

**Metropolitan Transportation Commission and the Association of Bay Area Governments  
Joint MTC Planning Committee with the  
ABAG Administrative Committee**

March 13, 2020

Agenda Item 4a

**Climate Initiatives Program Update**

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**Subject:** Update on MTC's Climate Initiatives Program, including strategies identified in Plan Bay Area 2040.

**Background:** MTC's Climate Initiatives Program identifies a variety of strategies and programs to help meet the per capita greenhouse gas (GHG) emissions reduction target established by the California Air Resources Board (CARB) for the region's Sustainable Communities Strategy (SCS). For Plan Bay Area (PBA) 2040, the target was 15%; for PBA 2050, the region must achieve a 19% per capita GHG reduction.

In November 2015, MTC committed \$22 million through the One Bay Area Grant Program (OBAG2) to implement three Climate Initiatives strategies identified in Plan Bay Area 2040: carsharing, targeted transportation alternatives (TTA) and electric vehicle incentives and infrastructure. To advance the electric vehicle infrastructure and incentives strategies, in October 2017, MTC allocated \$10 million to the Bay Area Air Quality Management District, the region's lead agency for electric vehicle implementation. In June 2018, MTC allocated \$1.2 million for carshare and \$325,000 for TTA to initiate implementation of these strategies. This item provides a progress update on these three strategies:

- **Carshare/Mobility Hubs.** Carshare provides access to an automobile for short-term use without the costs of individual ownership, and leads to shedding a vehicle and GHG reduction by reduced traffic congestion and parking demand. Based on lessons-learned from MTC's previous investment in carsharing, the next generation of carshare implementation will involve developing tools to assist local jurisdictions to be more successful in advancing car share locally, including the development of model policies, guidance and marketing materials. It will also include the development of mobility hubs, which not only serve as an ideal location for carsharing, but also provide highly visible intermodal connections that encourage transit trips, biking and walking, to better facilitate first/last mile connections, especially when co-located with other shared modes (e.g. bikeshare). Immediate next steps will identify the most effective locations for mobility hubs and working with local partners to develop implementation guidance and pilot program guidelines. Completion of the effort is expected by early Fall 2020.
  - Staff are currently learning about mobility hub implementation from the CARB funded Carsharing and Mobility Hubs in Affordable Housing Pilot Project. This pilot provides a combination of electric vehicle (EV) car sharing, e-bikes, free transit passes, and other transportation benefits to low-income residents living in affordable housing sites in Oakland, Richmond, and San Jose. The pilot is anticipated to be completed in 2022, and staff are able to provide annual progress reports.

- **Targeted Transportation Alternatives.** This travel behavior change program prompts a shift from driving alone to walking, biking, transit, or carpooling for any trip through outreach, education and incentives. Encouraging people to make this shift is difficult; however, Santa Monica, Portland and Seattle have successfully decreased solo driving trips with their version of targeted travel assistance programs. TTA adapts these approaches to the Bay Area's landscape and outreach preferences. Staff completed an implementation roadmap based on behavioral economics and targeted marketing. The immediate next step is to test the approach outlined in the roadmap. In the next month, staff plan to release an RFP for consultant assistance to design and implement a targeted behavior change pilot, and anticipate completion of the pilot in Spring 2021.
- **EV Programs.** As noted, MTC's \$10 million investment has leveraged the Bay Area Air Quality Management District's (Air District) existing EV infrastructure, incentive and outreach/marketing programs. The Air District also engages in supportive outreach, marketing and collaboratives to accelerate EV utilization in the Bay Area. Wide-scale adoption of EVs and electrification of all types of transportation are essential to achieving local, state, and federal emissions reduction targets for GHG emission and criteria air pollutants. As of December 31, 2018, there were 190,000 EVs registered in the Bay Area, and roughly 1,600 public charging locations.
  - Infrastructure. The grant program, Charge!, provides funding for the installation, design, and planning of publicly accessible EV infrastructure. For the 2019 cycle, 76 applications were received requesting over \$6.5 million for the installation of 847 Level 2 chargers and 70 direct current Fast EV chargers. The next round of Charge! is expected in mid-2020.
  - Incentives. Clean Cars for All provides grants to income-qualified Bay Area residents to buy or lease a new or used hybrid, plug-in hybrid, or battery electric vehicle or receive a Clipper Card when scrapping an old vehicle. Since launching in March 2019, the Air District has awarded over \$2 million to 270 low-income households.
  - Outreach and marketing. A number of supportive activities inform and advance EV adoption. The EV Coordinating Council is a staff-level, peer-to-peer forum, which serves as a venue for members to discuss EV-related emerging trends. Air District staff also analyze qualitative and quantitative data on consumer and business sentiments on barriers to EV adoption which will inform the Bay Area EV Acceleration Plan. The Plan will outline concrete recommendations to help accelerate EV adoption.
- **Plan Bay Area 2050.** As mentioned, MTC will need to reduce per-capita GHG emissions from cars and light-duty trucks by 19 percent for PBA 2050. To achieve this goal, PBA 2050 will have to prioritize a number of transportation, housing, and economy strategies to reduce the region's transportation emissions. These strategies will complement the Climate

