



# FAIRFAX TOWN COUNCIL MEETING STAFF REPORT

<b>MEETING DATE:</b>	August 2, 2023
<b>PREPARED FOR:</b>	Mayor and Town Council
<b>PREPARED BY:</b>	Sean Youra, Climate Action Coordinator
<b>SUBJECT:</b>	Receive the Marin Countywide Electric Vehicle Acceleration Strategy presentation from Christine O'Rourke, MCEP Sustainability Coordinator, and provide direction to staff on whether to develop a work plan as proposed in Appendix A of the EV Acceleration Strategy

## RECOMMENDATIONS

1. Receive the Marin Countywide Electric Vehicle Acceleration Strategy presentation from Christine O'Rourke, MCEP Sustainability Coordinator
2. Provide direction to staff on whether to develop a work plan as proposed in Appendix A of the EV Acceleration Strategy (attached)

## BACKGROUND

The Marin Countywide Electric Vehicle Acceleration Strategy was developed by the [Marin Climate & Energy Partnership](#) (MCEP), which is comprised of the eleven cities and towns of Marin, the County of Marin, MCE, the Transportation Authority of Marin (TAM), and the Marin Municipal Water District. Established in 2007, MCEP works to develop and implement mutual programs and policies outlined in each agency's Climate Action Plan (CAP) in an efficient and cost-effective manner. Funding for the Strategy was provided by TAM through its Alternative Fuels Program. The Strategy is designed to help Marin communities reduce greenhouse gas (GHG) emissions and enable the widespread adoption of electric vehicles (EVs) by 2030 outlined as a goal in each jurisdiction's CAP. In addition to the accelerated adoption of light medium, and heavy-duty EVs, the Strategy also supports the widespread use of electric bikes, scooters, and motorcycles.

## DISCUSSION

Fairfax's CAP includes an ambitious goal to reach net-zero emissions by 2030. According to Fairfax's latest GHG inventory for the year 2020, community emissions have decreased 27% since 2005. Transportation remains the largest sector in terms of GHG emissions in Fairfax, accounting for approximately 54% of total emissions. Within the transportation sector, 81% of the emissions come from passenger vehicles with the remainder coming from commercial vehicles (18%) and public transportation (1%). To meet the 2030 CAP goal of net-zero emissions by 2030, emissions reductions from the transportation sector must be prioritized. This also effectively means that Fairfax must achieve 100% zero-emission vehicle (ZEV) registrations by 2030. As shown in Figure 4 of the EV Acceleration Strategy, Fairfax had 5.2% ZEVs registered by the end of 2021.

Fairfax's CAP includes specific measures to reduce transportation emissions with the largest reductions coming from transitioning to ZEVs. Specifically, the estimated emissions reduction would be 10,648 metric tons CO<sub>2</sub>e if 100% of vehicles used by Fairfax residents and businesses are ZEVs by 2030 and all of them charge with 100% GHG-free electricity. To complement Fairfax's CAP measures to reduce

transportation emissions, the EV Acceleration Strategy discusses barriers to EV adoption and strategies to address those barriers. These barriers and strategies were identified through outreach to local government staff, nonprofits, regional agencies, and community leaders. A total of 36 actions are enumerated in the Strategy that are intended to guide implementation and accelerate EV adoption. The actions are further grouped under the four general themes:

1. Conduct Robust Community Outreach and Education
2. Accelerate Public Charging Infrastructure
3. Increase Municipal Fleet Electrification
4. Support and Advocate for Policy and Funding that Accelerates EV Adoption

Although Fairfax has already implemented or is in the process of implementing several of these actions such as conducting EV outreach and education (OE-1), adopting reach codes that facilitate the transition to EVs (PC-3), and installing municipal chargers (MF-4), there is an opportunity for staff to evaluate the actions in the Strategy and determine which actions should be prioritized for implementation to accelerate EV adoption in the Town.

In addition to receiving the presentation on the EV Acceleration Strategy, staff is seeking direction from the Council on whether to develop a work plan as presented in Appendix A of the Strategy that would identify and prioritize specific actions including which department would be responsible for implementation, the time frame required for implementation, an estimate of staff time to complete implementation, and funding sources that may be available to support implementation. To develop the work plan, the Climate Action Coordinator would work closely with Public Works and other relevant departments, along with the Climate Action Committee.

