



SFMTA

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 zero-emissions vehicles and other electric mobility options.

2030

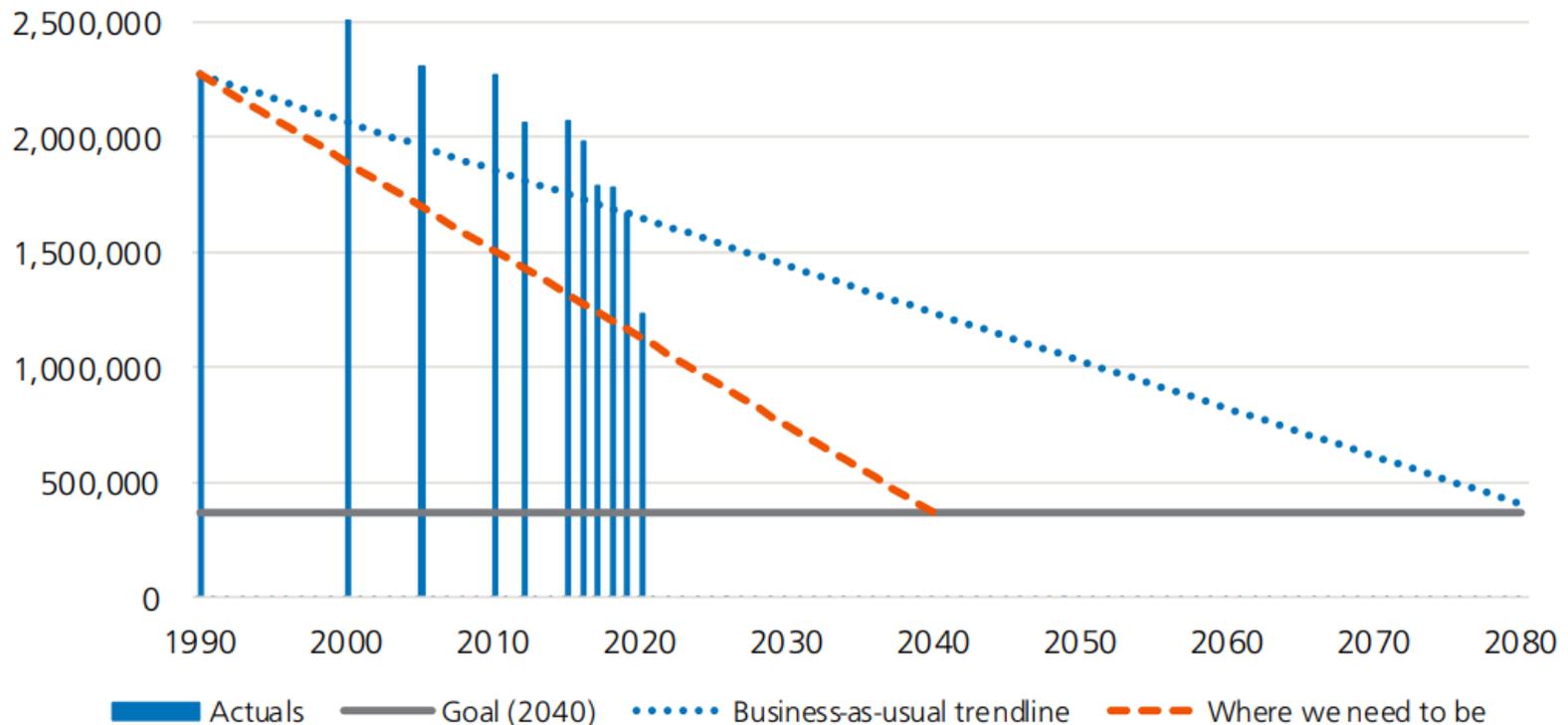
80% of trips taken by low-carbon modes
25% of registered private vehicles are EVs

