



SF Environment

Our home. Our city. Our planet.

A Department of the City and County of San Francisco

Electrifying Transportation in San Francisco

Prepared for the San Francisco County Transportation Authority, Board of Directors

January 28, 2020



Our Goal



Net Zero Emissions

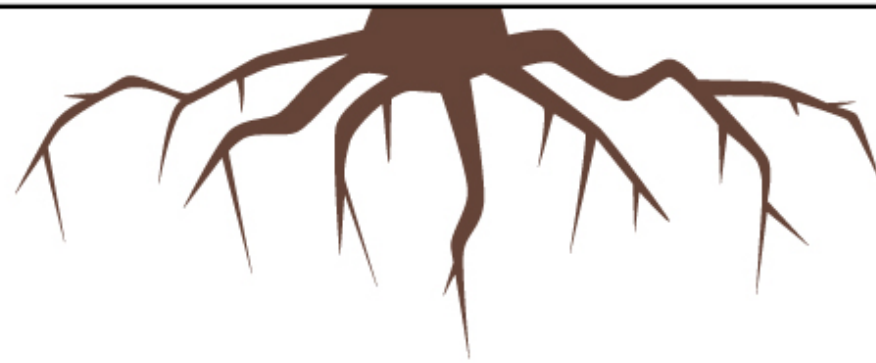


San Francisco's Climate Action Strategy



SAN FRANCISCO CLIMATE ACTION

0 80 100





Decreasing Emissions in a Growing City (1990-2017)

