

Jumpstart Workshop: Opening Activity Instructions

10:15 —
10:20

...

As you enter the room, read the terms on the chart paper on the walls and think about which represents a driver/motivation or a challenge relating to building electrification for your community?

Place a pink sticky note for a challenge, and a green sticky note for motivator.



Jumpstart Workshop: Scaling an Equitable Transition to All-Electric Neighborhoods

California Climate and Energy Forum

June 24, 2024



Workshop Team



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Program Manager, El Concilio of San Mateo County



Agenda

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- Welcome & Agenda Review
- Introduction & Background
 - County and community-based organization staff
 - Q&A
 - Whole group reflection
- Small group exercise
- Whole group discussion & final reflection



Guiding Questions:

How do you achieve equitable neighborhood electrification in very different neighborhoods?

What are the challenges, costs and benefits?



Key Terms:



Equitable



Addresses inequities between demographic groups, seeks to provide people with the resources and support they need to succeed



Electrification



Transitioning appliances to electric powered models



Neighborhood/Zonal



Moving beyond the appliance-by-appliance approach and electrifying a swath of homes/building at a time



Decarbonization



The umbrella of methods to reduce greenhouse gas emissions from buildings; include energy efficiency and building performance, not just swapping fuels

IMPROVING INDOOR AIR QUALITY IN CONTRA COSTA COUNTY



CCEC Forum - June 25, 2024

Jody London, Sustainability Coordinator
Contra Costa County
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Today's Talk

- About Contra Costa County
- County Efforts to Improve Air Quality in Buildings
 - Contra Costa Asthma Initiative
 - Block Grant Funding - Expanding Focus to Include More Sensitive Populations
 - Clean Energy Roadmap for Existing Buildings
- Building Efficiency Standards Ordinance



Regional Context

Locator Map



- Northern Waterfront
- Ship Channel
- Freeway
- Railroad
- Railroad (inactive)

About Contra Costa County

The County of Contra Costa, California was incorporated in 1850 as one of the original 27 counties of the State of California, with the City of Martinez as the County Seat. It is one of the nine counties in the San Francisco-Oakland Bay Area. The County is the ninth most populous county in California with a population at 1,082,384 as of January 1, 2013 per the California Department of Finance.

Market Access

The Northern Waterfront is a key component of the vibrant Bay Area economy. With a strong multi-modal shipping infrastructure, the Northern Waterfront has access to both international and domestic markets. (1)

Bay Area Economic Landscape

With a Gross Regional Product (GRP) of \$535 billion, the Bay Area would be the 19th largest economy in the world. (1) The Bay Area's GRP falls between the Gross Domestic Product (GDP) of Switzerland and Sweden. (3) The Bay Area is a top global innovation center and boasts the highest concentration of innovation-related jobs in the United States. Additionally, the Bay Area has the highest economic productivity in the nation - nearly twice the national average. (1)

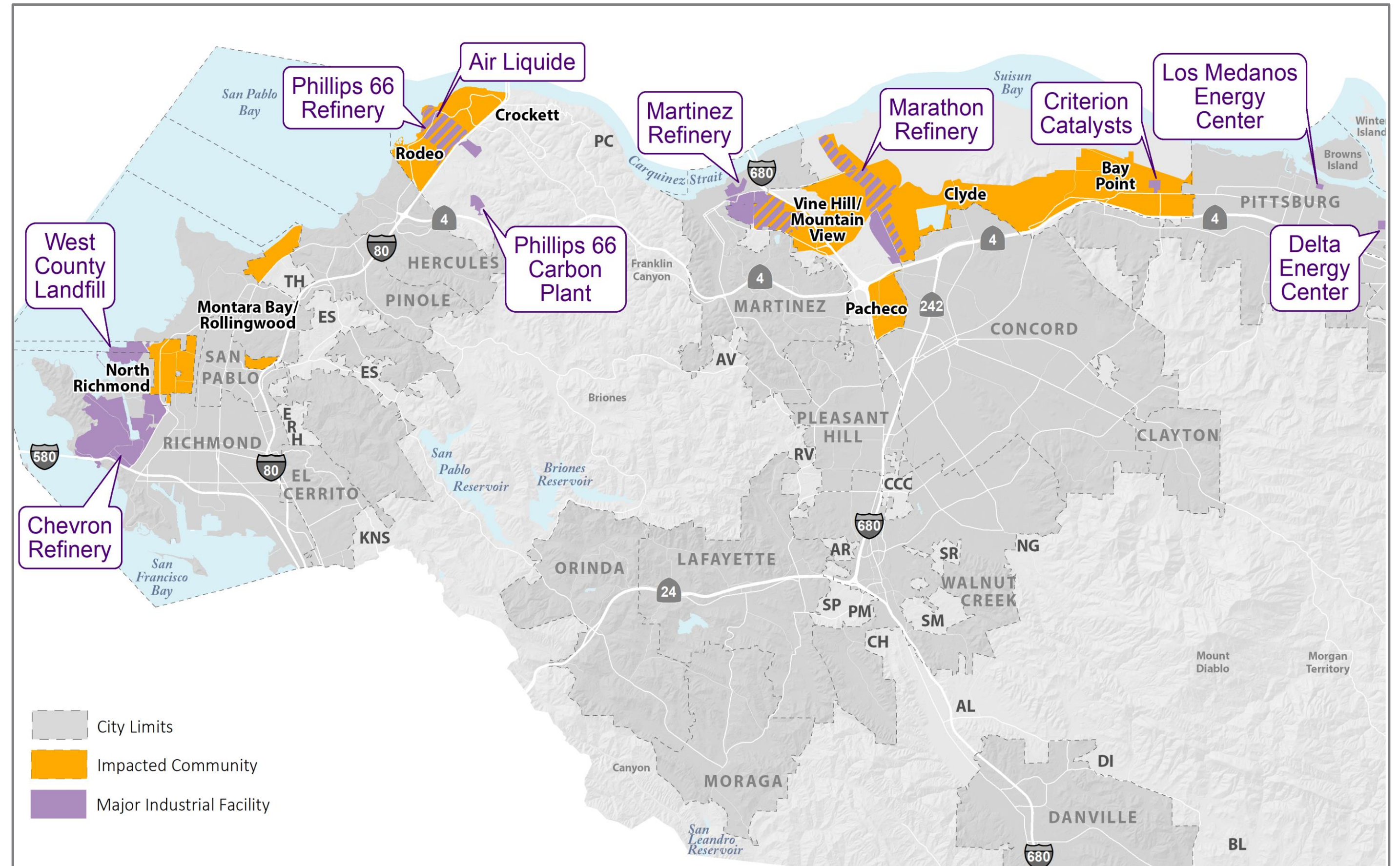
Economic Landscape of the Northern Waterfront