2040

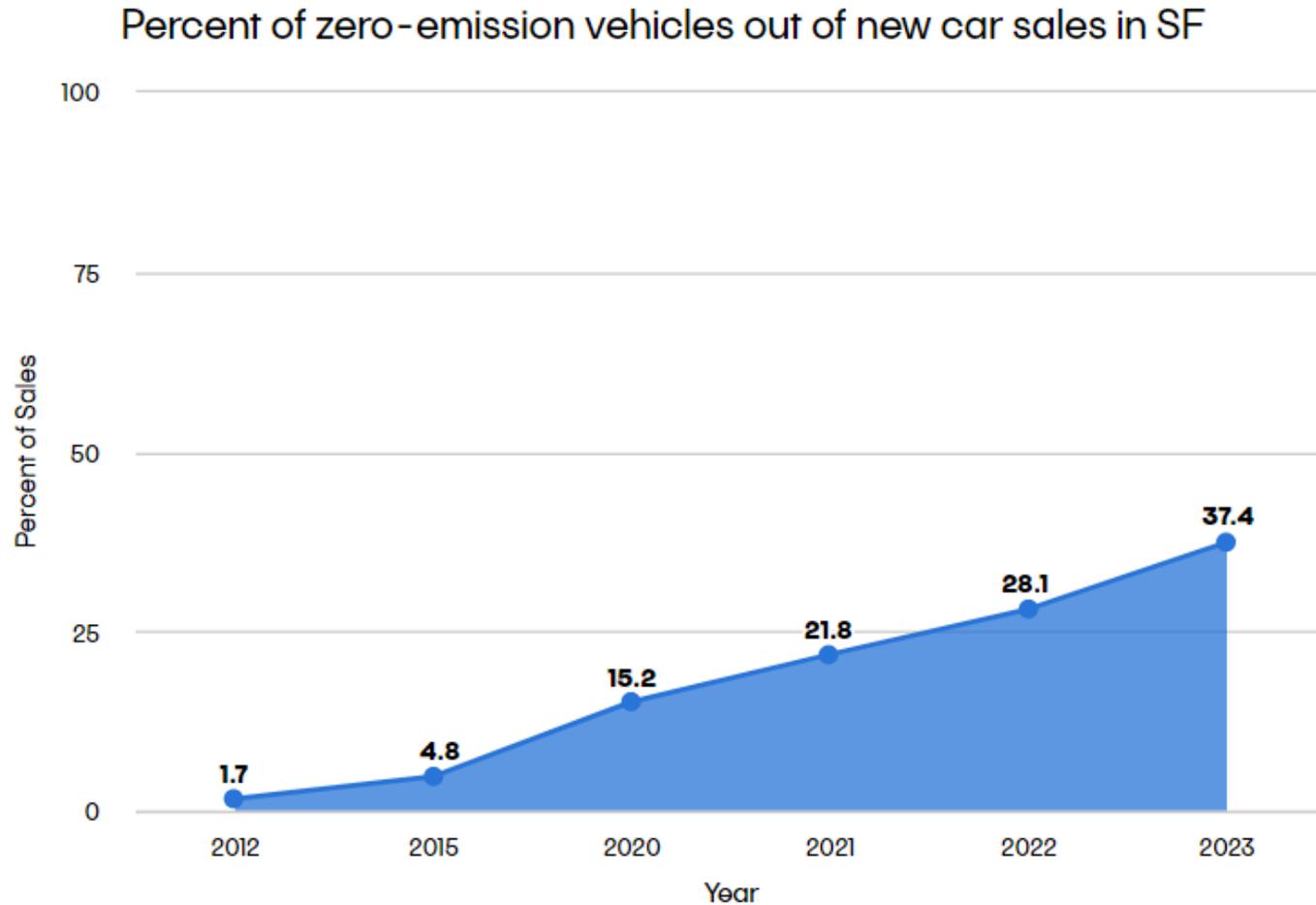
Net-zero emissions
100% of registered private vehicles are EVs

Progress towards target

San Francisco GHG Emissions from Ground Transportation
1990-2020 (mtCO₂e, excludes maritime and off-road
emissions)



