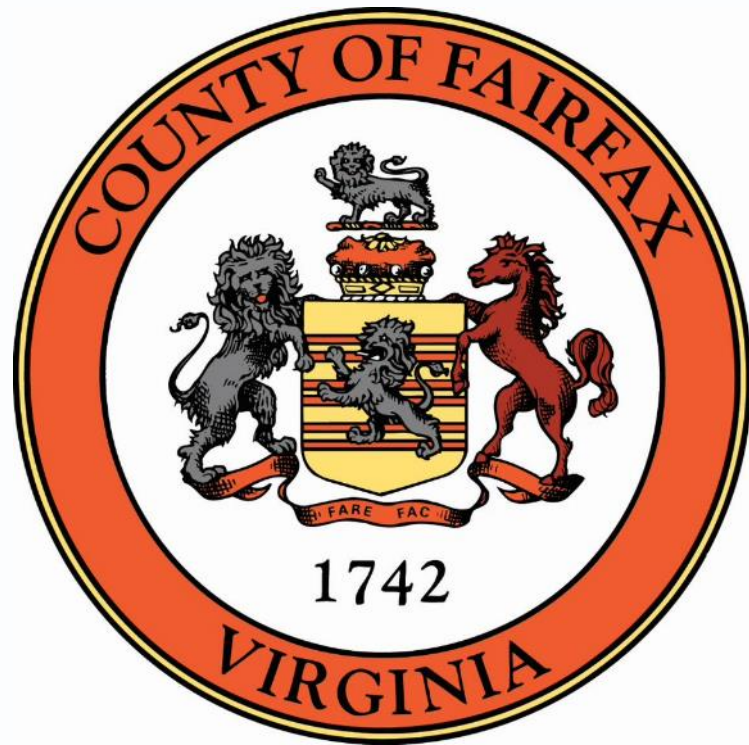


Metropolitan Washington Council of Governments Regional Electric Vehicle Deployment Working Group

County of Fairfax, Virginia
Electrical Vehicle Infrastructure Update
May 18, 2023



















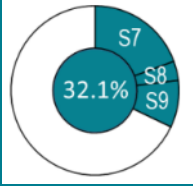
Marguerite Verville Guarino
Deputy Director
Fairfax County Department Vehicle Services

Matt Meyers
Division Director
Office of Environmental and Energy Coordination

Gina Weil
Climate Mitigation Specialist
Office of Environmental and Energy Coordination

Climate Plans in Fairfax County

 Addressing the <u>Cause</u>: by reducing harmful emissions		 Addressing the <u>Effects</u>: by building resilience
<u>CECAP</u> (Community-Wide)	<u>Operational Energy Strategy</u> (Government operations only)	<u>Resilient Fairfax</u> (Boosting resilience to climate hazards, for both community and government)
Goal: Carbon Neutral by 2050	Goal: Carbon Neutral by 2040	
 Transportation	 Fleet Electrification	 Integrated Action Planning
 Buildings and Energy Efficiency	 Energy & Water Efficiency Green Buildings	 Resilient Infrastructure & Buildings
 Solar and Renewables	 Renewables	 Climate-Ready Communities
 Waste Reduction	 Waste Management & Recycling	 Adaptive Environments
 Natural resources	 Goods and Services Utility Cost Management	



