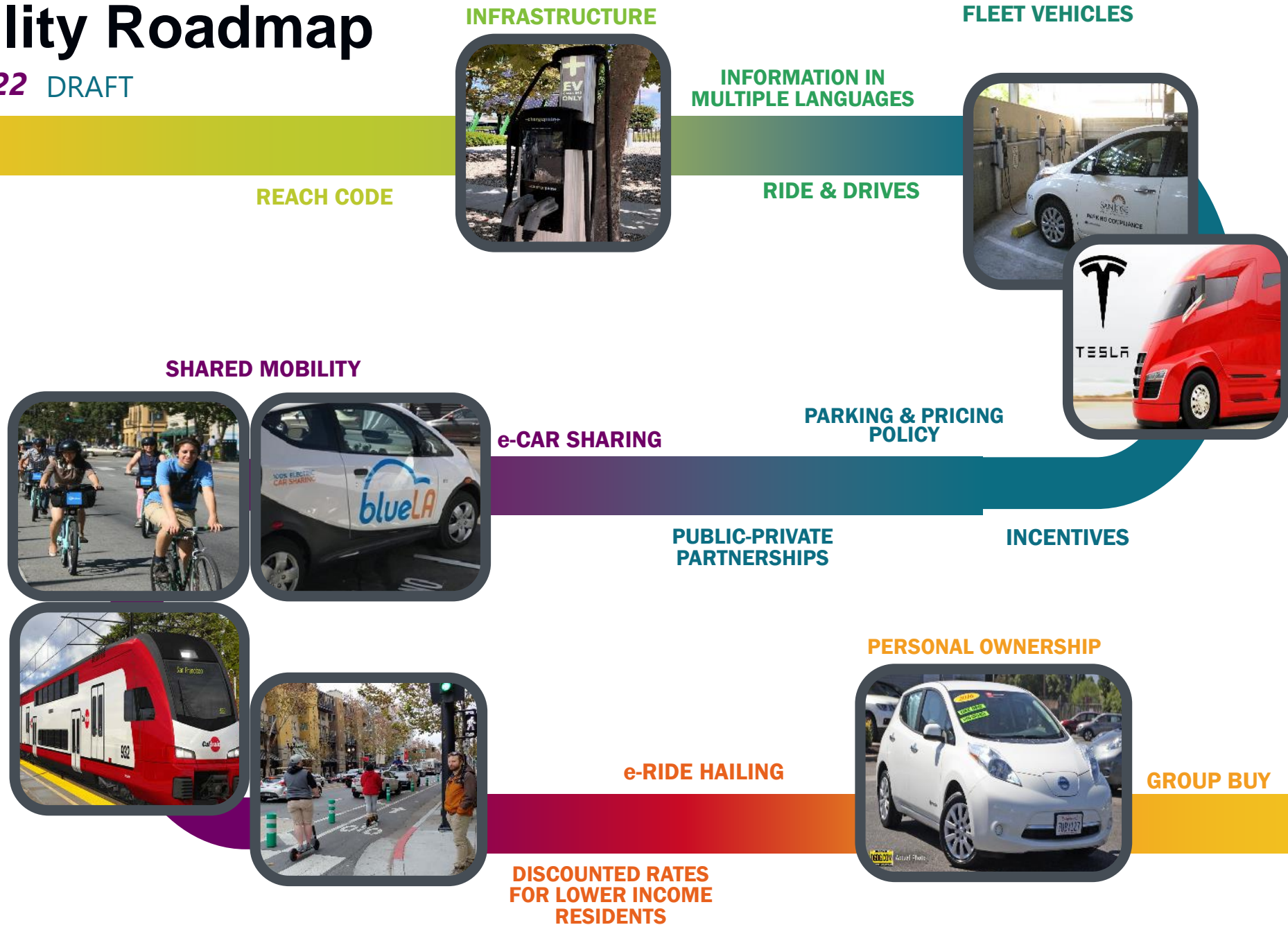


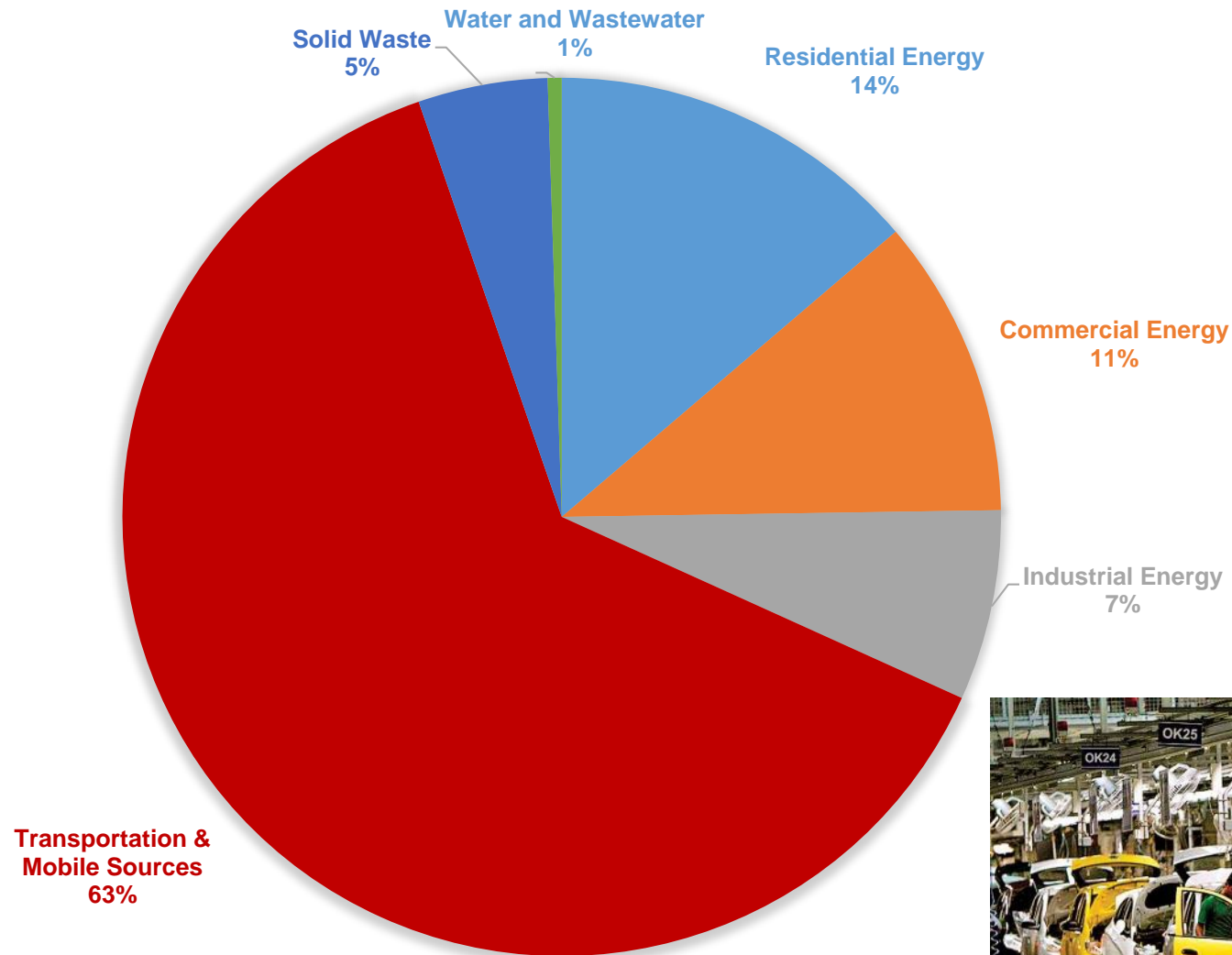
San José Electric Mobility Roadmap

2020-2022 DRAFT



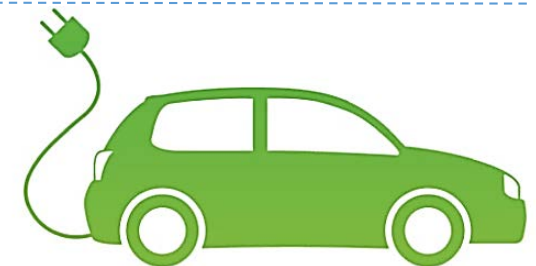