Initiatives Program. The PBA 2050 Climate Initiatives Program is expected to include most of the strategies from Plan Bay Area 2040. The per capita GHG reduction performance of these strategies, in combination with updated land use and transportation strategies, is currently being assessed. Depending on the assessment, additional policy commitments may be required to reach the region's target. This assessment is expected to be shared with the Joint Planning Committee in April.

**Issues:** None identified.

**Recommendation:** Information.

**Attachments:** Attachment A: Climate Program Update Presentation



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Therese W. McMillan

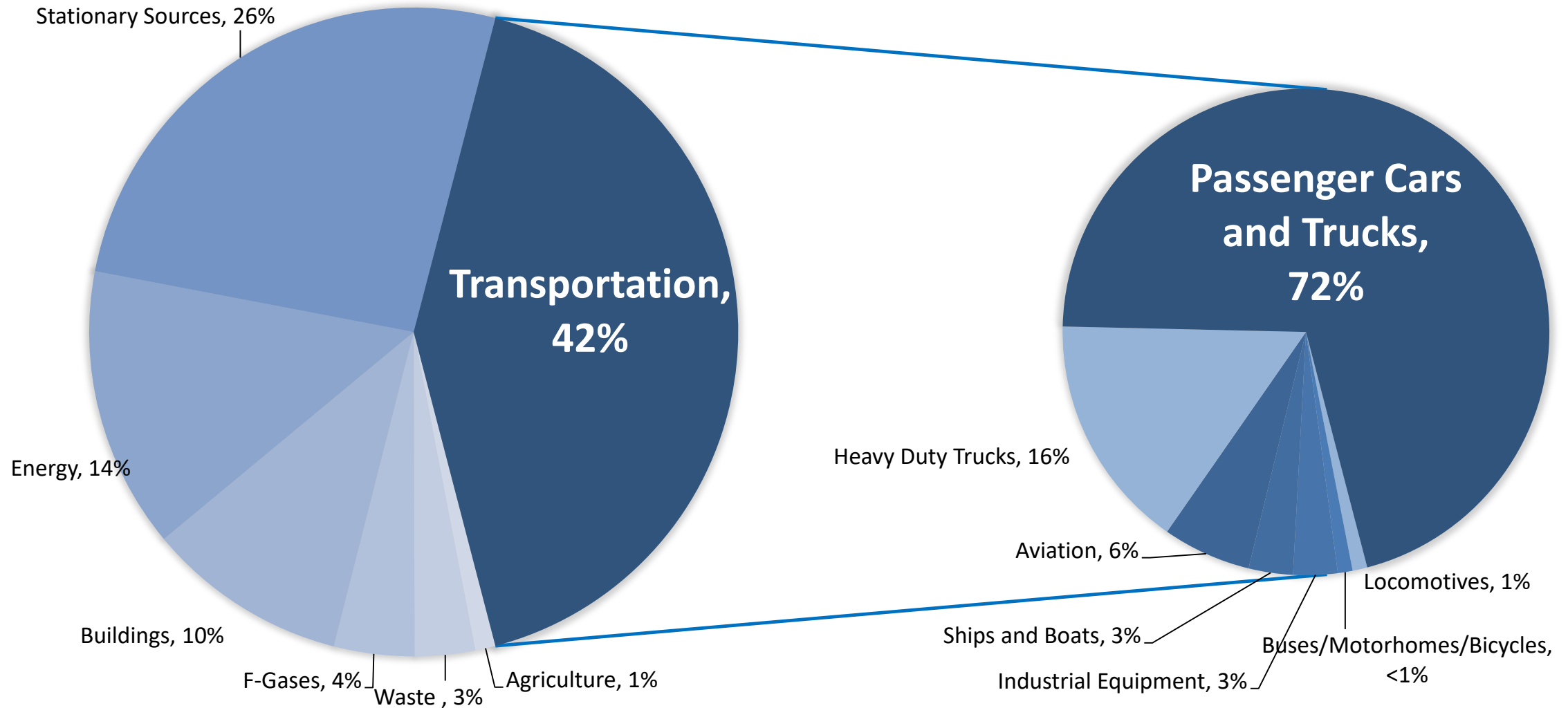
# Climate Initiatives Program Update

**Joint MTC Planning Committee with the  
ABAG Administrative Committee  
March 13, 2020**

**Krute Singa, MTC/ABAG  
Rebecca Fisher, BAAQMD**

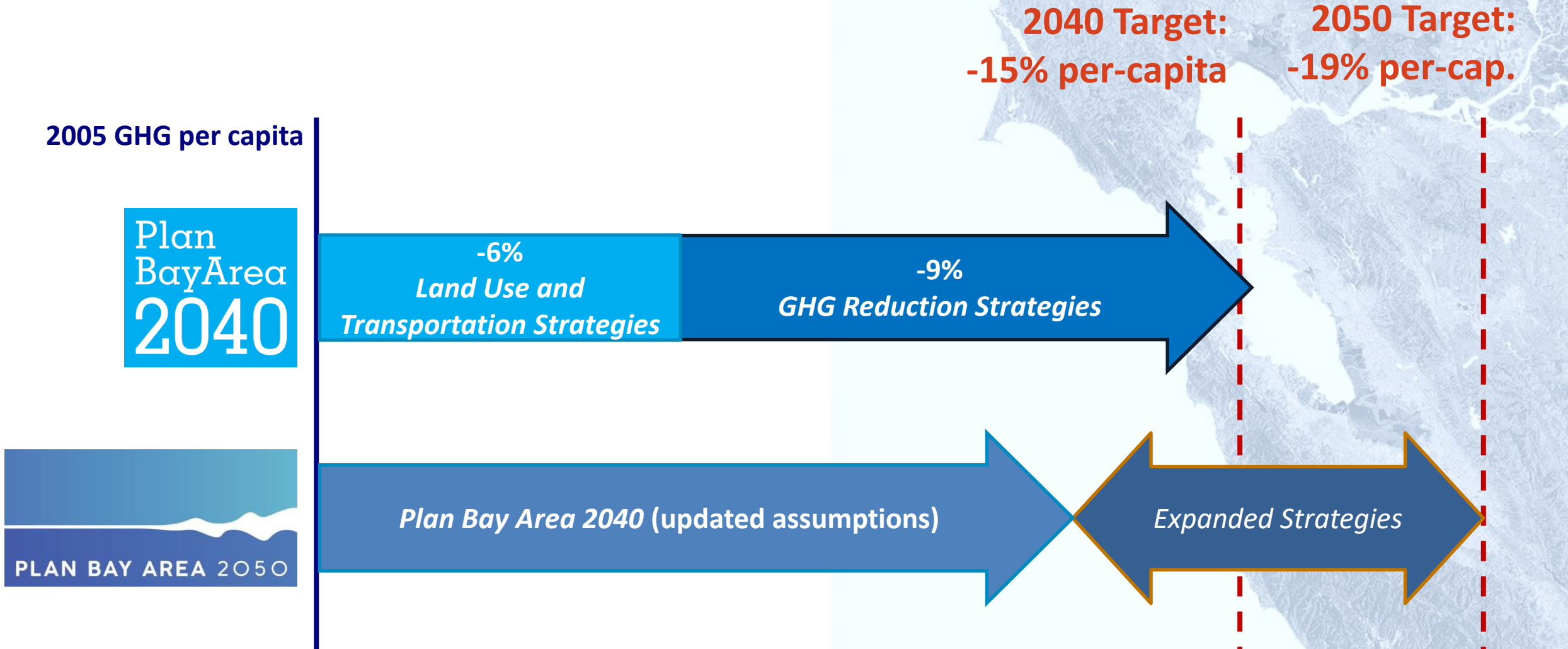
# Refresher:

## 2015 Bay Area GHG Emissions by Source Category





# Refresher: Plan Bay Area Targets





# Refresher: Key Statutory Requirements

*While Plan Bay Area 2050 must meet many statutory requirements, these three are among the most critical:*



## **Fiscal Constraint**

Under federal transportation planning regulations, the Plan must rely upon reasonably-expected revenues



## **Greenhouse Gas Reduction**

Under Senate Bill 375, Plan Bay Area 2050 must meet or exceed a recently-enhanced 19 percent per-capita GHG reduction target for light-duty vehicles by 2035.



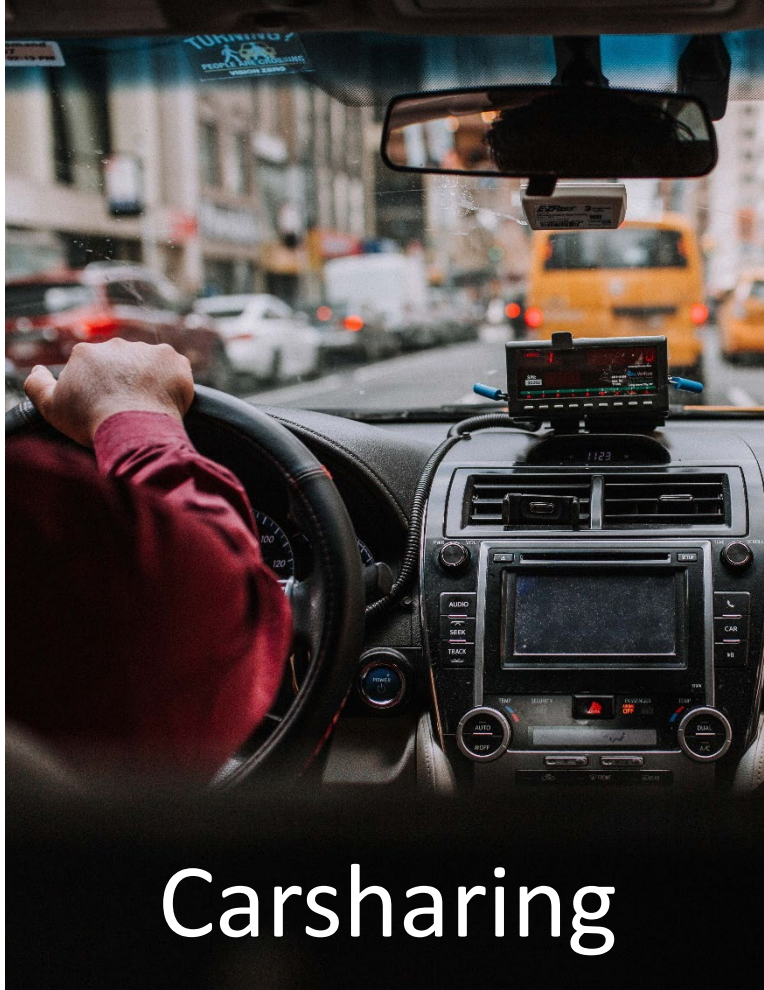
## **Housing at All Income Levels**

Under Senate Bill 375, Plan Bay Area 2050 plan for sufficient housing for all income levels; RHNA must ultimately be consistent with the Plan.

