

# Improving Neighborhood Air Quality





1 Air Quality and Health

2 What is AB 617

3 Selecting Communities for Action

4 Other Air District Activities

# 1 Air Quality and Health

## Air Pollutants



emission rates  
types of emissions

## Ambient Concentration



types of pollutants  
topography  
wind patterns

## Exposure and Dose



breathing rate  
location  
time

## Health Effects



dose  
susceptibility

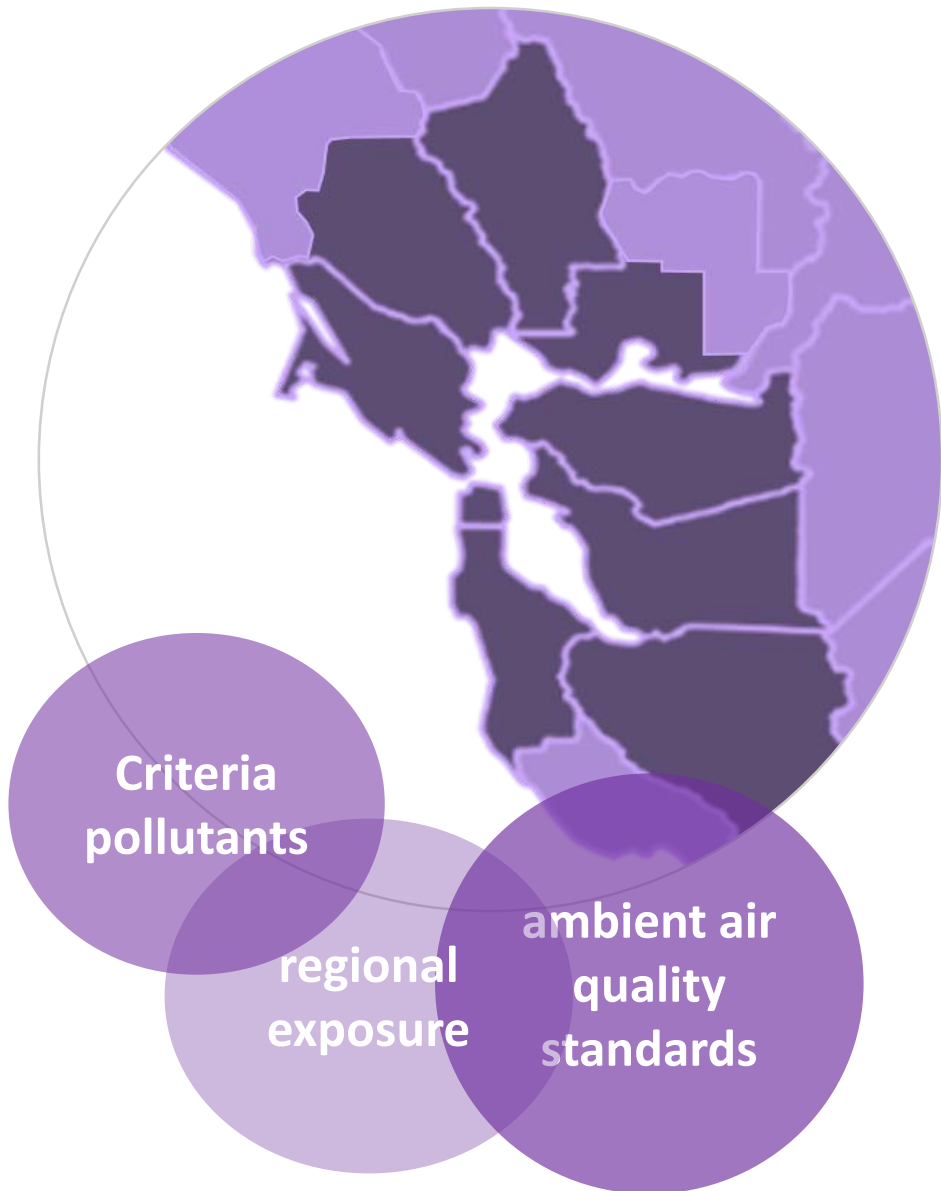


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# Air Quality and Health

## Community

### Regional



### Facility



- Community Participation
- Eliminate Air Quality Disparities
- Reduce Health Burdens
- Continuous Evaluation and Improvement