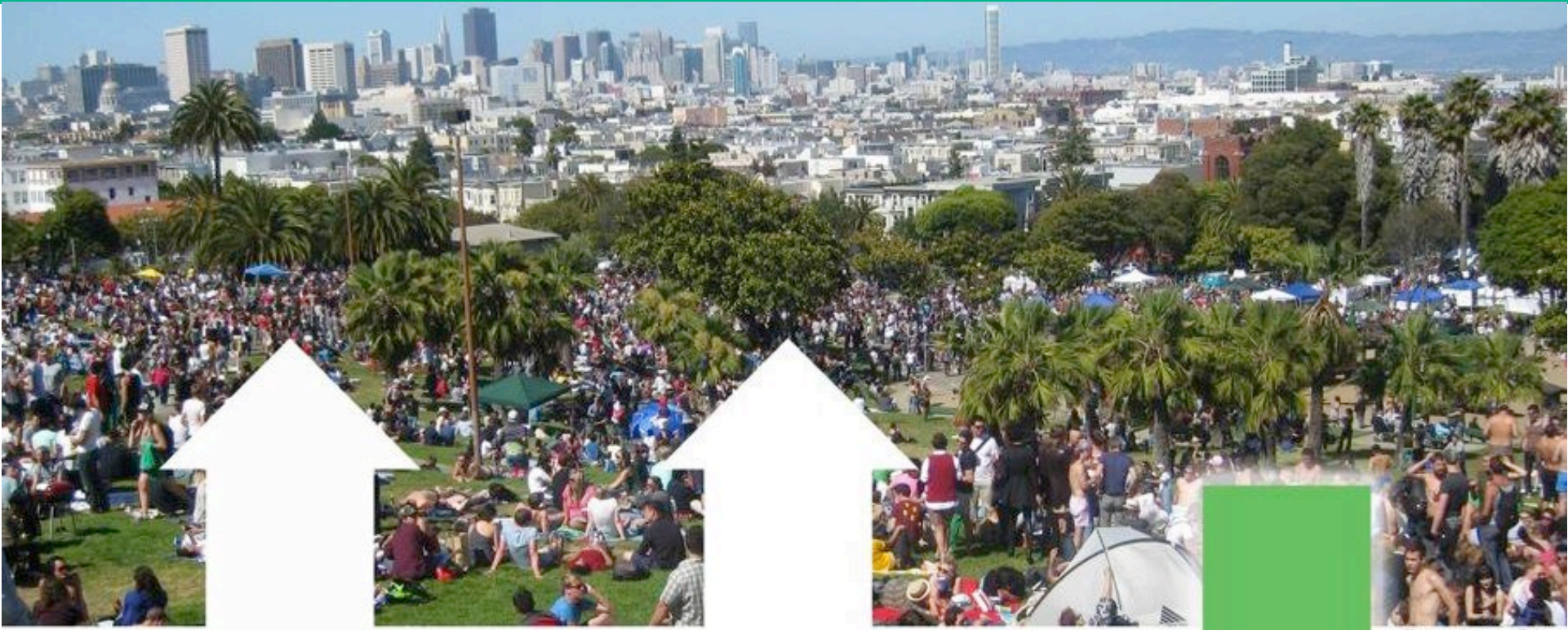


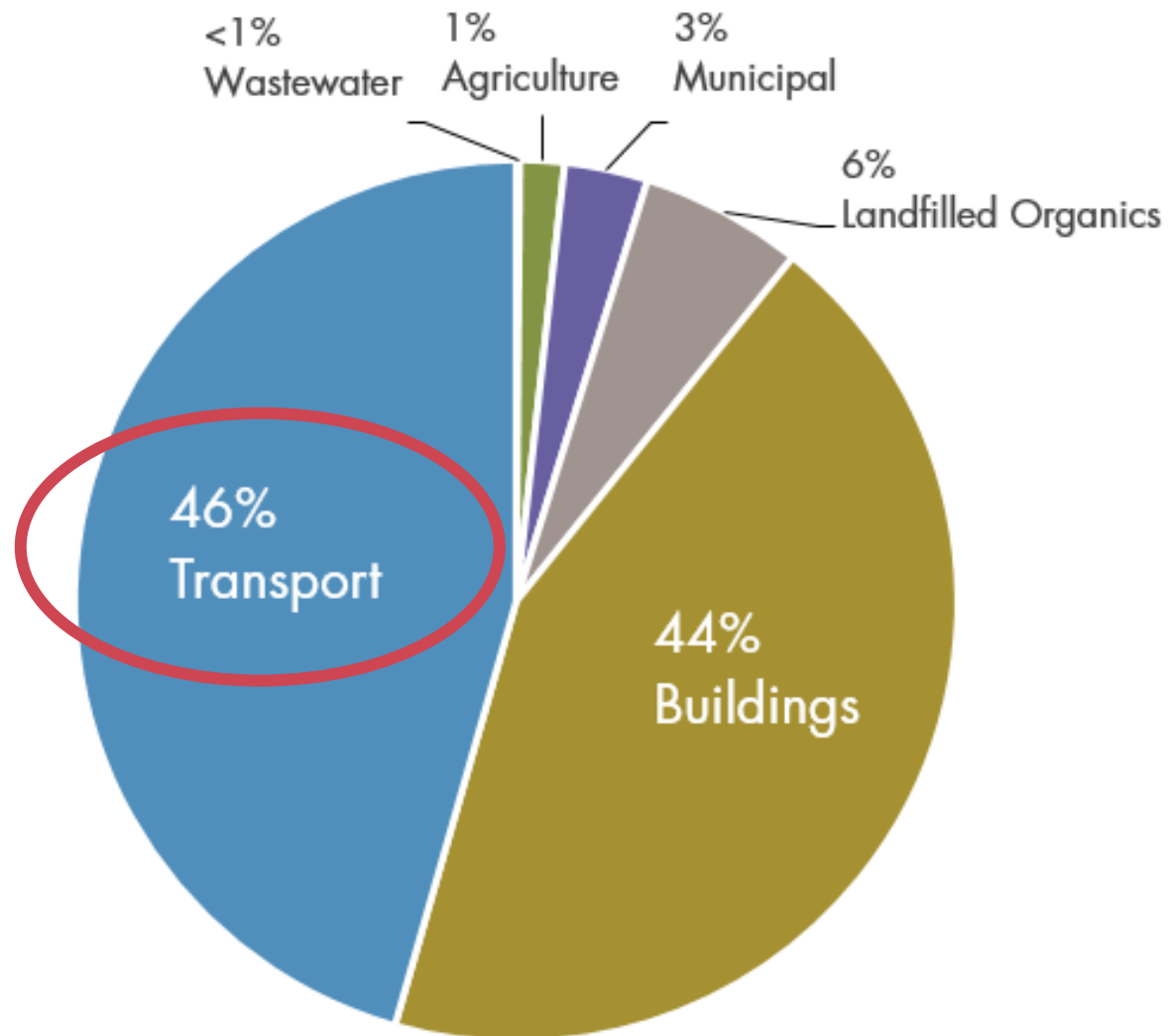
Photo credit: Merri, Flickr

22%
Population