Climate Program (PBA 2040)		Per Capita CO <sub>2</sub> Emission Reductions in 2035
Policy Initiative		
Bike Share and Bike Infrastructure		-0.1%
Carsharing		-2.3%
Commuter Benefits Ordinance		-0.4%
EV - Clean Vehicles Feebate Program		-0.8%
EV - Regional Electric Vehicle Charger Program		-1.4%
EV - Vehicle Buy-Back/Electric Vehicle Purchase Incentive		-0.4%
Smart Driving		-0.8%
Targeted Transportation Alternatives		-1.9%
Trip Caps		-0.8%
Vanpool Incentives and Employer Shuttles		-0.4%
Total		-9%



# O BAG 2, Resolution 4202 Revised (Nov. 2015): \$22m for Climate Initiatives Program



Carsharing



Targeted Transportation  
Alternatives/Trip Caps



EV Infrastructure and  
Incentives



# Carsharing/Mobility Hubs

## What the Initiative Is:

- Carsharing = access to a car without individual ownership for short-term use
- Mobility hubs = visible intermodal connections

## How It Advances GHG Reduction:

- Carshare: reduced parking and traffic congestion
- Mobility hubs: travel mode shifts and first/last mile connections

## Progress and Next Steps:

- *Complete*: carshare implementation plan
- *To be complete in Fall 2020*: mobility hub site analysis, regional locational typology and implementation plan



# CARB-Funded Grant Car Sharing and Mobility Hubs in Affordable Housing Pilot Project





# Mobility Options Assessed Through CARB Grant



EV CHARGING



BIKE SHARING



DISCOUNTED TRANSIT PASSES



EV CAR SHARING



TRAVEL INFORMATION SCREEN



BIKE PARKING



# Targeted Transportation Alternatives

## What the Initiative Is:

- Outreach and incentives to encourage shift from driving alone to sustainable modes

## How It Advances GHG Reduction:

- 5-8% shift in behavior from drive alone\*

## Progress and Next Steps:

- *Complete*: implementation roadmap based on behavioral psychology and economics, and targeted marketing
- *To be completed in Spring 2021*: pilot program in targeted areas throughout the region with the highest possibility for reducing GHG





# EV Infrastructure and Incentives

## What the Initiative Is:

- Accelerate adoption of electric vehicles (EVs) through
  - Increasing the number of chargers
  - Providing education, outreach and incentives

## How It Advances GHG Reduction:

- Increases the share of electric vehicle miles traveled

Progress and Next Steps →





# Air District Programs

- Charge!
- Clean Cars for All
- EV Coordinating Council
- Survey and Market Research
- Bay Area EV Acceleration Plan



# BAY AREA

## ELECTRIC VEHICLE TRENDS AND GOALS



7,750 public charging ports currently

20,000 public charging ports needed (NREL)