Emission Reductions

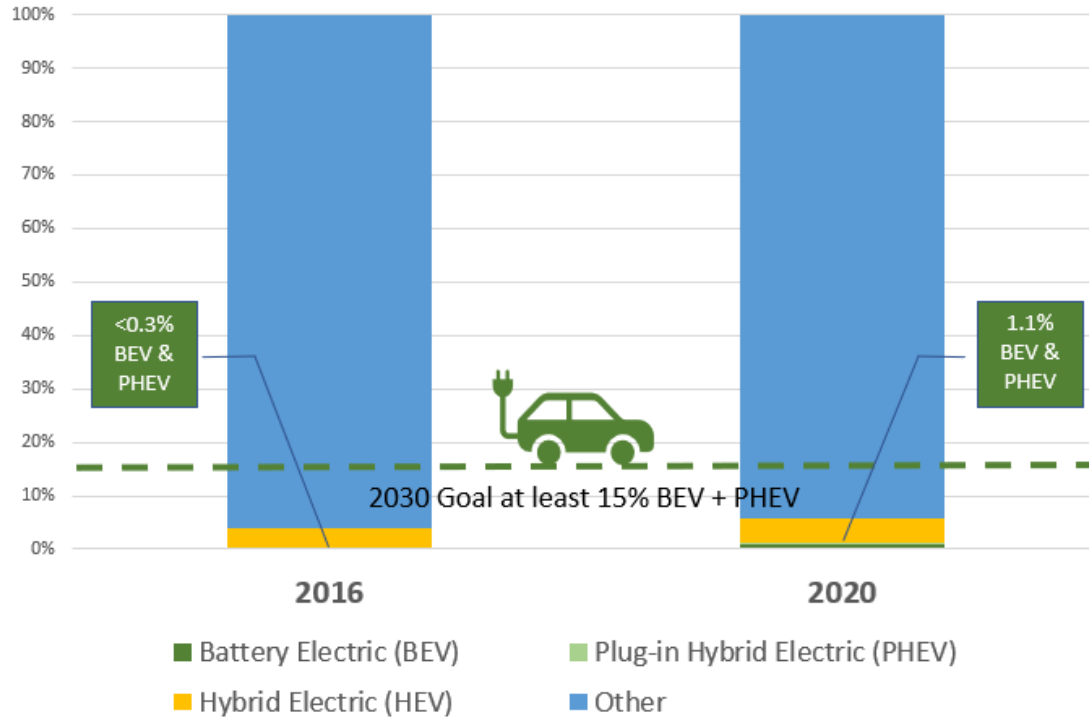
Transportation



CECAP Community Goals

OES County Fleet Electrification Targets

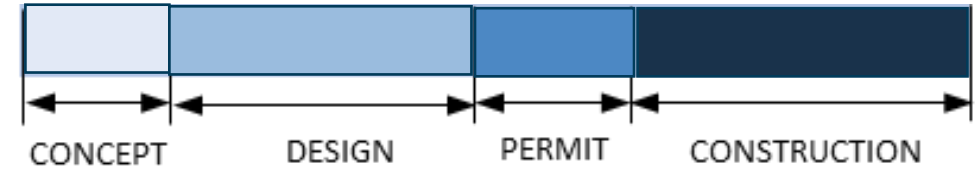
Electric Vehicle Registration in Fairfax County



- Develop a plan to use 100% non-carbon emitting fuels for county fleet vehicles by 2030.
- County buses and fleet vehicles will be electric or a non-carbon emitting alternative by 2035.
- No diesel buses will be purchased after FY2024



County Sustainable Development Policy



In Construction (Pre-OES July 2021)

Project Name	LEED Goal	Solar Ready	Net Zero	EV Ready
Lorton Volunteer Fire Station	Silver	No	No	No
Police Heliport	Silver	No	No	Yes
Reston Fire Station	Silver	Yes	No	No
Sully Community Center	Gold	Yes	No	Yes
Woodlawn Fire Station	Platinum	Yes	No	No
Lorton Community Center & Library	Gold	Yes	No	Yes
Edsall Road Fire Station	Silver	Yes	No	No
South County PS & Animal Shelter	Silver	Yes	No	Yes
Springfield Garage **1,100 spaces	n/a	Yes	No	Yes
Stormwater Wastewater Facility	Gold	Yes	Yes	Yes
Operational Support Bureau	Gold	Yes	Yes	Yes
Monument Garage **820 spaces	Parksmart	Yes	No	Yes
Innovation Garage	n/a	Yes	No	Yes
Seven Corners Fire Station	Gold	Yes	No	Yes
Kingstowne Library/Franconia PS	Gold	Yes	No	Yes
Mount Vernon RECenter	Silver	Yes	No	Yes
Final Design (Pre-OES July 2021)				
Patrick Henry Shelter	Silver	Yes	No	Yes
Orginial Mt. Vernon HS Redevelopment	Gold	Yes	No	Yes

Design (OES July 2021 Policy)

Project Name	LEED Goal	Solar Ready	Net Zero	EV Ready
Fairview Fire Station	Gold	Yes	Yes	Yes
Judicial Complex Building One	Gold	Yes	Yes	Yes
Mason Police Station	Gold	Yes	Yes	Yes
Gunston Fire Station	Gold	Yes	Yes	Yes
West Annandale Fire Station	Gold	Yes	Yes	Yes
Tysons Fire Station #29	Gold	Yes	Yes	Yes
Willard Health Center	Gold	Yes	Yes	Yes
Patrick Henry Library Garage	Gold	Yes	Yes	Yes
Audrey Moore Rec Center	Gold	Yes	Yes	Yes
Penn Daw Fire Station	Gold	Yes	Yes	Yes
Eleanor Kennedy Shelter	Gold	Yes	Yes	Yes
Crossroads	Gold	Yes	Yes	Yes
George Mason Library	Gold	Yes	Yes	Yes

Completed Buildings with Certifications:

- LEED Gold = 17
- LEED Silver = 21
- LEED Certified = 1
- Green Globe or Energy Star = 2



County Fleet Electrification EV Charging Stations



Site	Charging Spaces (Ports)	Status
Fairfax County Government Center	17	Complete
Herrity Building	6	Complete
Pennino Building	6	Complete
Public Safety Headquarters	8	Complete
Merrifield Center	6	Complete
Sully Community Center	4	Complete
Innovation Station Center	20	Complete
Herndon-Monroe Garage	20	complete
Police Heliport	2	Complete
Lorton Community Center	5	Complete
West Ox Bus Connector	2	Complete

Completed:

- 11 locations 96 charging spaces


Additional installations plan for 2023-2024:

- 5 locations with up to 116 charging spaces
 - Jermantown DVS
 - W. Springfield Government Center, Police Station, Fire & Rescue Station
 - Sully Police Department
 - Fairfax County Government Center
 - Public Safety Headquarters Phase II



Selecting an Electric Vehicle Charging Station

- Request for Proposal
 - Purchase, install, and maintain Level II Commercial Charging Stations
 - Compatible with standard connector and receptacles used by most EVs
 - Adaptable to general public use and fleet
 - Include Map Apps
 - Option of including solar
- Interviews
- Negotiation