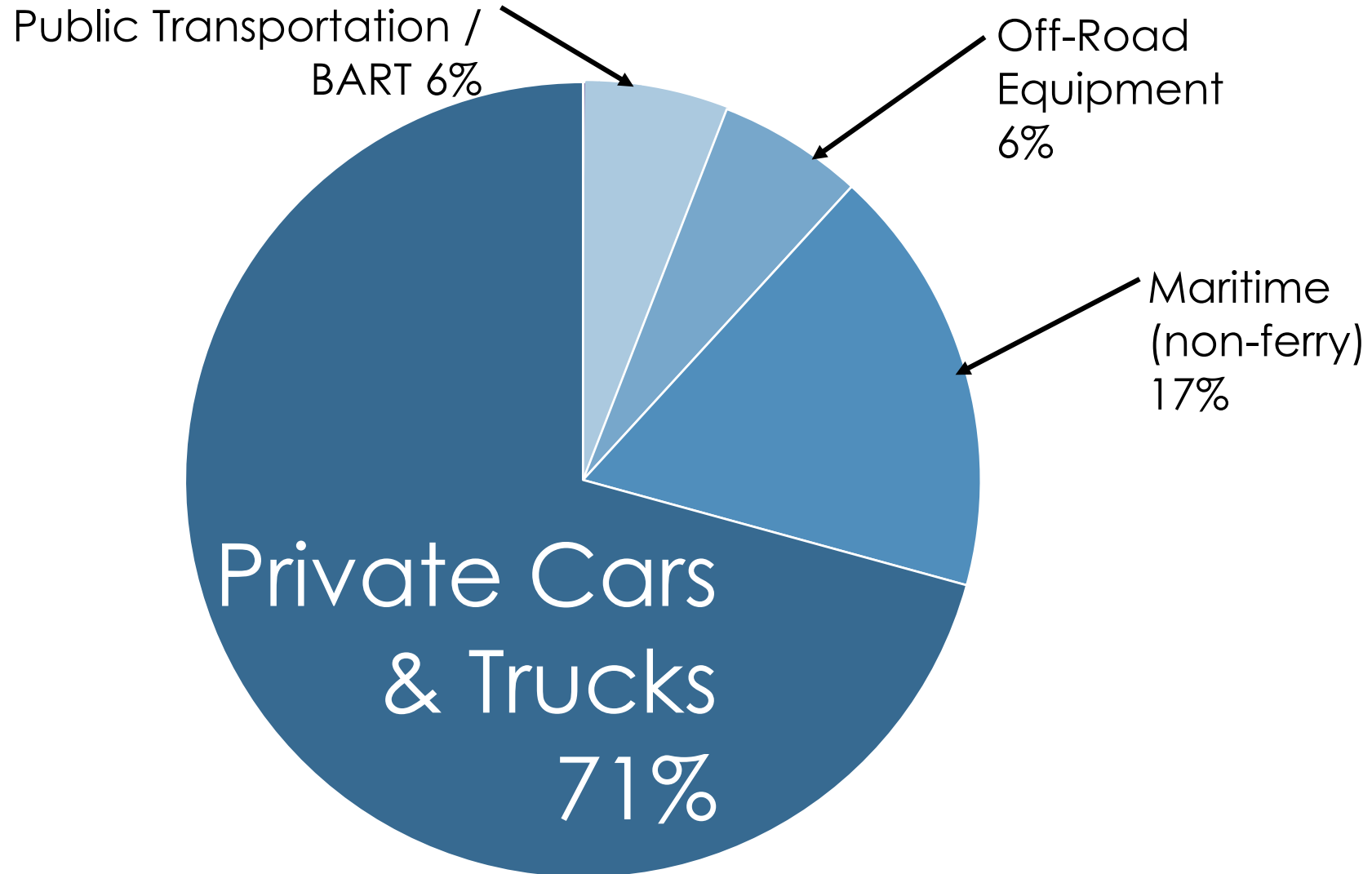
166%
GDP

36%

2017 Emissions Share



Transportation Sector Emissions



Our Transit First Policy