The Northern Waterfront generates \$21.6 billion in annual economic output and is home to an estimated 60% of the industrial designated land in Contra Costa County. There are more than 26,000 jobs tied to the Northern Waterfront and approximately one third of those jobs are in the Manufacturing Sector. Manufacturing jobs generally provide an average wage above the County's median household income. (1)

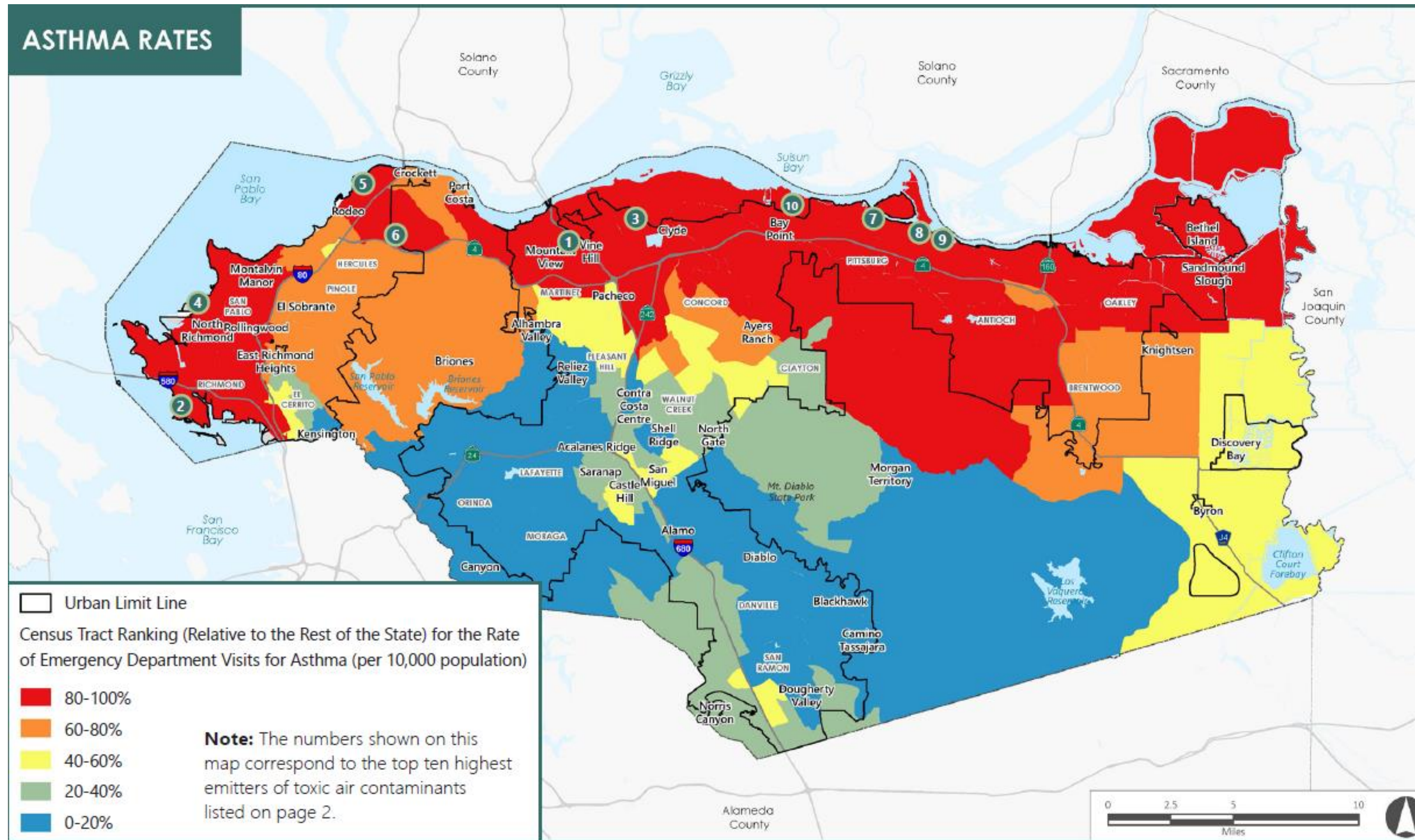


Snapshot of Contra Costa County

- Population: 1.16 million residents
- Size: Approximately 804 square miles
- 19 individual jurisdictions
- 4 Petroleum Refineries
 - Chevron
 - Phillips 66
 - Marathon
 - Martinez (formerly Shell)
- 2 Landfills