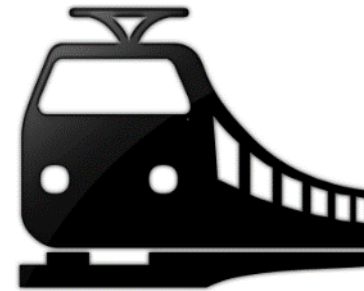
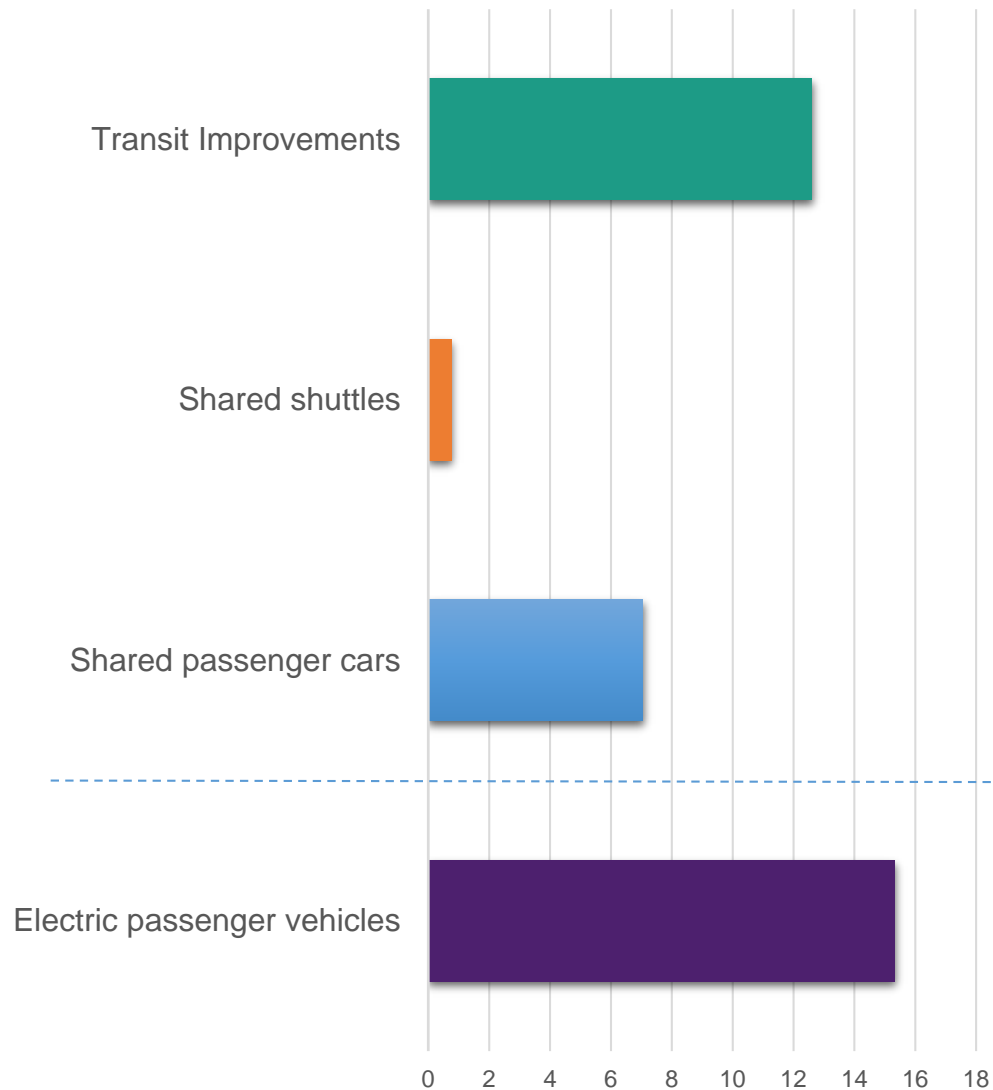
October 7, 2019
Transportation & Environment Committee
Laura Stuchinsky, DOT, Emerging Mobility Program Lead