**FISCAL IMPACT**

If directed by Council, existing staff resources would be used to develop and implement the EV Acceleration Strategy work plan.

**ATTACHMENT**

Marin Countywide EV Acceleration Strategy



# Marin Countywide EV Acceleration Strategy

August 2023

# Marin Countywide EV Acceleration Strategy

- Created by the Marin Climate Energy Partnership
- Funded through the Transportation Authority of Marin's Alternative Fuel Program
- Goal is to accelerate EV adoption to meet targets set in each jurisdiction's Climate Action Plan
- Intent is to develop a plan that can be accepted/adopted by all jurisdictions



# Process to Create the EV Acceleration Strategy

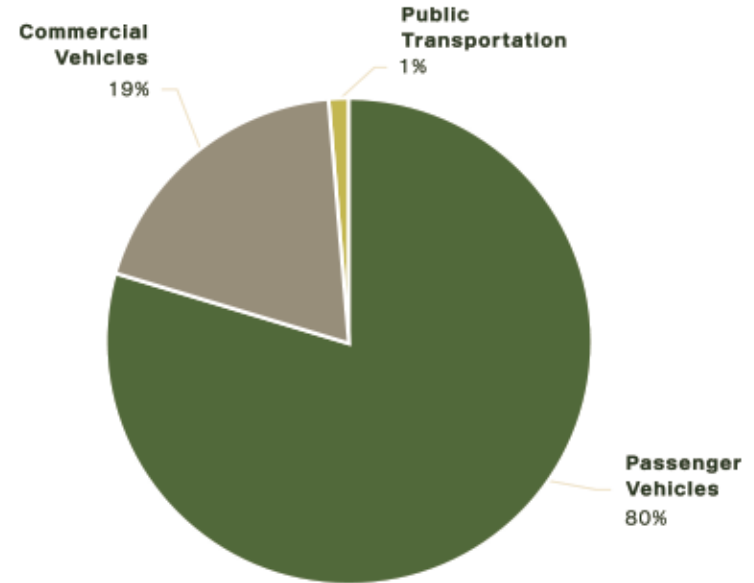
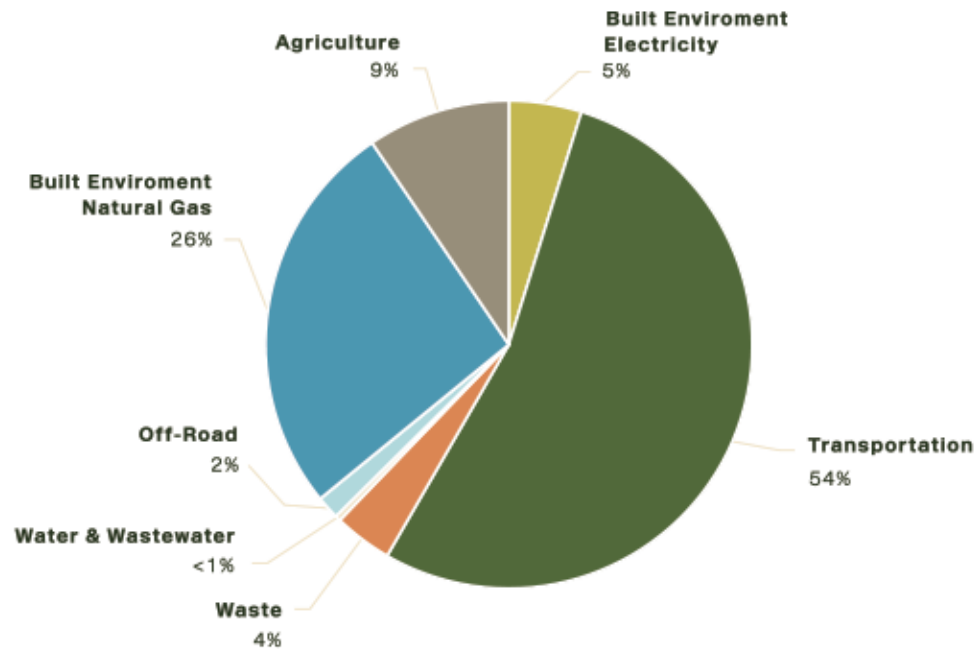
- MCEP subcommittee formed
- Guiding Principles developed
- Outreach conducted to stakeholders (jurisdictions' staff, community leaders, nonprofits, State agencies) to understand barriers and challenges to widespread EV adoption
- Reviewed other agencies' plans and guidance from regional and State agencies



