

Climate Initiatives Program Reducing GHG Emissions in the San Francisco Bay Area

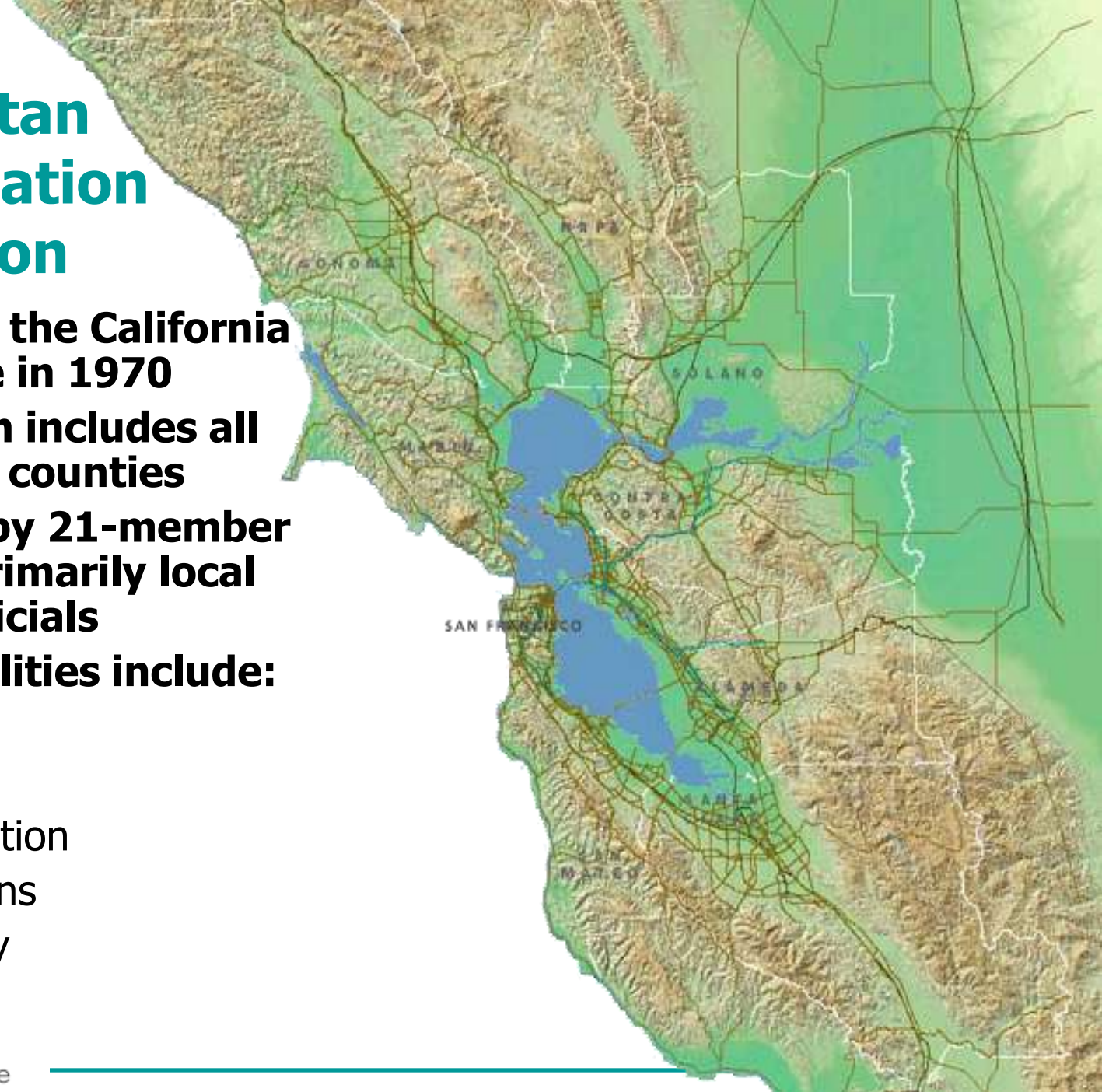


Rail~Volution
Ursula Vogler
MTC
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Background