Sensitive Populations



- Approx 300,000 Residents living in a census tract that ranks in the 95th percentile or higher for asthma related ER visits.
- Sensitive populations include:
 - Children
 - Elderly
 - Low-income
 - Existing health condition
 - Pregnant women
 - Residents living near refineries, landfills, and other heavy industrial facilities

Building Type	Total Buildings	Percentage of Buildings
Single-family Homes	47,970	93%
Small Multi-family (Duplex, Triplex, and Quadplex)	916	2%
5+ Multi-family, up to 3 floors	2,829	5%
Total Residential	51,715	100%

Majority of single family and small multi-family was built before 1978; majority of 5+ multi-family was built 1978-1991.

Housing Stock in Unincorporated Contra Costa County

Contra Costa Asthma Initiative

Three Year Pilot, completed Nov. 2023

Program Component

Staffing Organization

Home Visits

3 Home Visits for Asthma Education

Coordinate with PCP on Asthma Action Plan; medication usage training; environmental triggers training; follow up with PCP and care managers

Consumer Supplies to reduce asthma triggers

e.g. green cleaning supplies, hypo-allergenic mattress and pillow covers, integrated pest management, food storage containers



Home Assessment

Environmental assessment

Identify home-based asthma triggers and write remediation scope

Single-Family:
County Weatherization

Multi-Family:
Association for Energy
Affordability

Trigger Remediation

Remove asthma triggers from home

Moisture issues (mold removal, ventilation, plumbing leaks)
Allergens (carpet removal/cleaning), and
Irritants (HVAC, combustion gases, VOCs)



EE/ Weatherization

Lower energy bills and improve comfort of home

Leveraged funds

Lighting, heat pumps, energy-efficient appliances, HVAC



June 25, 2024

Contra Costa Asthma Initiative – Program Results

In-home Measure	Quantity
In-home Asthma Trigger Assessments, Education, and Asthma Trigger Supplies to Sensitive Populations	280
Number of Portable Air Purifier and replacement filters	471
Number of In-home Visits that resulted in Energy Efficiency and Weatherization Retrofits.	~15

Reaching Additional Sensitive Populations with Grant Funding

- Energy Efficiency Community Block Grant funding coming in late 2024
- EECBG funding will utilize the framework of the Contra Costa Asthma Initiative to complete energy efficiency and building envelope retrofits at **licensed home-based childcare facilities** in disadvantaged communities
- This model can be expanded to reach a greater number of sensitive populations
 - People who live near Keller Canyon **Landfill**
 - **Facilities that serve seniors**



Phot Credit: Google Creative Commons

Clean Energy Roadmap for Existing Buildings

- Under development
- Roadmap will serve as a guide for staff to:
 - Improve energy efficiency and building envelope
 - Strategize around transitioning existing buildings to use electricity as sole fuel source
- Roadmap will include:
 - Preliminary Research
 - Building Inventory
 - Cost Analysis
 - Overview of existing policies/strategies implemented in other CA jurisdictions
 - Anticipated challenges associated with an equitable transition
 - Recommendations for staff

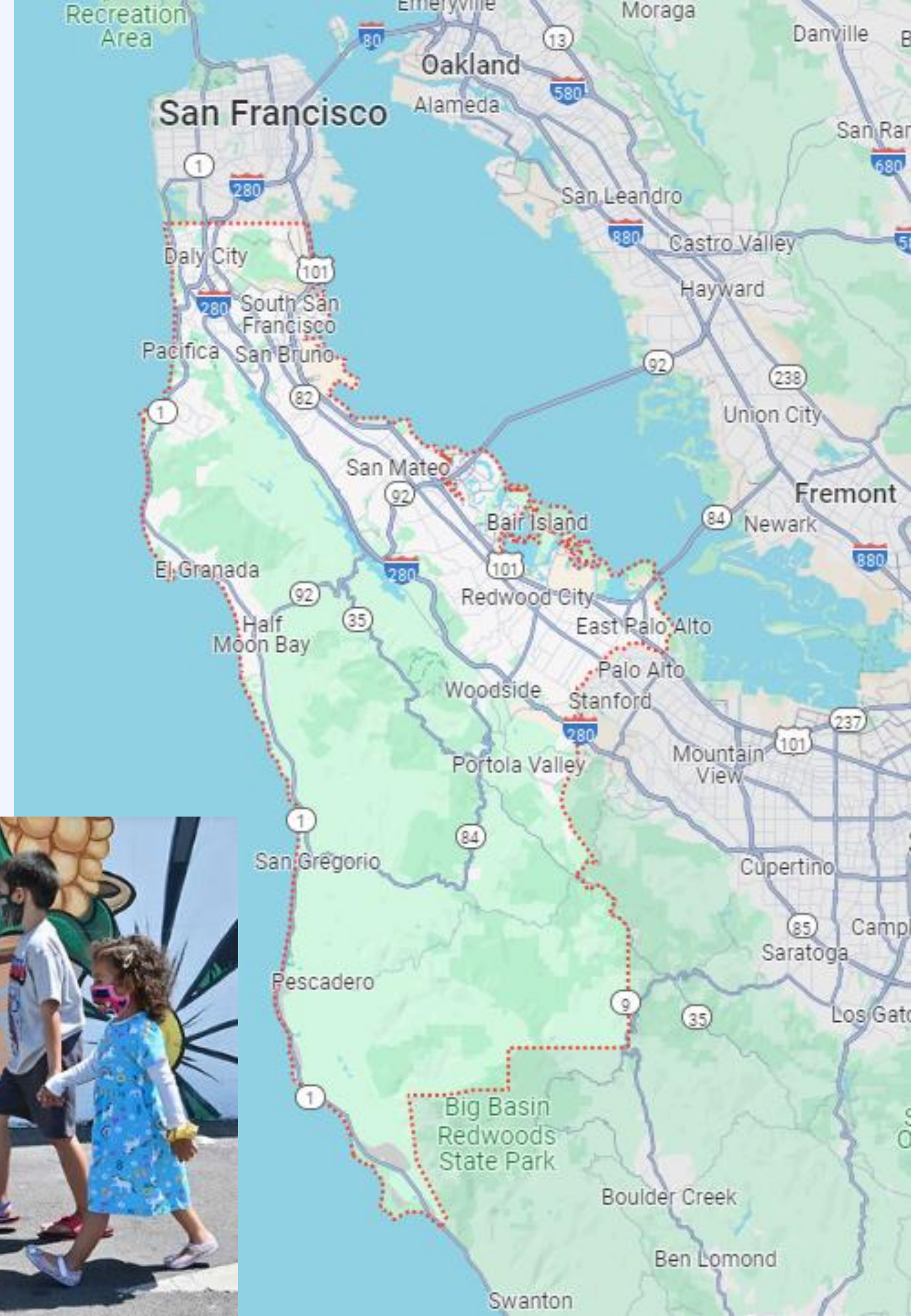
THANK YOU!

