

Measure X

Public Works Progress and Expenditure Update

Brian Balbas
Director
Public Works Department



Contra Costa County
Public Works
Department

Overview



Sustainability Fund
\$2.5 million, Annual Allocation

County Deferred Maintenance
\$3.75 million, One Time Allocation

Measure X and Sustainability Fund

- BOS adopted a resolution declaring a climate emergency (2020)
- Interdepartmental Climate Action Task Force established
- First report from Task Force included a recommendation to establish a Sustainability Fund
- Staff recommended initial focus of the Fund to support projects identified in the Distributed Energy Resource (DER) Plan
 - EV Charging (highest priority)
 - Zero-Emission Fleet Plan
 - Energy Efficiency Implementation



Electric Vehicle Charging Infrastructure

Project Description

- Design and implement EV Charging equipment to serve electric fleet vehicles
- Over 140 ports (plugs) across 15 sites
- Level 2 (19.2 kW) and Level 3 (100 kW) chargers
- Portable Solar EV charging Equipment, (4) units, "EV BEAM ARC"

Current Project Status

- 59 ports- in construction
- 33 ports- submitted for permit
- 45+ ports- in design phase
- PO issued for 100 EV chargers (Flo Services)

Anticipated Schedule/Timeline

- 66 ports- Completed by Dec 2023
- 26 ports- Complete by Jan 2024
- >50 ports- Complete by June 2024

Challenges

- Supply chain delays (e.g switch gear equipment, electrical panels- up to 50 weeks)

Measure X Funded Projects

Address	Department	# of Ports	Status
30 Muir Rd	DCD	26	In Construction
255 Glacier Dr	PW	9	In Construction
1960 Muir Rd	Sheriff Office	16	In Construction
202 Glacier Dr	Probation	8	In Construction
4545 Delta Fair Blvd	EHSD	14	Submitted for Permit
4549 Delta Fair Blvd	EHSD	12	Submitted for Permit
BEAM ARC	various	16	Issuing Purchase Order
2475 Waterbird Way	PW Corp Yard	6	In Design
4061 Port Chicago Hwy	Print & Mail	7	In Design
10 Douglas Dr	Veterans Services	10	In Design
2467 Waterbird Way	PW Fleet	6	In Design
4800 Imhoff Place	Animal Services	8	In Design
597 Center Ave	HSD	6	In Design
2047 Arnold Industrial Way	HSD	4	In Design
847 Brookside Dr	HSD	8	In Design
2467 Waterbird Way *DCFC	PW Fuel Station	2	Feasibility Phase