Metropolitan Transportation Commission

- **Created by the California Legislature in 1970**
- **Jurisdiction includes all 9 Bay Area counties**
- **Governed by 21-member board of primarily local elected officials**
- **Responsibilities include:**
 - Planning
 - Funding
 - Coordination
 - Operations
 - Advocacy



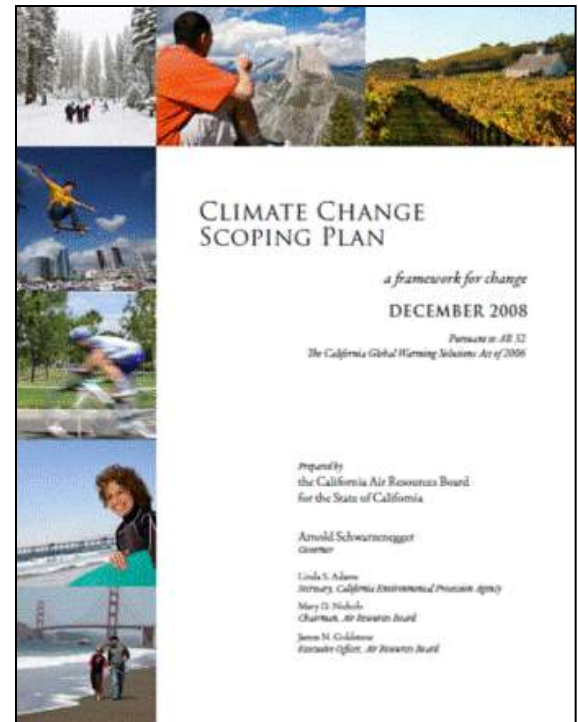
Regional Transportation Plan

- **Road map that guides region's transportation development over 25-year period**
- **Plan constrained to revenues reasonably available to region**
- **Updated every four years**
- **Extensive public outreach and consultation with various agencies**
- **Transportation projects must be consistent with RTP to receive federal, state or regional funding**



AB 32 Global Warming Solutions Act of 2006

- Establishes regulatory and market mechanisms to achieve greenhouse gas (GHG) emissions reductions
- AB 32 sets GHG emissions limit for 2020 at 1990 level
 - Acknowledges that 2020 is not the endpoint
 - Points way towards 80% reduction by 2050
- Air Resources Board (ARB) adopted a Scoping Plan to achieve AB 32's GHG emissions reduction target



Senate Bill 375

Sustainable Communities Strategy

- Requires the **integration of land use and transportation planning in a Sustainable Communities Strategy (SCS)** to reduce emissions from light duty vehicles
- Directs ARB to develop **GHG reduction targets** for CA's 18 MPOs for 2020 and 2035 -7% and -15% respectively for the Bay Area



Climate Initiatives Program

Climate Initiatives Program

- **Transportation 2035**: first RTP to outline GHG emission reduction strategies to comply with state laws
- 3-year, \$80 million program adopted in December 2009
- Program developed by Commission members, representatives from Bay Area transit agencies, advocates and staff
- Program makes **short-term investments** that **reduce transportation-related emissions** and **vehicle miles traveled**
- Program focuses on evaluation to **inform the next Regional Transportation Plan/Sustainable Communities Strategy**

Climate Initiatives Program

Cycle 1 CMAQ

- **Public Outreach and Education Program - \$10 million**
 - School and Youth Outreach Program
 - Smart Driving Pilots
 - Electric Vehicle Promotion Campaign
- **Innovative Grants – \$31 million for 13 grants**
 - 4 Clean Vehicles
 - 4 Transportation Demand Management (TDM)
 - 4 Showcase
 - 1 Parking Management
- **Safe Routes to School (SR2S) County Program & Creative Grants - \$17 million**
- **Program Evaluation - \$2 million**