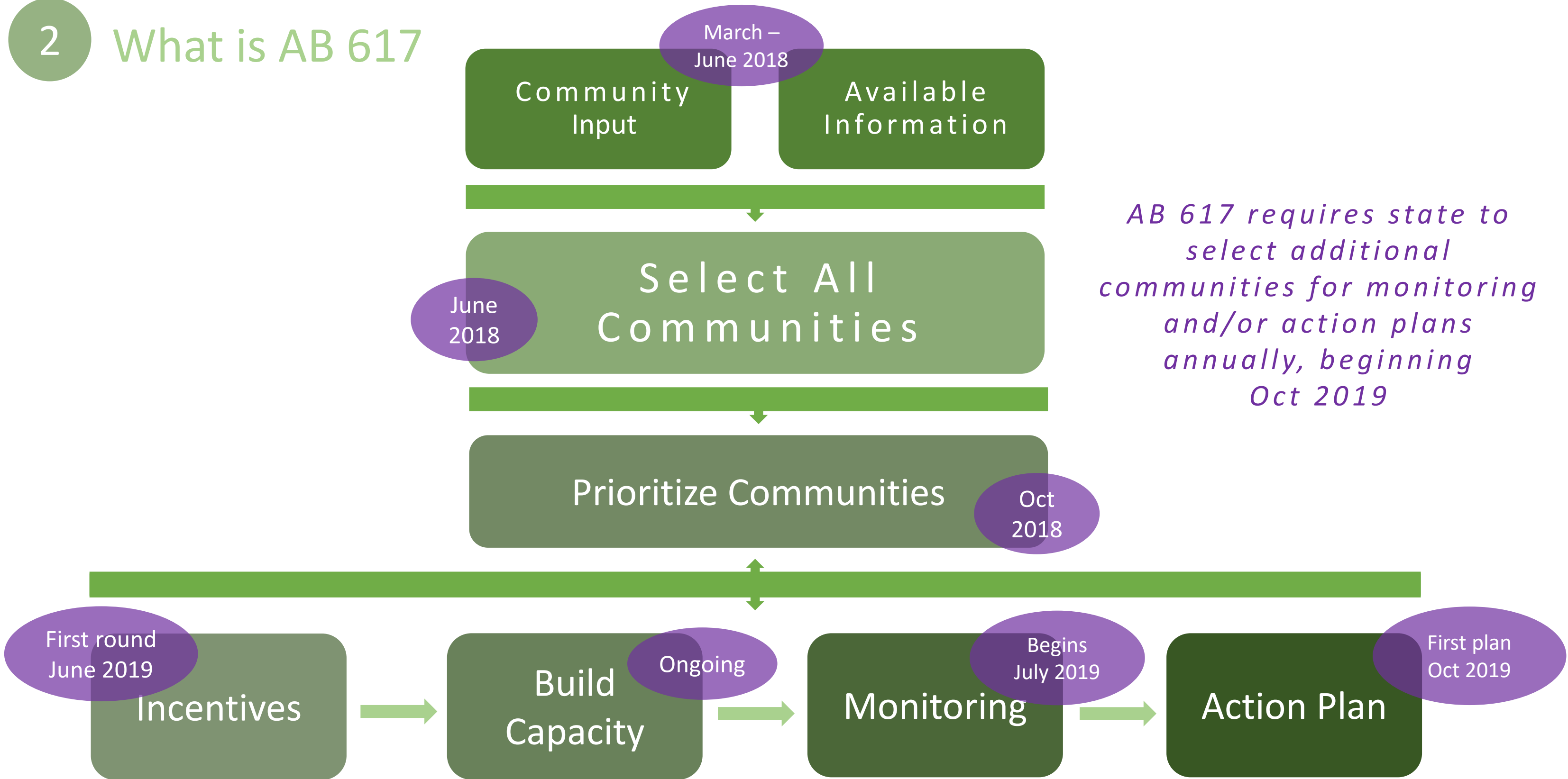


### 3 Selecting Communities for Action

*Under AB 617, the state requires districts to work with communities to select all areas in the region that have a “**high cumulative exposure burden**” and then **prioritize** areas for community monitoring and/or actions plans over the next 6 years.*



