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Committee Item	No.	4	
Board Item No.	35		

### **COMMITTEE/BOARD OF SUPERVISORS**

AGENDA PACKET CONTENTS LIST

Committee: Land Use and Transportation Date: May 20, 2024					
<b>Board of Sup</b>	Board of Supervisors Meeting: Date: June 4, 2024				
Cmte Board	•	ort nd/or Rep			
OTHER					
	SFMTA Presentation – May 20, 2024				
Prepared by: John Carroll Prepared by: John Carroll Prepared by: Date: May 16, 2024 Date: May 31, 2024 Date:					

## AMENDED IN COMMITTEE 5/20/2024 RESOLUTION NO.

FILE NO. 240270

1	[Affirming Support for SFMTA and SFE, in Partnership with Public Works, SFPUC, and SFCTA to Expediently Implement Curbside Electric Vehicle Charging Feasibility Study and
2	Pilot Program]
3	
4	Resolution affirming support of the San Francisco Municipal Transportation Agency
5	(SFMTA) and San Francisco Environment Department (SFE) in their work with Public
6	Works, San Francisco Public Utilities Commission (SFPUC), San Francisco County
7	Transportation Authority (SFCTA), climate and transportation advocates, equity
8	groups, and other relevant agencies and stakeholders to expediently implement the
9	Curbside Electric Vehicle (EV) Charging Feasibility Study; and requesting a report
10	containing recommendations, cost estimates, and funding strategies for a Curbside EV
11	Charging Pilot Program before the end of 2024.
12	
13	WHEREAS, Climate change poses immediate and extraordinary threats to
14	ecosystems, economy, and public health in San Francisco and beyond; and
15	WHEREAS, July 2023 marked the hottest month in global human history, and San
16	Francisco's average temperature has increased by 2.9°C (5.22 °F) since 1970 due to rapidly
17	rising global greenhouse gas emissions; and
18	WHEREAS, Climate change not only poses significant economic threats, but also
19	impacts community health and welfare; and
20	WHEREAS, The Los Angeles Times reported that 3,900 Californians died from
21	extreme heat exposure between 2010 and 2019, and the San Francisco Department of Public
22	Health Climate and Health Adaptation Framework highlights that these climate-driven health
23	impacts disproportionately affect low-income communities of color in San Francisco; and
24	WHEREAS, The transportation sector accounts for approximately one quarter of global
25	greenhouse gas emissions, is the largest source of carbon dioxide emissions in the US with

1	motor vehicles producing 83% of these emissions, and accounts for 47% of San Francisco's
2	emissions; and
3	WHEREAS, The City and County of San Francisco (City) has a transit first policy and
4	recognizes the critical role of transit, walking and bicycling in reducing emissions which
5	simultaneously generate important health, safety and economic benefits; and
6	WHEREAS, The City has already committed to reach net zero greenhouse gas
7	emissions by 2040 with an interim target of cutting emissions 61% below 1990 levels by 2030;
8	and
9	WHEREAS, On September 23, 2020, California Governor Gavin Newsom signed
10	Executive Order N-79-20, which mandates that 100 % of in-state sales of new passenger cars
11	and trucks are zero-emission by 2035, a target that would achieve more than a 35% reduction
12	in greenhouse gas emissions and an 80% improvement in oxides of nitrogen emissions from
13	cars statewide; and
14	WHEREAS, The City has also set a goal that 25% of all registered private vehicles be
15	electric by 2030 and it is crucial that the City expand access to affordable and convenient
16	charging options to meet this benchmark; and
17	WHEREAS, Zero emission vehicle sales accounted for 37.4% of annual vehicle sales
18	in the City in 2023, more than four times the US average of 7.6%; and
19	WHEREAS, The percentage of Electric Vehicle (EV) ownership is expected to increase
20	with fully-electric and hybrid vehicles representing 50% of new retail vehicle registrations in
21	San Francisco in March 2023, nearly tripling the national average and making San Francisco
22	the first U.S. metro area to reach this milestone; and
23	WHEREAS, The Bay Area's hybrid share is 15.8%, six percentage points above the
24	U.S. average, and with approximately 500,000 commuters driving into San Francisco daily,
25	the City's EV charging infrastructure must also meet the needs of these drivers; and