 County of Fairfax, Virginia

NOTICE OF AWARD

Date of Award: **NOV 04 2020**

CONTRACT TITLE: Electric Vehicle Charging Stations

SOLICITATION NUMBER: RFP 2000002956

CONTRACT TYPE: Requirement Contract (RQ)

NIGP CODE: 06009, 96737

CONTRACT PERIOD: October 20, 2020 through October 31, 2025

RENEWALS: Five (5) one-year renewals

PRICES: See Attached Pricing Schedule

DELIVERY: FOB Destination

PAYMENT: Net 30 days

CONTRACTOR: National Car Charging, LLC
209 Kalamath Street, STE 3
Denver, CO 80223

SUPPLIER CODE: 1000043945

CONTRACT NO: 4400009695

Contact: James Burness, Chief Executive Officer
Telephone: (866) 996-6387 x700
Fax: (866) 996-6387 E-mail: jburness@nationalcarcharging.com

DPMM CONTACT: Guyler "Ryan" Justus, VCA, Contract Specialist I
Telephone: (703) 324-2719
Fax: (703) 324-3228
E-mail: guyler.justus@fairfaxcounty.gov



Locating Electric Vehicle Charging Stations in Fairfax County

A screenshot of the ChargePoint website interface. On the left, a sidebar lists several charging stations with their addresses and status. The main area shows a map of Fairfax County, Virginia, with several charging stations marked with green circular icons containing numbers. The stations listed in the sidebar are:

- O-WOOD OAKWOOD: 11781 Lee Jackson Memorial Hwy, Fairfax, Virginia. Status: Available AC.
- FAIRFAX COUNTY PENNINO 1: 12011 Government Center Pkwy, Fairfax, Virginia. Status: Available AC.
- FAIRFAX COUNTY PENNINO 2: 12011 Government Center Pkwy, Fairfax, Virginia. Status: Available AC.
- O-WOOD GREENWOOD: 12015 Lee Jackson Memorial Hwy, Fairfax, Virginia. Status: Available AC.
- FAIRFAX COUNTY PENNINO 3: 12011 Government Center Pkwy, Fairfax, Virginia. Status: Available AC.
- FAIRFAX COUNTY HERRITY 2: 12011 Government Center Pkwy, 1, Fairfax, Virginia. Status: Available AC.
- FAIRFAX COUNTY HERRITY 3: (Address partially obscured).

All stations with public access are visible on the ChargePoint and Google Maps.

<https://driver.chargepoint.com/mapCenter/38.857445158100916/-77.35396337826329/15>



Board Agenda Item
August 2, 2022

ACTION

Establishment of Retail Fees for the Charging of Electric Vehicles at County-Owned Charging Stations (All Districts)

ISSUE:

Board adoption of retail fees for the charging of electric vehicles at county-owned charging stations, effective August 3, 2022.

RECOMMENDATION:

The County Executive recommends that the Board of Supervisors adopt a two-part fee to be paid by the public effective August 3, 2022, including county employees charging their privately-owned vehicles, for the charging of electric vehicles (EVs) at county-owned charging stations, consisting of (1) a charge of \$0.30 per kilowatt hour and (2) a post-charge dwell-time fee of \$2.00 per hour that applies following a 10-minute grace period and is capped at \$25.00 per session.

TIMING:

Board action is requested on August 3, 2022, so that staff may begin to program fee information into county-owned EV charging stations and begin collecting revenue for the provision of EV charging service.

BACKGROUND:

Over the last several years, the Board of Supervisors (board) has supported electrification of the transportation sector, including funding the installation of EV supply equipment (EVSE) at county government facilities. Beginning in 2021, county staff began installing ChargePoint Level 2 EVSE at county government locations pursuant to a multi-year plan most recently described in a December 13, 2021 memorandum to the board. Level 2 EVSE can fully charge most EVs in four to eight hours. Currently, over 20 Level 2 charging stations have been installed at county facilities and are eligible for activation, with more scheduled for installation in CY 2022 and beyond.

Before the EV charging stations can be activated for public use, they must be programmed with information regarding the fees, if any, to be paid by the public, which is the subject of this item. The fees that the county establishes for the provision of retail EV charging service are not subject to regulation by the Virginia State Corporation Commission pursuant to § 56-232.2:1 of the Virginia Code.

Fee	
Hourly	\$0.30 per kWh
Dwell-Time	\$2.00 per hour <i>cap at \$25.00 per session</i>