Public Outreach Program: Smart Driving Pilots

Testing the effectiveness of:

1. In-vehicle devices measuring miles per gallon (MPG)
2. Smart driving education
3. MPG mobile applications



SMART DRIVING
Good for Your Pocketbook,
Good for the Air

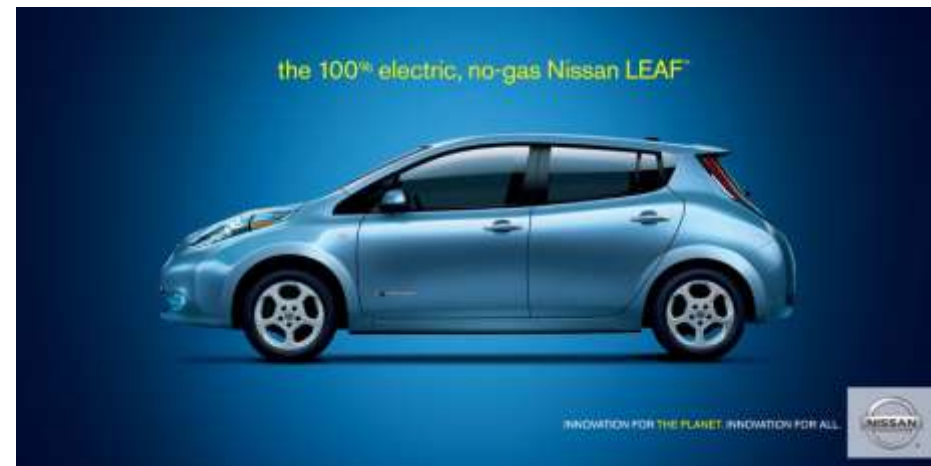
Results will determine whether to promote smart driving tactics to the region

Pilots underway, to be completed in 2014



Public Outreach Program: Electric Vehicle Campaign

- **Campaign's main goal: Encourage Bay Area drivers to purchase or use EVs when offered the choice**
- **Will achieve this via ride-and-drive events and social media/promo campaign**
- **Behavior Change: using a 10% adoption rate for 23-25 events with 250-275 attendees each = 575-688 purchases/leases**
- **Campaign to be implemented spring 2014**



“Spare the Air Youth”

School and Youth Outreach Program

- \$3 million over 4 years
- Program implemented in two phases: testing and implementation
- Phase II: funded 7 projects totaling \$1.6M
- Program encourages kids and their families to use alternative transportation



Safe Routes to School

- **Distributed \$15 million to the 9 Bay Area counties**
- **Funding distributed based on school enrollment**
- **Counties decided projects based on local needs**
 - Most schools funded education and outreach programs