2017 San José GHG Emissions

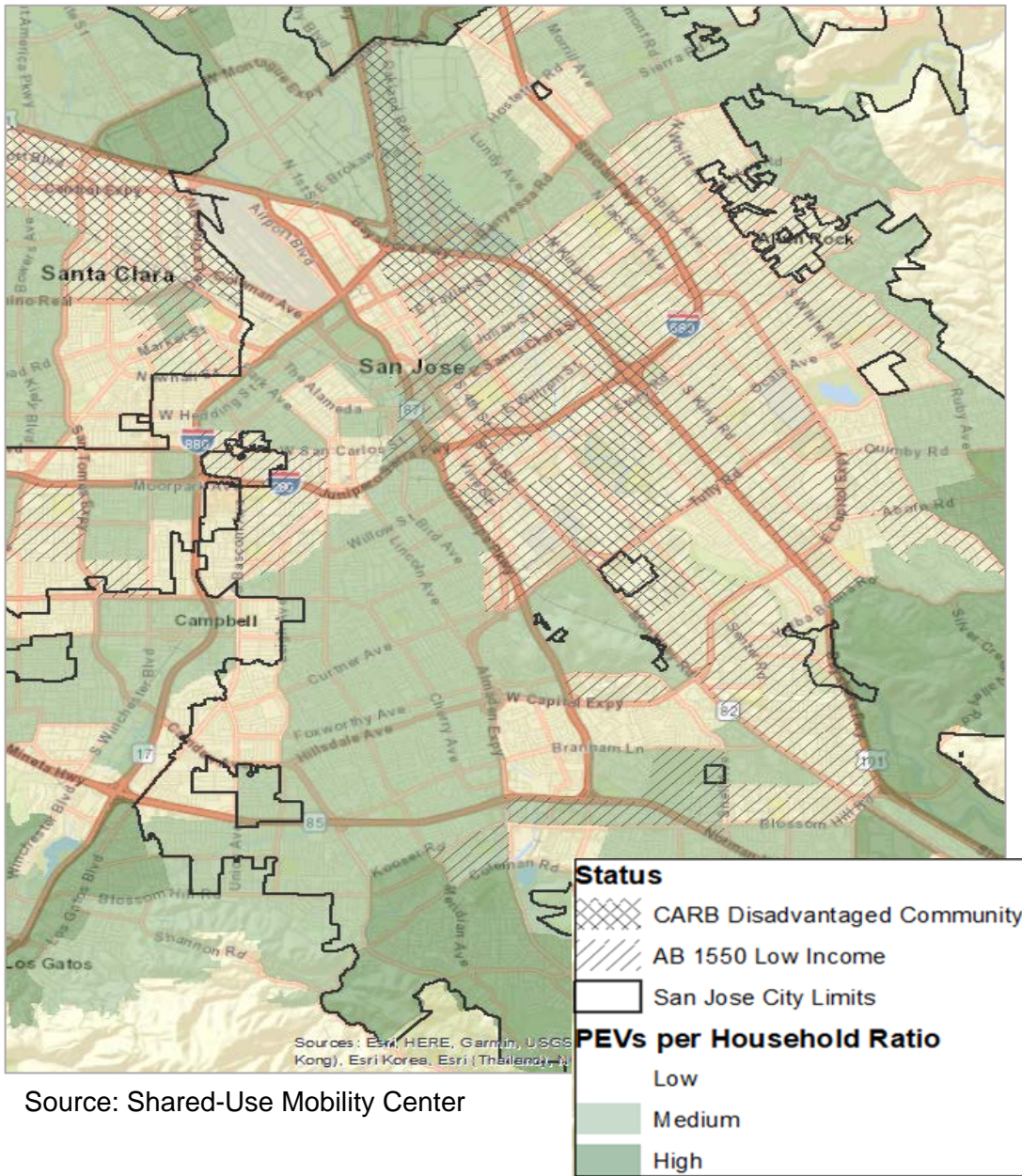


Multi-Prong Strategy

Tons of CO2e Reduced

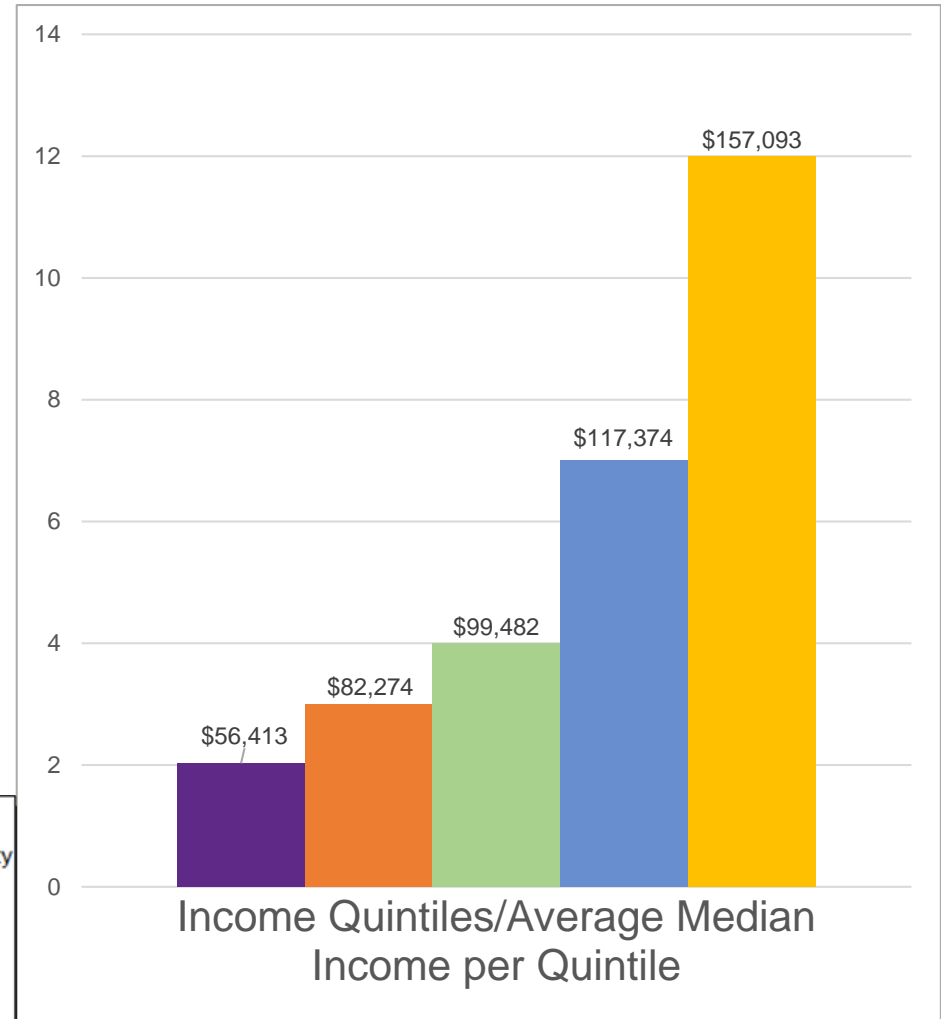


Equity

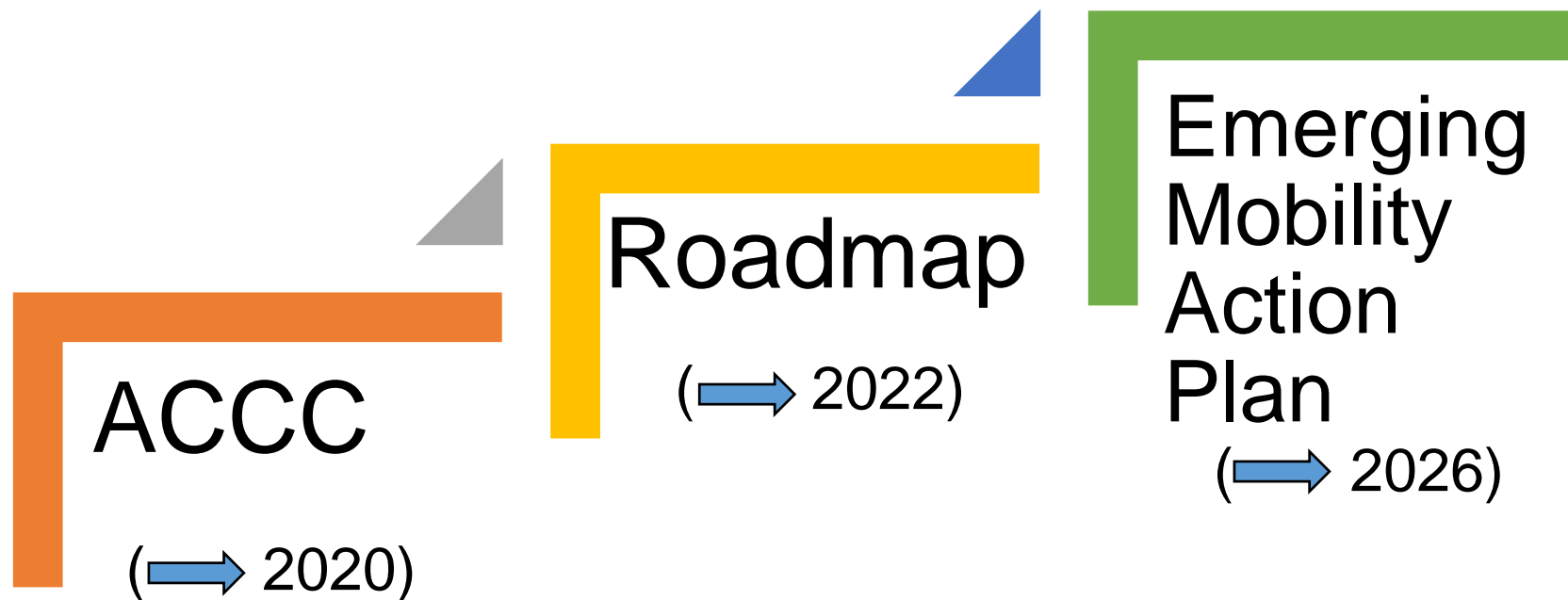


Source: Shared-Use Mobility Center