sustainability@dcd.cccounty.us

San Mateo County Background



- Population: 729,181 (2022)
- Size: 744 square miles
- 20 cities and towns, plus unincorporated areas
- Coastside/rural areas vs. bayside/suburban areas
- **Key Policy Driver:**
Community Climate Action Plan



Developing a strategic approach

California Equitable Home Electrification Program



Focus on municipal policies, programs and actions to equitably electrify existing housing stock.

- Emerald Cities in partnership with RMI created a 9-month program from fall 2021 to summer 2022 for local governments.
- Cohort of ten local governments partnered with a local community-based orgs for 6 months.



Partnering with Community Based Orgs



Focus on addressing existing inequities through trust and co-creating a sustainable future with our communities.

- Strategic partnerships with CBOs.
- Increased access to partnership through on-call contracts.



Neighborhood Scale



Focus on a specific area allows for a targeted and tailored response.

- Different communities have different needs or considerations and infrastructure.
- CEHEP looking at North Fair Oaks with El Concilio.



Introduction of Community Partners



Irma Rodriguez Mitton

Executive Director, South
Coast Sustainable



Aurelio Huizar

Program Manager, El Concilio
of San Mateo County



El Concilio: Our Work

System Navigation

- **Consumer Protection and Energy Savings (CHANGES)**
 - Assistance with **PG&E bills**, including **LIHEAP** applications, **CARE/FERA** enrollment, **payment plans**, etc.
 - Assistance with water bill
- **Telecommunication Education & Assistance (TEAM)**
 - Internet Access
 - Bill assistance
- **Individual and Family Services**
 - Interpretation and Translation Services
 - Public Benefits Navigation
 - Housing Case Management
 - & More!



San Mateo County Community Context



San Mateo County residents of North Fair Oaks (**unincorporated**) experience chronic underinvestment in infrastructure and programming, de-facto racial segregation, inequities in economic opportunity, lack of access to parks and canopy, limited access to main transit arteries, and exposure to light industry emissions.

- **NFO is AB 1550 Low-Income**
- Individual median income is approximately \$40,000
- Under 30% of residents over age 25 have completed higher education
- 5.6% of the population has a disability and 9.3% are adults over 65

Residents of NFO experience disproportionate climate impacts including:

- Extreme heat
- **Poor air quality**
- Drought
- Flooding & related power outages

San Mateo County Community Context



Residents face numerous barriers in accessing existing low-income programs:

- **Residents may not have a computer or reliable access to internet**
- Programmatic landscape is fragmented & confusing to navigate
- Programmatic materials often provided exclusively in English

El Concilio assists the community by providing critical services and energy information that address these barriers:

- **Helping families to enroll in programs**
- Assisting clients with accessing low income energy programs and services

Accomplish this through

- Proactive outreach
- Prompt response
- **Helping residents understand and manage energy bills**
- Helping families and individuals negotiate payment arrangements

Partnership with Local Energy Provider: Peninsula Clean Energy (PCE)

- Partner with (PCE Peninsula Clean Energy to:
 - **Improve resident understanding of programs by conducting outreach and education**
 - Promote PCE's electrification and programs available for low-income families
- Host focus groups to include communities voices in PCE's program development and help shape electrification on the ground
 - Address the concerns, impacts, challenges, and opportunities



Energy Discounts & Assistance Programs



Peninsula Clean Energy

- 5% off monthly on your energy bill

CARE (low-income qualified)

- 20% off your monthly PGE bill

FERA (income qualified)

