



Community Summit Design Team (CSDT)

Meeting #2: January 3, 2019

List of Appendices:

- Meeting Agenda
- PowerPoint Presentation



Richmond-San Pablo Community Air Monitoring Plan Community Summit Design Team (CSDT): Meeting #2

*January 3, 2019 ~ 6:00 pm 8:00 pm
West County First 5 Center (2707 Dover Avenue, San Pablo)*

A G E N D A

- 5:30 pm *Informal Conversation and Light Dinner*
- 6:00 **I. Welcome and Introductions**
- Agenda Review
- 6:10 **II. Key Milestones for the Richmond-San Pablo Community Air Monitoring Plan**
- Community Engagement Timeline
 - Community Summit Updates
- 6:30 **III. Steering Committee and Co-Leads Discussion**
- Steering Committee Membership Nominations
 - Co-Lead Partnership Agreements
- 6:50 **IV. Sub-Committee Planning and Report-Backs**
- Community Summit Logistics Sub-Committee
 - Steering Committee Design Sub-Committee
- 7:50 **V. Summary and Next Steps**
- Next CSDT Meeting: TBD
- 8:00 pm *Close...*

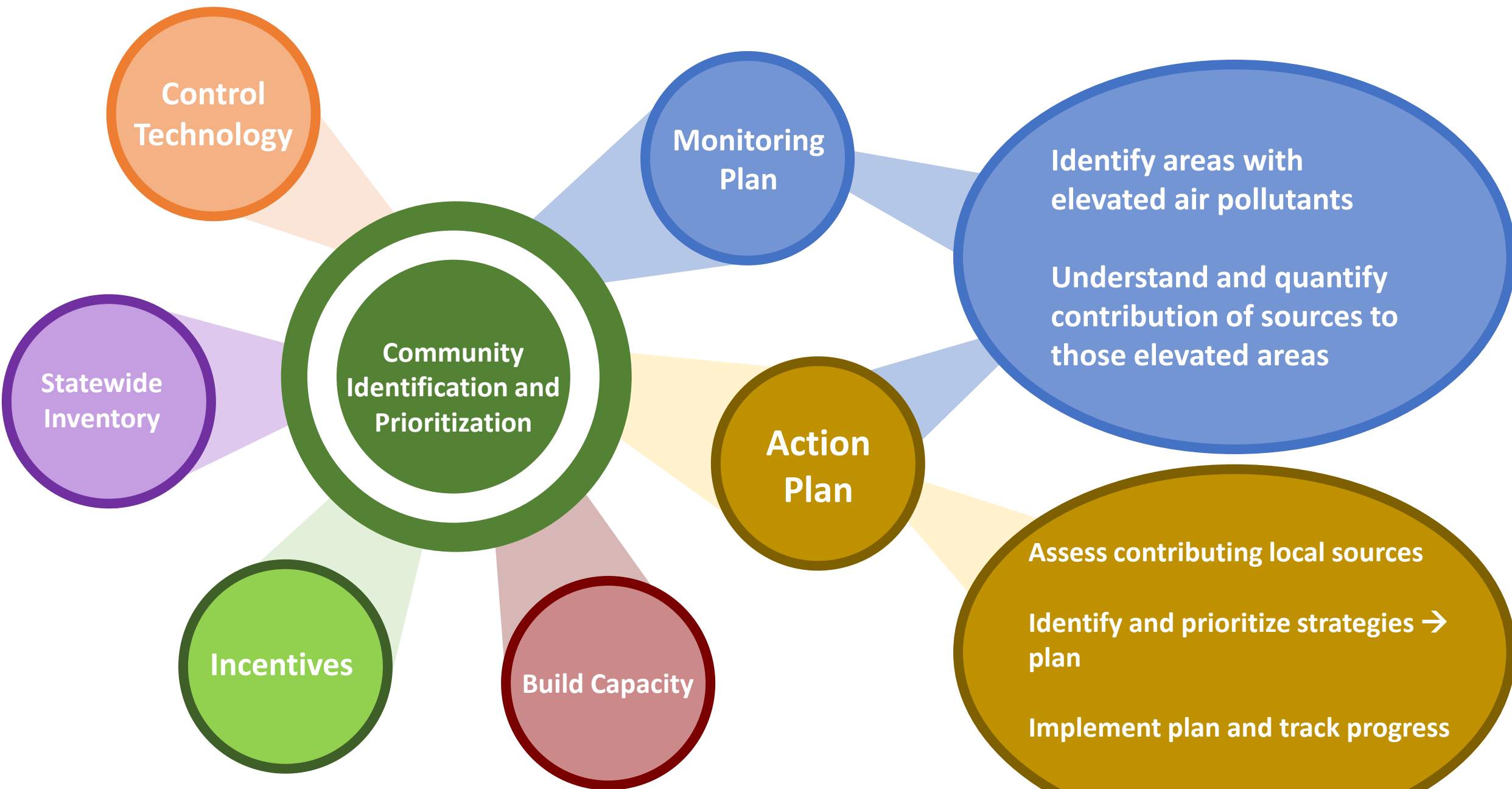


Richmond – San Pablo Community Air Monitoring Plan Community Summit Design Team



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

January 3, 2019



Community Health & Air Quality

The concentrations we measure are complex; **we cannot measure every pollutant everywhere**. Our questions and objectives will determine how and what we monitor.



Emissions

Concentration

Exposure and Dose

Health Effects



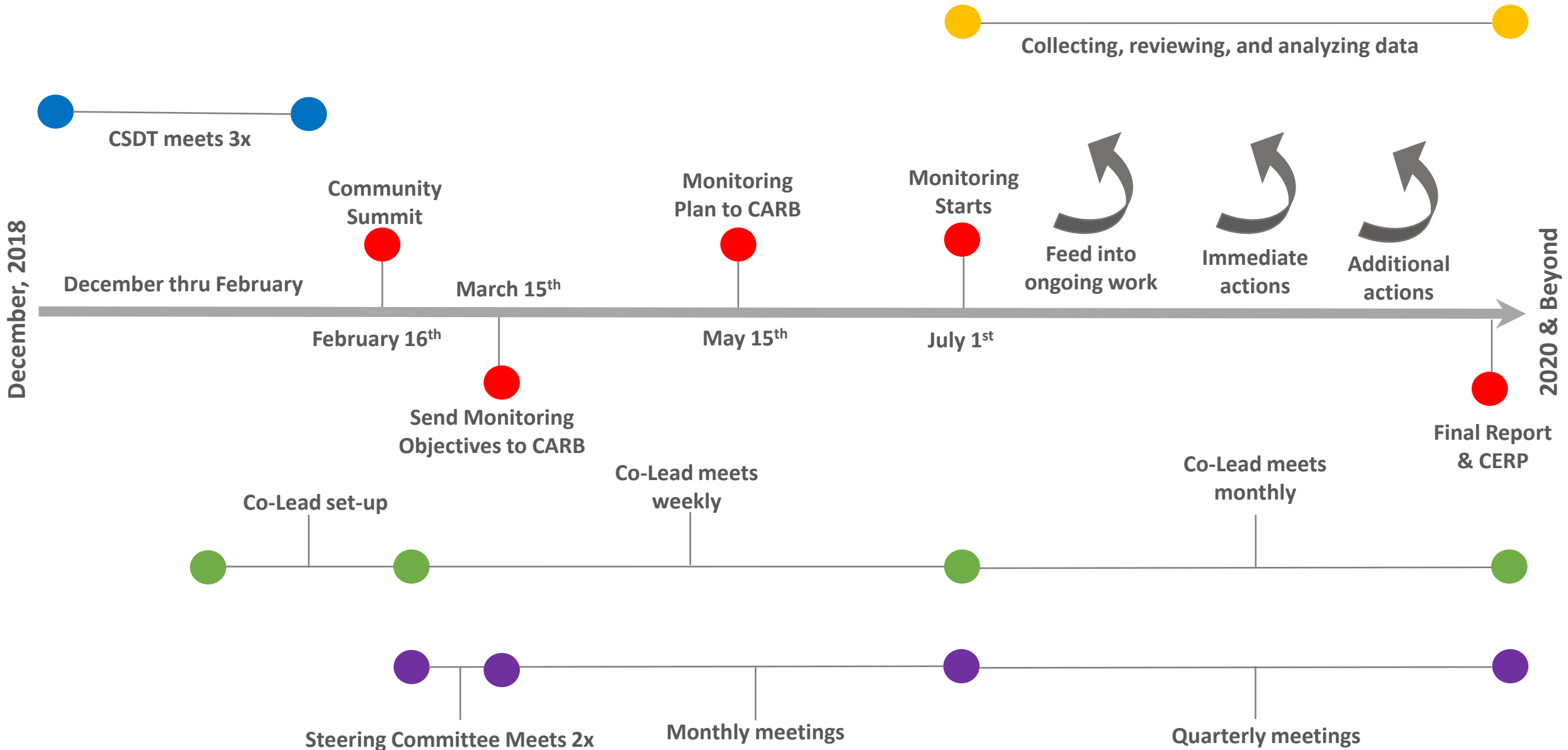
- emission rates
- pollutants

- meteorology
- chemistry
- topography
- transport

- breathing rate
- location
- time

- dose
- susceptibility

Richmond Community Monitoring Plan Milestones and Community Engagement Timeline



Nov 2018 - Feb 2019

February 2019

Feb – June 2019

Community Summit Design Team (CSDT)