Average Number of Registered EVs Per 100 Households By Quintile



Building Blocks to Achieve City Goals



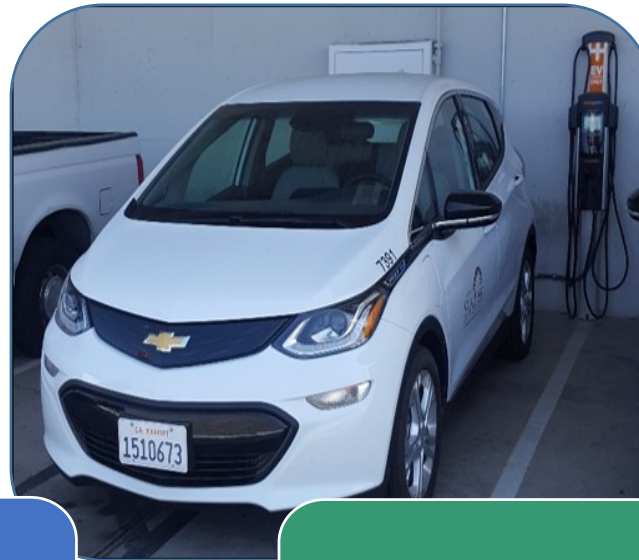
Climate Smart San Jose

Envision San Jose 2040

The Electric Mobility Roadmap



1. Infrastructure



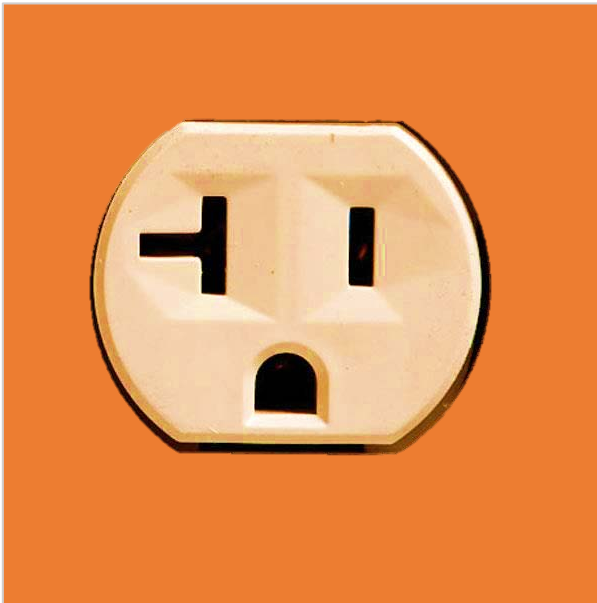
