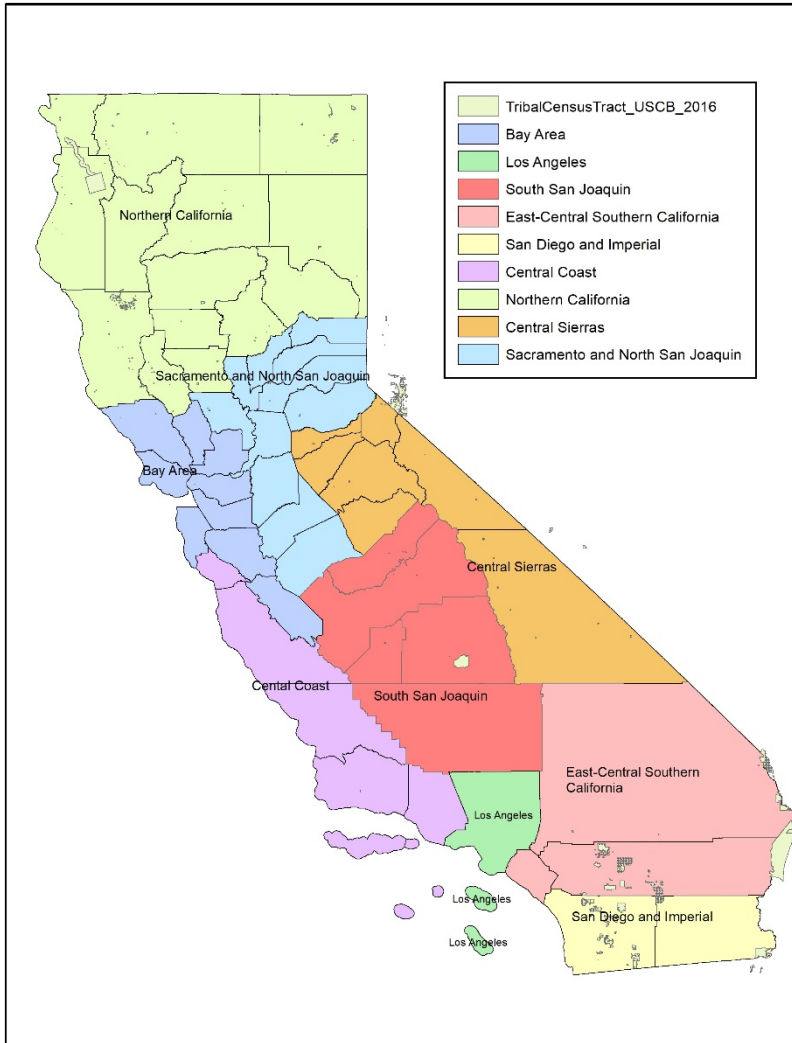


Discussion – Community-based Organizations

Do community-based organizations in your local area face challenges applying for competitive funding?



Proposed Regions for Awards



General Area Description		Selected Counties
1	Bay Area	San Francisco, Alameda, Contra Costa, San Mateo, San Benito, Marin, Sonoma, Napa, Solano, and Santa Clara Counties
2	Sacramento and North San Joaquin Area	Sacramento, El Dorado, Sutter, Yuba, Yolo, Placer, San Joaquin, Stanislaus, Placer, Nevada, Sierra and Merced Counties
3	South San Joaquin Area	Fresno, Kings, Tulare, Madera and Kern Counties
4	East-Central Southern California Area	San Bernardino, Los Angeles, Orange and Riverside Counties
5	Los Angeles	Los Angeles
6	San Diego and Imperial Area	San Diego and Imperial
7	Central Coast	Santa Cruz Monterey, San Luis Obispo, Santa Barbara and Ventura Counties
8	Northern California	Siskiyou, Trinity, Shasta, Lassen, Tehama, Modoc, Plumas, Glenn, Butte, Plumas, Mendocino, Lake, Del Norte, and Colusa Counties
9	Central Sierras	Alpine, Mono, Amador, Calaveras, Tuolumne, Inyo and Mariposa Counties
10	CA Native American Tribes	All California



Funding

- Funding will be distributed equally between the 10 proposed regions
- Each region will receive an allocation to support multiple projects
- If the full allocation is not awarded in a region then funds can be reallocated



Discussion – Education & Outreach

What are the most effective methods for outreach in your community?

What resources would help you identify community transportation needs?



Thank You!

Additional comments or feedback?

Contact for additional information or feedback:

Shaun Ransom

Shaun.Ransom@energy.ca.gov

(916) 654-4217