Lorton Community Center



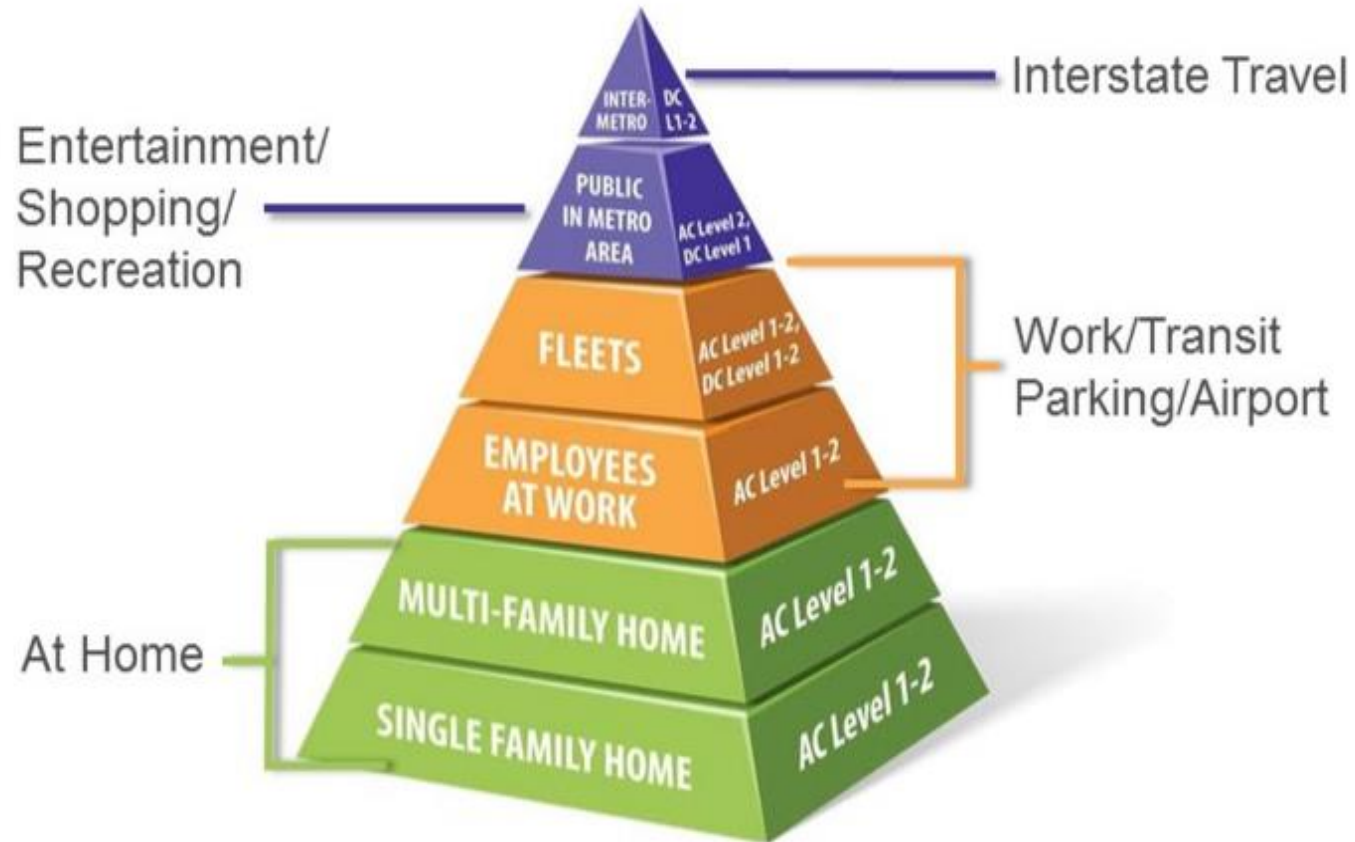
CHARGE UP FAIRFAX

Introduction to Charge Up Fairfax

Regional Electric Vehicle Deployment
Working Group

May 18, 2023

Electric Vehicle Charging Challenges in Common-Interest Communities



- The widely accepted paradigm is most EV charging is best “at home”.
- Residents of common-interest communities face challenges to at-home EV charging if they do not own individual private lots.
- Charge Up Fairfax aims to help with those challenges.

Electric Vehicle Charging Challenges in Common-Interest Communities

Charge Up Fairfax is a community-based engagement program to assist HOAs with the installation of charging stations for residents and their guests.

Charge Up Fairfax envisions a three-phase approach to the installation of EV supply equipment (EVSE) in HOAs.