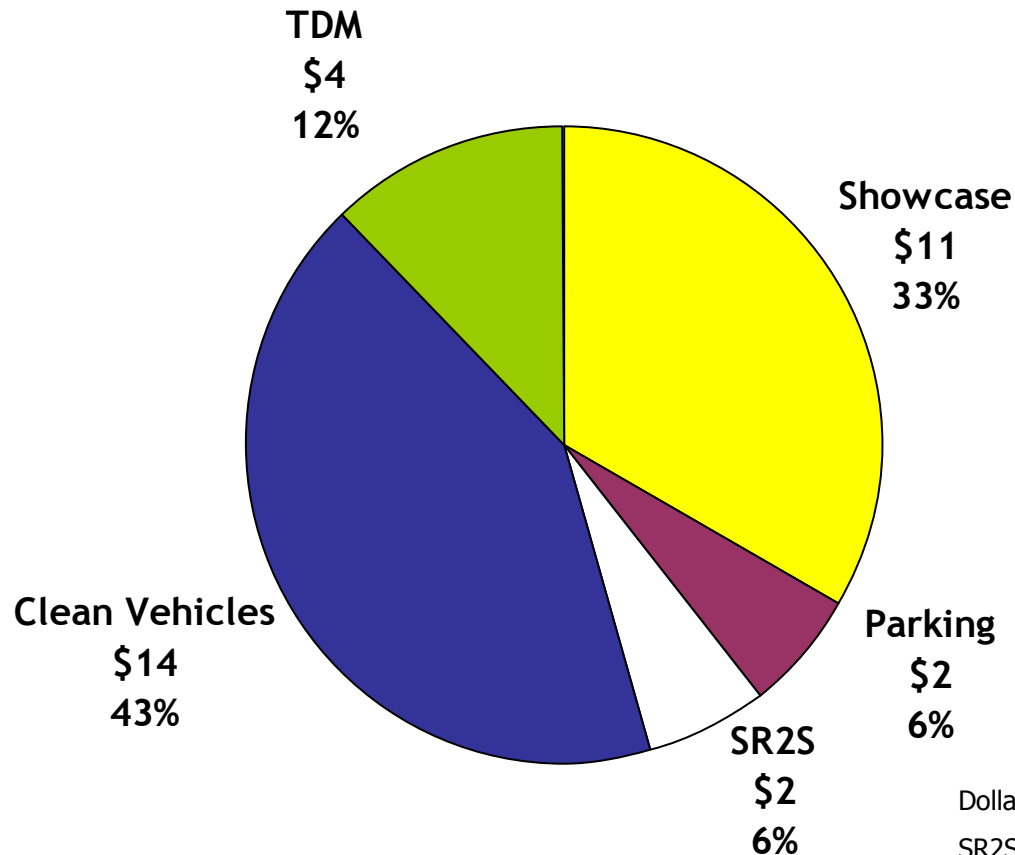


Innovative Grants: Goals and Objectives

- Measurably **reduce emissions of greenhouse gases** and criteria pollutants
- Have the greatest **potential for replication**
- Employ multiple approaches together, effectively layering them to produce synergy
- **Remove substantial barrier** – technical, financial, policy or political – that impedes successful implementation of a new strategy
- Build effective **collaboration and partnerships**

Innovative and SR2S Creative Grants: Funding Breakdown

Total: \$33 Million



Dollars shown in millions

SR2S: Safe Routes to School

TDM: Transportation Demand Management

Safe Routes to School Grant Funding: \$2 million

- Bike mobile for repairs and education
- Green Ways to Schools through social marketing
- Green Star Schools' climate curriculum and competitions
- GIS-based school route maps



Parking

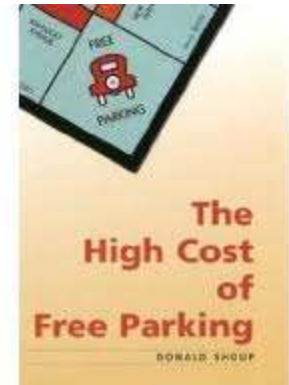
Grant Funding: \$2 million

- Parking pricing in Berkeley commercial districts (includes parking pricing, enforcement, TDM, GreenTrip certification, and incentives)



Transportation Demand Management Grant Funding: \$4 million

- Dynamic ridesharing pilot in 3 counties
- Creation of TDM employer group to implement parking cashout and Muni Partners shuttles coordination in San Francisco
- Grand Boulevard Initiative's TDM Strategies



Showcase

Grant Funding: \$11 million

- Bike sharing pilot in San Francisco, San Mateo, and Santa Clara counties
- Port of Oakland's Shore Power Initiative
- Bicycle Detection Systems
- Cold in Place Recycling demos for road rehabilitation



Clean Vehicles

Grant Funding: \$14 million

- EV Taxis in San Francisco
- Municipal EV Fleets and Smart Driving
- City CarShare EV Fleet
- Tribal EVs



Program Evaluation: Key Questions

- What are the **quantified estimates of change** before and after the implementation of the project or program?
- How effective is the project or program at **reducing GHG emissions** and criteria pollutant emissions?
- What are the **costs and benefits** of the project or program? How can the project/program be **replicated** elsewhere in the Bay Area? How can we **remove barriers** and support elements that would lead to successful implementation?
- What are some **key lessons** that we can learn from the project or program?
- Are there any different or new approaches, strategies or ways to make the project or program even **more effective**?