## 2 What is AB 617



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# Select Communities for Action **Criteria for Selecting *All Areas***

## CARE

High pollutants  
fine particles  
toxics  
ozone  
Mortality  
Cancer risk  
ER visits and hospitalizations due to air pollution

## Health and Vulnerability

Life expectancy  
Low birth weight  
Diesel exhaust  
Traffic  
Socioeconomic factors  
Education  
Housing costs  
Access to transportation

## Large Sources

Oil refineries  
Cement plants  
Chemical plants  
Marine ports  
Airports



**Consider communities with:**

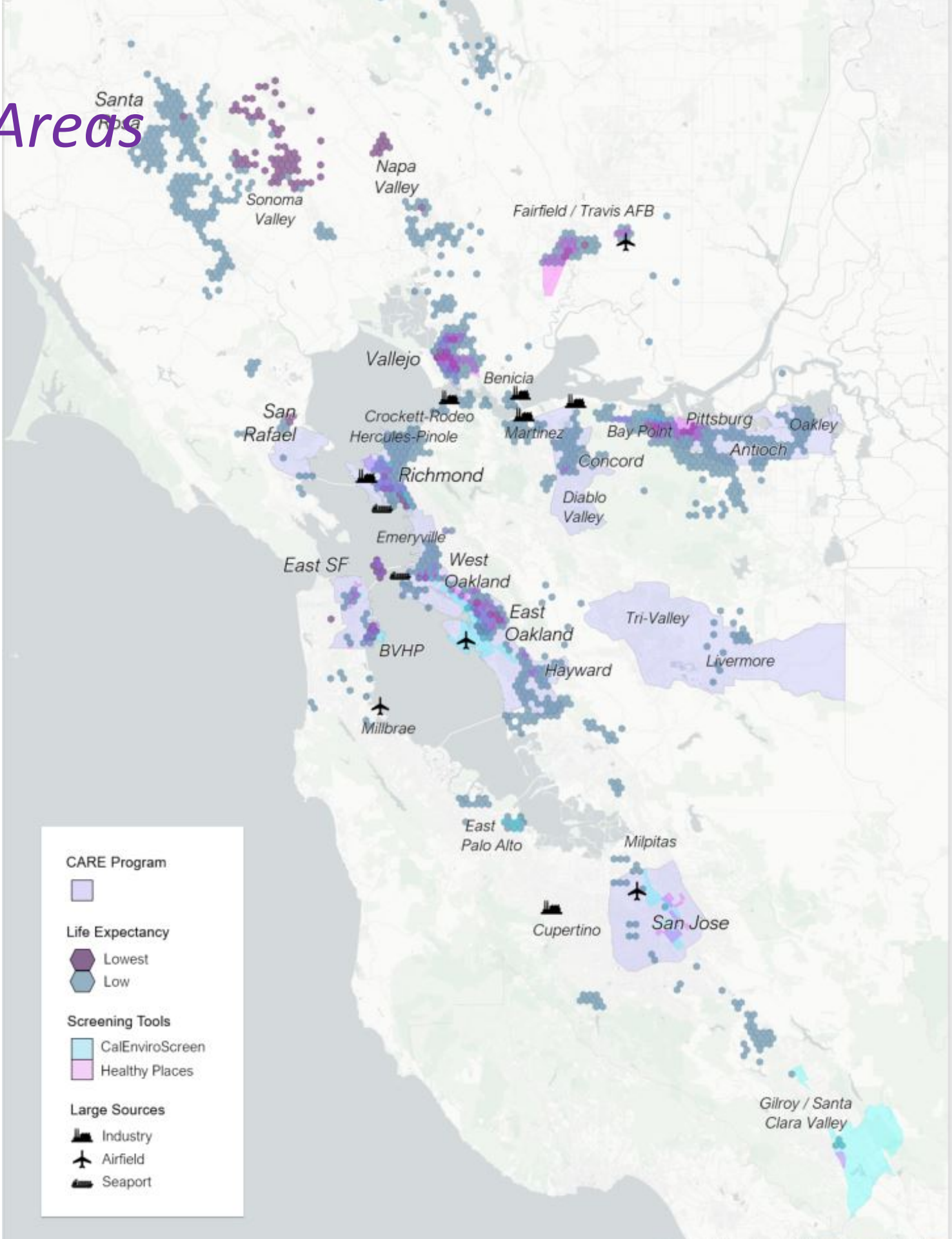
- Refineries and other large facilities
- Woodsmoke
- Odors
- Multiple transportation sources
- History of contamination, violations, or environmental injustice