1	WHEREAS, nearly 70% of San Francisco residents reside in multi-dwelling units and
2	most do not have access to off-street parking or home charging, including one-third of
3	vehicles (157,000 cars) that are registered for parking at multi-unit dwellings, and an
4	additional third of all registered vehicles (128,000 cars) that are street-parked without private
5	garage or driveway access; and
6	WHEREAS, San Francisco's approximately 1,193 public charging ports equate to
7	only 0.04 public ports per EV currently registered in the City, not accounting for commuters or
8	visitors who drive EVs; and
9	WHEREAS, San Francisco needs over 5,000 public and workplace chargers to support
10	EVs by 2030; and
11	WHEREAS, The City's EV Roadmap, published in 2019, does not fully address how
12	the supply of public chargers will meet increasing demand. The study assesses that the
13	charging needs of street-parked EVs can be met by workplace charging infrastructure or at
14	publicly available charging networks, although concerns have been raised regarding
15	availability and accessibility of publicly accessible off-street EV charging stations; and
16	WHEREAS, Public EV Charger access is lower in Black and Hispanic majority
17	neighborhoods and areas with below-median household incomes in California, with more
18	pronounced public charger access disparities in areas with a higher proportion of multi-unit
19	housing; and
20	WHEREAS, Other cities leading on addressing the climate crisis have ambitious EV
21	charging plans, including the City of Los Angeles, which as of March 2022 installed 16,749
22	Level 2 EV chargers and aims to create a network of 44,000 Level 2 EV chargers by 2025
23	and 120,000 by 2030; and
24	
25	

1	WHEREAS, Cities such as New York City have implemented curbside EV charging
2	pilots with promising results, such as the installation of 100 Level 2 EV curbside chargers
3	in 2021 with 81% charger efficiency and 99.9% charger uptime; and
4	WHEREAS, In light of the need for expanded public EV charging infrastructure in San
5	Francisco, the Municipal Transportation Agency (SFMTA) and San Francisco Environment
6	Department (SFE), in partnership with Public Works, San Francisco Public Utilities
7	Commission (SFPUC), and San Francisco County Transportation Authority (SFCTA), have
8	committed to jointly collaborating on a Curbside EV Charging Feasibility Study, which would
9	evaluate the feasibility of installing, operating and maintaining public charging infrastructure at
10	the curb in selected locations in San Francisco, develop a framework for a Curbside EV
11	Charging Pilot Program that can be implemented shortly after the conclusion of the study, and
12	both establish and leverage strong working relationships with private sector partners and key
13	City departments to establish the pilot framework; and
14	WHEREAS, The final deliverable for the Curbside EV Charging Feasibility Study will be
15	a pilot program framework that identifies key components, cost estimates, and parameters
16	necessary for implementation of a future pilot beginning in 2025; now, therefore, be it
17	RESOLVED, That the Board of Supervisors of the City and County of San Francisco do
18	hereby support the efforts of SFMTA and SFE in partnership with Public Works, SFPUC, and
19	SFCTA, to expediently implement the Curbside Charging Feasibility Study, and request that
20	SFMTA and SFE submit a report containing recommendations, cost estimates, and funding
21	strategies for a Curbside EV Charging Pilot Program that is meaningful in scope, spans
22	across multiple neighborhoods throughout San Francisco, and sets a foundation for
23	deployment of EV curbside charging infrastructure Citywide, before the end of 2024 to the
24	Board of Supervisors; and, be it