Electrify Transportation



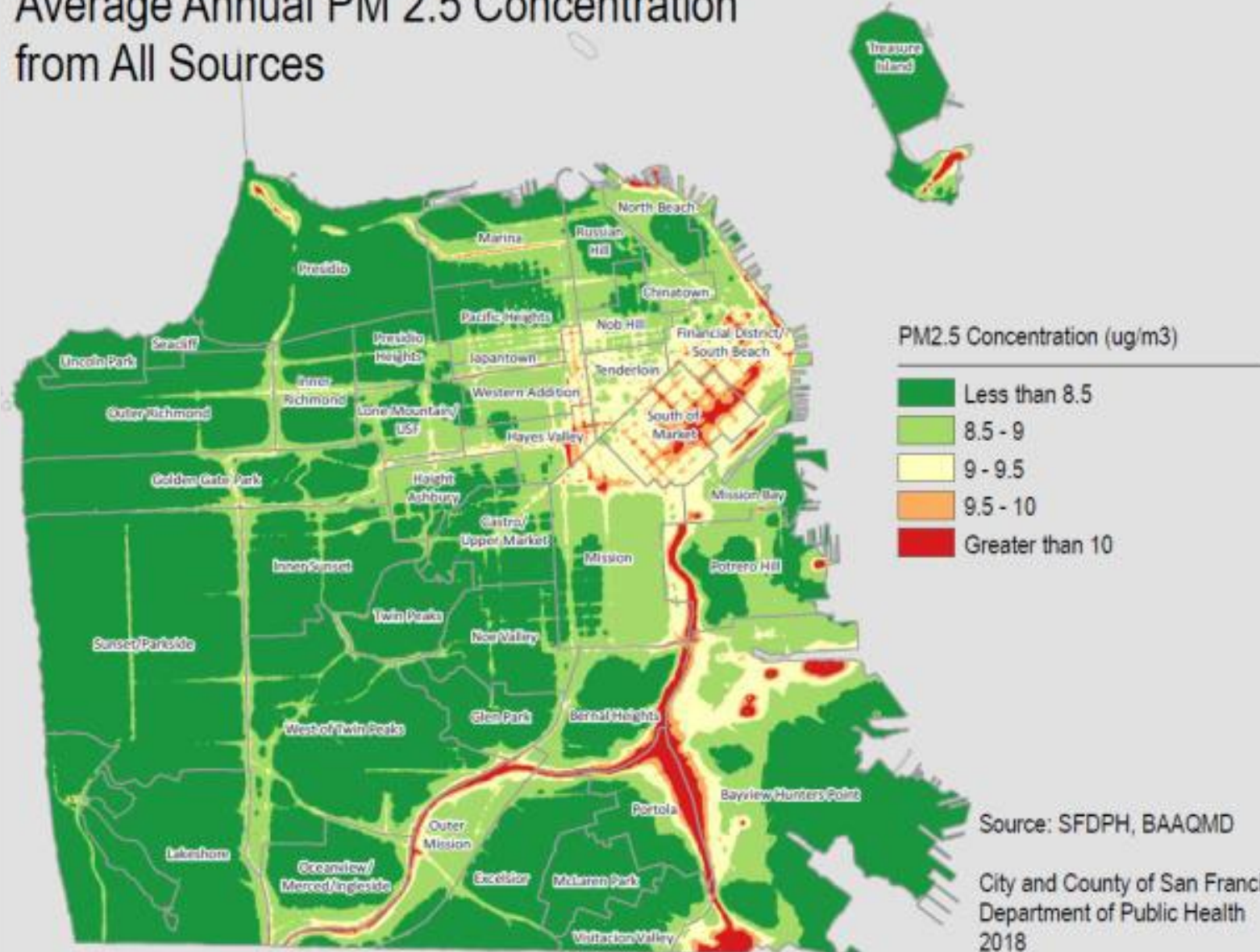
Tailpipe emissions – more than just greenhouse gases