## Guiding Principles

- Align with and support local climate action plans.
- Provide equitable access to EV programs and strive for equitable outcomes.
- Coordinate countywide for consistency, efficiency, and cost-effectiveness of program implementation.
- Track and measure progress of EV Strategy actions and adoption rates.
- Strive to capture local economic co-benefits whenever possible.
- Focus government actions on those that most efficiently utilize public funds and resources.
- Leverage regional, state, and federal funds to support EV deployment in Marin County.
- Support acceleration of EV sales and charger installation by the private market.

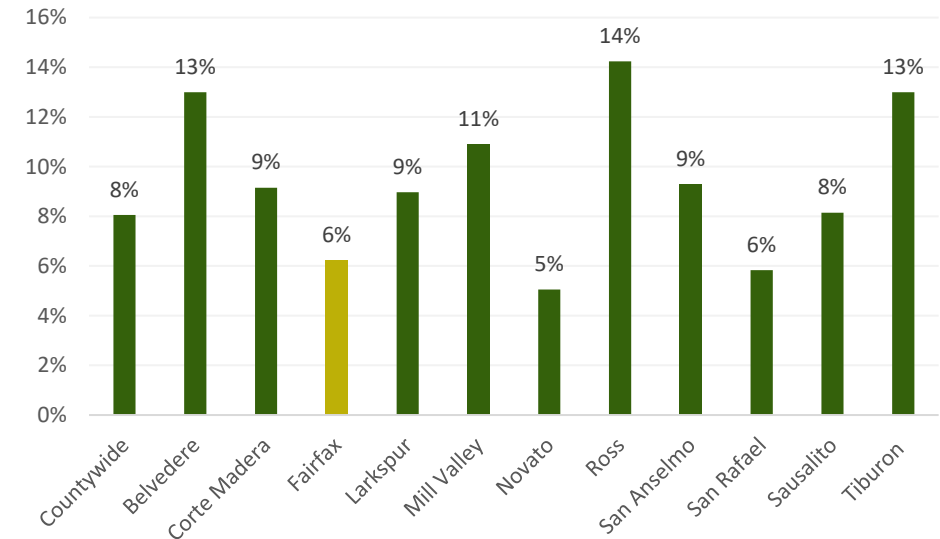
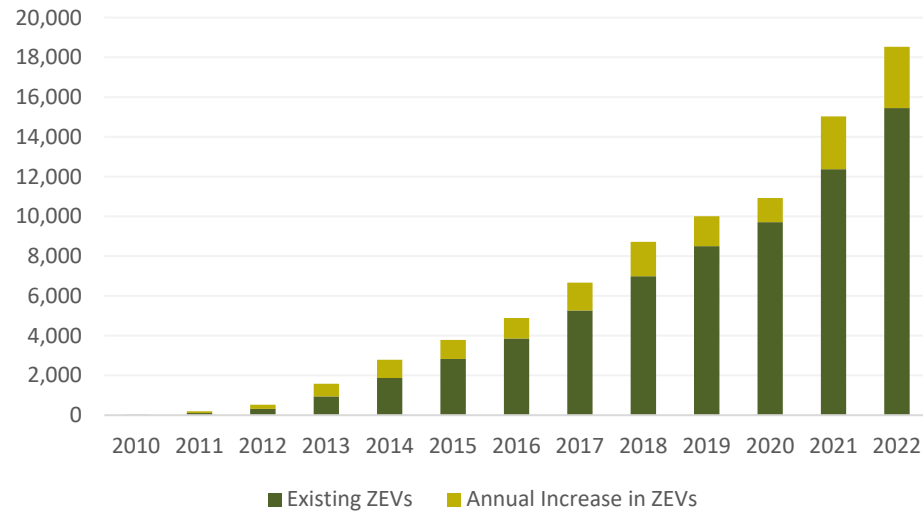
## Existing Conditions: GHG Emissions (2020 Data)



- Countywide, emissions from the Transportation sector is responsible for more than half of community emissions (2020 data)