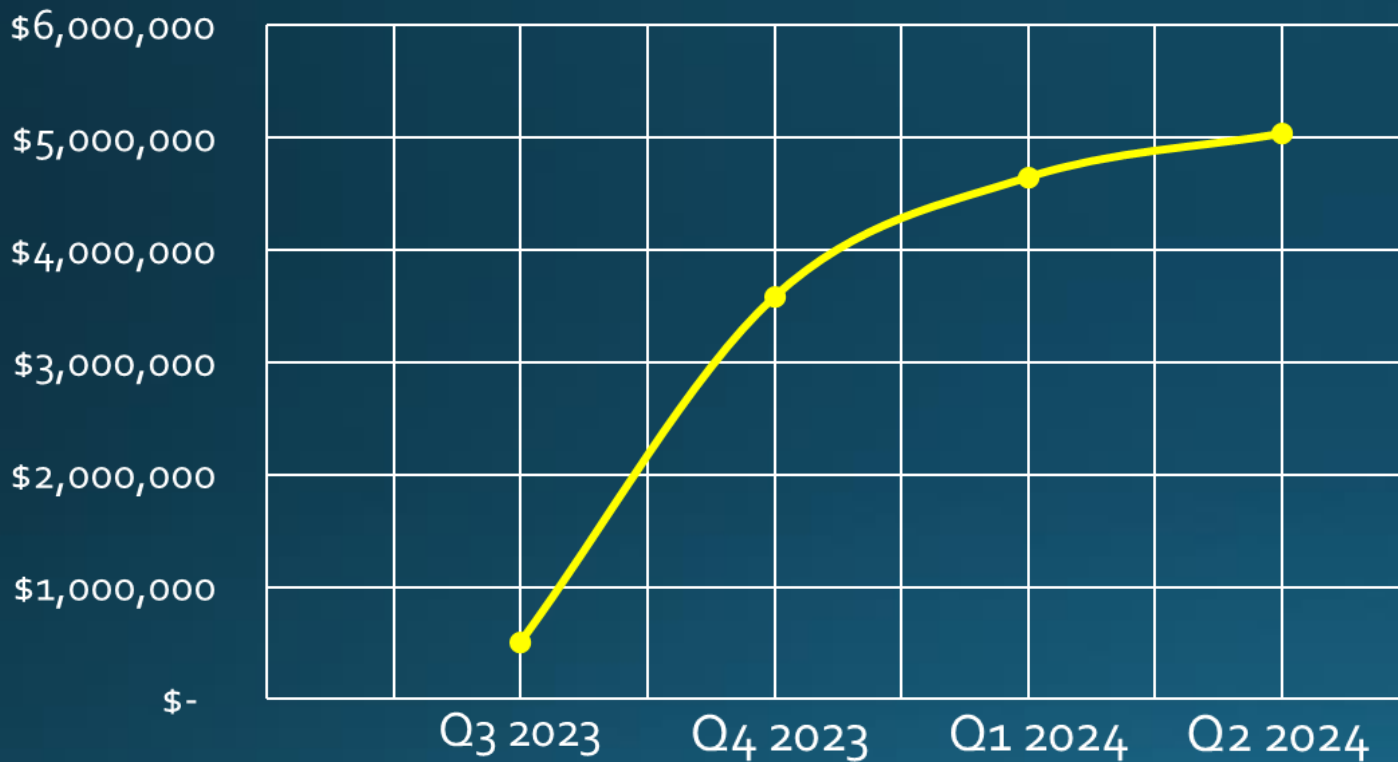
BEAM ARC

- 100% renewable, transportable, off-grid EV charging



- 4 Charging ports per unit
- Battery energy storage system
- Deployable clean energy generator for extended emergency response
- Limited maintenance
- No cost vehicle fueling
- Functions when electric grid is down

EV Charging Planned Expenditures



- Sustainability Fund Allocation
 - 2022-23 = \$2,500,000
 - 2023-24 = \$2,650,000
 - **Total = \$5,150,000**

>\$5,000,000 expended
by July 1, 2024

Average cost/port = \$32,000

Average rebate/port = \$5,000

Projects *Leveraged* by Measure X (3rd Party-Funded)

Site Name	# of DCFC Ports	# of L2 Ports	Status
Antioch Library	4	4	Pending Federal Funding
Brentwood Library	4	4	Pending Federal Funding
Clayton Library	4	4	Pending Federal Funding
Concord Library	4	4	Pending Federal Funding
Crockett Library	2	4	Pending Federal Funding
San Ramon Library	4	4	Pending Federal Funding
El Sobrante Library	2	4	Pending Federal Funding
Hercules Library	4	4	Pending Federal Funding
Martinez Library	4	4	Pending Federal Funding
Moraga Library	2	4	Pending Federal Funding
Pinole Library	2	4	Pending Federal Funding
Pittsburg Library	4	4	Pending Federal Funding
Pleasant Hill Library	4	4	Pending Federal Funding
Antioch Library	4	4	Pending Federal Funding
San Pablo Library	4	4	Pending Federal Funding
West County Detention Facility	8	14	Pending State Funding / L2 funding from Measure X
50 Douglas	8	0	Design review, pending approval
151 Linus Pauling	8	0	Design review, pending approval
Regional Medical Center	8	0	Partial funding reserved (CEC)
Total	76	74	

Leveraged Funding / Climate Benefits

- \$3,000 to \$10,000 per port rebate from local programs
 - 10 – 30% project level cost coverage
 - \$420,000 – \$900,000 portfolio level cost coverage
- Pending \$15,000,000 grant submitted for federal funding
 - (52) DCFC, (60) Level 2 @ 15 county libraries
- Contract with charging vendor (EVCS) to install, own and operate 16 DCFC across two sites (WCDF, CCRMC)
 - Estimated revenue to County = \$112,000/year (profit share)
- Zero Emission Vehicles (ZEV) offers significant GHG reduction value for County Climate Action Plan (CAP)