2. Fleet



3. Personal Vehicles & Shared Mobility

Electric Vehicle Chargers

Level 1 (110 v.)



Level 2 (240 v.)



Direct Current Fast Charger (480+ v.)



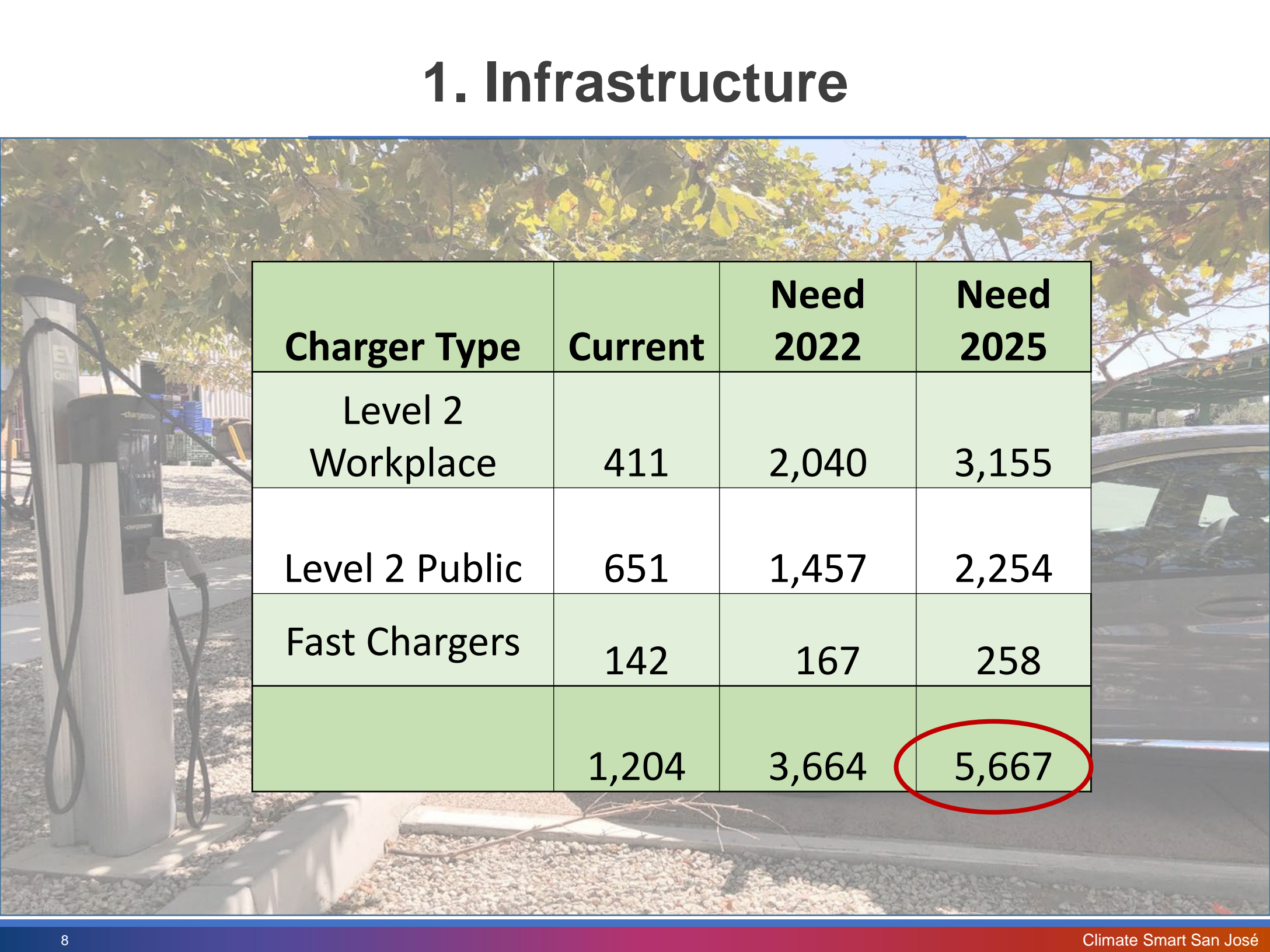
Time required to fully charge a Nissan Leaf:

20 hours

4-8 hours

30 minutes

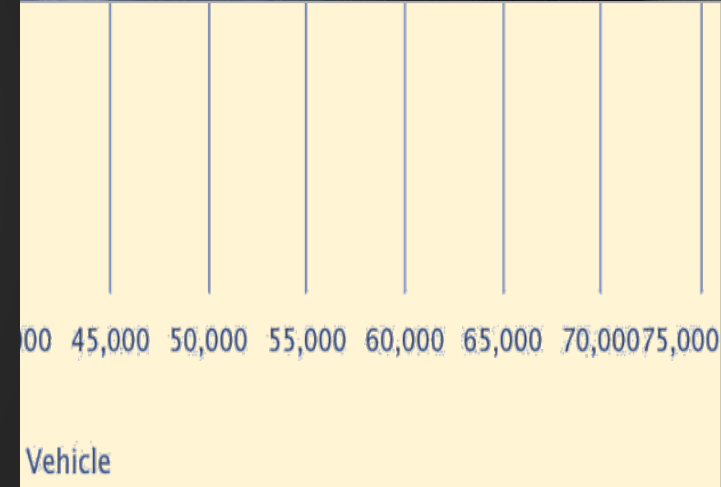
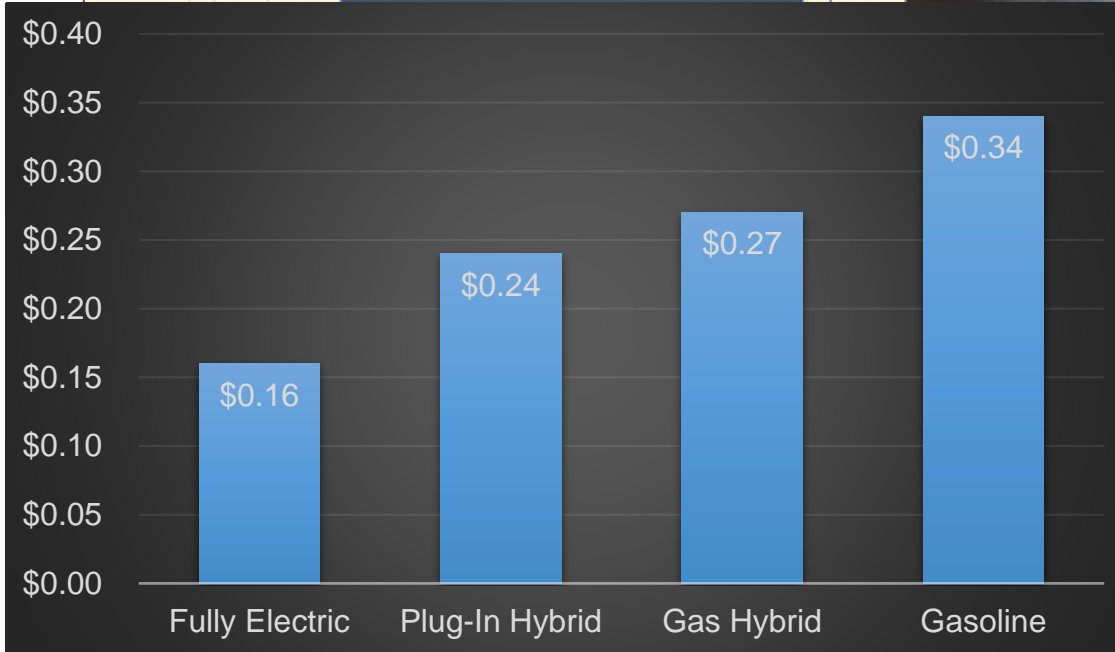
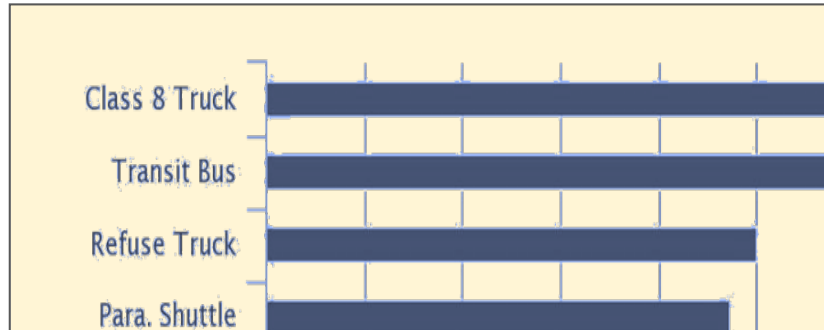
1. Infrastructure