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# Selecting Communities for Action *All Areas*

## Recommendations

- CARE
- Areas with large sources
- Areas with health and pollution impacts
- Areas with low life expectancy





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# Selecting Communities for Action

Local View

Airport

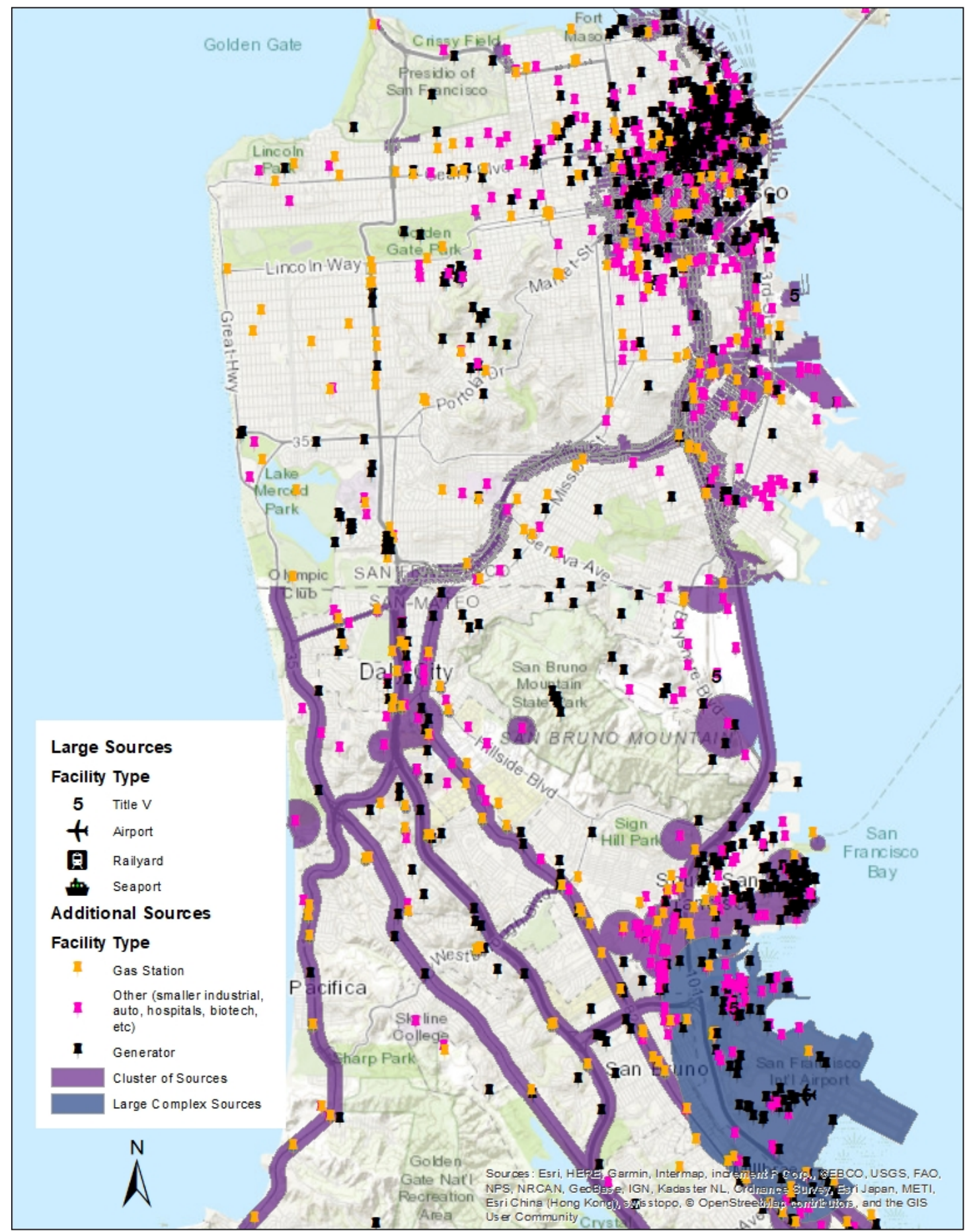
Organics recovery, waste facilities

Power plants

Industrial and manufacturing operations

Construction and equipment operations

Freeways, roadways and rail



# 3 Selecting Communities for Action

How we propose to prioritize communities...