3% of the cars are EVs, with a goal of 90%

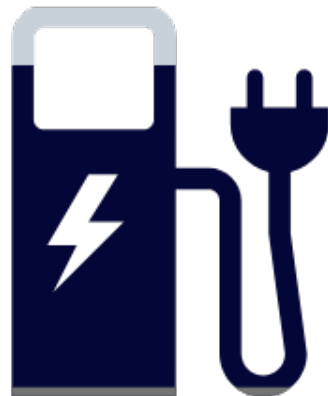


### Public charging ports

14% DC Fast

83% Level 2

3% Level 1



### Progress towards our EV Adoption Goals

2018: 190,000



2013: 15,000



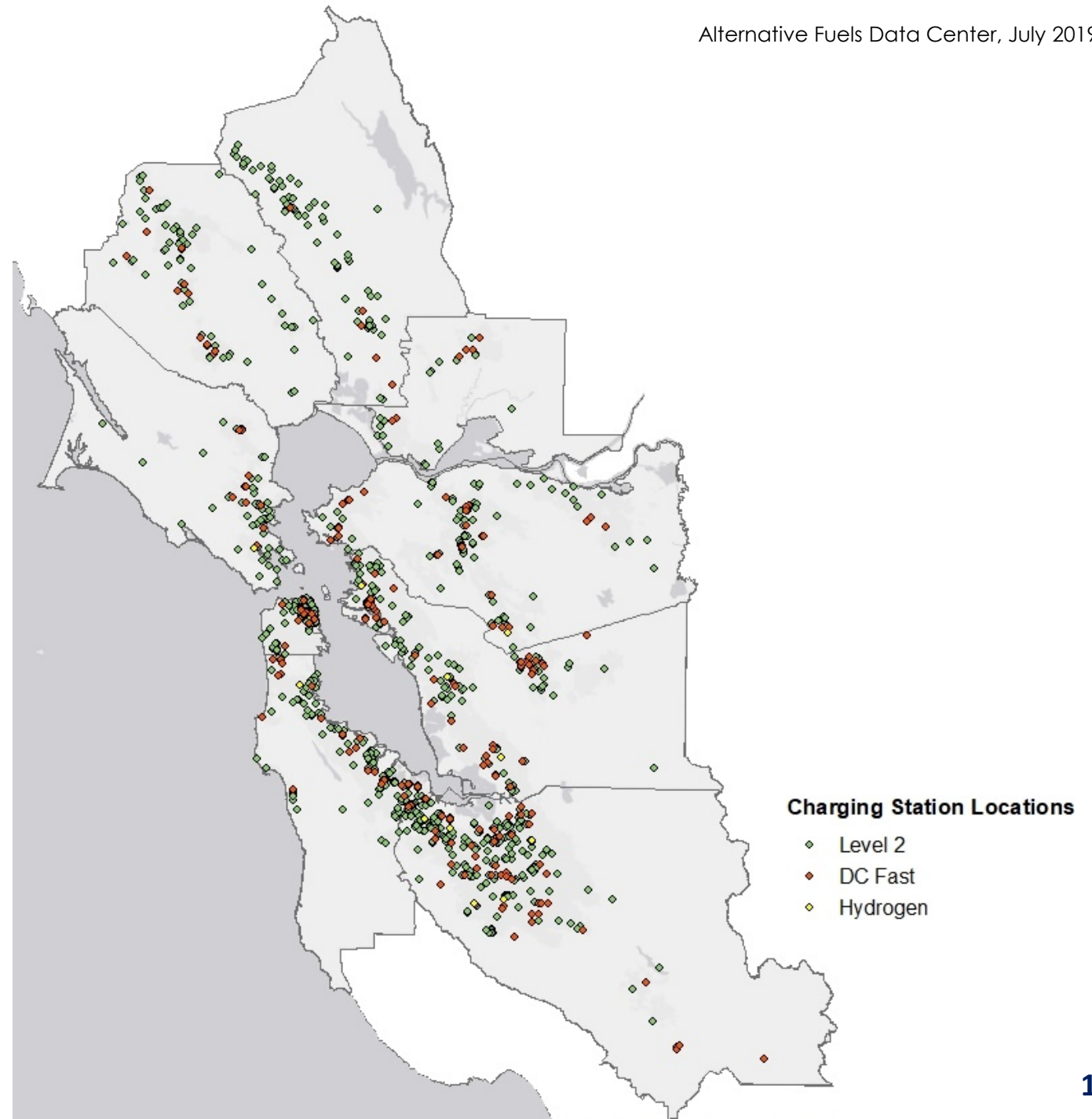
2025: 247,000



2050: ~5 million



# Publicly Accessible EV Charging in the Bay Area



# Plan Bay Area 2050 Blueprint

## Strategy: Expand the Climate Initiatives Program

- Expand current program while working with the Air District and the State to reduce greenhouse gas emissions for other transportation sectors
- Consistent with Plan Bay Area 2040 strategies
- Additional policy commitments may be considered to achieve the SB 375 GHG reduction target for 2035





# Thank You

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