Charger Type	Current	Need 2022	Need 2025
Level 2 Workplace	411	2,040	3,155
Level 2 Public	651	1,457	2,254
Fast Chargers	142	167	258
	1,204	3,664	5,667

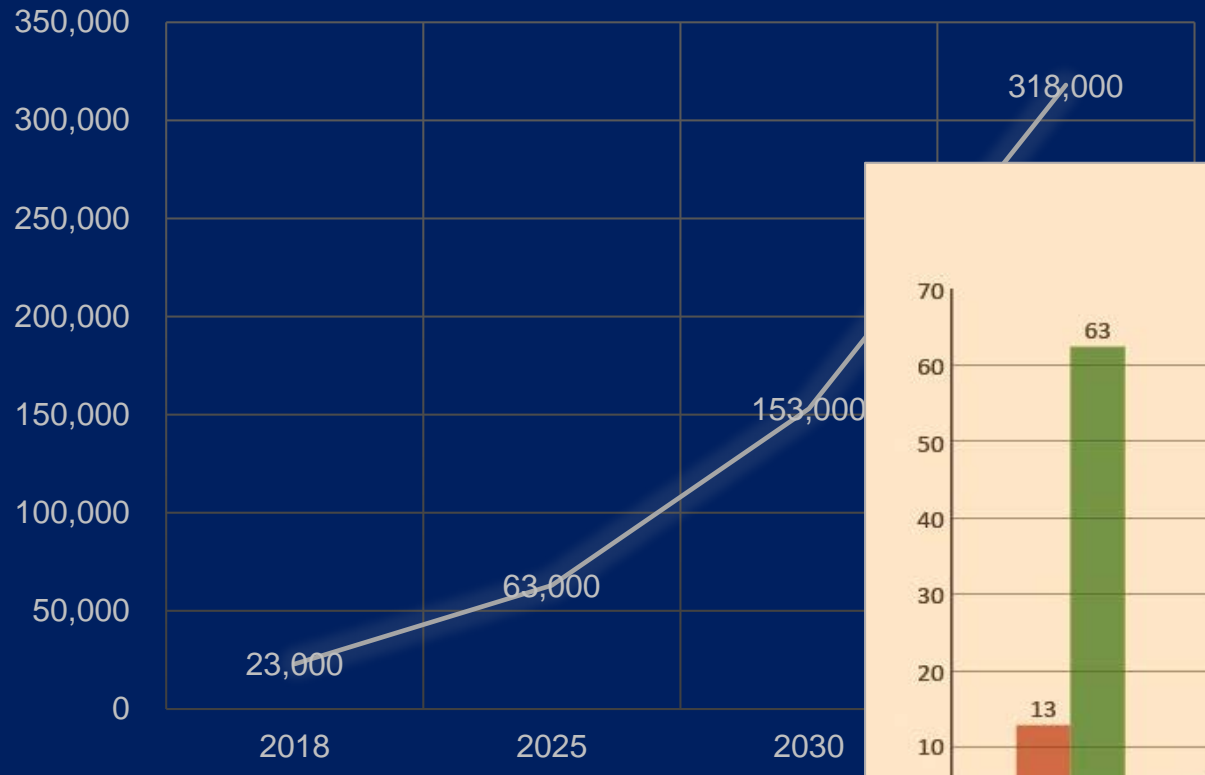
2. Fleet

Average Annual
by Major V

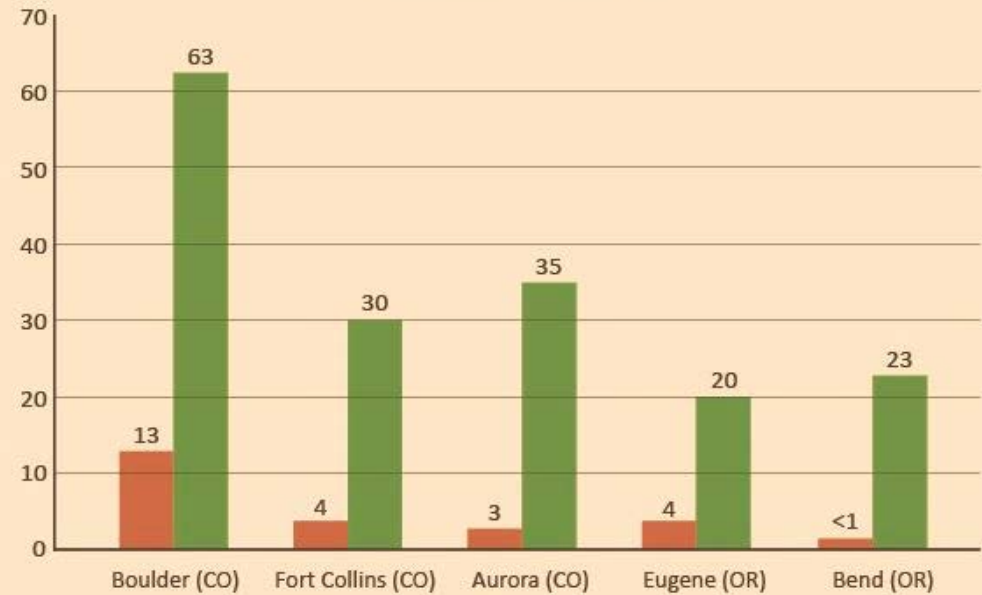


3. Personal Vehicles

San José Climate Smart Goals for Plug-In Electric Passenger Vehicles



Monthly Group Buy Sales
(before vs during program)