## Air Quality

Fine particles  
Toxics

## Health

Life expectancy  
Lung disease  
Heart disease

## Other

Resources  
Data  
Planning  
Collaboration  
Capacity

...other ideas?

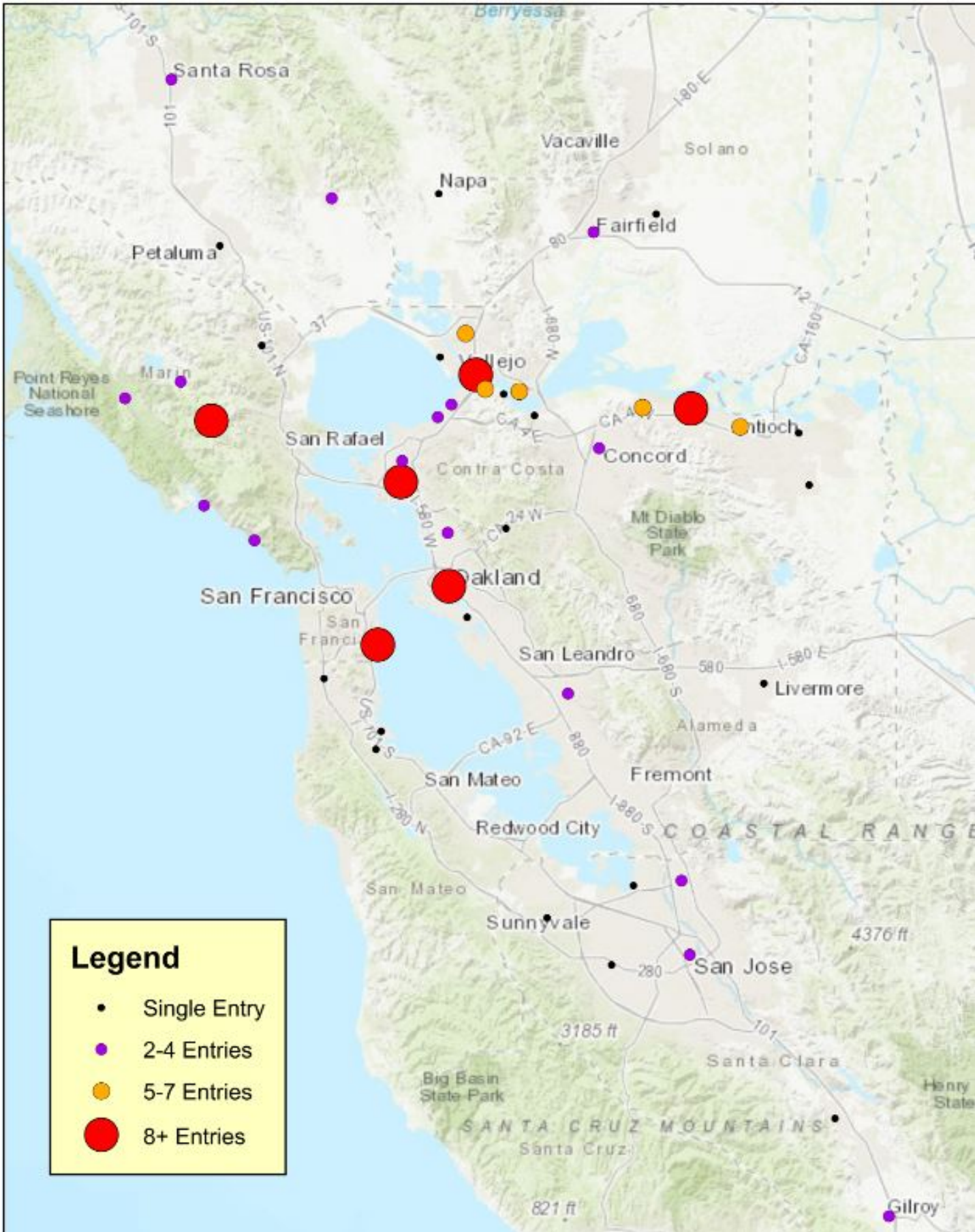


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# Selecting Communities for Action

