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NEVADA COUNTY BOARD OF SUPERVISORS
Board Agenda Memo

MEETING DATE: May 14, 2024
TO: Board of Supervisors
FROM: **George Schureck, Acting Director of Public Works**
SUBJECT: Presentation of the Draft Nevada County Zero Emission Vehicle (ZEV) Transition Plan

RECOMMENDATION: Receive the presentation of the draft Nevada County Zero Emission Vehicle (ZEV) Transition Plan presented by Frontier Energy, providing comment and feedback to incorporate into a final plan that will be brought before the Board of Supervisors in late June 2024.

FUNDING: The ZEV plan and transition is estimated to cost an additional \$10M over the cost of conventional vehicle purchases during the 29-year transition period. Funding for ZEVs will mainly come from our Fleet replacement fund balances. We will take every effort to make this EV transition as cost effective as possible, leveraging any incentive and grant voucher opportunities that are available. Fleet will work with Information General Services Agency on charging infrastructure at County facilities. We will be seeking grant funding to support these expenses.

The projections for the recommended transition schedule will increase capital costs by \$2.6 million for vehicle replacements over the 30-year transition period, a 16% increase. This cost increase will be offset by the projected fuel savings of \$16.2 million.

BACKGROUND:

In April 2023, the California Air Resources Board (CARB) adopted the Advanced Clean Fleets (ACF) regulation, which requires all California municipalities to gradually transition their medium heavy-duty (MHD) fleets to zero-emission technologies. The regulation, which applies to municipalities and all other California fleets, is designed to accelerate the transition of medium and heavy-duty vehicles (over 8,500 pounds), off-road yard tractors and light-duty mail and package delivery vehicles to Zero Emission Vehicles (ZEVs). The ACF is part of California's broader strategy to reduce greenhouse gas emissions and combat climate change.

As a part of the transition process, the CARB ACF regulation requires that new MHD municipal fleet purchases be ZEVs. Designated small counties, including Nevada County, are permitted to delay implementation of ACF requirements until 2027, when 100% of new MHD fleet purchases must be ZEVs.

As a result of these regulations, Nevada County Transportation Commission (NCTC) contracted with Frontier Energy, who collaborated with Momentum, DKS Associates, and Sugarpine Engineering to develop the draft plan to address the complexities of fleet transition and infrastructure development for the County.

Recommendations from the Executive Summary in the attached draft transition plan include:

- Nevada County focus its initial transition on light-duty electric vehicles for the first several years of its transition to increase operational familiarity with the technology before requirements to purchase ZEVs for MHD fleet begin. And during this time, purchase one (1) class 7 (MHD) vehicle taking advantage of grants, vouchers, and tax credits.
- A three (3) phase transition (2024-2029, 2030-2034, and 2035-2053) with corresponding charging infrastructure at 16 County facilities.
- A listing of recommended ZEV replacement is provided, initially focused on battery-electric vehicles (EVs) rather than hydrogen fuel cell electric vehicles (FCEVs) for the lack of hydrogen fueling facilities in the area. FCEVs will be considered beginning in 2035 with the focus of hydrogen technology on long-range and heavy-duty capacity vehicles that need fast fueling.
- 1 vehicle per plug versus multiple vehicles sharing a plug is recommended to ensure County vehicles are appropriately charged without staff supervision. Although more expensive to construct a 1:1 ratio, long term cost savings will be achieved through staff time savings and vehicles being charged and readily available for any emergent or non-emergent needs.

The draft plan estimates that the County's full transition to electric vehicles is calculated to cost an additional \$10 million above what an internal combustible engine (ICE) would cost over the 29-year transition period, without consideration of grant, voucher, and tax credit offerings. The additional cost of installing and maintaining Electric Vehicle Supply Equipment (EVSE) has not been calculated. Significant cost savings are expected from fuel and Low Carbon Fuel Standard (LCFS) credits. Total greenhouse gas reduction is expected to be over 39,000 metric tons of carbon dioxide between 2024 - 2053.

After the presentation, comments and concerns will be considered and a final Nevada County ZEV Transition Plan will be brought to Board of Supervisors for approval. The final ZEV Transition Plan will be a living document, that may require updates as we implement the various technologies.

Attachments:

1. Draft Nevada County Zero Emission Vehicle Transition Plan Report

Item Initiated by: Josh Hylinski, Fleet Services Manager

Approved by: George Schureck, Acting Director of Public Works