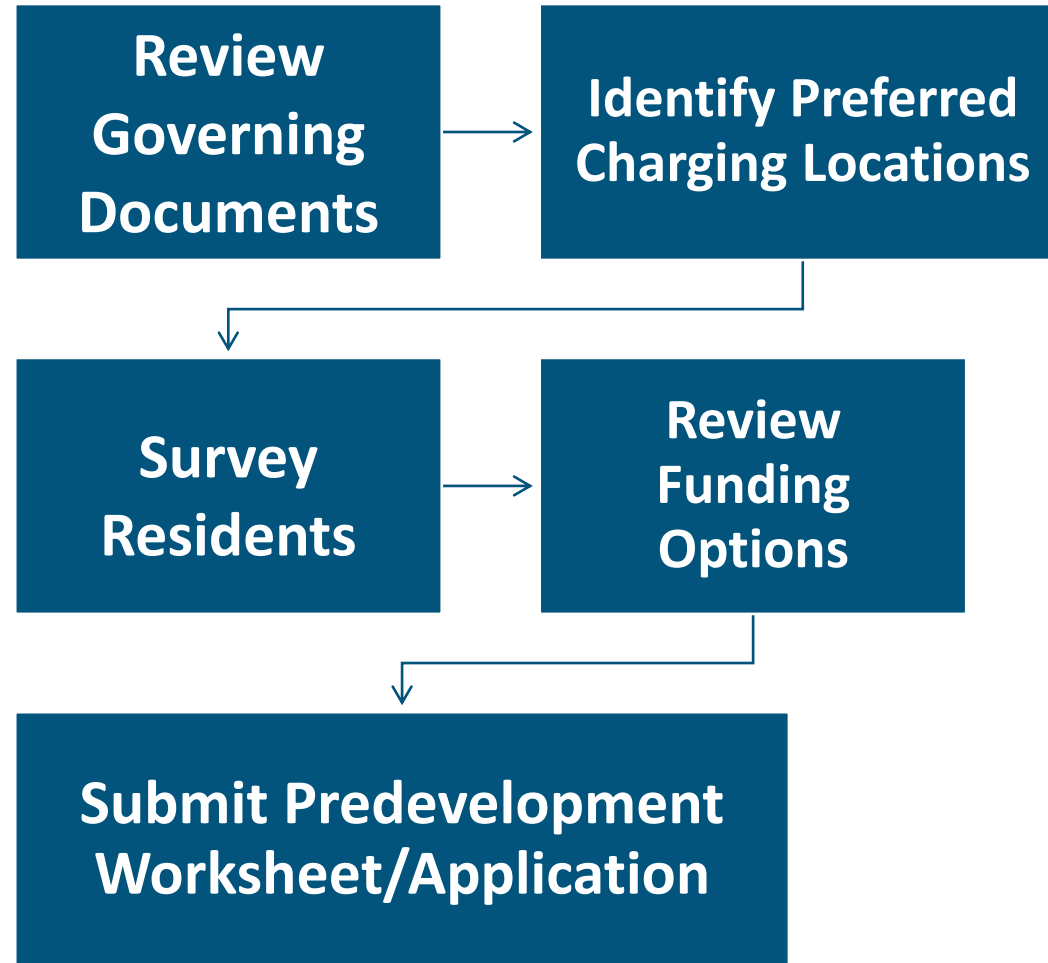
1. **HOA Exploration** Phase – burden on the HOA to do preparation
2. **County Engagement** Phase – county staff and contractor(s) provide assistance
3. **HOA Implementation** Phase – If HOA pursues EVSE, county remains in touch and eventually provide rebate for successful installation.