What we heard

*West Oakland, Richmond, Vallejo, East San Francisco and the Pittsburg-Bay Point area, along with areas in Marin, mostly due to concerns over woodsmoke, emerged as communities' top priorities.*



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# Selecting Communities for Action

## Recommendations

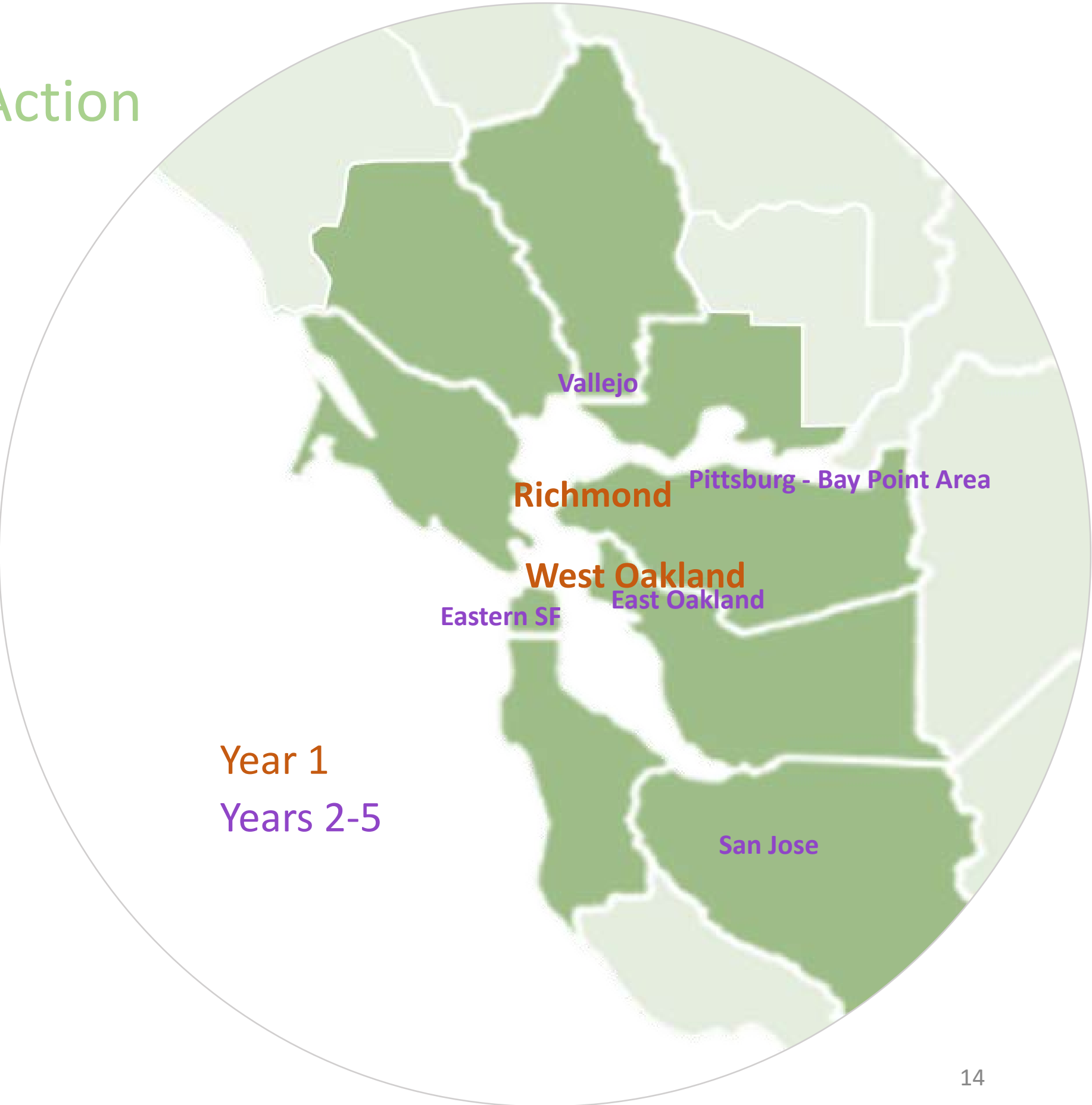
Year 1

West Oakland – action plan

Richmond - monitoring

Year 1

Years 2-5



# West Oakland

## *Action Plan*

- Very high mobile source emissions
  - Port of Oakland largest single source of DPM
  - Roadways contribute significantly to PM<sub>2.5</sub>
- High health burden
- High socio-economic vulnerability
- Concerns about new development at Port of Oakland and Oakland Army Base
- Goal of zero emissions environment
- Leverage previous and ongoing collaboration and research



# Richmond

## Monitoring Plan

- High emissions from stationary and mobile sources:
  - Refinery, chemical plant, landfills, water treatment facility, metal scrapping, marine terminals, freeways, port
- High health burden
- High socio-economic vulnerability
- Regional monitoring data are not consistent with observed health issues
- More monitoring to evaluate which sources may be contributing to issues
- Leverage ongoing data analysis and monitoring work



## 4 Other Air District Activities

- New controls on industrial sources (BARCT)
- Analysis of all toxic sources, including refineries, and immediate reductions for most toxic facilities (Rule 11-18)
- Consider changes to permitting system
- More stringent wood smoke rule; more incentives
- Changes to odor rule

## Other Air District Activities

- Air monitoring expansion in communities near refineries (Rule 12 – 15)
- Increasing capacity for source-attribution monitoring
- Increased availability of real-time and final data with context
- Fine-scale PM and toxics modeling with improved emissions

## Other Air District Activities

- Building sensor center to develop resources for community-led sensor projects and air quality training
- EPA STAR Grant for PM<sub>2.5</sub> sensor projects in two Bay Area communities
- Work with communities that received CARB or Air District grants for monitoring and data interpretation

## Other Air District Activities

- Work with local governments to encourage implementation of SB 1000
- Work with cities to address land use incompatibilities; explore zoning and other land use planning options
- Improve land use planning tools, i.e. *Planning Healthy Places*, to help local governments plan near sources of pollution and reduce exposure
- Encourage cities to plan and enforce truck routes and truck parking regulations