Community Summit

Co-led Steering Committee (SC) Meetings

Richmond Monitoring Plan

Who:

Community members & organizations

Who:

Public & broader stakeholders
Potential SC members

Who:

Air District & CARB
Community Co-lead
Steering Committee
Public observes & comments

Purpose:

1. Plan Summit
 - Logistics
 - Outreach
 - Agenda & Materials
2. Outline process for developing monitoring plan
 - ID & Confirm Co-lead
 - SC makeup & members
 - Draft charter

Purpose & Outcomes:

1. Inform people about AB617 monitoring plan
2. Hear about people's ideas & concerns
3. Determine SC makeup, members
4. Draft charter

Purpose:

1. Develop & implement monitoring plan according to CARB elements
2. Review data throughout project

Initial steps

Inform people about AB617 monitoring plan
Hear about people's concerns
Learn about sources and emissions
Learn what we know about AQ in Richmond

We've got our work cut out for us!

Community Summit Design Team:

Plan Summit

- Logistics
- Outreach
- Agenda
- Materials

Outline process for developing monitoring plan

- Identify & confirm co-lead
- Draft SC makeup
- ID potential SC members
- Draft charter

Potential Challenges:

- Legislative timelines within AB 617 legislation are tight (monitoring to begin by July 2019)
- Steering Committee must be formed and provide guidance to develop monitoring plan
- The Air District is compiling information on current and previous studies in the Richmond area as well as what we know/don't know
- There are numerous CARB community grants that should also be considered and incorporated into the monitoring plan process.

Community Air Monitoring Plan Elements

**Submit to
CARB by
March 15th**
* Need SC actions

***What is the
reason for
conducting air
monitoring?***

- Form community partnerships
- State the community-specific purpose
- Identify scope of actions
- Define air monitoring objectives
- Establish roles and responsibilities

***How will air
monitoring be
conducted?***

- Define data quality objectives
- Select monitoring methods and equipment
- Determine monitoring areas
- Develop quality control procedures
- Describe data management
- Provide work plan for conducting field measurements

***How will data
be used to take
action?***

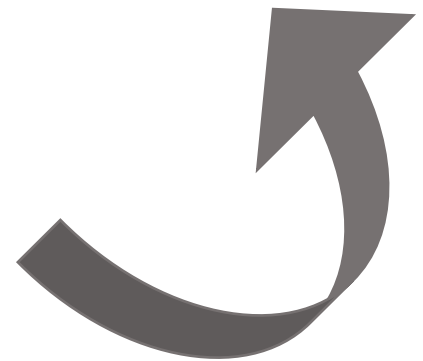
- Specify process for evaluating effectiveness
- Analyze and interpret data
- Communicate results to support action



Conduct Monitoring
Beginning July 2019



Final Report
Identified location of hotspots
Identify contributing sources
Quantify impact from specific sources



- Immediate actions to reduce emissions:**
- Enforcement on sources not meeting requirements
 - Rulemaking to address identified problems
 - Additional actions identified



Steering Committee Roles

With support from the Air District and co-lead, the steering committee will identify a shared monitoring objective and the best monitoring strategy to achieve the greatest outcome.

Examples objectives:

1. Locate hotspots and identify air quality problems
2. Choose specific areas and characterize air quality problems, including contributions from specific sources

As the steering committee is formed we will:

- Share information about sources, emissions, exposure, health effects, and receptors and learn from the community representatives about their priority sources of concern.
- Share information about various types of monitoring tools and approaches. Develop a method to cross reference monitoring tools with the communities' concerns.
- Develop a method to record, compile and track Steering Committee concerns and ideas.