- Passenger vehicles are responsible for 80% of transportation emissions
- Reducing emissions from passenger vehicles is critical to meeting local and state emissions reduction goals

# Existing Conditions: ZEV Adoption



- 15,449 ZEVs in Marin at the end of 2022 – 25% increase since 2021
- ZEVs include battery electric (71%), plug-in hybrid (29%), and fuel cell electric vehicles <1%)

- Countywide, 8.1% of registered passenger vehicles were ZEVs in 2022 (5.8% at end of 2021)
- Statewide, 3.9% of registered passenger vehicles are ZEVs



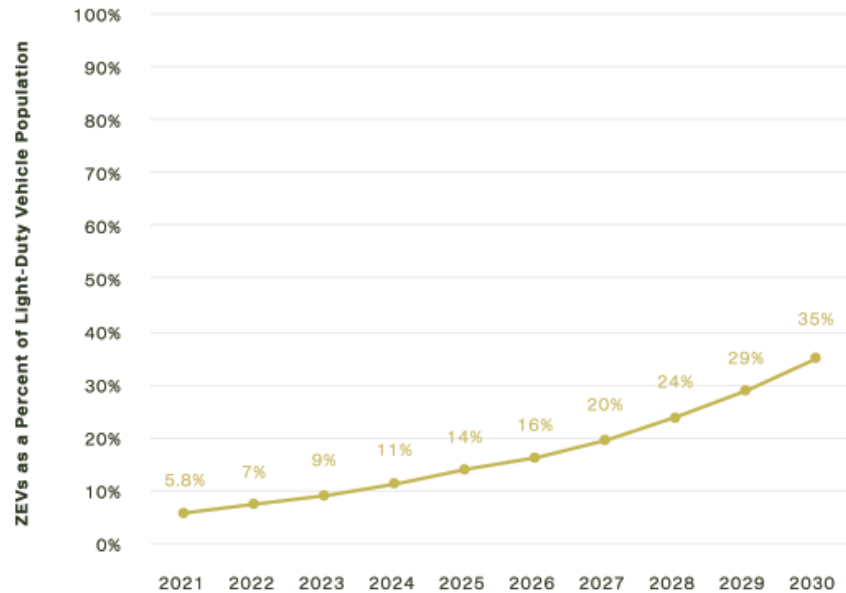
## GHG Reduction and ZEV Targets

Jurisdiction	ZEV registrations as % of total passenger vehicle registration by 2030
City of Belvedere	35%
Town of Corte Madera	25%
Town of Fairfax	100%
City of Larkspur	33%
County of Marin	45%
City of Mill Valley	35%
Town of San Anselmo	25%*
City of San Rafael	25%
City of Sausalito	30%
Town of Tiburon	45%

*\*The Town of San Anselmo has also adopted a local target of 3,000 ZEVs registered in San Anselmo by 2030.*

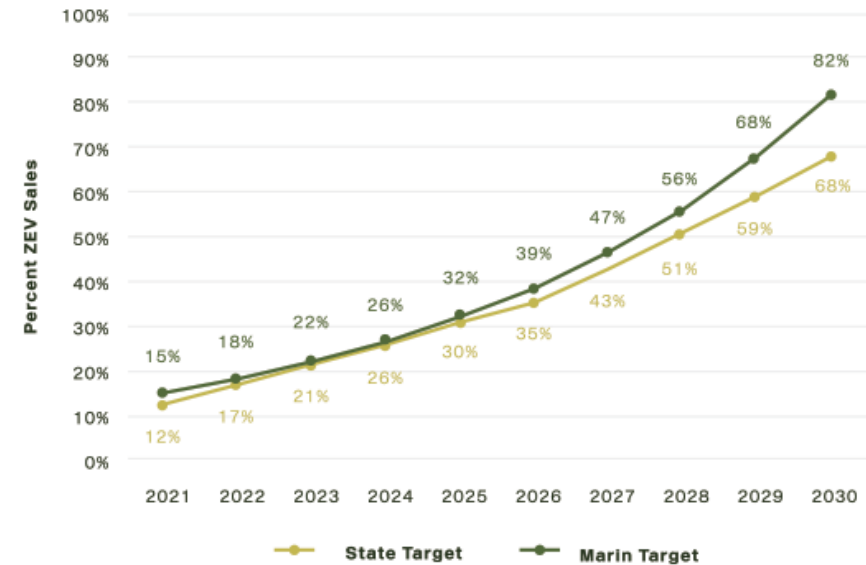
# ZEV Registrations and Sales Needed to Meet Targets