- 18% off your monthly PG&E bill, higher threshold than CARE

Energy Savings Assistance Program

- Weatherization program for low-income residents to get home upgrades

LIHEAP

- One time annual financial assistance on utility bill

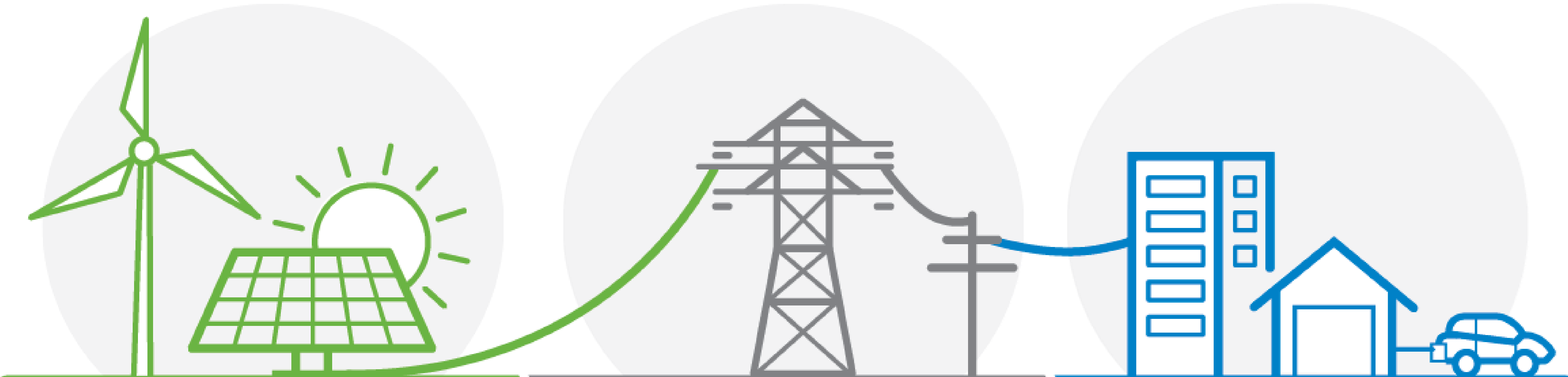
REACH

- One time annual financial assistance on utility bill (based on federal income guidelines)

Medical Baseline Assistance Program

- Discount on your utility bills for individuals that meet medical criteria

How it works



Generation

Delivery

Savings



Our Community



ENERGY STATEMENT

www.pge.com/MyEnergy

Your Account Summary

Amount Due on Previous Statement	\$163.15
Payment(s) Received Since Last Statement	-163.15
Previous Unpaid Balance	<hr/> \$0.00
Current PG&E Electric Delivery Charges	\$106.74
Peninsula Clean Energy Electric Generation Charges	156.30
Current Gas Charges	14.94

Total Amount Due by 09/12/2023	\$277.98
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Current charges include a discount of \$153.57 for CARE.

THANK YOU!