Community Steering Committee & Co-Leads

Roles of the Community Steering Committee

- Comprised of community residents and stakeholders from a variety of sectors
- Assist with identifying all **air pollution issues** and sources of air pollution
- **Advise** the development of the Monitoring Plan
- Disseminate and **solicit information** from community stakeholders



Roles of the Co-Leads

- A co-lead or team of co-leads will work with the Air District to provide **infrastructure support** to the Steering Committee (SC) and the monitoring plan development.
- For example, co-leads will **prepare SC agendas** and ensure that the SC has the information needed to make important decisions and are following the procedures laid out in the **charter**.
- The co-lead or co-leads will be **local to the Richmond-San Pablo Area** and can be one trusted organization or a small collective or coalition of individuals.
- **Specific roles** will be determined through our work with the CSDT and at the summit.

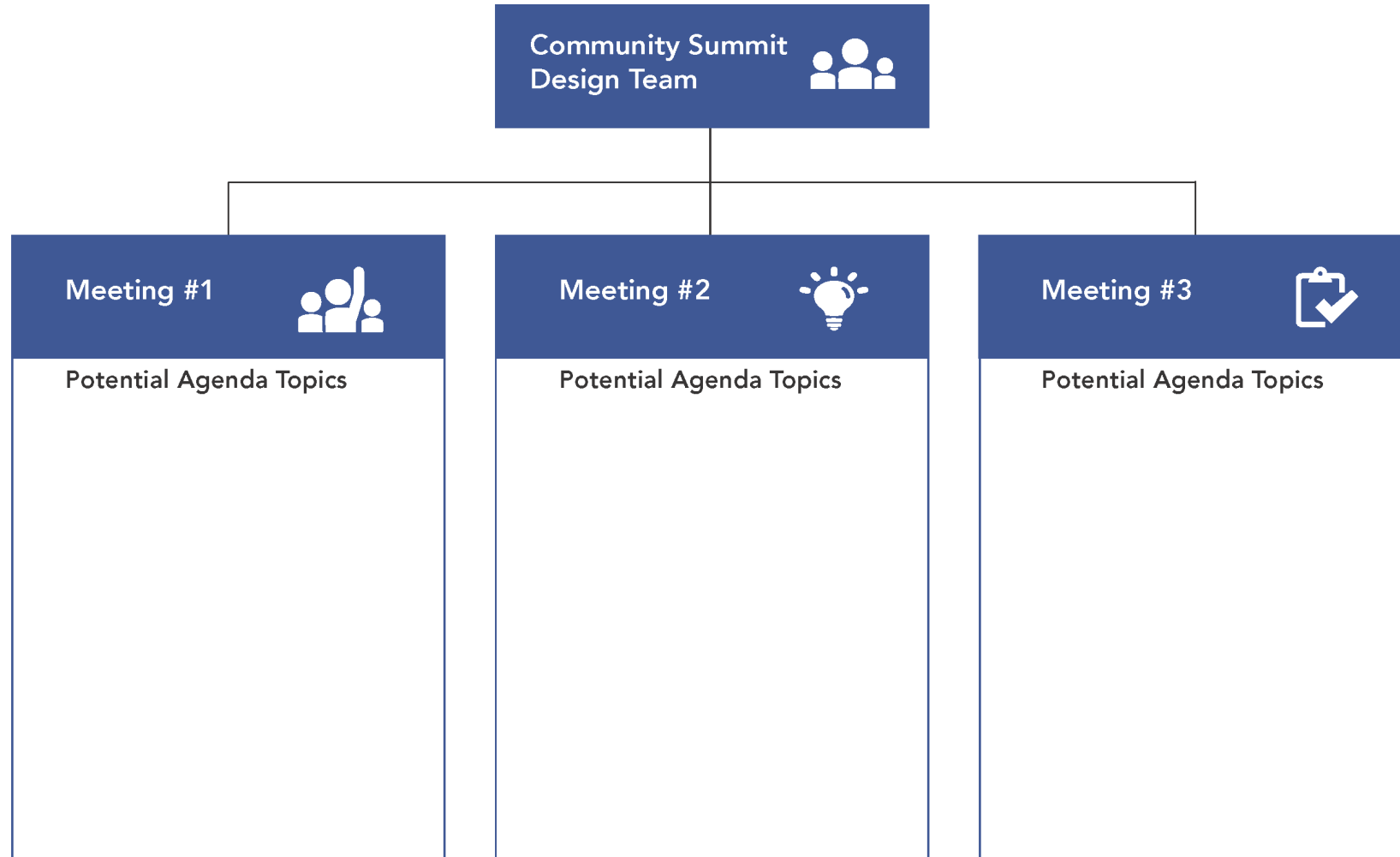


Community Summit

Community Summit Goals



- Review **AB 617 goals and timeline** for the Monitoring Plan
- Audience **reflects diversity** of community and strong attendance by local residents
- Determine study **boundaries** and criteria
- Confirm co-lead and **steering committee selection criteria**, membership and charter
- Provides **information/ education** on existing sources and monitoring methods
- Results in **achievable** goals, outcomes and actions