Charge Up Fairfax – HOA Exploration Phase

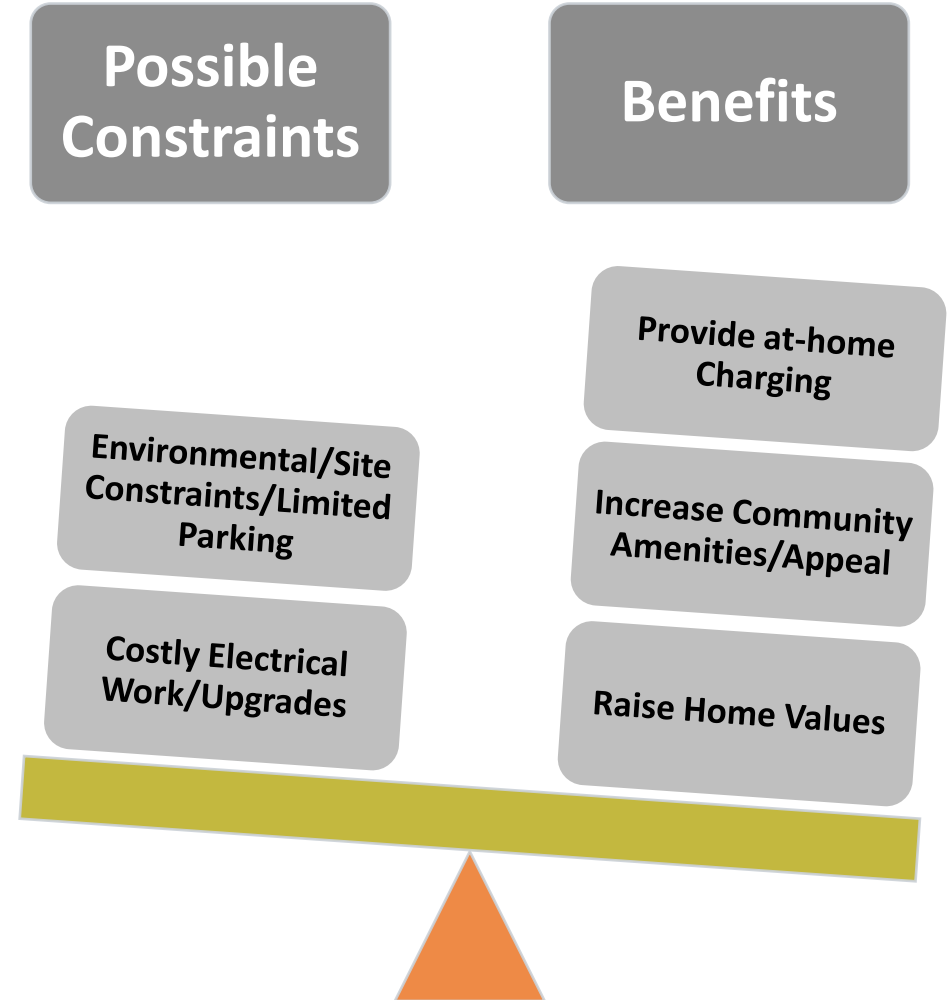
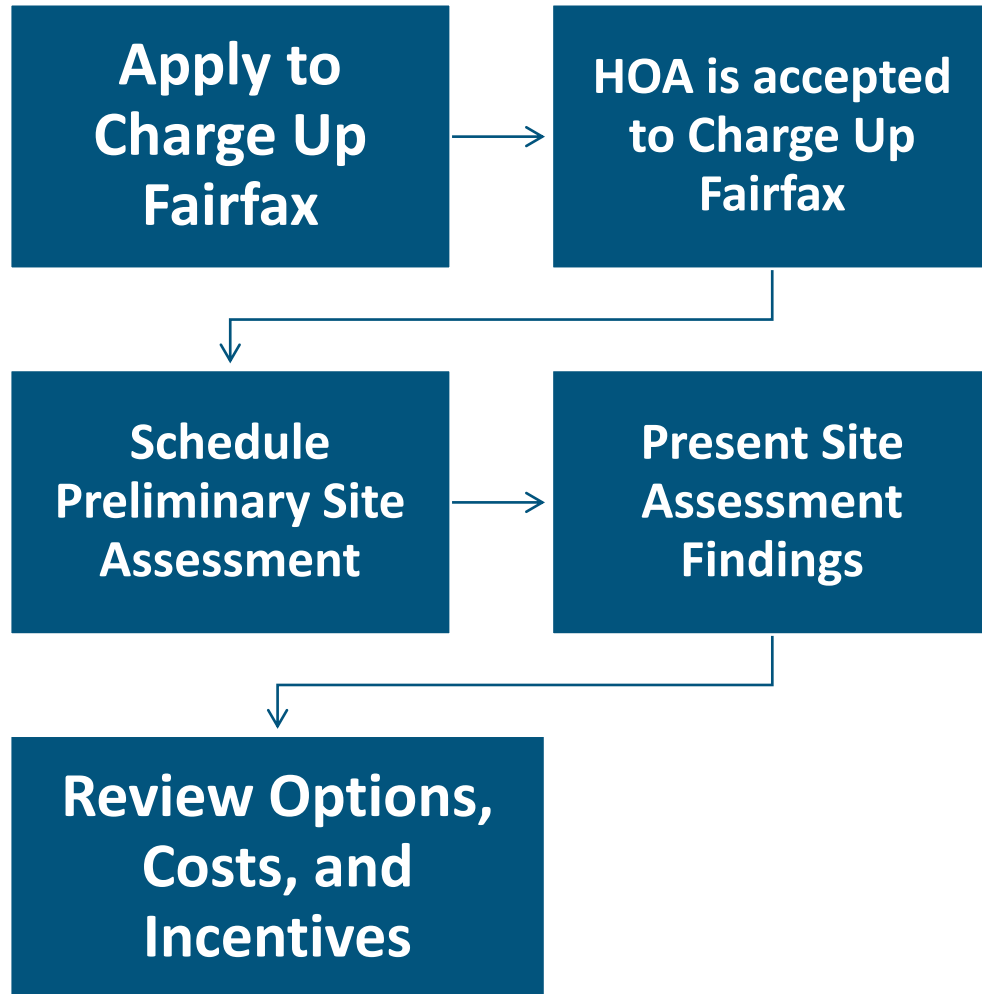
The County will consolidate resources and provide template documents to support exploration by HOAs.