25

1	FURTHER RESOLVED, That the San Francisco Board of Supervisors affirms support
2	of the SFMTA and SFE, in partnership with Public Works, SFPUC, and SFCTA to build in
3	equity considerations, as well as clear data-monitoring and reporting processes, into the
4	Curbside EV Charging Pilot Program, and provide regular updates to the Board of
5	Supervisors; and, be it
6	FURTHER RESOLVED, That these EV curbside chargers are intended exclusively for
7	the public benefit and not intended for commercial uses; and, be it
8	FURTHER RESOLVED, That the San Francisco Board of Supervisors urges the Office
9	of the Mayor and SFCTA to work with relevant City departments and leverage all available
10	sources of local, state, and federal funding to implement a Curbside EV Charging Pilot
11	Program beginning in 2025.
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Curbside EV Charging Feasibility Study



### **Outline**

- Climate Goals & EV Trends
- Project Overview
- Study Details & Timeline
- Questions

### **Climate Action Plan Goals**

Where vehicle use is necessary, accelerate the adoption of zeroemissions vehicles and other electric mobility options.



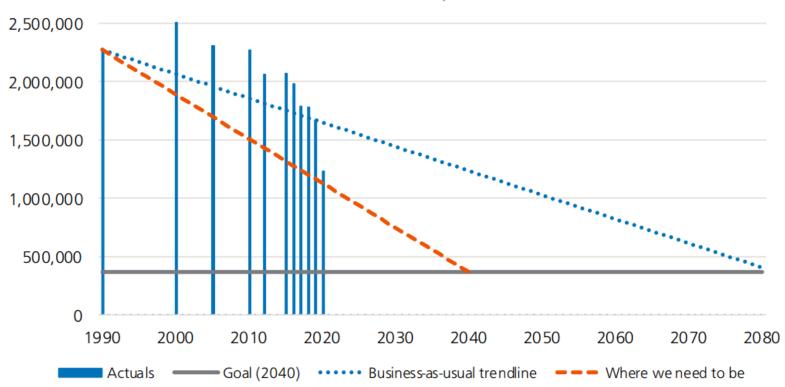
80% of trips taken by low-carbon modes 25% of registered private vehicles are EVs

2040

Net-zero emissions
100% of registered private vehicles are EVs

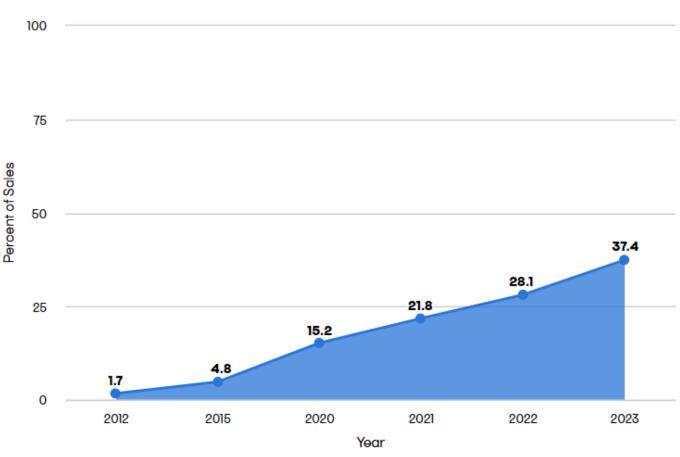
### **Progress towards target**

San Francisco GHG Emissions from Ground Transportation 1990-2020 (mtCO<sub>2</sub>e, excludes maritime and off-road emissions)