## Projected Marin ZEV Population for 35% Target



- Annual growth rate has averaged 22% over past 3 years
- Need to sustain 21% annual growth rate to get to 35% adoption rate by 2030

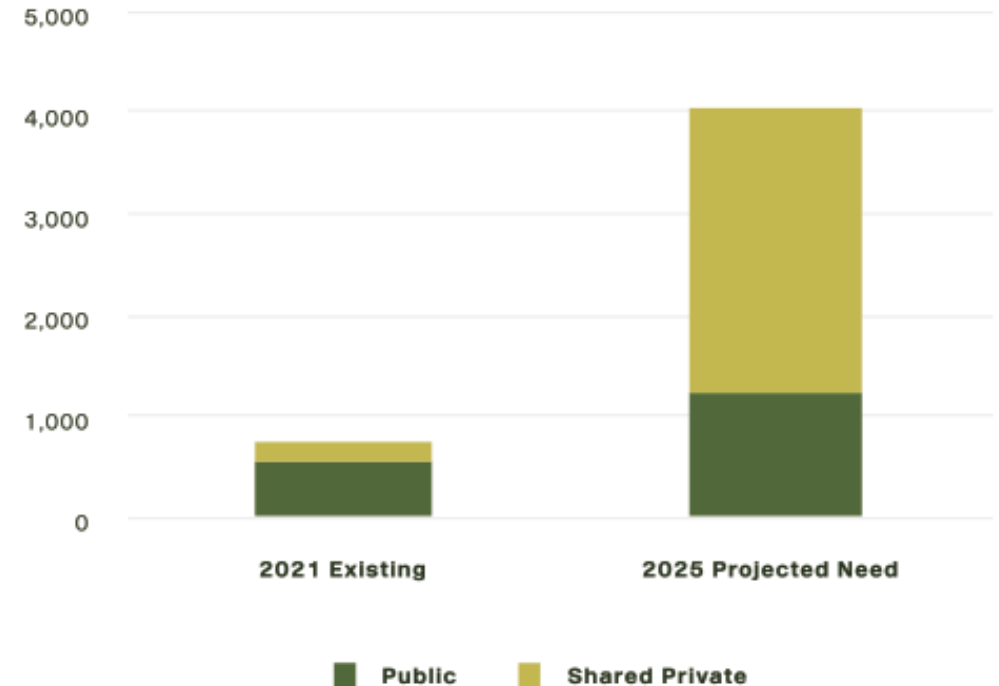
## Percent New ZEV Registrations vs. State New Sales Targets



- Advanced Clean Cars II Rule sets annual ZEV sales targets beginning in 2026 to achieve 100% ZEVs by 2035
- Statewide, ZEV sales are currently 21% of light duty vehicle sales. In Marin, it's 33%.

## EV Charging Needs

- According to California Energy Commission data, there are 739 public (75%) and shared private (25%) chargers in Marin
- The number of single-family home chargers is undoubtedly much higher.
- 71% of housing units in Marin are single family homes
- Greatest need is for shared private chargers in multifamily buildings and at workplaces
- Opportunity to ensure new multifamily buildings are ready for an all-electric future



# EV Charging Needs

- TAM's Marin County Electric Vehicle Charging Station Siting Plan (2019)
- Level 2 chargers needed:
  - Southern Marin, especially TAM junction, Mill Valley, Strawberry
  - Frontage roads next to Highway 101
  - Shopping centers
  - School parking lots
  - SMART stations
  - Ferry terminals
  - Park and ride lots
  - Marin City and Canal Neighborhood to support equitable EV access and adoption
- Level 3 chargers needed:
  - Terra Linda, downtown San Rafael, downtown Novato, Sausalito, Point Reyes Station, Larkspur/Corte Madera, Mill Valley