Interested HOAs will have done their homework and be prepared to act.

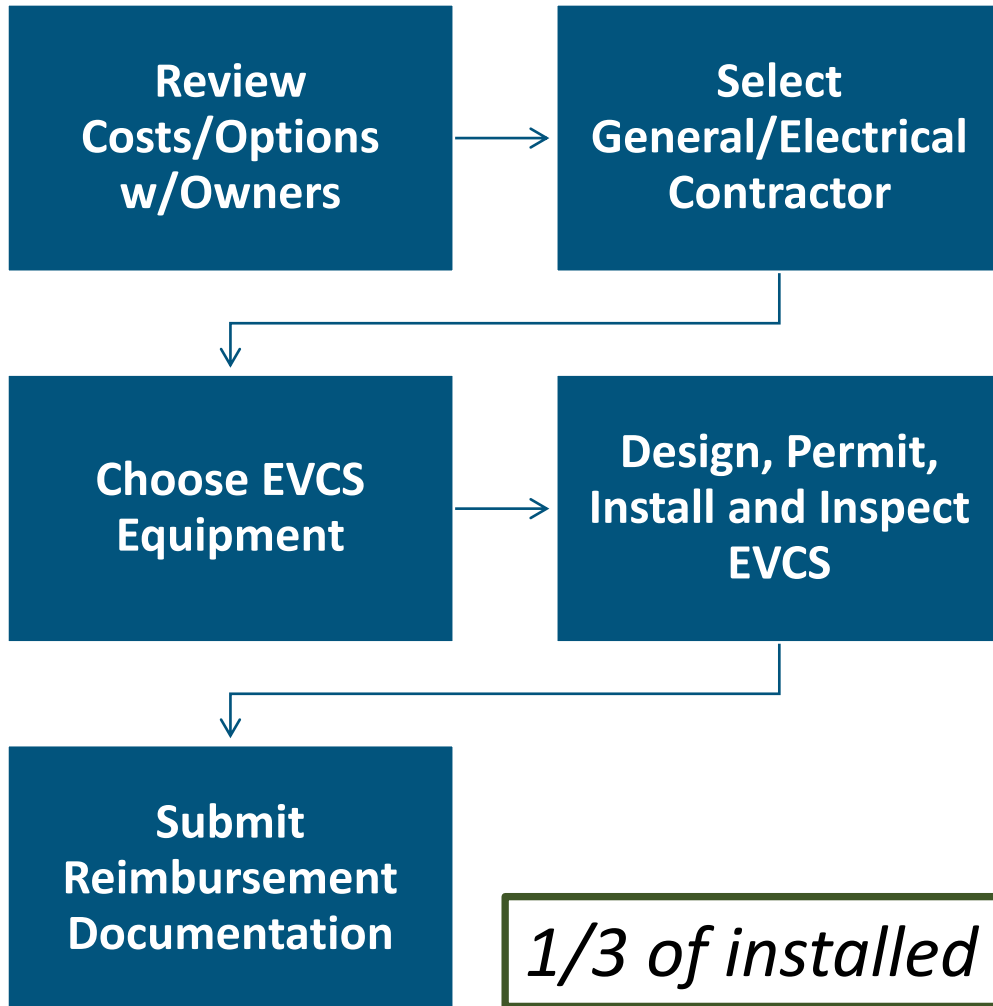
Support of the HOA's board of directors and residents is critical!