Air Quality and Equity

Average Annual PM 2.5 Concentration from All Sources



Source: SFDPH, BAAQMD

City and County of San Francisco
Department of Public Health
2018



EV Adoption Targets

2025 Target: 50% New Vehicles are Electric

2030 Target: 100% New Vehicles are Electric

2040 Target: 100% ALL Vehicles are Electric





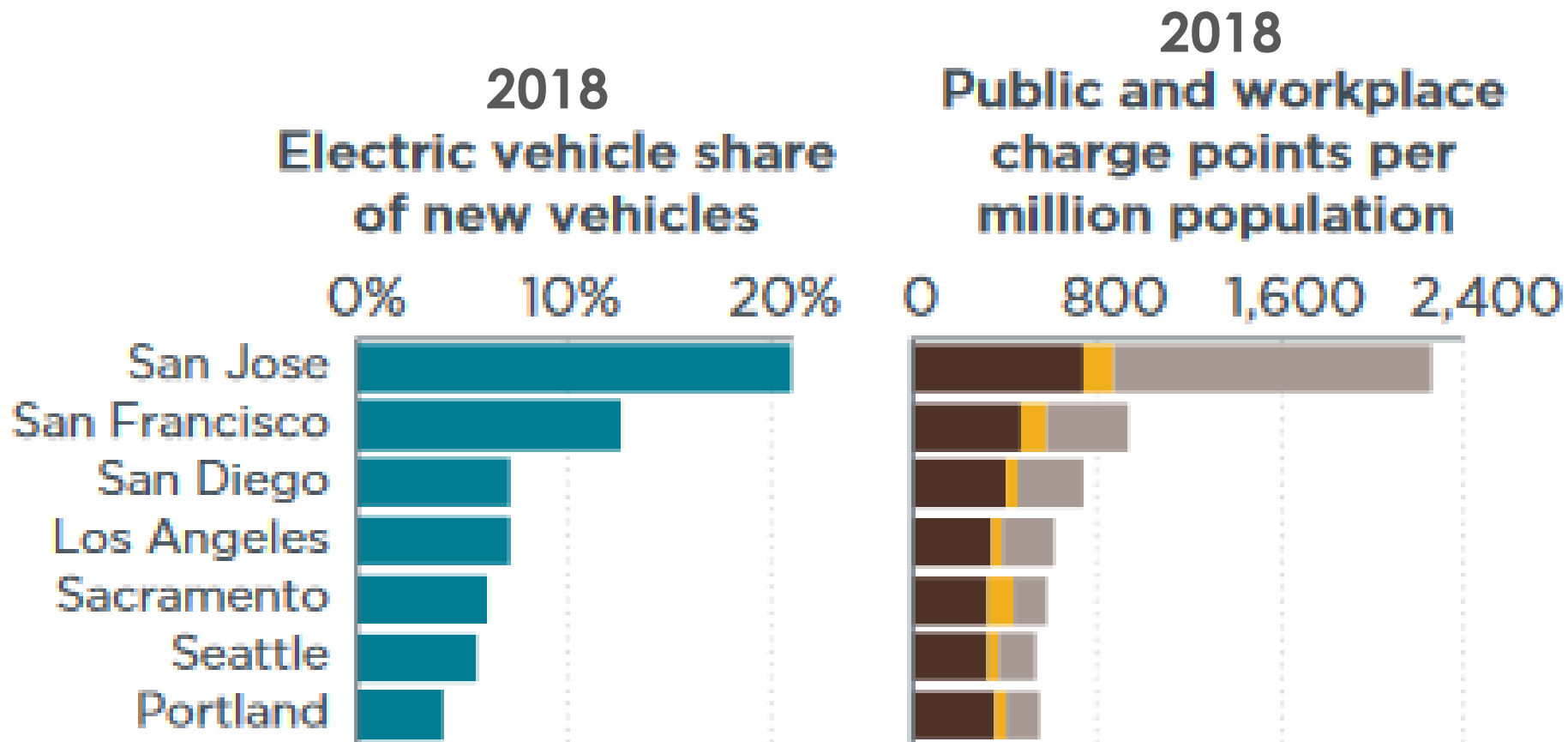
EV Roadmap's Six Strategies



- 1) Public Awareness
- 2) Incentives
- 3) Charging Infrastructure
- 4) Electrical Grid
- 5) Medium- & Heavy-Duty Vehicle
- 6) Emerging Mobility