# 4

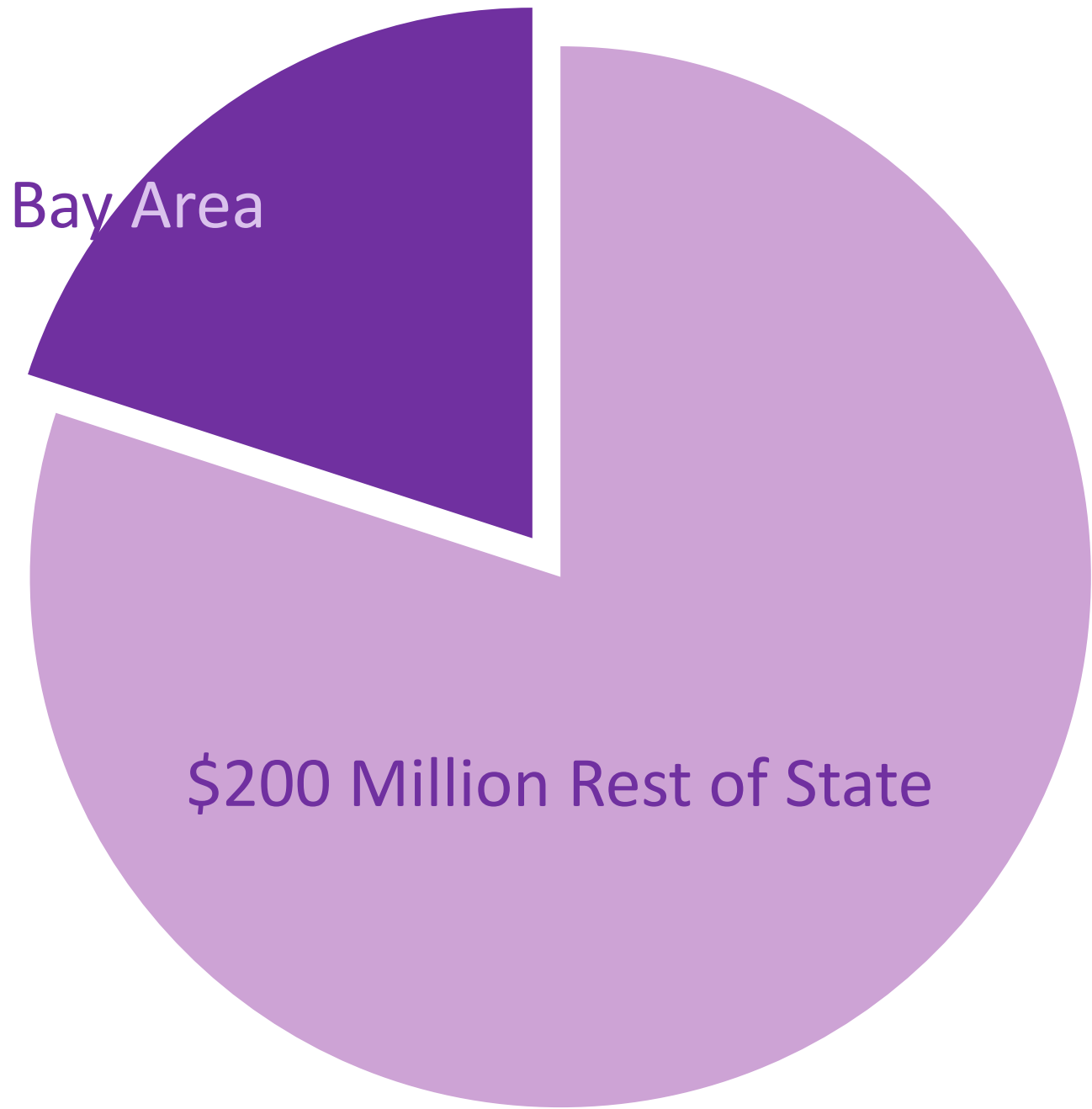
## Other Air District Activities

- Work with communities to prepare for action and/or monitoring plans
- Establish community partnerships
- Develop a shared understanding of local air quality concerns

## Other Air District Activities

- Trucks
- Buses
- Locomotives
- Construction Equipment
- Agriculture Equipment

\$50 Million to Bay Area



\$200 Million Rest of State

# Questions?

Webcast viewers can submit questions  
to [AB617info@baaqmd.gov](mailto:AB617info@baaqmd.gov)



# Early Actions & Community Spotlight



*Our Primary goal of the Richmond monitoring effort will be to better characterize the mix of sources and to more fully understand the associated air quality and pollution impacts.*

## Request for Qualifications



# Supportive Services for Community Air Monitoring Plan In the Richmond-San Pablo Area

The Air District is expanding efforts to reduce community exposure to air pollutants in the Richmond-San Pablo area by partnering with community groups, environmental organizations, regulated communities, and other stakeholders.

Respondents to this RFQ may choose to provide **one or more** of the following services in the Richmond-San Pablo Area:

- Stakeholder Group Coordination and Support
- Outreach and Promotion
- Meeting and Workshop Support
- Technical Expertise with a Local Perspective
- Neutral Meeting Facilitation

Learn more and ask questions at one of the Air District's bidders conferences:

**Mon., July 9, 11:00 am - 1:00 pm or  
Thur., July 12, 5:00 - 7:00 pm  
11784 San Pablo Ave., El Cerrito**

Or join the conference via web-conference:

<https://register.gotowebinar.com/rt/666862989850110977>

RFQ closes July 23, 4:00 pm. View the RFQ:

<http://www.baaqmd.gov/about-the-air-district/request-for-proposals-rfp-rfq>

For questions, contact Cynthia Zhang, [czhang@baaqmd.gov](mailto:czhang@baaqmd.gov).

BAAQMD.gov



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**Webcast viewers may visit the online interactive workshop:**  
**<https://www.opentownhall.com/6130>**