# Municipal Fleets

<b>Jurisdiction</b>	<b>BEVs</b>
City of Belvedere	2 passenger cars and 1 e-bike
Town of Corte Madera	3 passenger cars and 1 e-bike
Town of Fairfax	1 passenger car and 1 light truck (on order)
County of Marin	13 passenger cars
City of Larkspur	2 passenger cars
City of Mill Valley	6 passenger cars and electric utility carts
City of Novato	3 passenger cars and 5 e-bikes
Town of Ross	1 passenger car
Town of San Anselmo	3 passenger cars and 2 e-bikes
City of San Rafael	1 passenger car, 3 parking service buggies, 2 pickup trucks, 1 utility vehicle and 4 e-bikes
City of Sausalito	None

# Barriers to EV Adoption

<b>Vehicle Technology</b>	<ul style="list-style-type: none"><li>• EV range</li><li>• Battery degradation (especially in the used EV market)</li><li>• Lack of diversity in vehicle types (light/heavy duty trucks, police pursuit vehicles) and price points</li><li>• Lack of vehicle availability</li></ul>
<b>Charging</b>	<ul style="list-style-type: none"><li>• Not enough publicly accessible charging locations, both Level 2 and 3</li><li>• Cost to install chargers, especially for trenching and getting electricity to site</li><li>• Low grid capacity or connectivity in certain locations</li><li>• Not enough wayfinding signage for EV charging locations</li><li>• Difficult to retrofit existing multi-family buildings for EV chargers and lack of parking spaces for EVs</li><li>• EV charging cost allocation to residents at multi-family buildings can be complicated with electricity meters</li><li>• Cost and effort to upgrade electrical panel/install Level 2 charger at home</li><li>• Reliability of public chargers</li></ul>
<b>Economics</b>	<ul style="list-style-type: none"><li>• Higher initial purchase or lease price of EVs compared to internal combustion engine vehicles</li><li>• Complicated incentives (vehicles and EV chargers)</li><li>• Revenue from public EV chargers does not cover cost of subscription, maintenance, electricity, and depreciation</li></ul>
<b>Perceptions and Behavior</b>	<ul style="list-style-type: none"><li>• Misinformation about EV models, range, charging, etc.</li><li>• Resistance to change/fear of the unknown</li><li>• Lack of EV knowledge at car dealerships</li><li>• Lack of knowledge about best times to charge</li></ul>
<b>E-bikes and E-scooters</b>	<ul style="list-style-type: none"><li>• Higher purchase price</li><li>• Limited rebates and incentives</li><li>• Lack of secure parking</li><li>• Lack of safe, protected cycling infrastructure</li></ul>

## EV Strategy's Actions

- 36 actions in four areas
- Expectation is that jurisdictions will identify and prioritize specific actions for implementation
- Sample Workplan provided in the appendix for this purpose



## EV Strategy's Actions

- Conduct Robust Community Outreach and Education **(4 actions)**
  - Conduct EV outreach through City communication channels
  - Promote rebates and incentives
  - Support countywide marketing campaigns
  - Support consumer awareness programs, such as ride-and-drives



# EV Strategy's Actions

- Accelerate Public Charging Infrastructure **(16 actions)**
  - Adopt a model reach code with EV infrastructure requirements above the base code
  - Identify locations for public chargers and include projects in Capital Improvement Plans
  - Focus municipal investment in frequently used properties (community centers, near multifamily buildings)
  - Utilize available assistance for site and equipment analysis, financing and installation
  - E-Bike facilities, including Level 1 charging and secure parking
  - Ensure equitable access to EV charging in low-income and underserved communities
  - Revise municipal policies/regulations as needed: parking, signage, pricing
  - Partner with EV charging vendors
  - Explore innovative charging solutions

## EV Strategy's Actions

- Increase Municipal Fleet Electrification **(11 actions)**
  - Adopt a fleet replacement policy with goal to convert to 100% of fleet to EVs by 2030
  - Develop a fleet replacement plan and integrate in capital improvement planning; include fire and police vehicles
  - Identify fleet replacement manager
  - Install municipal chargers
  - Incorporate e-bikes in municipal fleet

## EV Strategy's Actions

- Support and Advocate for Policy and Funding that Accelerates EV Adoption **(5 actions)**
  - Additional funding for municipal needs
  - Support equity priority communities:
    - Focus investment in low-income communities
    - Provide equitable access to rebates and incentives
    - Develop targeted programs such as buy-back programs

## Next Steps

- Staff to complete the Work Plan (Appendix A)





Questions?