2018

2019

Community Summit



Key Goals

- Review **AB 617 goals and timeline**
- Audience **reflects diversity** of community
- Strong attendance by **local residents**
- Determine study **boundaries** and criteria
- Confirm co-lead and **steering committee selection criteria**, membership and charter
- Provides **information and education** on existing sources and monitoring methods
- Results in **achievable** goals and outcomes



What's next?

- CSDT Meeting #3: TBD
- Continue co-designing the Community Summit
- Continue developing the Steering Committee charter and co-lead agreement

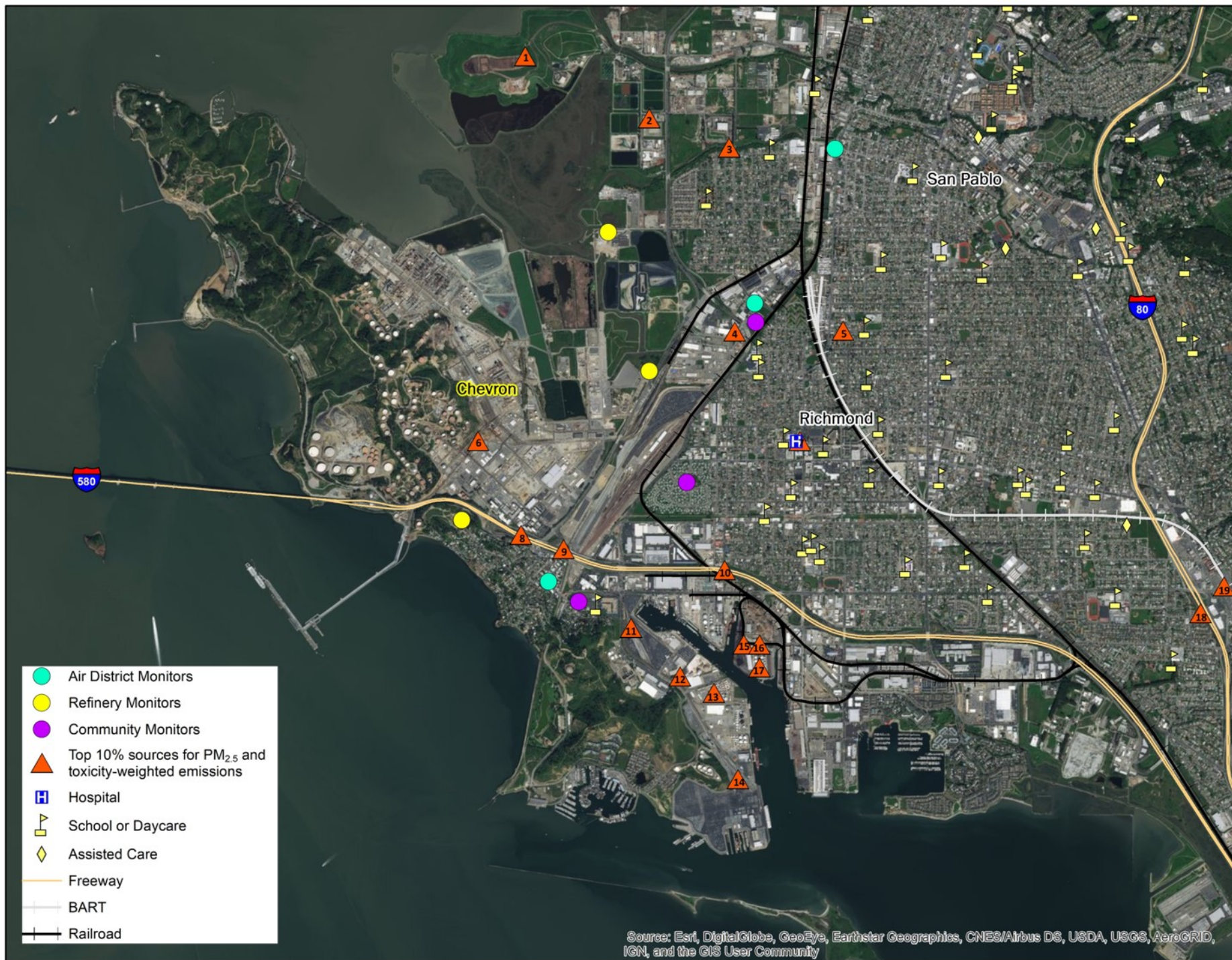


Richmond – San Pablo Community Air Monitoring Plan Community Summit Design Team



January 3, 2019

Extra slides



- Air District Monitors
- Refinery Monitors
- Community Monitors
- ▲ Top 10% sources for PM_{2.5} and toxicity-weighted emissions
- H Hospital
- ▢ School or Daycare
- ◇ Assisted Care
- Freeway
- BART
- Railroad