**Visit el-concilio.org to learn more. Call or
walk-in to make an appointment!**

**3180 Middlefield Road
Redwood City, CA 94063
(650) 373-1080**

**2396 University Ave
East Palo Alto, CA 94303
(650) 330-7432**

Equitable Energy Transitions for Rural Neighborhoods

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South Coast Sustainable

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**SOUTH COAST
SUSTAINABLE**

CREATING PLACES FOR COMMUNITY

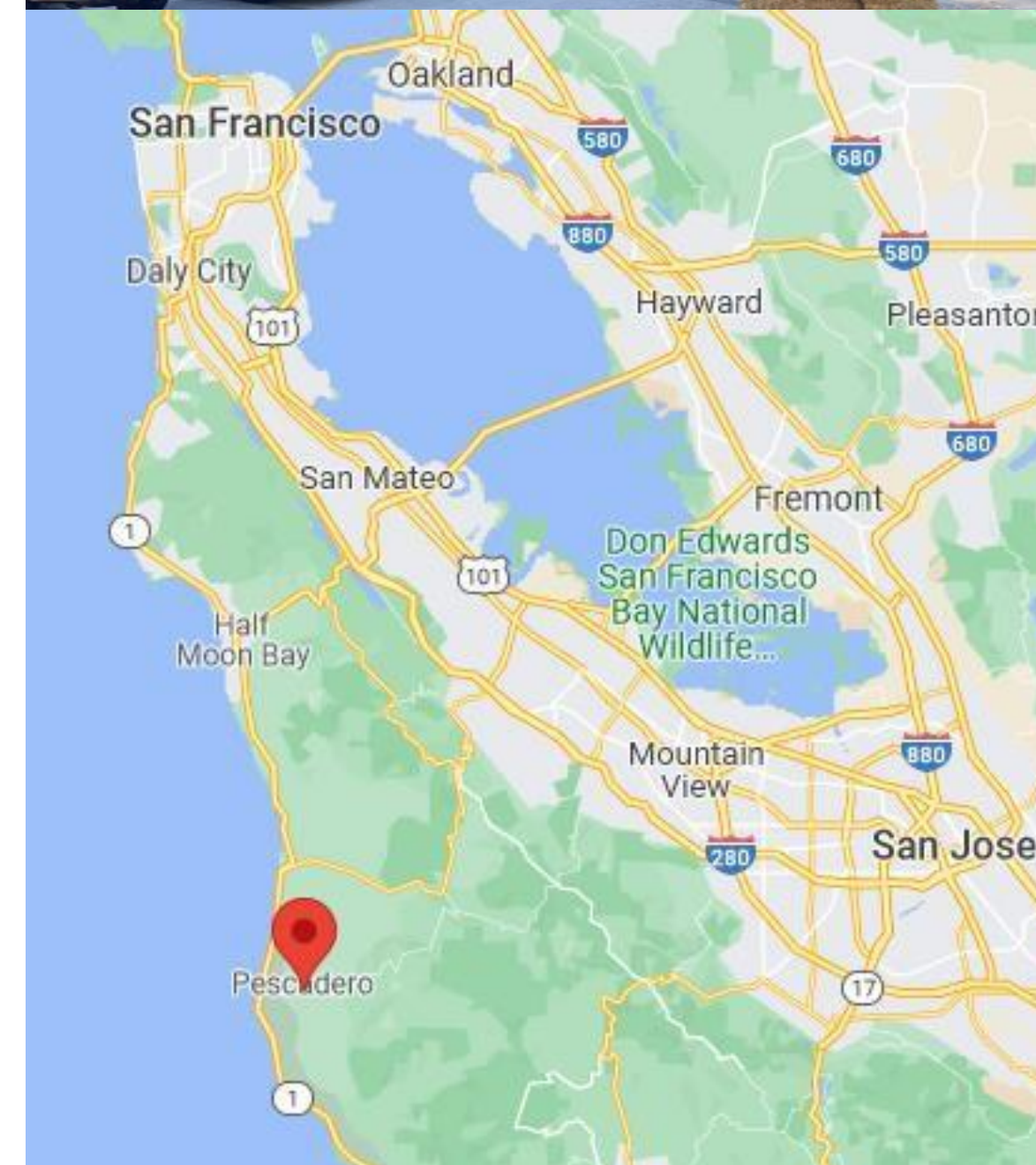
San Mateo South Coast

- Pescadero, La Honda, Loma Mar, San Gregorio
- 4,000 people over 160 square miles
- 1,600 housing units
- Typical “neighborhood” is 15-90 homes
- Post office + eateries, local shops, farmstands
- Two gas stations, no public EV chargers