Measure X – Sustainability Fund Next Steps

- Continue Electric Vehicle Supply Equipment (EVSE) Implementation
- Evaluate and implement building energy efficiency measures
- Continue implementation of the County's Distributed Energy Resources (DER) Plan
 - Solar
 - Energy Efficiency
 - Battery Energy Storage
 - Electric Vehicle Charging Systems
 - Demand Response



Inefficient parking lot lighting (County-wide)

Measure X – County Deferred Maintenance

- \$3.75 million one time allocation
- Targeted to County facilities that serve multiple departments or part of Employment and Human Services (EHSD) facilities that serve significant numbers of Contra Costa residents.
- 4545 & 4549 Delta Fair Blvd (EHSD)
- 50 Douglas Drive (EHSD, Child Support Services)
- 30 Douglas Drive (DoIT)
- 151 Linus Pauling Drive (EHSD)



Deferred Maintenance Projects Summary

Location	Department	Project	Status	Estimated Cost
4545 Delta Fair Blvd	EHSD	Electrical Panel Maintenance & Inspection	Complete	\$25,000
151 Linus Pauling Dr	EHSD	Electrical Panel Maintenance & Inspection	Complete	\$25,000
30 Douglas Dr	DoIT	Generator Replacement	Design	\$750,000
50 Douglas Dr	EHSD, Child Support Services	Generator Replacement	Design	\$750,000
4549 Delta Fair Blvd	EHSD	HVAC Replacement	Planning	\$2,200,000
TOTAL				\$3,750,000

30 Douglas Dr Generator

Estimated Budget	\$750,000
Building Occupant	DoIT
Estimated Completion Date	August 2025



Project Status

- Feasibility Study completed June 2023
- Design in Progress

Anticipated Timeline

- Permit Submittal December 2023
- Construction 2024/2025

Challenges

- Supply chain lead times of 60 weeks for generators and electrical equipment

50 Douglas Dr Generator

Estimated Budget	\$750,000
Building Occupant	EHSD, DCSS
Estimated Completion Date	March 2026



Project Status

- Feasibility Study in progress

Anticipated Timeline

- Complete Electrical Load Study December 2023
- Complete Design March 2024
- Construction 2025/2026

Challenges

- Supply chain lead times of 60 weeks for generators and electrical equipment

4549 Delta Fair Blvd HVAC Replacement

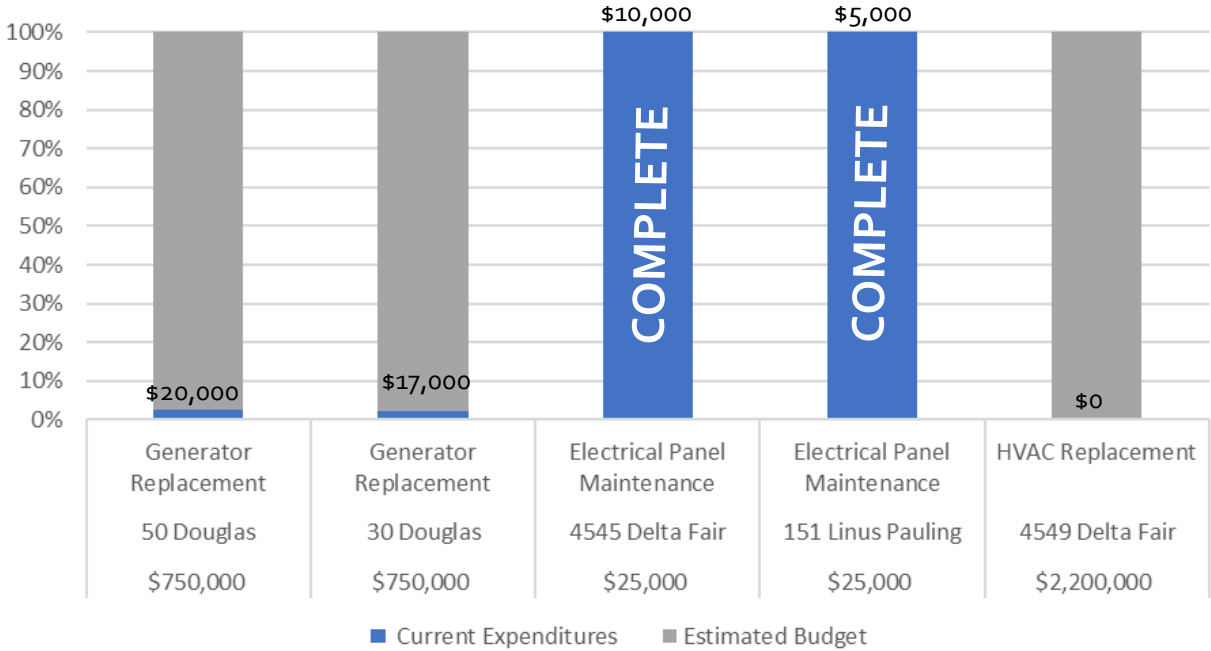
Estimated Budget	\$2.2 million
Building Occupant/Clients	EHSD
Estimated Completion Date	2025