### **EV Adoption in SF**

Percent of zero-emission vehicles out of new car sales in SF



### **Types of EV Charging**



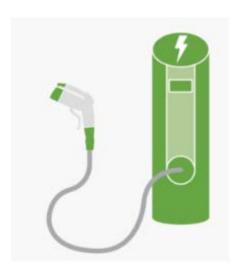
Level 1

40 mi. in 10 hrs



Level 2

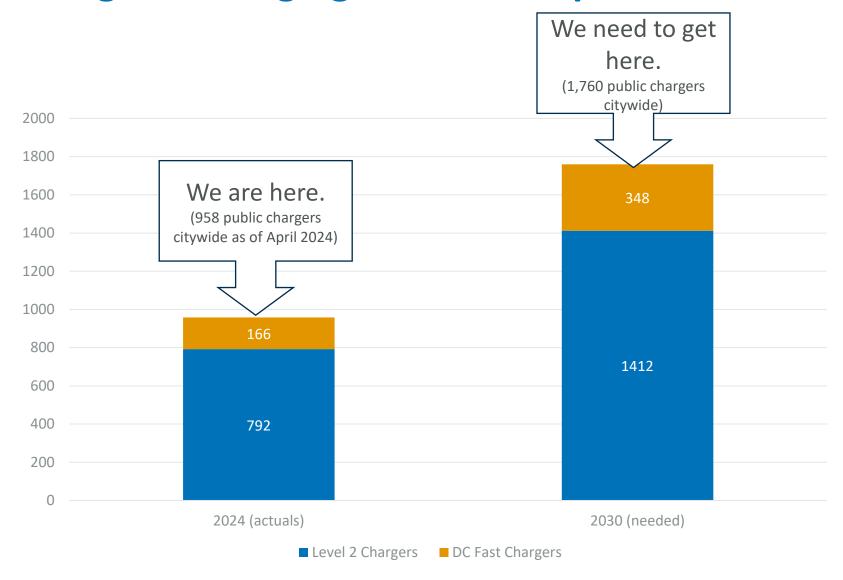
160+ mi. in 8 hrs



**DC Fast Charger** 

100-200 mi. in 30 min.

### **Closing the Charging Network Gap**







### **Challenge to Solve**

70% of residents live in multi-family units and likely lack access to dedicated overnight parking and charging



Source: Adobe Stock

### **Reaching Our Climate Action Plan Targets**

- Charging in City Garages
- Van Ness BRT
- Central Subway
- Bike and Rolling Plan
- Low-emission taxis
- Bus electrification
- Paratransit
- E-bikes for delivery workers
- Zero-emission Truck Plan
- Commuter benefits



Source: SFE Staff



Source: Photo by Jeremy Menzies, SFMTA

# **Key Deliverables**



**Recommended Sites** 



**Cost Estimates** 



Insight

### **City Case Studies**



Source: NYC DOT

Source: Seattle City Light



Source: Emmett Werthmann (WRI)

#### **New York City**

- 100 Level 2 curbside chargers distributed across all five boroughs
- Prioritized equitable access for residents and for-hire drivers

#### Seattle

- 58 Level 2 chargers installed at 31 locations
- Used equity metrics to guide site selection
- Currently evaluating their program

#### Los Angeles

- 700+ streetlight Level 2 chargers
- 200 BlueLA chargers (low-income EV carshare program)
- Selected sites near multifamily dwellings and commercial uses

## **Curbside Feasibility Study Topics**

**Grid Capacity** 

**Operational Models** 

**Technology Options** 

**Equity Analysis** 

Enforcement

Accessibility

Pricing

Permitting

Site Suitability

**User Experience** 



Source: Adobe Stock

## **Community and Industry Engagement**



#### **Community Webinar**

Introduce study to community members and businesses

#### **Community & Industry Surveys**

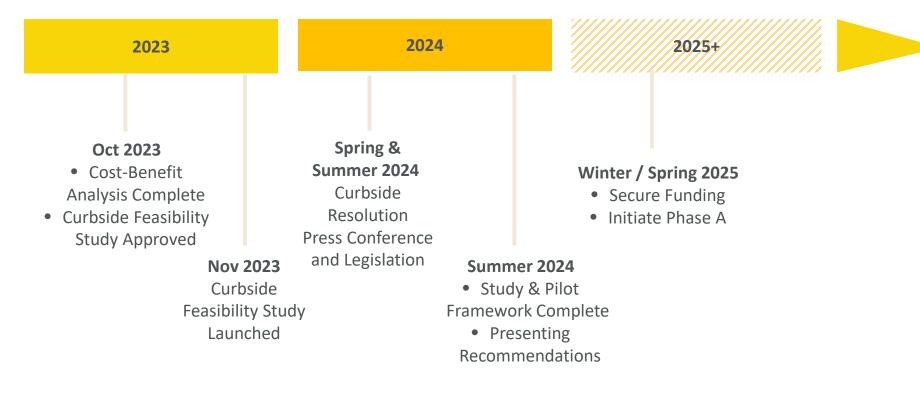
Collect input from community members to identify preferences and potential challenges