Source: Southwest Energy Efficiency Project

Brown: Monthly sales before group buy
Green: Monthly sales during group buy

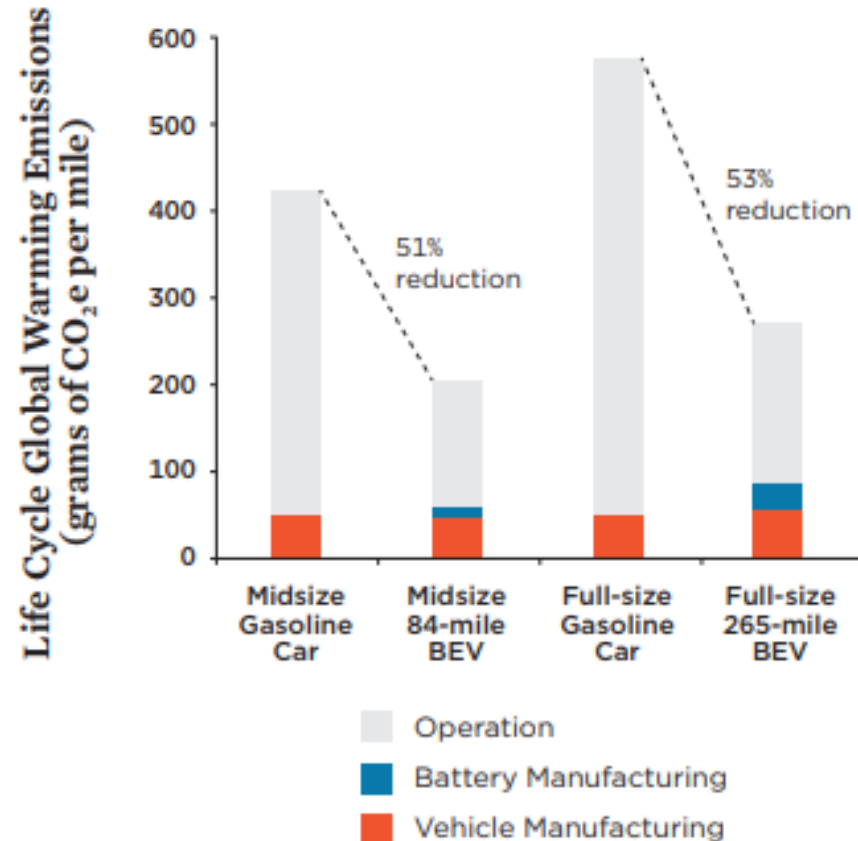
3. Shared Mobility



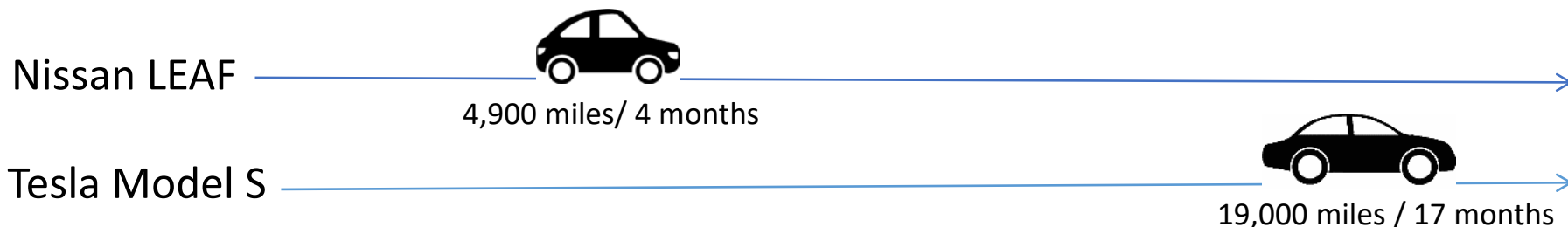
Life Cycle Emissions

Electric vs. Gas-Powered Vehicles

- Higher emissions EV production
- Lower operating emissions offset:
 - 50% lower life cycle emissions nationally
 - 75% lower in California
- CA: Electricity 42% carbon-neutral; goal 100% by 2025.
- San José: 80% now; 100% by 2021
- EV “break-even” point low and falling; Gas vehicles never break-even.



Current Break-Even Point for BEVs in California



Next Steps

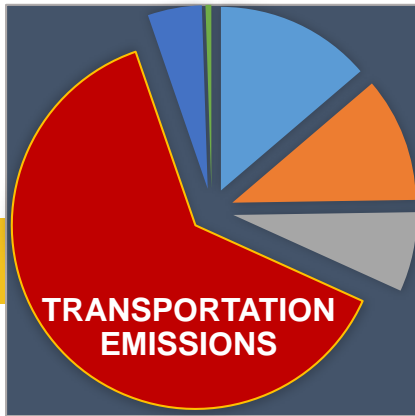
- Oct: Seek feedback from T&E Committee
- Dec: Present revised plan to Smart Cities & Service Improvement Committee
- Jan 2020: Present final plan to City Council



DRAFT

San José Electric Mobility Roadmap

2020-2022



1. INFRASTRUCTURE

3a. SHARED MOBILITY



2. FLEET VEHICLES



3b. PERSONAL OWNERSHIP