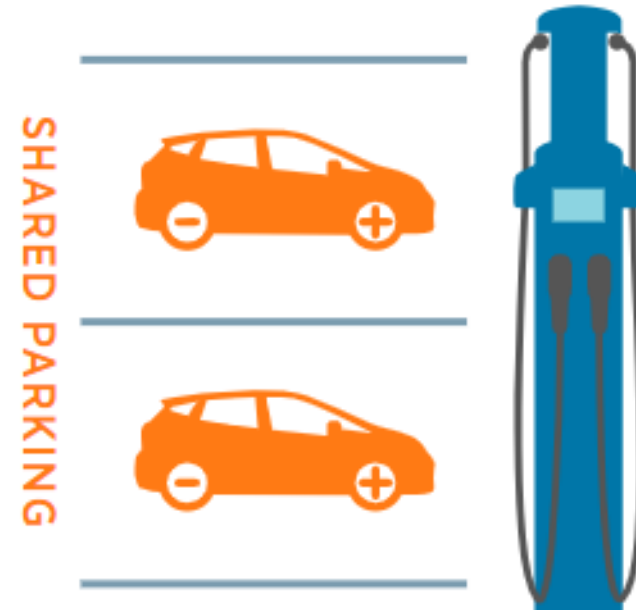
Charge Up Fairfax – Engagement Phase



Charge Up Fairfax– HOA Implementation Phase



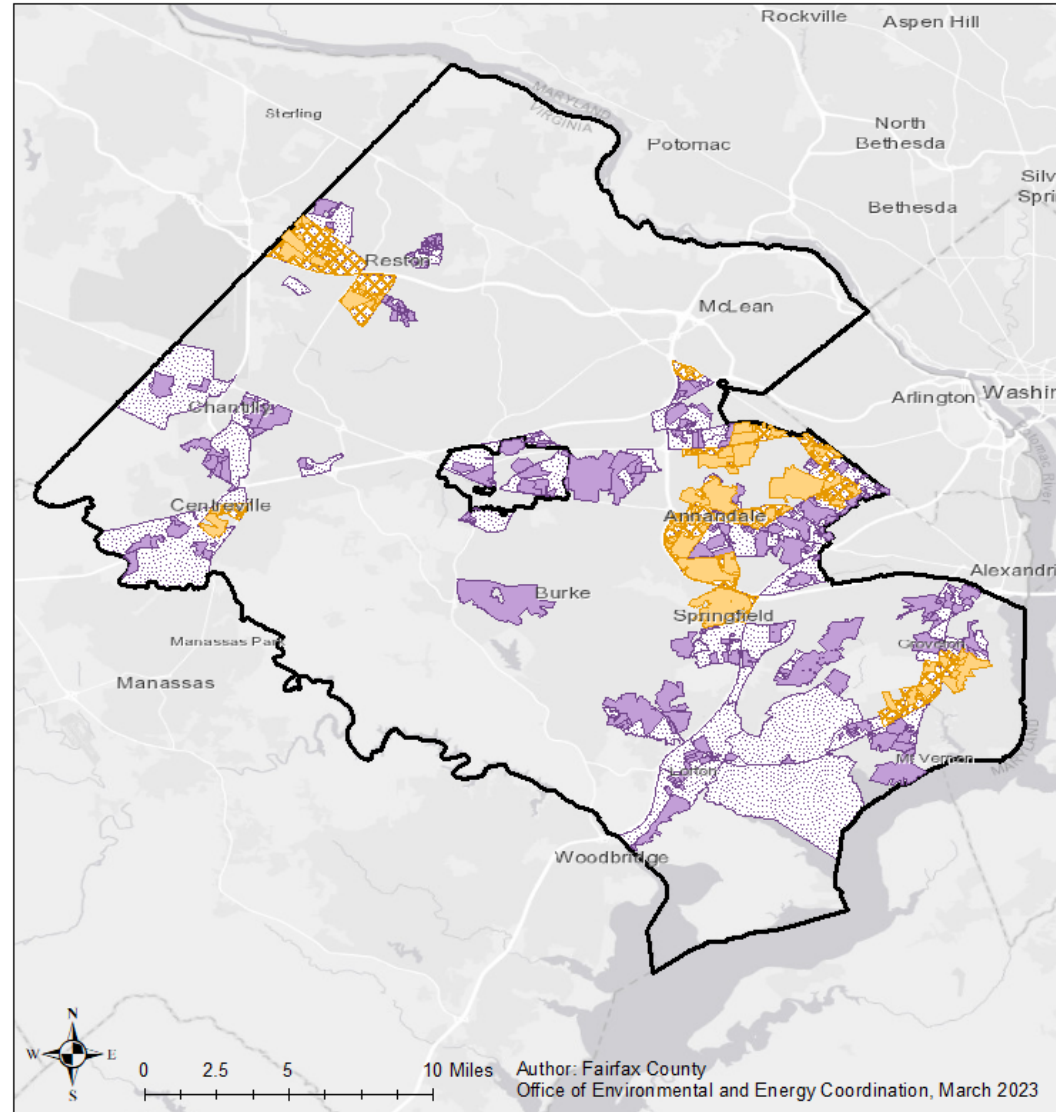
Community charging



1/3 of installed cost, up to \$5,000 per HOA

Equity is vital.

Some HOAs will qualify for a \$10,000 reimbursement grant.



Fairfax County, Virginia Civic Associations and Demographic Vulnerability *One Fairfax Vulnerability Index* *Justice 40 Vulnerability Index*

Legend

- Orange Civic Associations: BOTH Justice 40 & One Fairfax
- Purple Civic Associations: One Fairfax, but not Justice 40
- Cross-hatched Justice 40 Vulnerable Census Tracts
- Dotted One Fairfax Vulnerable Census Tracts

This map shows Civic Associations in Fairfax County that may have higher demographic or socioeconomic vulnerability, according to One Fairfax (local) and Justice40 (federal) designations.

Orange Civic Associations are those that intersect Census Tracts classified as vulnerable by BOTH Justice 40 and One Fairfax. Note: All Justice 40 Census Tracts are also One Fairfax Census Tracts.

Purple Civic Associations are those that intersect Census Tracts classified as vulnerable by One Fairfax, but not by Justice 40.

Partners

- Vybe Engineering
- Northern Virginia Soil and Water Conservation District
- Department of Planning and Development
 - LDS
 - Zoning
- Dominion



Pilot Program: where are we now?



26 invitations to apply



9 applications received



4 finalists

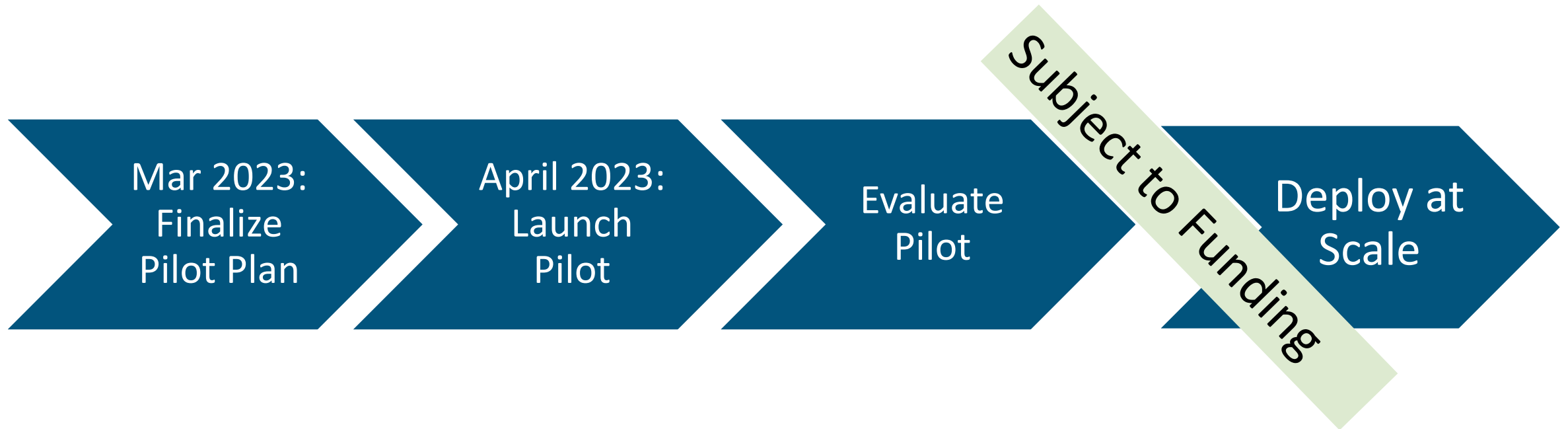


3 pilot communities

Flexibility is key

- Community that plans to repair retaining wall and create new charging stations
- Power from transformer (new Dominion account needed)
- Power from existing panel
- No power – new transformer needed

Charge Up Fairfax Timeline



What Questions do You Have?

