

# Fairfax County Proposal to Facilitate Electric Vehicle Charging In Common-Interest Communities

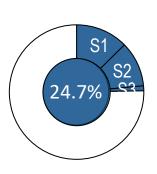
Charge Up Fairfax

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## **CECAP Strategies Organized by Sector**



#### **Buildings and Energy Efficiency**

**Strategy 1**: Increase energy efficiency and conservation in existing buildings.

**Strategy 2**: Electrify existing buildings.

**Strategy 3**: Implement green building standards for new buildings.



## #

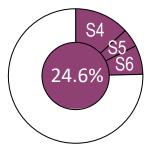
#### **Energy Supply**

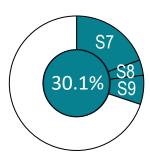
Strategy 4: Increase renewable energy in electric grid.

**Strategy 5**: Increase production of onsite renewable

energy.

**Strategy 6**: Increase energy supply from resource-recovered gas, hydrogen, and power-to-gas.





#### **Transportation**

**Strategy 7**: Increase electric vehicle (EV) adoption.

**Strategy 8:** Support sustainable land use, active transportation, public transportation, and transportation demand management (TDM) to reduce vehicle-miles traveled.

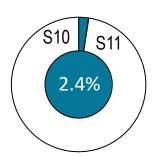
**Strategy 9**: Increase fuel economy and use of low-carbon fuels for transportation.

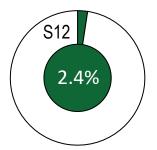


#### Waste

**Strategy 10:** Reduce the amount of waste generated and divert waste from landfills and waste-to-energy facilities.

**Strategy 11:** Responsibly manage all waste generation, including collected residential and commercial waste, wastewater, and other items.





#### **Natural Resources**

**Strategy 12:** Support preservation, restoration, and expansion of natural systems, green spaces, and soil quality.



New Action:
Increase EV
Adoption by
Residents in
commoninterest
communities

#### **CECAP Strategy 7 Target:**

1. Increase plug-in hybrid electric vehicles (PHEVs) and battery electric vehicles (BEVs) to at least 15% of all light-duty vehicle registrations by 2030 & to 42% by 2050 (May 2022 ~ 0.92%)

#### **Current and New County Actions:**

- Education & Outreach (Ongoing)
  - a. Carbon Free Fairfax Campaign

     EVs from every angle <u>Learn</u>

    <u>About Climate Change Science</u>

    <u>And Action | Office of</u>

    <u>Environmental and Energy</u>

    <u>Coordination</u>

    (fairfaxcounty.gov)
- 2. Leveraging County Assets
  - a. County's EV Game Plan
- 3. Entitlement Process
  - a. Comprehensive Plan Policy
- 4. Community-Based Program
  - a. Charge Up Fairfax

## **Action**: Install EV Chargers in New Buildings & Leverage County assets to expand EV use across on-road vehicles and off-road equipment

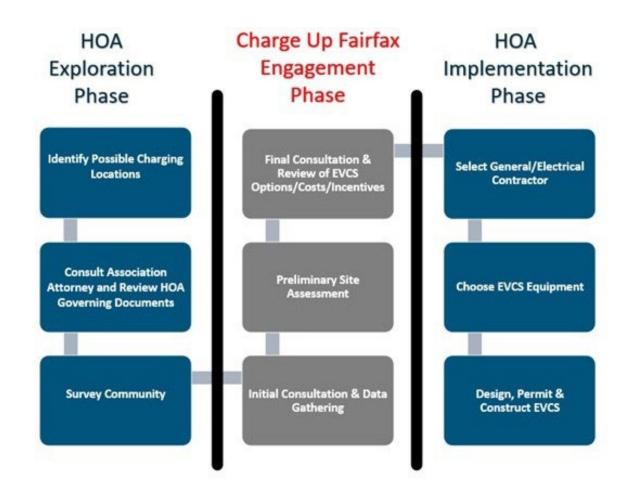


Electric Vehicle Charging Infrastructure Sites – October 2022					
Site	Location	Charging Stations	Charging Spaces	Status	
Fairfax County Government Center	P1 Parking Garage	8 Dual and 1 Single	17	Complete	
Herrity Building	Parking Garage	3 Dual	6	Complete	
Pennino Building	Parking Garage	3 Dual	6	Complete	
Public Safety Headquarters	Parking Garage	4 Dual	8	Complete	
Merrifield Center	Parking Garage	3 Dual	6	Complete	
Sully Community Center	Surface Lot	2 Dual	4	Complete	
Innovation Station Center	Parking Garage	10 Dual	20	Complete	
Herndon-Monroe Garage	Parking Garage	8 of 20 Single Complete	20	October 2022	
Police Heliport		1 Dual	2	Complete	
Lorton Community Center	Surface Lot	2 Dual and 1 Single	5	October 2022	
TOTAL			94		

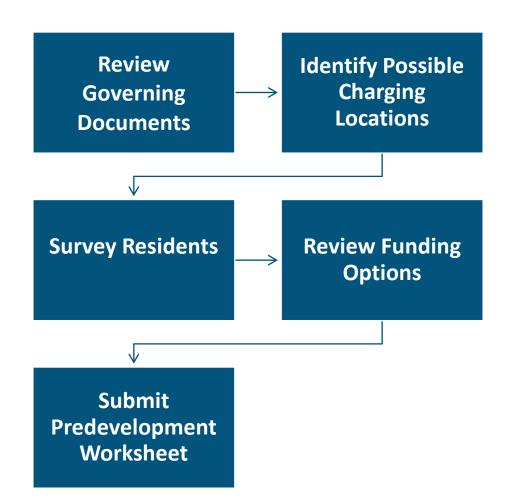


#### Electric Vehicle Charging Challenges in Common-Interest Communities

- Some Common-interest communities pose particular challenges for at-home EV charging. Residents of common-interest communities may find that they are unable to install EV charging stations because they are not considered a "lot owner"
- Charge Up Fairfax is a community-based engagement program developed to assist HOAs with the installation of <u>publicly</u> available shared charging stations.
   Charge Up Fairfax envisions a <u>three-phase</u> approach to the installation of EV supply equipment (EVSE) in HOAs (see Exhibits 1 & 2 attached).