EV Adoption in SF



Types of EV Charging



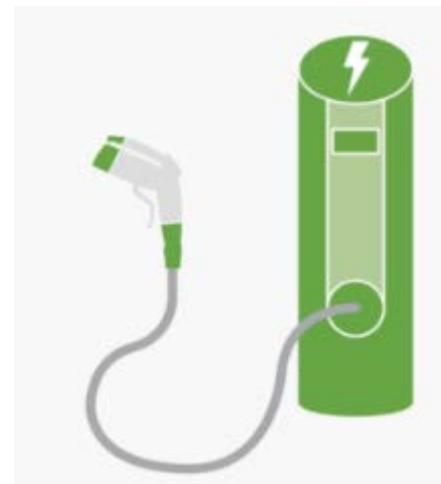
Level 1

40 mi. in 10 hrs



Level 2

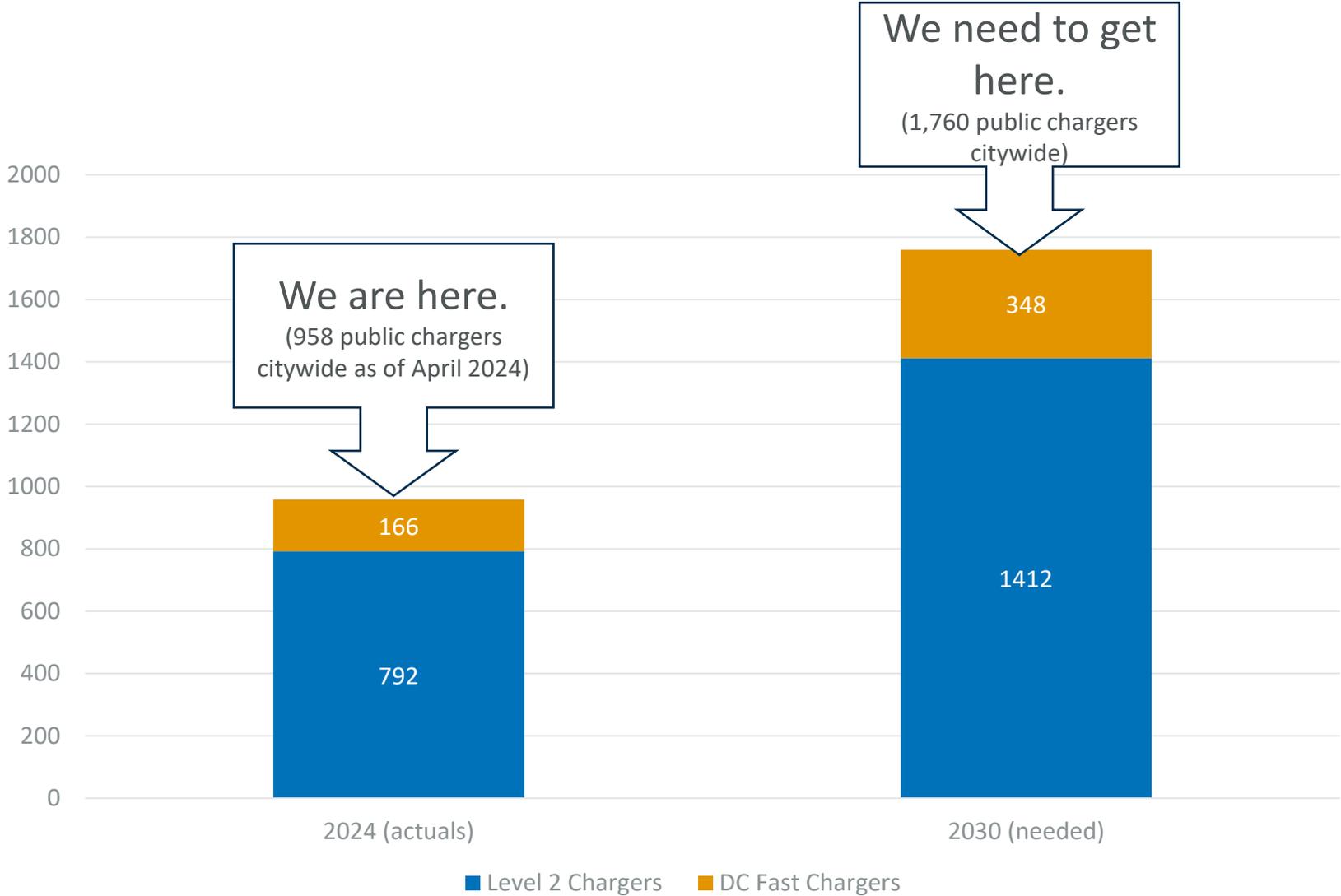
160+ mi. in 8 hrs



DC Fast Charger

100-200 mi.
in 30 min.

Closing the Charging Network Gap





Study Overview

- Technical Feasibility Study
- Community & Industry Engagement
- Implementation Framework

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

New York City

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



Source: Seattle City Light

Seattle

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



Source: Emmett Werthmann (WRI)

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



Source: SFE Staff

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

Curbside Charging Timeline

