



Pomona Valley  
Transportation  
Authority

A partnership of the cities of Claremont, La Verne, Pomona and San Dimas

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May 11, 2022

**AGENDA  
ITEM #5**

**MEMORANDUM**

To: Pomona Valley Transportation Authority  
From: Nicole Carranza, Sr. Program Manager *NC*  
Subject: **Zero Emission Planning Update**

Summary

As climate change continues to impact our communities, the state of California is taking measures to attempt to reduce greenhouse gas emissions with statewide emissions reduction requirements including California Air Resources Board (CARB) Innovative Clean Transit (ICT) Regulations.

PVTA services and Claremont Dial-a-Ride combined have a total of 26 vehicles that fall under the ICT regulation which states that all fleets operated with vehicles with a gross weight rating (GVWR) greater than 14,000 lbs. must have a zero emissions roll out plan by 2023 and begin a phased implementation of Zero Emission Vehicles (ZEV's) by 2026. The process of converting the PVTA and Claremont DAR fleet to zero emissions will require planning and coordination between various stakeholders including the cities, transit agencies, and contractors.

The process of converting fleets of vehicles to zero emissions will require years of planning and collaboration between cities and transit agencies. The infrastructure can be very costly for cities and transit agencies if strategic planning is not put in place.

There are several aspects to consider when planning for Zero Emission Vehicles:

- **Funding** - Collaboration is highly encouraged and beneficial in the planning stage and grant solicitation process. There are a variety of grants available from public to private funding.

- **Infrastructure** – Identifying the proper infrastructure development needed for charging/fueling ZEV vehicles with battery or hydrogen fuel vehicles. For example, cities will need to consider reconfiguring electric grids to allow for electric conduits to be installed for electric vehicle charging stations. PVTA currently does not own any property to house vehicles. PVTA will need to consider all options including acquiring/leasing a property or continuing to hold operators responsible for the operation infrastructure.
- **Hydrogen Fuel vs. Battery Electric Fleet** – PVTA and Claremont Dial-a-Ride will need to decide if it is feasible to move towards battery electric vehicles. What is the better path: battery electric vehicles, a mixed fleet of battery electric vehicles and hydrogen fuel cells or waiting until a full fleet of hydrogen vehicles is feasible? The current market for battery electric cutaway vehicles is very new and options are limited. Battery electric vehicles currently possess limited range and are not sustainable. PVTA needs to consider the implementation of hydrogen fuel cell vehicles along with the battery electric option.
- **Utility Companies** – Electric, gas and water companies will need to be consulted for power, grid planning, budget planning and funding purposes.
- **Sustainability** – The cities will need to decide on the source of energy they would like to implement battery electric or renewable sources such as hydrogen fuel, solar or wind.
- **Safety** – Fire departments will need to be heavily involved during the infrastructure planning to help prevent and support emergency situations.

## ZEV Status Update

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PVTA, like many other small operators who fall under the ICT regulation, has continued to research all aspects of electric vehicle implementation. As the chair of Metro's Local Transit Systems Subcommittee, Nicole Carranza has formed a Zero Emission Vehicle Committee that includes a network of more the 40 other operators. The Committee also includes a staff representative from CARB. Most of the committee members including PVTA are small operators and are required to submit an ICT roll out plan by 2023.

Claremont Dial-a-Ride as an Included Municipal Operator receives separate regional and federal funds that requires separate reporting and compliance from the Federal Transit Administration and the California Air Resource Board (CARB). This will require Claremont to produce a roll out plan as well. PVTA will proceed with a joint roll out plan for PVTA and Claremont Dial-a-Ride.

PVTA is in the planning phase and continues to research any new industry developments. Most large agencies like Foothill transit and Metro have been the first to implement certified electric vehicles that meet federal standards. Foothill has also started to explore the use of hydrogen fuel cell buses. As zero emission vehicles become available for smaller vehicles, PVTA has begun the challenging search for the proper facility and infrastructure.

To assist in this planning effort, PVTA will be releasing a Request for Proposal for a zero emission vehicle implementation analysis and a joint CARB-ICT roll out plan for PVTA (including Get About, San Dimas Dial-a-Cab and Pomona Group) and Claremont Dial-a-Ride (DAR)

The purpose of the analysis will be to allow PVTA and Claremont DAR to develop a plan to facilitate a phased transition that coincides with funding availability and in coordination with member city plans.

#### Request For Proposal Scope of Work Outline

- Assessment of current conditions and risks of moving to a zero emission fleet, including evaluating market conditions for electric and hydrogen fuel cell vehicles and charging/hydrogen fueling equipment.
- Evaluate current operational needs and costs versus operational needs and costs with an electric fleet.
- Assessment of the ZEV infrastructure needs, identifying the possible sites to build, purchase or lease in each of the four cities in the service area. Determine the best location for charging infrastructure. Evaluate site acquisition options, such as, purchase, contractor purchase or shared facilities.
- Identify opportunities for PVTA to share charging/fueling infrastructure.
- Collaboration with relevant stakeholders such as, city departments and external partners including utilities, Public Works, Planning Departments, Public Health, etc.
- Evaluate the current market and determine vehicle options and charging options.
- Identify routes to electrify in order of feasibility.
- Work with power suppliers to identify infrastructure needs for supply.
- Develop a timeline for vehicle replacement/purchases and infrastructure development.
- Develop a funding plan/assessment
- Finalize an initial plan and produce an ICT roll out plan.

We plan to release the RFP by the end of May and award a contract for the work by July. PVTA staff will consult with Claremont and the Technical Committee prior to making an award.

PVTA will continue to reach out to cities and connect with the proper planning departments as well as work with our contractors to come up with the proper implementation options. PVTA will continue to keep the board informed of any future funding solutions and roll out plan developments.