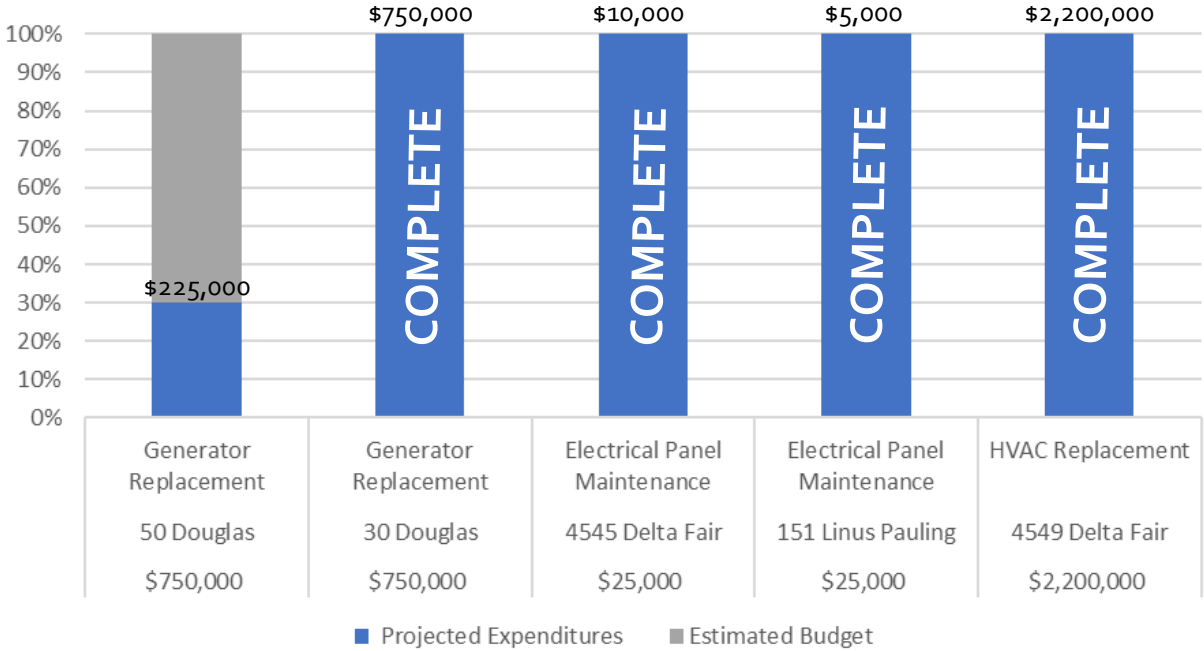
- **Project Status**
 - Evaluating initial \$3.2 million replacement estimate
 - Developing options to extend useful life
- **Anticipated Timeline**
 - Design Completion May 2024
 - Construction 2024/2025
- **Supply Chain Challenges**
 - HVAC - 60 week lead time
 - Increasing costs of equipment and construction

Deferred Maintenance Project Expenditure Summary

Current Percent of Allocation Expenditures



Two-Year Projected Percent of Allocation Expenditures



Projections based on expected expenditures at end of 2025.

Questions and Discussion



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