Sample Distances

Fire Station 1 - 12 miles

Public Library 20-30 miles



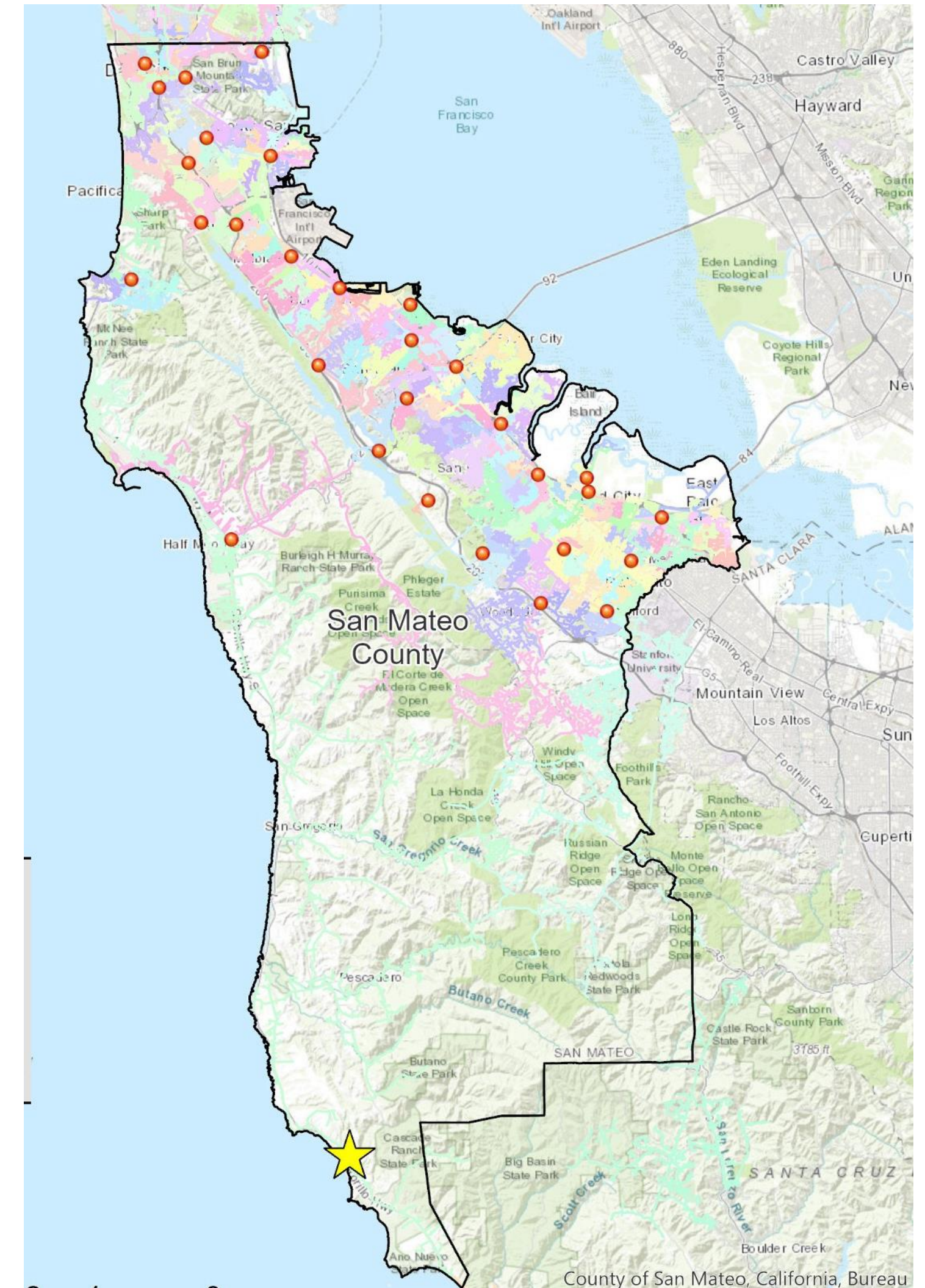
Grid Vulnerability

One PG&E substation,
3 feeders for entire coast

CPUC High Fire Threat
District Tier 2

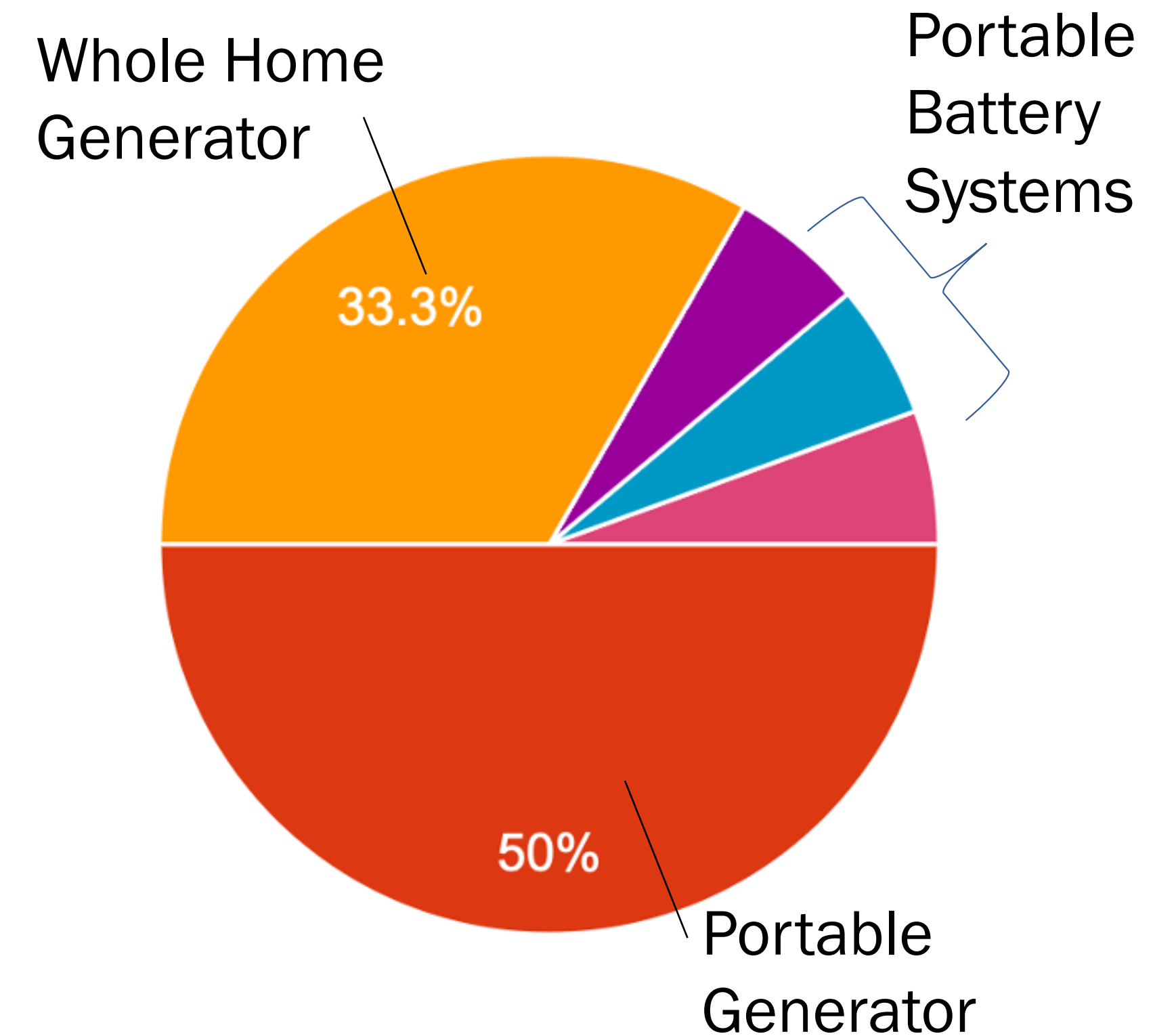
Loss of electricity impacts
water, cellular, Internet

More than 80% homes rely
on fossil fuel generators
for backup power



Outage Anxiety = Resistance to Electrification

- Gas and propane fueled generators are lifelines
- Top power needs:
 - Kitchen appliances
 - Internet/cellular routers
 - Well pumps/water systems
- Heating relies on propane and wood year-round
- Clean storage limited to powerbanks or small battery backup systems



Frequent grid outages = More than 80% generator use

Barriers to All-Electric Neighborhoods

Inequities are Hidden

- Low density buildings and population
- Lack of data at neighborhood level
- Extreme disparity of household income levels

Housing is Not Uniform

- Geographically distant and distinct
- Mix of housing parcels, ag lands, open space
- Poor condition of housing stock

Low Utility Presence

- Historical under-investment in rural infrastructure
- Unreliable and highly vulnerable grid
- Lack of access, low penetration of traditional energy upgrade programs

Alternative Carbon-Based Fuels Work

- Heavy dependence on propane and wood fuels for homes, diesel for backup generation and transport
- Value self-sufficiency for daily life and disasters