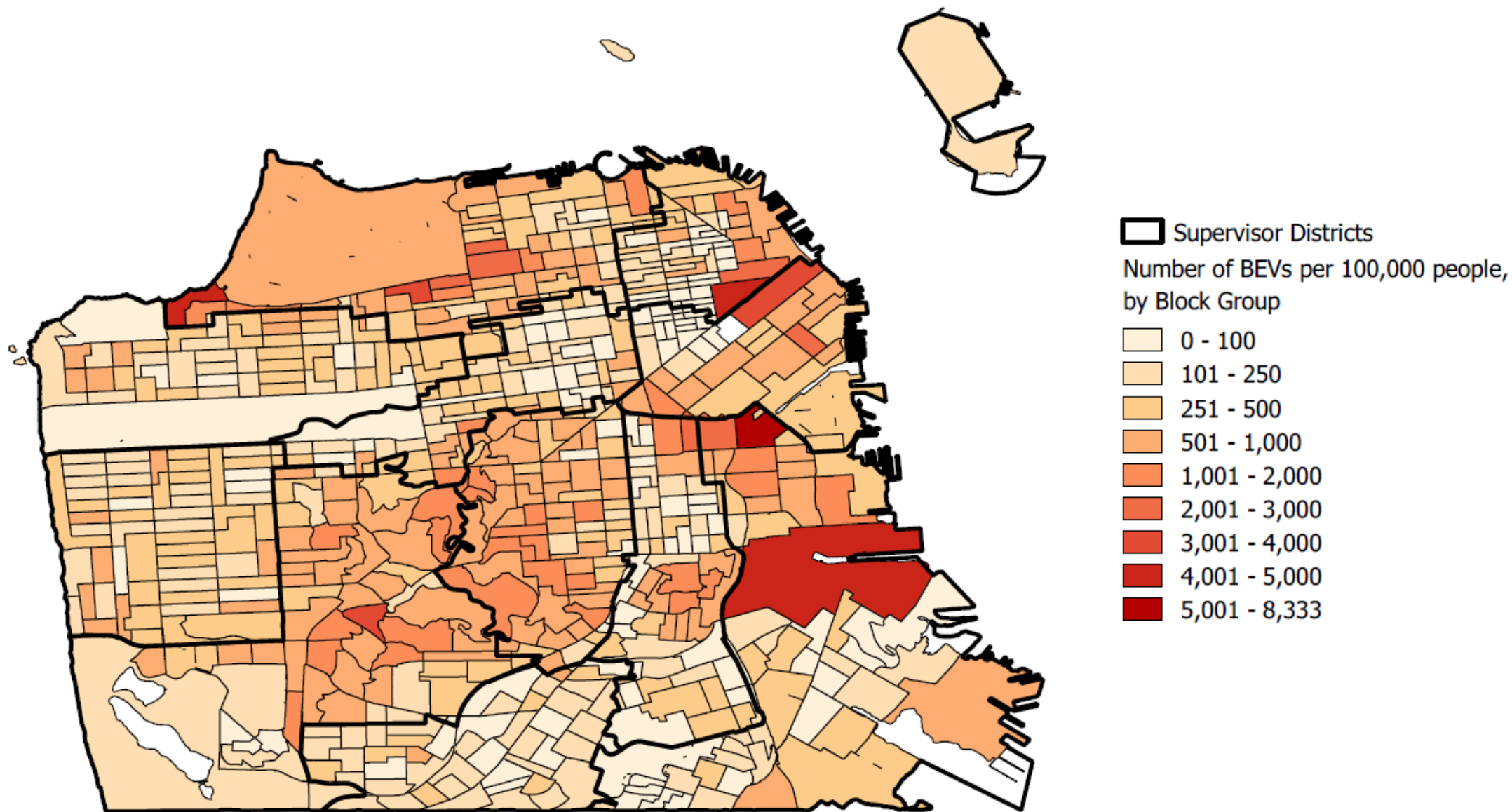


As Compared to Others





EV Registrations by Neighborhood

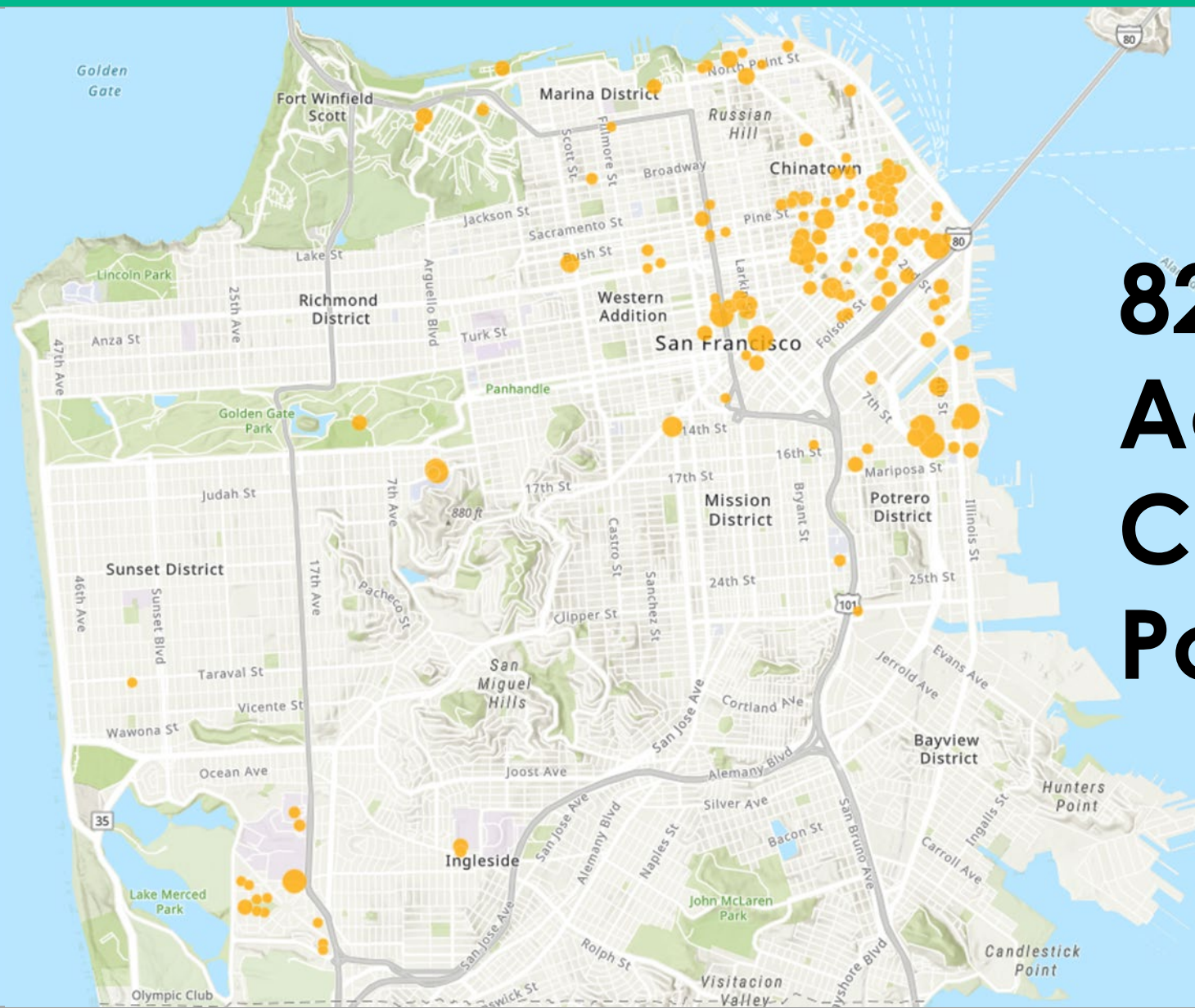


Challenge of a Dense City





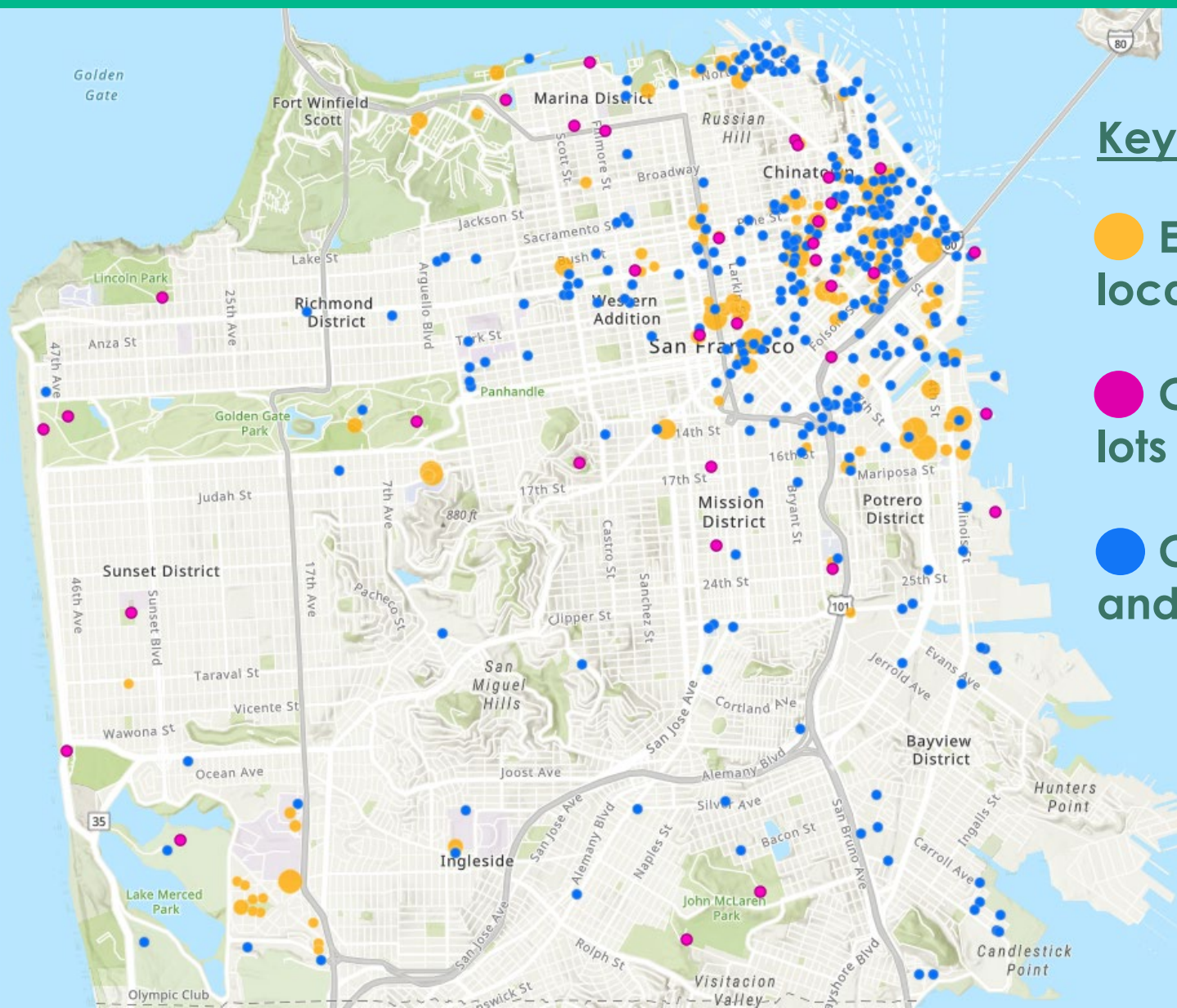
Publicly Available Charging Locations



**820 Publicly-
Accessible
Charging
Points**