Program Evaluation: Co-benefits

- **Increase in physical activity**
- **Reduction in air pollution and associated public health impacts**
- **Improvement in roadway safety**
- **Reduction in household transportation costs**
- **Increase in public awareness of strategies to reduce emissions**
- **Reduction of barriers to clean vehicle adoption and use**



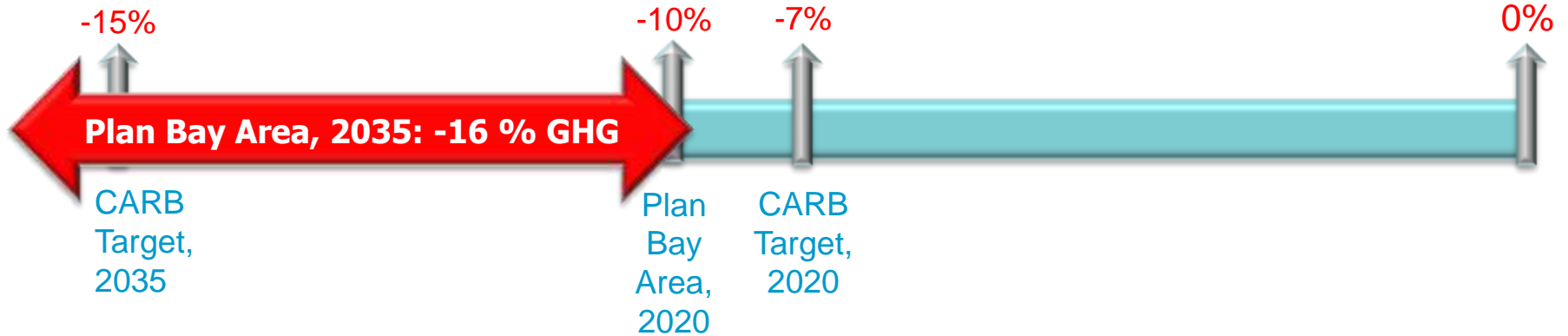
Climate Initiatives Program Cycle 2

Plan Bay Area

- **SB 375 mandated integration of land use and transportation planning in a Sustainable Communities Strategy (SCS)**
- **Plan developed over four years**
- **Adopted in July 2013**
- **Climate Initiatives Program continued; key component of GHG emission reduction plan**



GHG Emission Reductions Target - 2035



GHG Emission Reduction

- > 9% reduction due to land use
- > 6% reduction due to Climate Initiatives Program

Moving Forward: Plan Bay Area Climate Program

Policy Initiative	2035 Cost In YOE millions	Per Capita CO2 Emissions Reductions in 2035	Cost per GHG Ton Reduced in 2035
Regional Electric Vehicle Charger Network	\$80	-0.3%	\$812
Vehicle Buy-Back & Plug-in or Electric Vehicle Purchase Incentive	\$120	-0.5%	\$684
Car Sharing	\$13	-2.6%	\$14
Vanpool Incentives	\$6	-0.4%	\$29
Clean Vehicles Feebate Program	\$25	-0.7%	\$108
Smart Driving Strategy	\$160	-1.5%	\$322
Commuter Benefits Ordinance	\$0	-0.3%	\$0
Climate Initiatives Innovative Grants	\$226	TBD	TBD
Total	\$630	-6.3%	

MTC Staff Contact for Climate Initiatives Program

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