The Contractor Gap

Low quote-to-job ratio

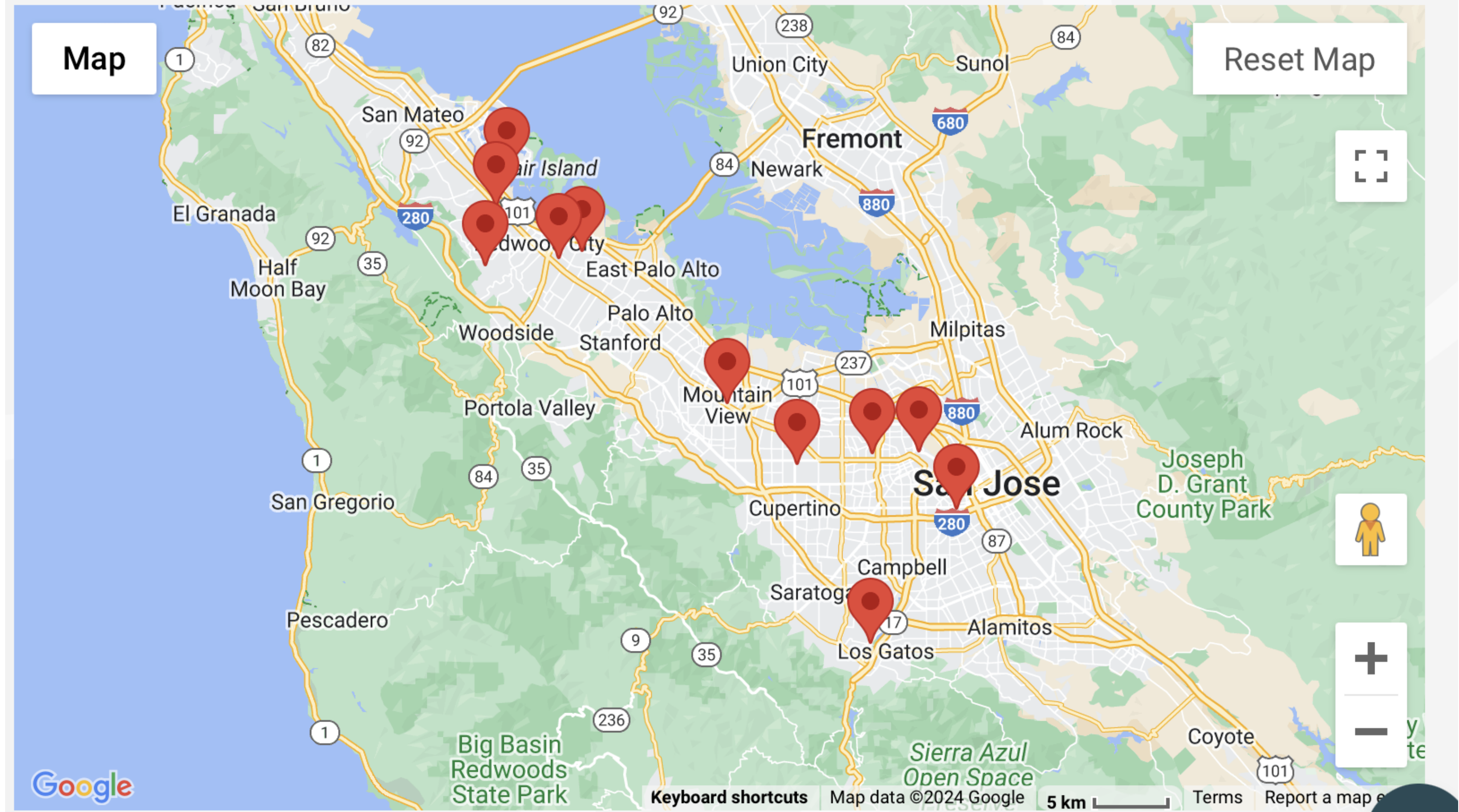
Extra travel time for crews and material deliveries

High complexity installs

11 Contractors available for 94060

Map search for Clean Energy contractors within 25 miles of Pescadero zip code 94060

<https://switchison.cleanenergyconnection.org>



Think Differently for Rural Equity

Question your
assumptions and
prescriptive
solutions

Who are you solving
this problem for?

How do your
policy/org goals
align with
community needs?

Create trust and
support community-
led efforts

What self-organized
(formal or informal)
groups are already
in this space?

How can their lived
experience and
actual data inform
solution design?

How can you work
with them?

Recognize that
**EQUITY COSTS
MORE,**
esp in rural locations

What will it take to
solve the toughest
cases?

Are you measuring
the right things?

Group Discussion:

- Are there any clarifying questions?
- As you listened to these presentations, what stands out to you?
- What themes did you hear?



Prep for Small Group Work

- As you consider your own organization, what are the opportunities in neighborhood electrification?
- What do you imagine are barriers and challenges?





11:00-

11:45

Small Group Work: Carousel Activity

Starting with the barrier or opportunity at your table, spend the next 5 minutes talking about what that looks like in your community and jot down your ideas as you go.

After 5 minutes has passed, your group will be called to shift to the next table over and do the same thing for 5 minutes. After each group has visited each table, and has returned to the original table, we'll have time to reflect.



11:40-

11:45

Carousel Activity: Wrap Up

Once your group has visited each table and has returned to your original table, please take the next ~3 minutes to reflect.

Identify themes, write them down and designate someone to share out to the larger group.

Full Group: Carousel Activity Reflection

- What were the themes from the barriers and opportunities at your table?
- Is there something new that you learned?





Full Group: Final Reflection

...

Please head to [this Mentimeter survey](#) for our final reflection.



Continuing the Conversation



If you'd like to continue the conversation, please scan this QR code and enter your name and email address.





Thank you.

Staff Name

Staff Title

Staff Email