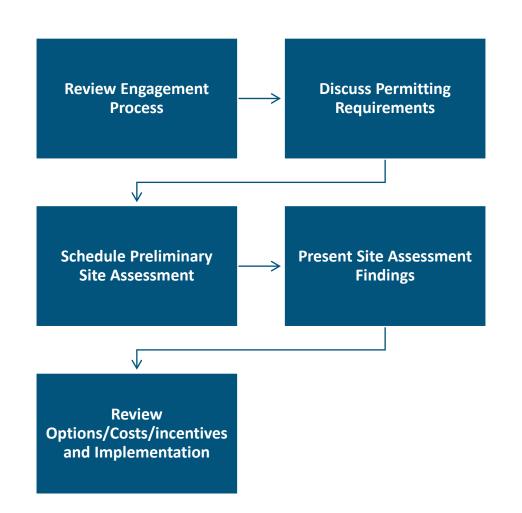
## **HOA Exploration Phase**

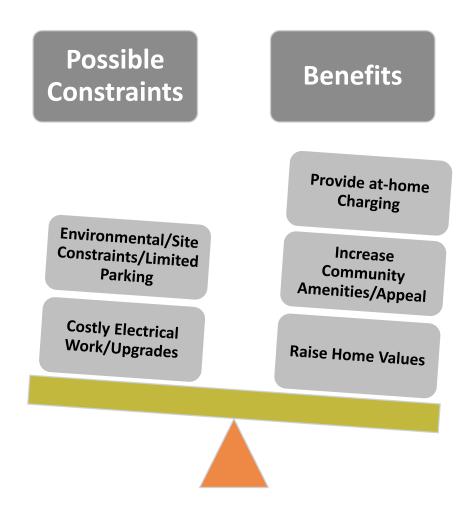


Scenario	Legal	Electrical Infrastructure	Board Dynamic			
Horizontal/Vertical Community (parking garage, lot or street parking)						
Parking all unassigned, HOA owns parking spaces	Straightforward?	Location priority eased by choosing nearest source.	Should be straightforward.			
Parking by mix of assigned and unassigned (visitor) spaces; HOA owns unassigned spaces.	Straightforward?	Challenge is where the unassigned spaces are and proximity to electric source.	HOA can relocate unassigned spaces to accommodate EV infrastructure if needed, but that may cause friction.			
All parking by assigned spaces, but HOA owns some visitor spaces	Could be challenging depending on HOA dynamic.	Challenging as desired EV charging spot may be far from electric source.	Decision whether to allow individual unit owner to pursue.			
All parking spots assigned or owned by individual unit owners	Very challenging.	Challenging as desired EV charging spot may be far from electric source.	Decision whether to allow individual unit owner to pursue.			

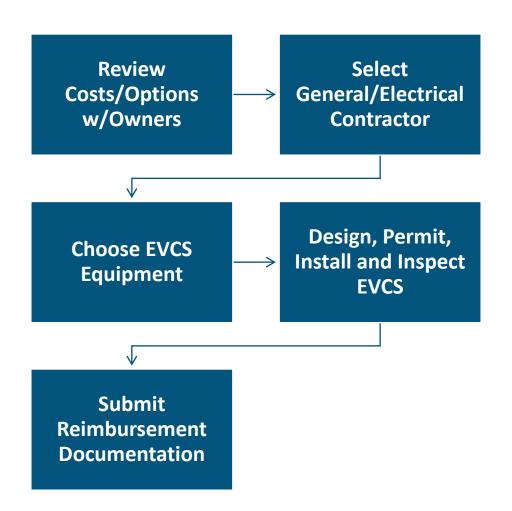


## Charge Up Fairfax Engagement Phase

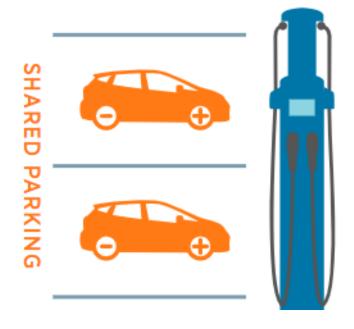




## **HOA Implementation Phase**



#### Community charging



### Charge Up Fairfax Next Steps

- 1. OEEC plans to work with the Reston Association to pilot *Charge Up Fairfax* which will allow OEEC to develop best practices and compile lessons learned which it can then use to expand *Charge Up Fairfax* to other HOAs in the county.
- OEEC intends to seek Board approval on November 1 to apply for federal funding through the DOE's Vehicle Technology Office (VTO): No Home Charging: Multi-Family Housing (MFH) Innovative Demonstrations, Technical Assistance and Best Practices grant (see Exhibit 3 attached).
- 3. One Fairfax equity lens will be applied to prioritize the HOA database for the *Charge Up Fairfax* program and determine the amount of the grant funding.



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EV Charging for Common Interest Communities | Office of Environmental and Energy Coordination (fairfaxcounty.gov)