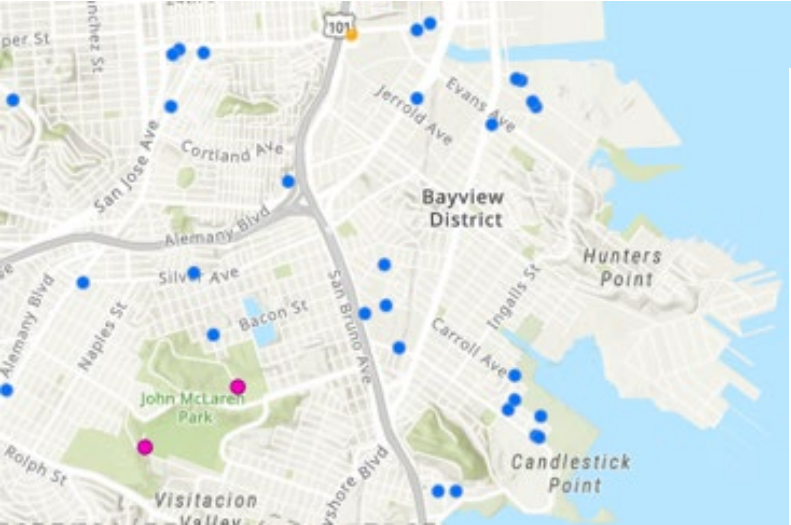
Potential Impact of New Policies



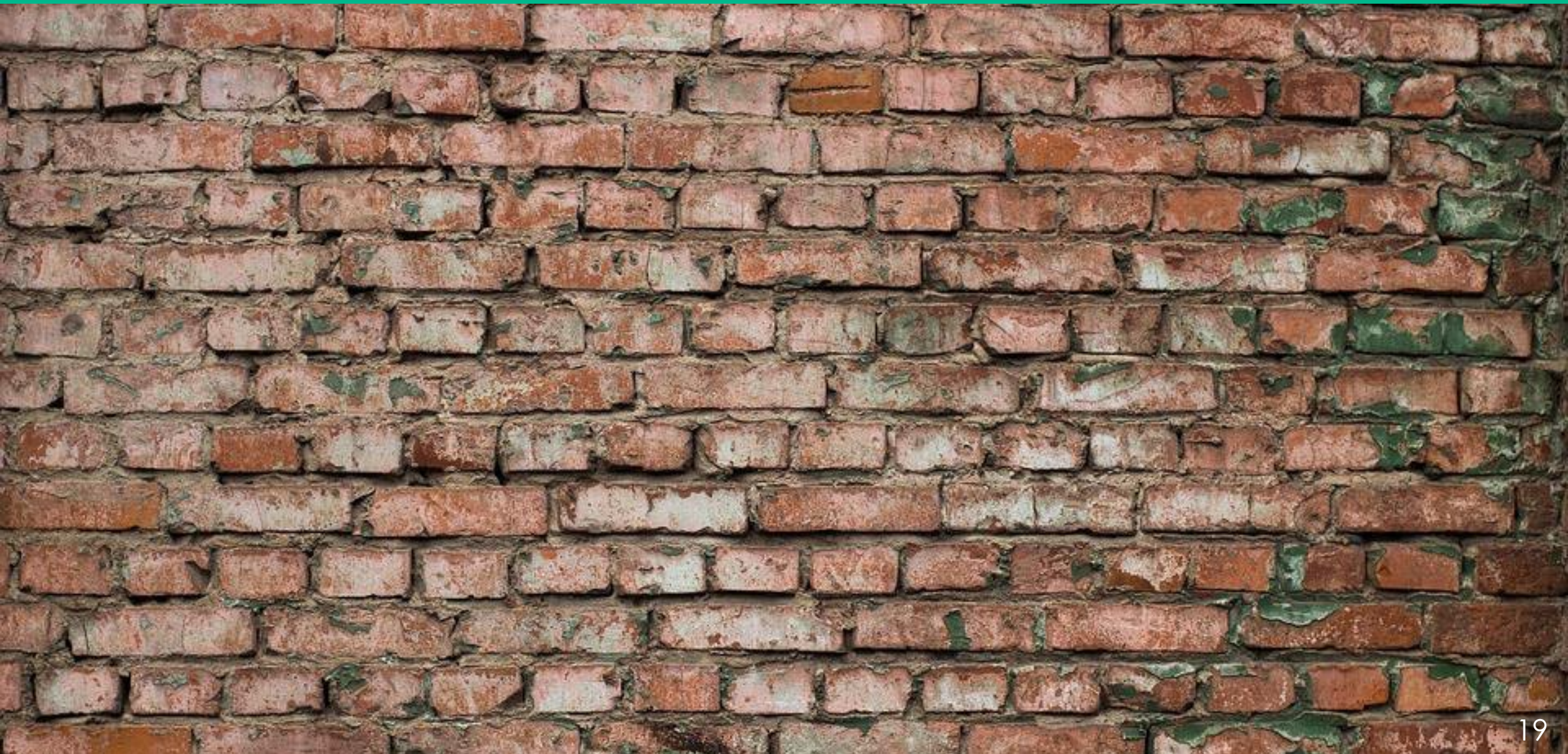
Key

- Existing public charging locations (~200)
- City-owned garages and lots (38)
- Commercial garages and lots (~300)

EVs for All



Barriers





- **Competition for curb space**
- **Placement of transformers (sidewalk vaults)**
- **Grid limitations (PG&E requirements)**
- **Cost of infrastructure installation (existing bldgs.)**
- **Complexity of incentives**
- **Fire department uncertainty**
- **Restrictions on repaving**

4950 Mission St



SFMTA, SFPUC and SFE Partnership





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