- ▲ Point Sources Legend**
- 1 – West Contra Costa County Landfill
 - 2 – West County Wastewater District
 - 3 – West County Resource Recovery
 - 4 – BNSF Railway Company
 - 5 – Richmond BART
 - 6 – Chevron Products Company
 - 7 – Kaiser Permanente
 - 8 – Chevron Richmond Technology Center
 - 9 – Chemtrade West US LLC
 - 10 – East Bay Batch
 - 11 – City of Richmond Water Pollution Control
 - 12 – Brenntag Pacific
 - 13 – Phillips 66 Company
 - 14 – New NGC, Inc
 - 15 – Cemex
 - 16 – Plains Products Terminals LLC
 - 17 – Levin Richmond Terminal Corporation
 - 18 – IMTT Richmond
 - 19 – El Cerrito del Norte BART

Near source impacts are different for pollutants from different sources:

- Mobile sources: freeways, rail, ships: Diesel Particulate Matter (DPM), NO_x, PM from road dust, coal cars, rail grinding...
- Landfill, composting, wastewater treatment: Volatile Organic Compounds (VOCs), sulfur compounds
- Refinery: VOCs, NO_x, sulfur compounds, DPM
- Chemical plant and chemical products storage/transport: VOC/toxics, DPM
- Coal and petcoke storage/transport: PM (Black carbon/coal dust), DPM
- Liquid petroleum product storage/transport: PM, NO_x, VOCs
- Metal facilities: PM including metals, VOCs
- Gypsum and cement plants: PM, DPM
- Aggregate facilities: PM, DPM

[Depending on ultimate objective chosen by steering committee, the effective monitoring approach may vary.](#)

Air Monitoring

Different approaches are better at answering different types of questions:

Screening – Usually covers large areas

Special studies with advanced instrumentation (e.g. speciation of PM or toxics) – small areas but focused on specific emission types/sources

Long term trend monitoring for EPA standards – used to identify general air quality trends over time



Screening

Monitor over a large area to locate problems, e.g.:

- Which neighborhoods (blocks) have $PM_{2.5}$?

Limitations

Not possible for all pollutants

Usually not as accurate as other types of monitoring

Not very specific

Might be a snapshot, so may miss intermittent issues

May find problem, but more measurements may be needed to understand what is causing it



Special studies

Better understand areas of elevated air pollution or areas of concern, e.g.:

- Why is $PM_{2.5}$ higher in this neighborhood?
- Is there coal dust from the port or rail cars in the air that I breathe?
- How much of the $PM_{2.5}$ that I breathe near my home is due to coal dust, the refinery, truck traffic on the highway, or other sources?

Limitations

Expensive, and difficult to operate instruments in order to get specific, accurate information about the pollutants

Cannot be everywhere at once – need to focus on areas of concern

Medium duration (still may miss very intermittent problems, such as emissions during repairs)



Long term stations for compliance with a standard

Very accurate measurements at one location over years or decades

- Is the Bay Area in compliance with the NO₂ NAAQS?
- Did the Chevron Refinery record any SO₂ excesses (Rule 9-2)?

Limitations

Very expensive

Logistically difficult, secure location, power etc

Must be technically and legally defensible

Typically designed for common situations, so might not characterize cumulative levels of pollution from a unique mix of sources



Monitor Plan Area: Initial information gathering

- Source locations and emissions estimates
- Air quality and meteorological measurements
 - Air District monitors – long-term PM_{2.5} and toxics trends
 - Refinery-related monitoring
 - Ground-level monitors (SO₂, H₂S, meteorology)
 - Fenceline monitors
 - Community monitors
 - Data from third-party studies (e.g., mobile monitoring, BEACO₂N – help identify hotspots)
- Modeling studies
 - Health risk assessment for refinery communities
 - PM and hazardous air pollutant modeling from CARE
- Use above information/analyses and issues identified by the Steering Committee to help identify locations for further investigations