### **Industry Interviews**

Collect general input from all charging vendors to identify opportunities and challenges

Source: SFE Staff

### **Curbside Charging Timeline**



From: <u>Carroll, John (BOS)</u>

To: <u>Dave Massen</u>; <u>Board of Supervisors (BOS)</u>

Cc: Ho, Calvin (BOS)

**Subject:** RE: Supporting Item 4, 240270 - today"s hearing

**Date:** Tuesday, May 21, 2024 9:59:00 AM

Attachments: image001.png

Thank you for your comment letter.

By copy of this message to the <u>board.of.supervisors@sfgov.org</u> email address, your comments will be forwarded to the full membership of the Board of Supervisors. I will include your comments in the file for this resolution matter.

I invite you to review the entire matter on our <u>Legislative Research Center</u> by following the link below:

Board of Supervisors File No. 240270

#### John Carroll Assistant Clerk

Board of Supervisors San Francisco City Hall, Room 244 San Francisco, CA 94102 (415)554-4445



Click here to complete a Board of Supervisors Customer Service Satisfaction form.

The Legislative Research Center provides 24-hour access to Board of Supervisors legislation and archived matters since August 1998.

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From: Dave Massen <massen@pacbell.net>
Sent: Monday, May 20, 2024 11:25 AM

**To:** Carroll, John (BOS) <john.carroll@sfgov.org> **Cc:** Ho, Calvin (BOS) <calvin.ho@sfgov.org>

**Subject:** Supporting Item 4, 240270 - today's hearing

Dear John,

I'm unable to attend today's Land Use and Transportation Committee hearing, but want to voice my support for the above referenced resolution.

I'm glad to see that expanding EV charging facilities in SF is moving forward. I've driven a hybrid car since 2015, but hybrids only get around 30% better mileage than pure gas powered, and I'd much prefer to drive an all-electric car.

A friend in Petaluma has an EV and can't charge at home, but finds she can manage with public charging. I think it remains to be seen how well that can work for people in SF with our crowded streets, so a pilot program is appropriate.

I hope in the future EV charging may be added to inside parking spaces in existing multifamily buildings in SF.

Best regards,

Dave

Dave Massen 700 Church St Apt 313 415.626.7086 Chair 700 Church Tenants' Association (SCTA)

#### **Introduction Form**

(by a Member of the Board of Supervisors or the Mayor)

I here	by subn	nit the following item for introduction (select only one):
	1.	For reference to Committee (Ordinance, Resolution, Motion or Charter Amendment)
	2.	Request for next printed agenda (For Adoption Without Committee Reference) (Routine, non-controversial and/or commendatory matters only)
	3.	Request for Hearing on a subject matter at Committee
	4.	Request for Letter beginning with "Supervisor inquires"
	5.	City Attorney Request
	6.	Call File No. from Committee.
	7.	Budget and Legislative Analyst Request (attached written Motion)
	8.	Substitute Legislation File No.
	9.	Reactivate File No.
	10.	Topic submitted for Mayoral Appearance before the Board on
The p	roposed	l legislation should be forwarded to the following (please check all appropriate boxes):
		mall Business Commission   Youth Commission   Ethics Commission
	□ Pl	anning Commission   Building Inspection Commission   Human Resources Department
Gene	ral Plan	Referral sent to the Planning Department (proposed legislation subject to Charter 4.105 & Admin 2A.53):
	□ Y	es $\square$ No
(Note	: For In	nperative Agenda items (a Resolution not on the printed agenda), use the Imperative Agenda Form.)
Spons	sor(s):	
Subje	ect:	
Long	Title or	text listed:
		Signature of Sponsoring Supervisor: