

Community Air Initiatives

East Los Angeles, Boyle Heights,
West Commerce Community
Steering Committee Meeting #2

*Thursday, January 24, 2019
East Los Angeles, CA*



Meeting Roles and Expectations

CSC Purpose: To guide strategies for community air monitoring and emissions reduction plans for this AB 617 community, and track progress on community plans.

Expectations:

- Presenters will be concise
- Everyone should help us stay on time by staying on topic
- **Aim to build consensus**

Meeting Participant Roles*

SCAQMD	Note taker	Co-host	Committee members
<ul style="list-style-type: none">• Organize meeting logistics• Provide agenda and meeting materials• Present key information• Address committee concerns and answer questions	<ul style="list-style-type: none">• Take notes• Prepare a summary and post it online	<ul style="list-style-type: none">• Help facilitate discussions• Help SCAQMD staff review materials• Help SCAQMD staff with meeting logistics	<ul style="list-style-type: none">• Provide input on discussion items• Provide prompt feedback and response (e.g. filling out surveys, replying to emails, etc)• Engage with other committee members and members of the public• Serve as a liaison to your networks within the community• Provide suggestions on how to improve this process

* Based on feedback from the CSC members, we are working on getting a facilitator

Where we are now

Where we are going



Identify Community Air Quality Concerns

- Committee Input
- Technical Data

Oct 2018-
Jan 2019



Prioritize Sources of Emissions and Areas with High Exposure Concerns

- Target areas/pollutants for air monitoring
- Target sources/places for emissions or exposure reduction

Jan 2019-
Mar 2019



Develop Strategies to Reduce Emissions and Exposures and Metrics for Tracking Progress

- Community Air Monitoring Plan
- Community Emissions Reduction Plan

Mar 2019-
Oct 2019

Today's Meeting Objectives

- Provide summary of air quality concerns and complete discussion on community boundaries
- Provide information on air monitoring, and ideas for air monitoring through AB 617
- Prepare for next steps (prioritize air quality issues and develop strategies to address them)
- Follow up on committee logistical items

Air Quality Concerns and Community Boundaries

Recap: How were Year 1 AB 617 communities identified?

We first **identified communities using a broadly inclusive approach.**

Preliminary list includes each of the following:

- (1) **Top 25%** of MATES IV air toxics cancer risk
- (2) **Top 25%** of CalEnviroScreen 3.0 score
- (3) Community nominations (148 nominations received through 5/17/2018)
- (4) Communities with the highest density of schools within 1,000 feet of industrial land use

CalEnviroScreen 3.0 (OEHHA)

Pollution Burden

Exposures



Ozone



PM2.5



Diesel PM



Pesticide Use



Traffic



Drinking Water Contaminants



Toxic Releases from Facilities

Environmental Effects



Solid Waste Sites and Facilities



Cleanup Sites



Groundwater Threats



Impaired Water Bodies



Hazardous Waste Generators and Facilities

Population Characteristics

Sensitive Populations



Asthma



Cardiovascular Disease



Low Birth-Weight Infants

Social and Economic Factors



Poverty



Unemployment



Educational Attainment



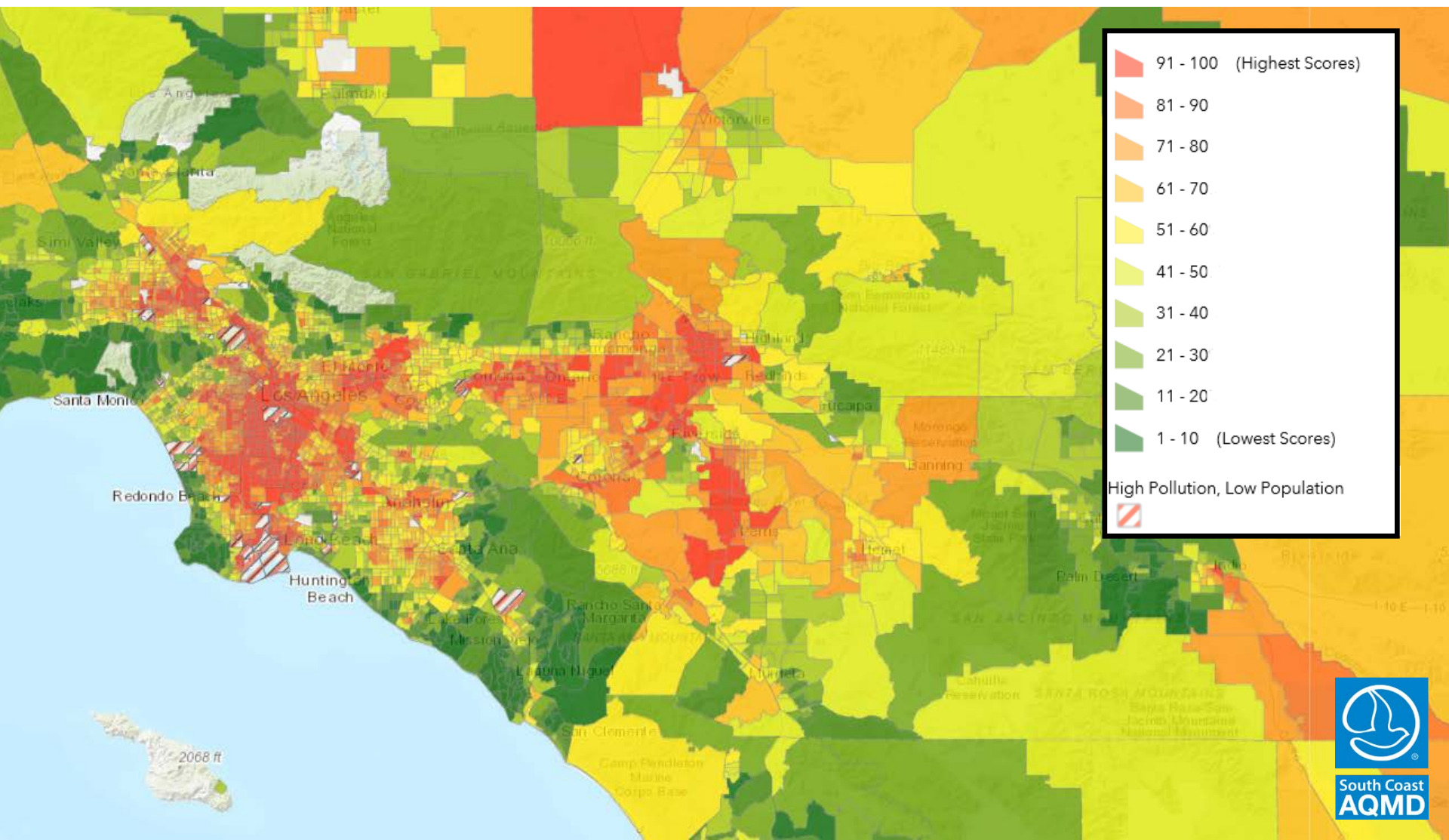
Linguistic Isolation



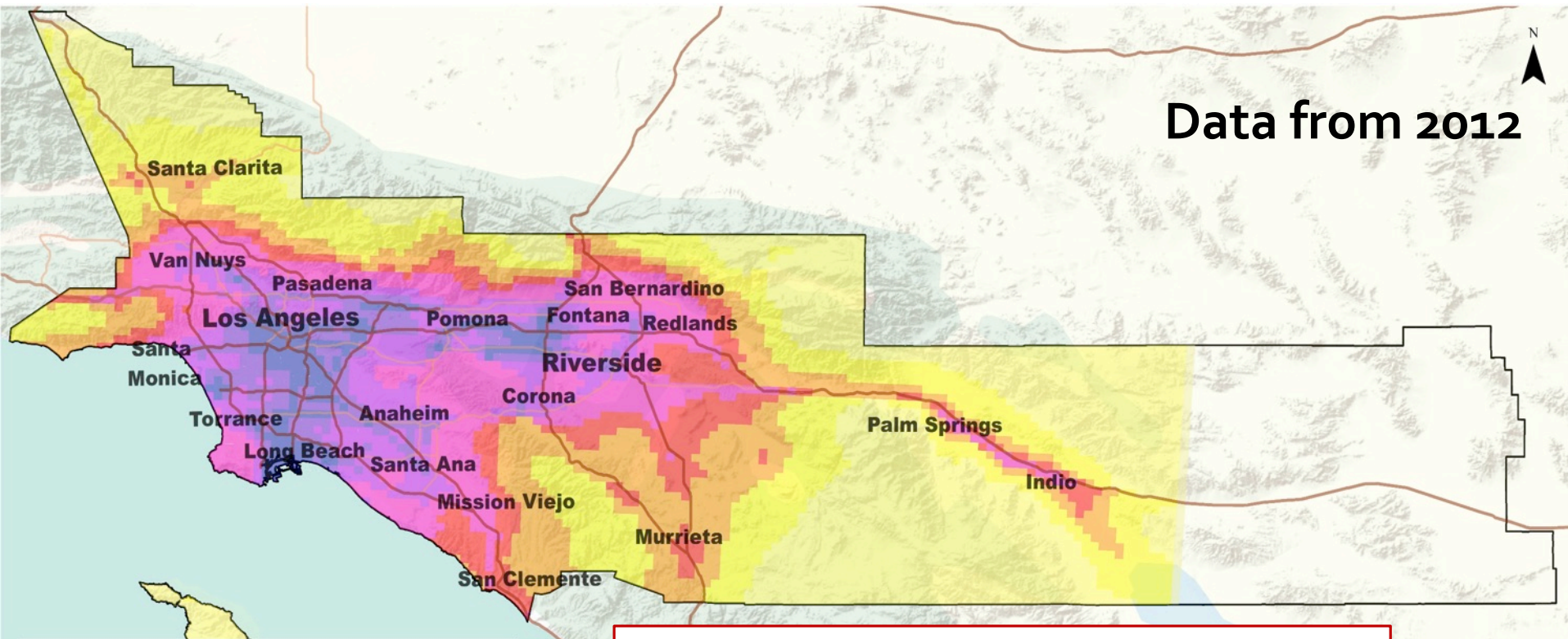
Housing Burdened Low Income Households

OEHHA:
Office of
Environmental
Health Hazard
Assessment
(State agency)

CalEnviroScreen 3.0 (OEHHA)



Multiple Air Toxics Exposure Study (MATES IV)



Cancer Risk Per Million

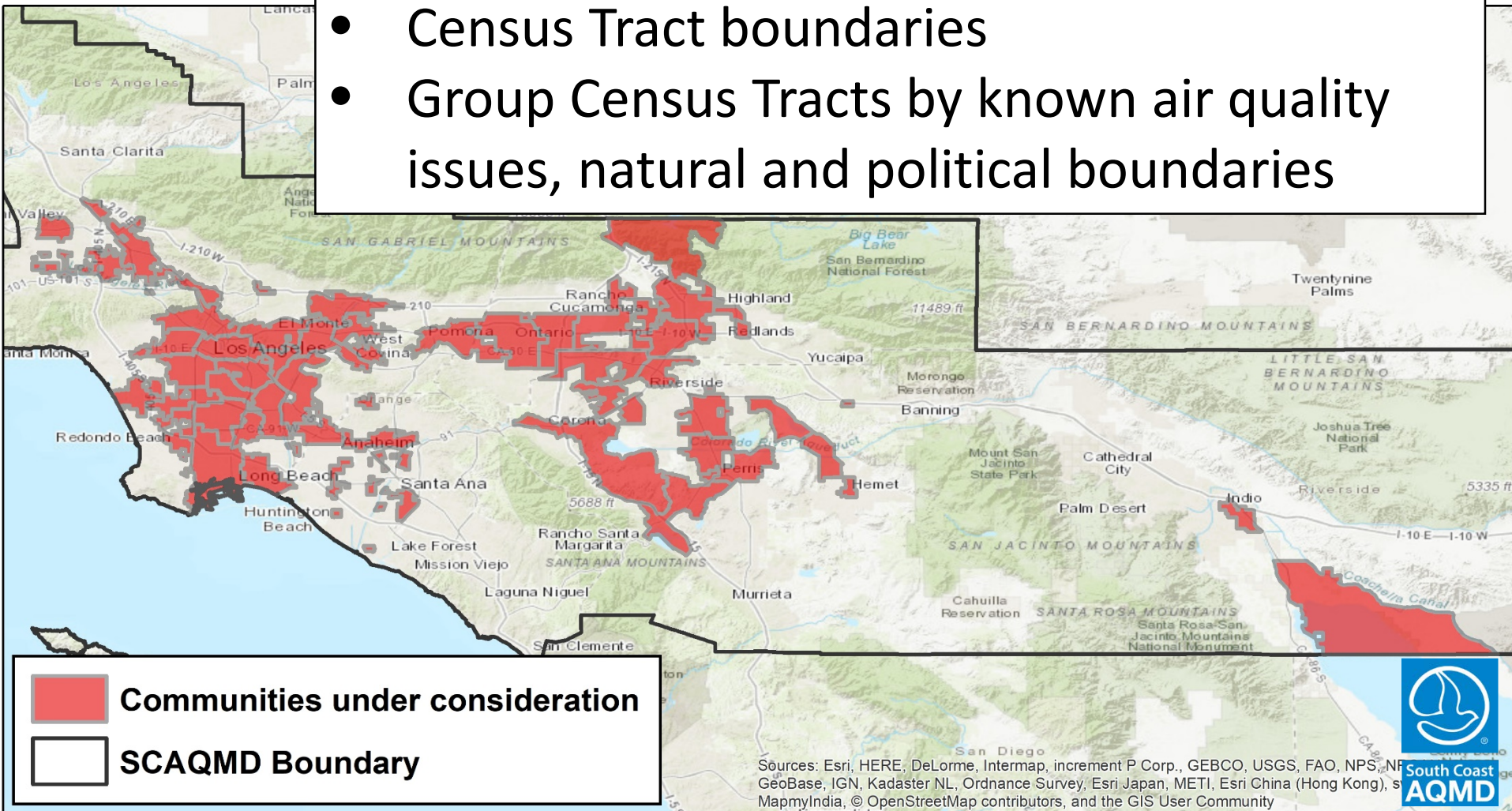
<100	400 - 500
100 - 200	500 - 800
200 - 300	800 - 1000
300 - 400	1000 - 1200
	>1200

Main findings:

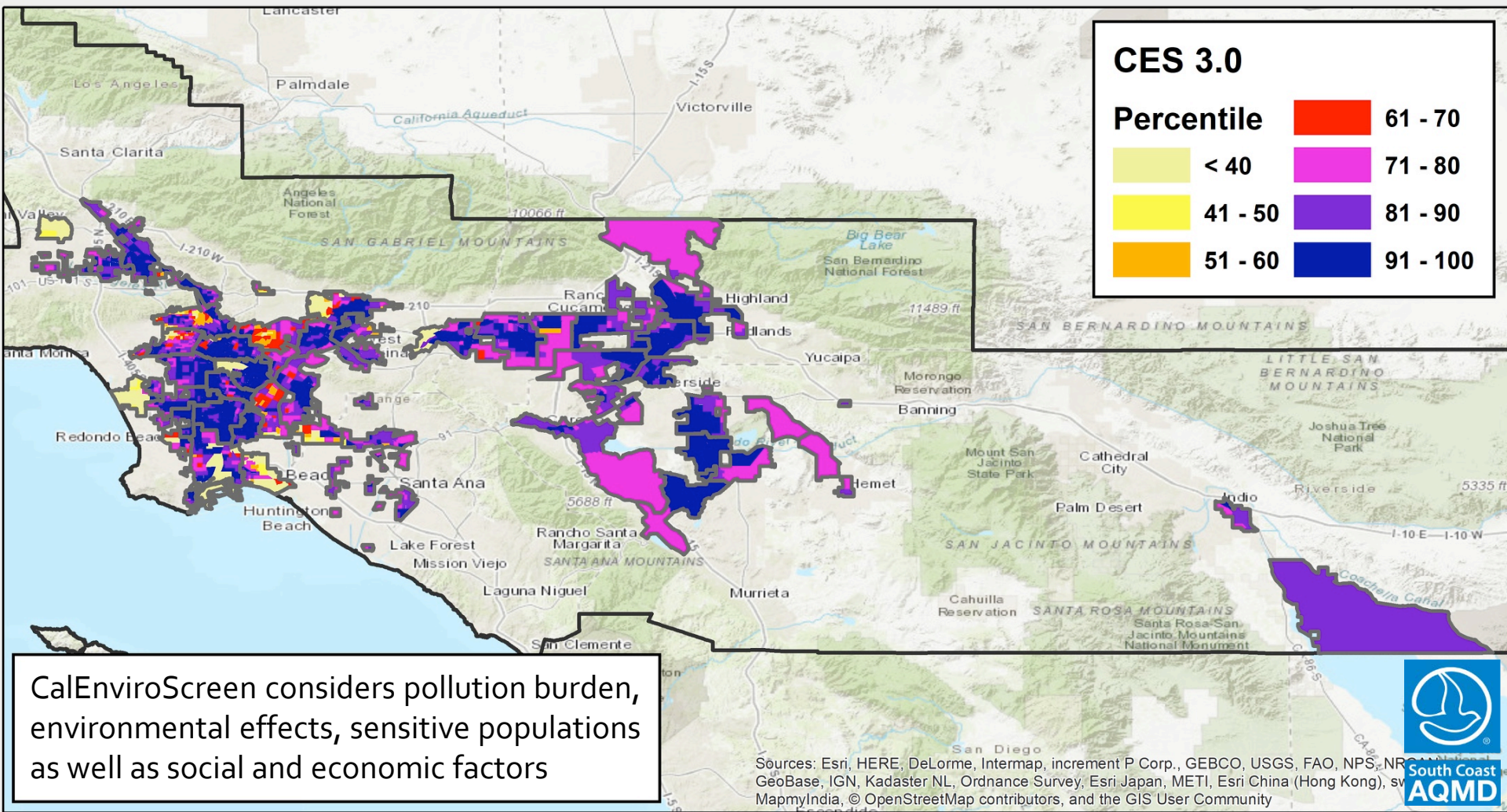
- Diesel Particulate Matter (PM) accounted for 2/3 of air toxics cancer risk
- Ports (ships), rail yards and goods movement corridors (trucks) are large sources of diesel PM

Map of communities under consideration for AB 617

- 55 communities identified in SCAQMD
- Census Tract boundaries
- Group Census Tracts by known air quality issues, natural and political boundaries



CalEnviroScreen 3.0 ranking in communities under consideration

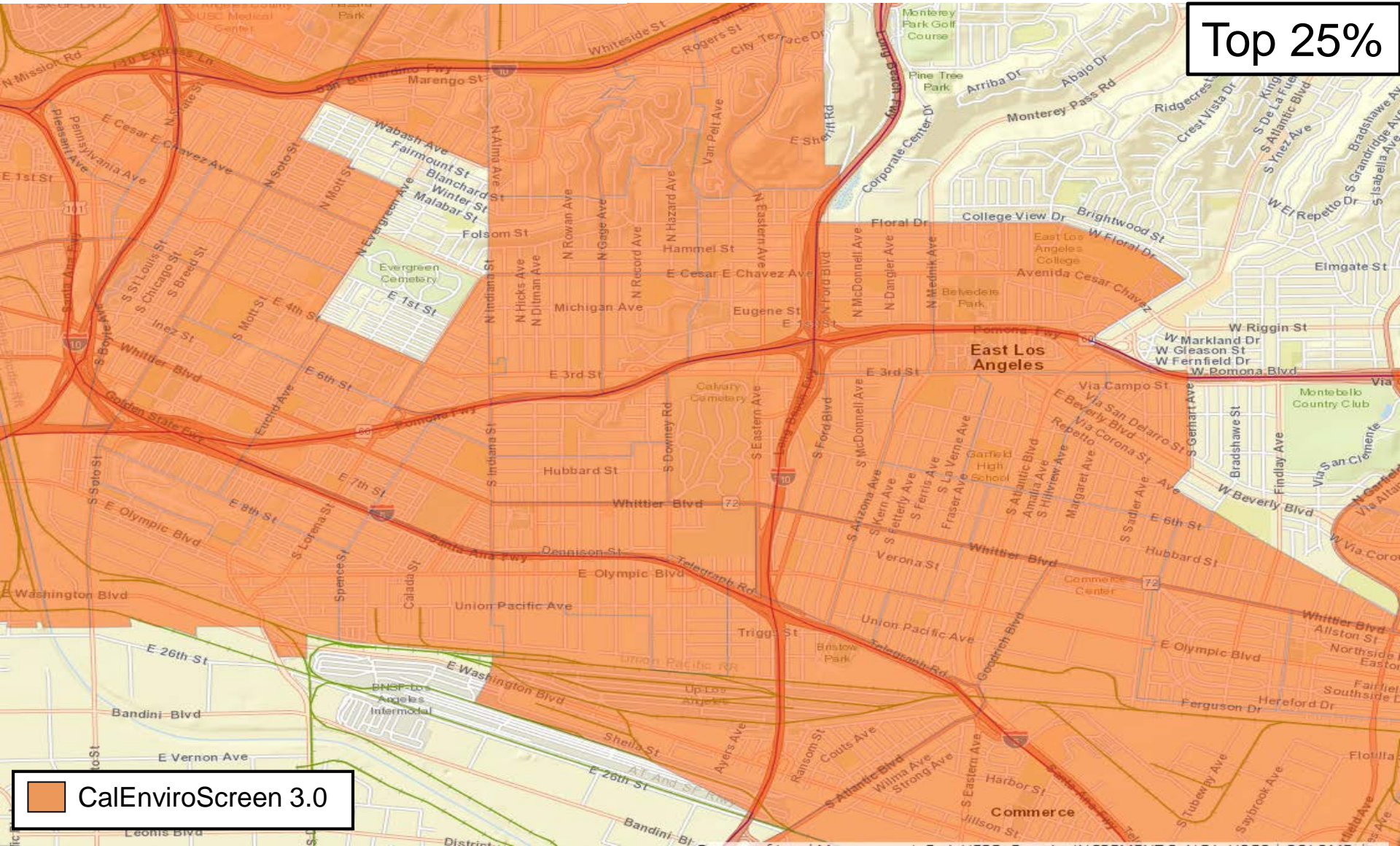


Many disadvantaged areas

But resources are limited



Top 25%



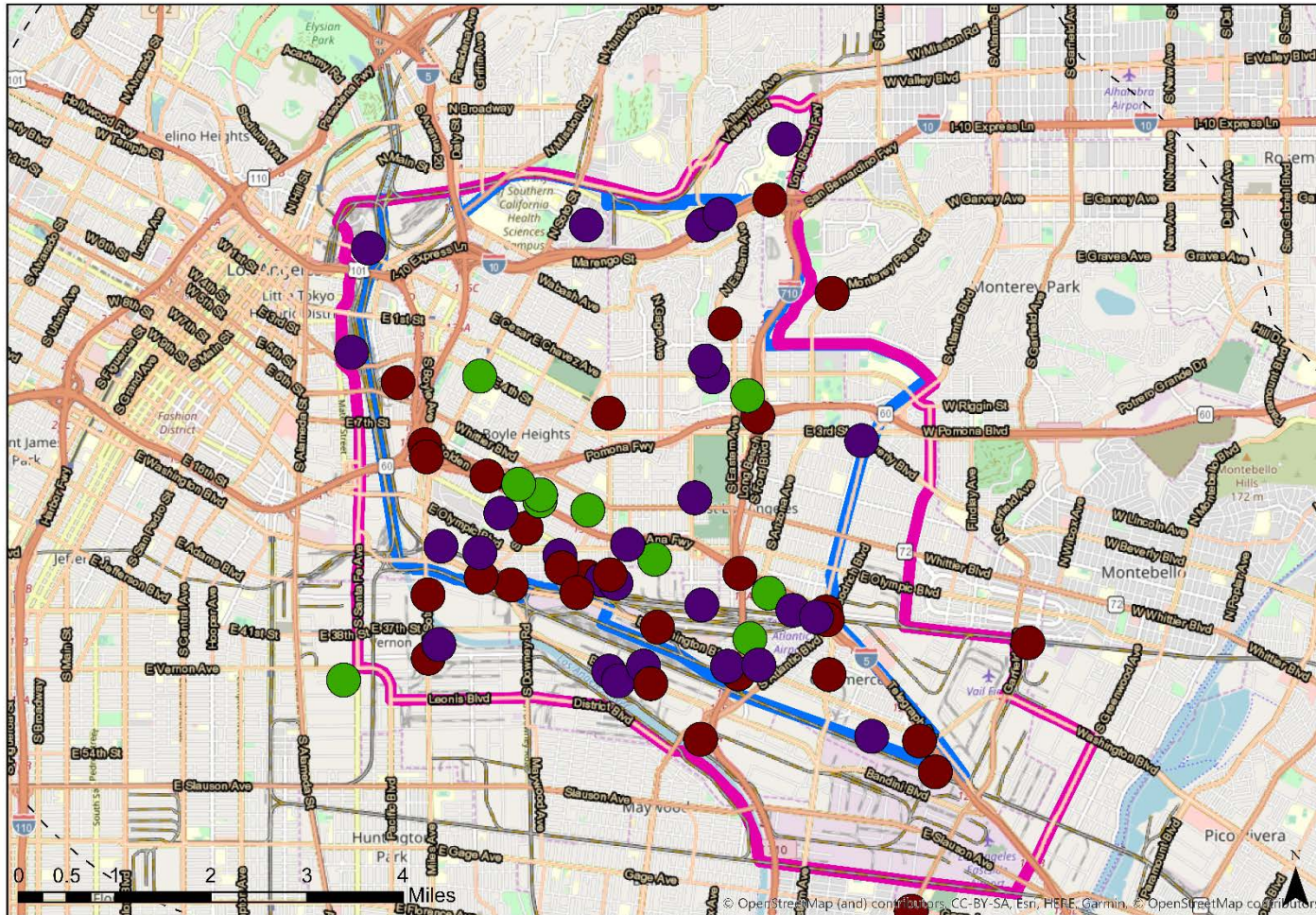
CalEnviroScreen 3.0

For more details...

- SCAQMD recommendations to CARB for Year 1 communities and implementation schedule: <http://www.aqmd.gov/docs/default-source/ab-617-ab-134/submittal-to-carb.pdf>
- CARB staff report describing statewide strategy and Year 1 communities https://ww2.arb.ca.gov/sites/default/files/2018-09/2018_community_recommendations_staff_report_revised_september_11.pdf

And now, let's discuss this community (East Los Angeles, Boyle Heights, West Commerce)...

Community-Identified Air Quality Concerns - Map



- Community Impacted Area
- Emissions Study Area
- Mobile Source
- Stationary Source
- Sensitive Receptor

Community-Identified Air Quality Concerns

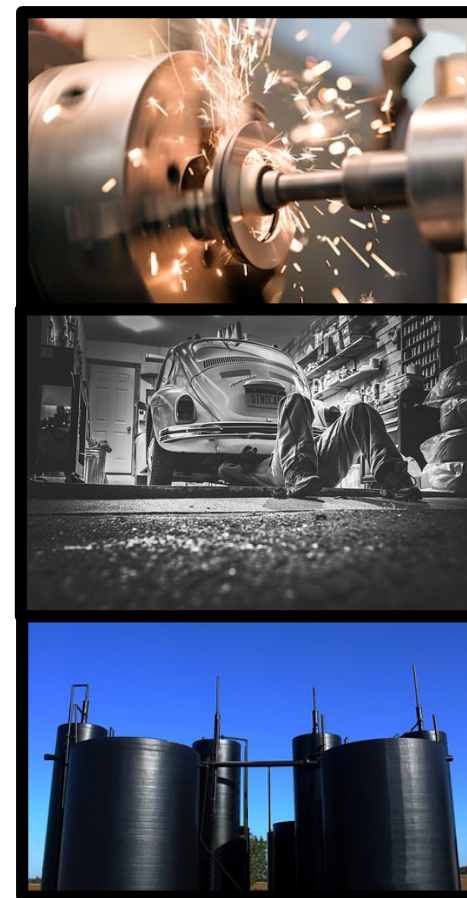
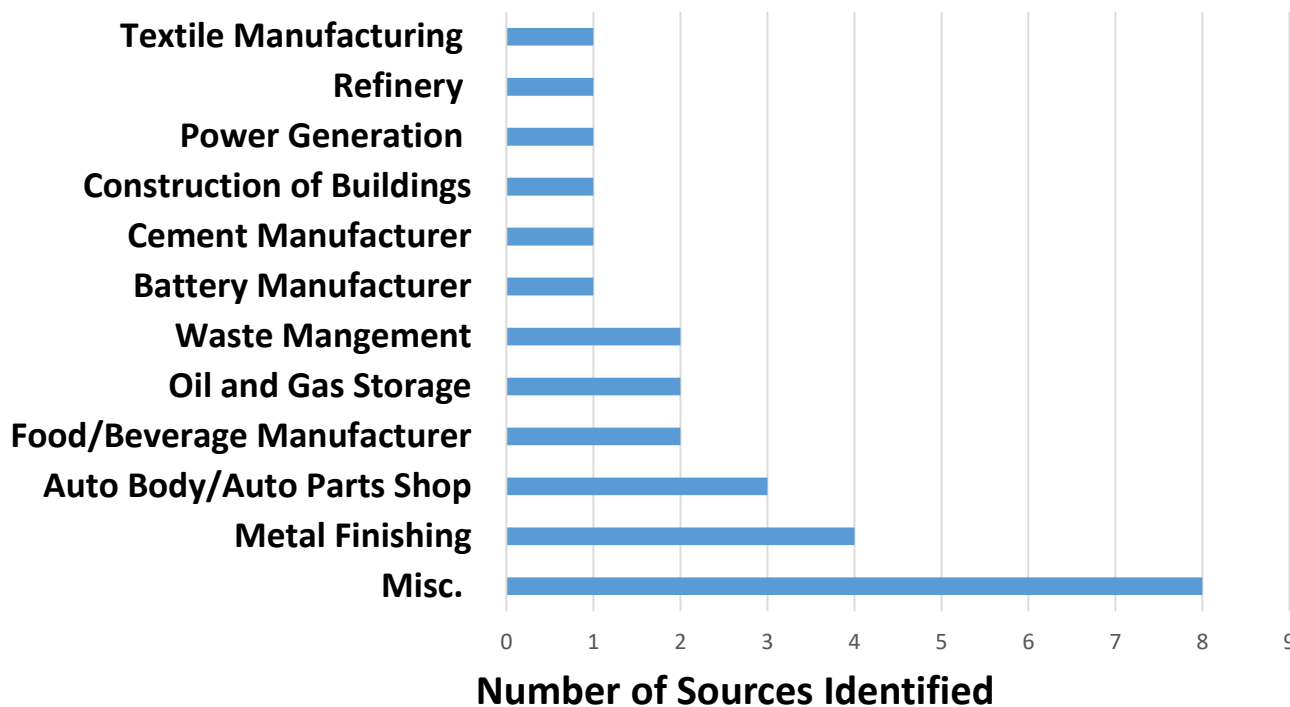
Based on Air Quality Mapping Activity in Meeting #1



	Number
Stationary Sources	28
Mobile Sources	30
Sensitive Receptors	11
Total Unique Concerns	61

Stationary Source Concerns

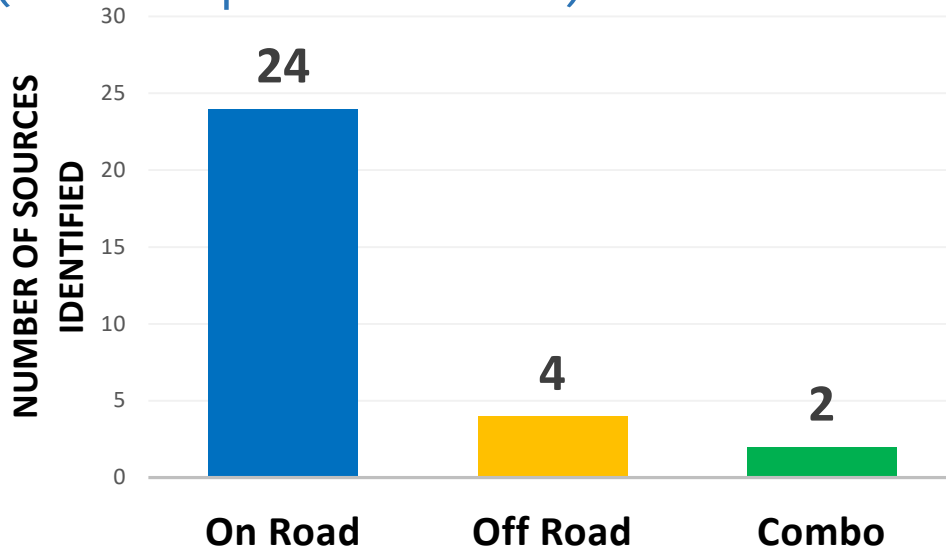
(28 unique sources)



- Misc. were single concerns marked as either odors, dioxin, furans, sulfur, pollution, or as industry.
- The cement manufacturer was identified twice in the mapping exercise

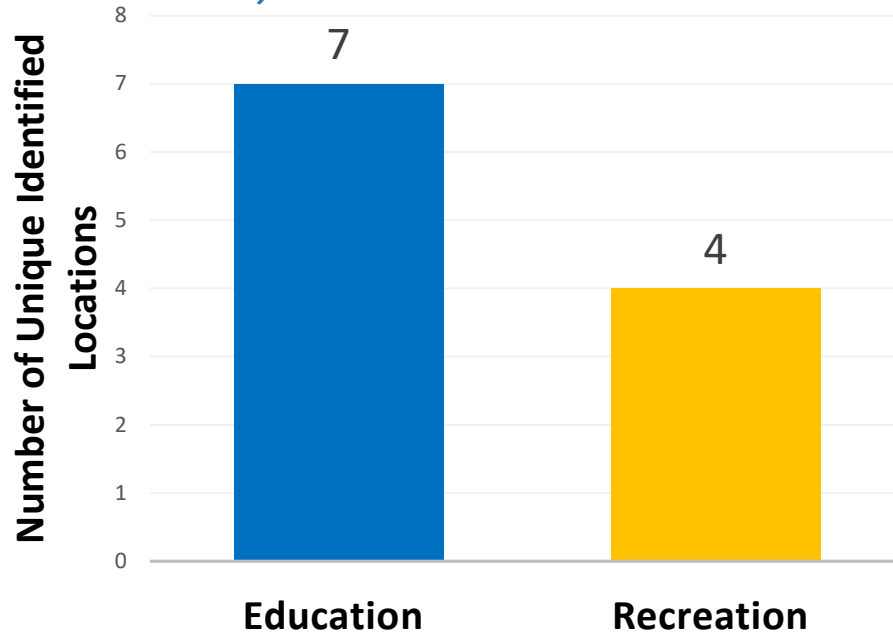
Mobile Source Concerns

(30 unique sources)



- On Road: Mainly trucks idling and truck traffic
 - 710 freeway
 - Freeway intersections
- Off Road
 - Railyards and rail traffic
- Combo
 - Transfer yard
 - Train and truck idling

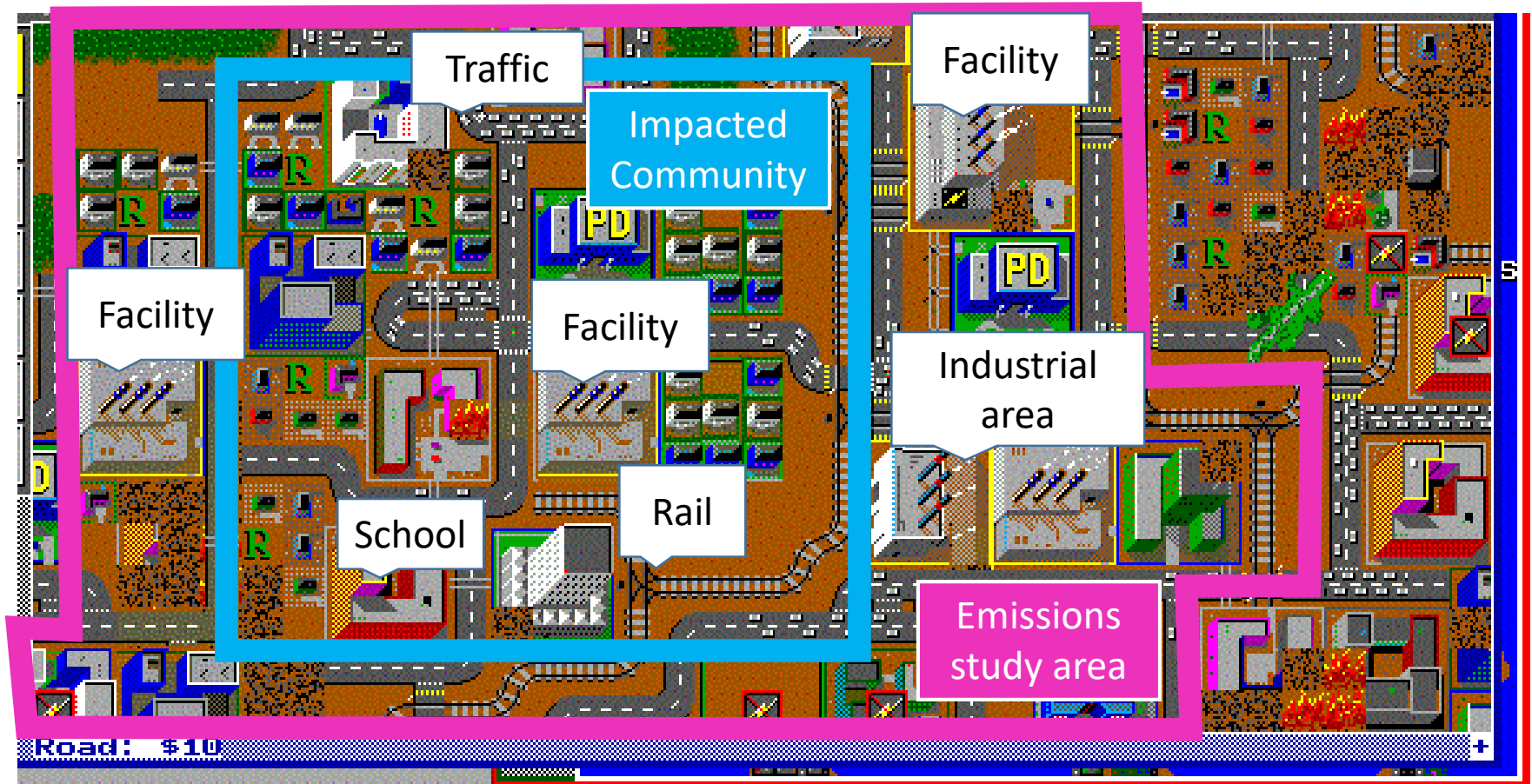
Sensitive Receptors (11 unique locations)



- Most of the sensitive receptors identified were along the freeways or around heavy truck traffic



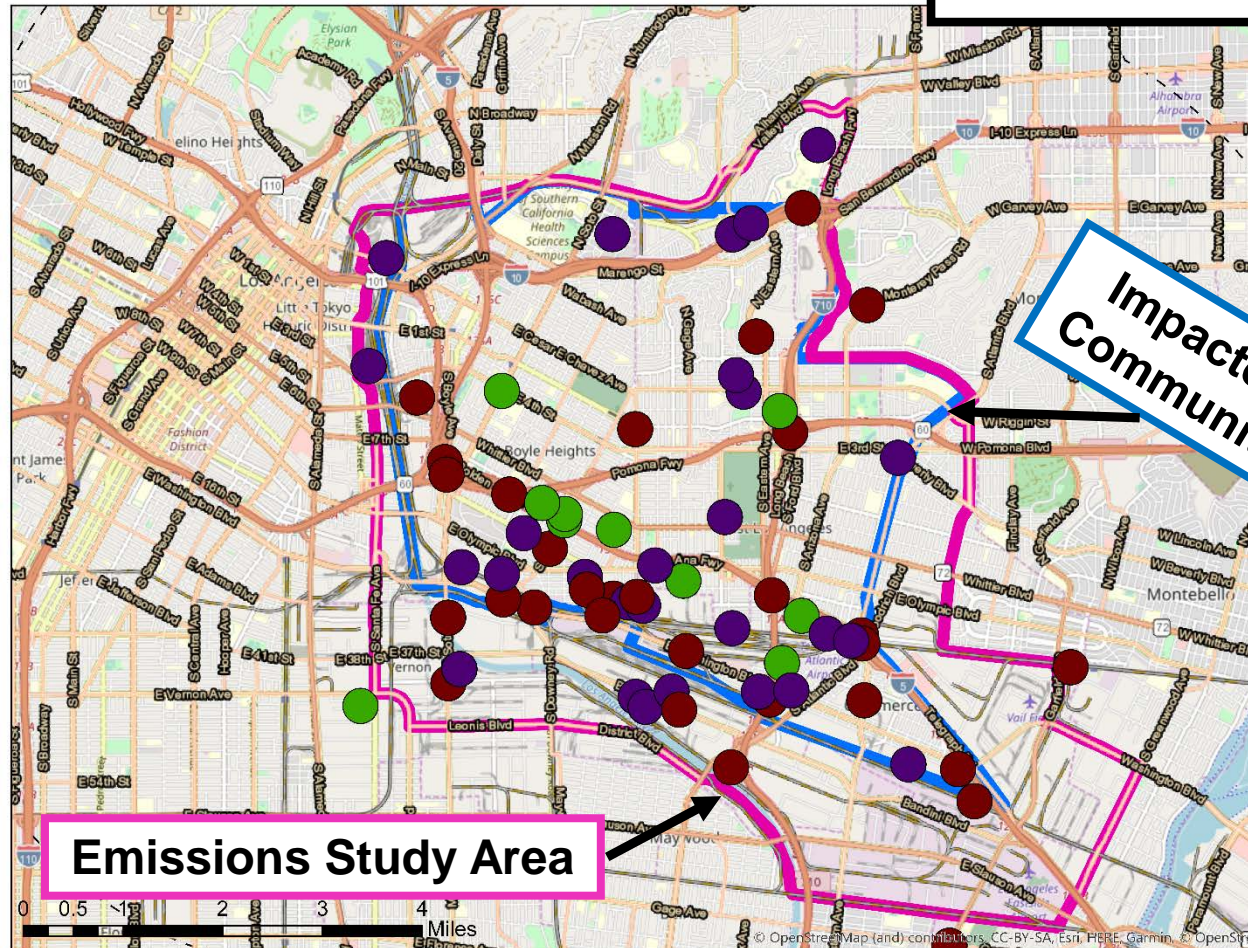
Community Boundaries Example



Impacted Community: Area of the community where people live, work, go to school, and spend the majority of their time.

Emissions study area: Region that includes the sources that affect the Impacted Community.

Updated boundary for input/discussion



Impacted Community

- Community concerns were taken into consideration
- Majority of community concerns fall within the proposed impacted community boundary
- Regions within and near the emissions study area will also benefit from the emissions reductions
- Warehouse related mobile sources will be addressed, even if the warehouses are located outside the emissions study area

Community Impacted Area

Emissions Study Area

Mobile Source

Stationary Source

Sensitive Receptor

Stretch break

**Come back in
5 minutes**



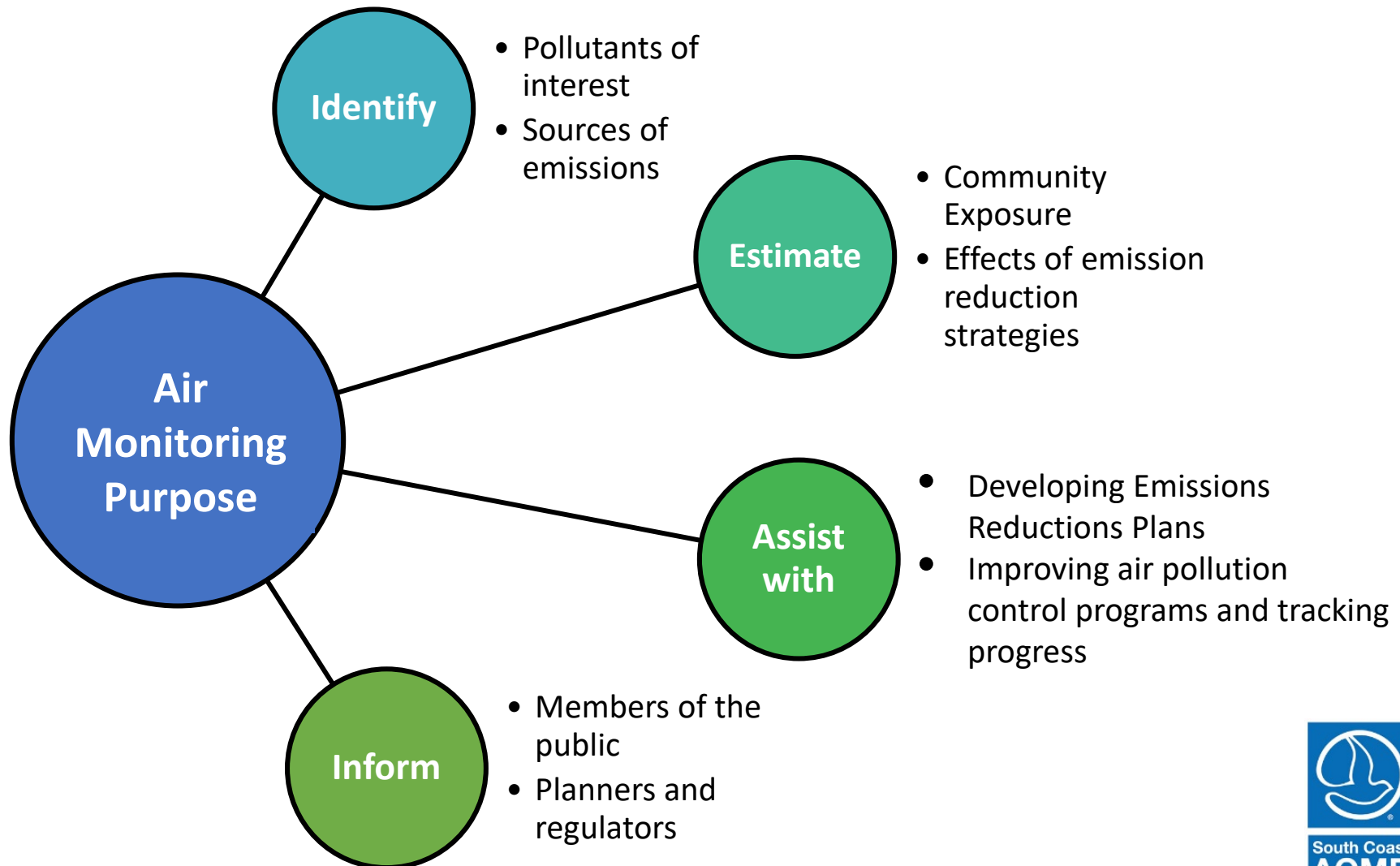
Developing Community Air Monitoring Objectives

*Thursday, January 24, 2019
East Los Angeles Service Center*

*Dr. Andrea Polidori
Advanced Monitoring Technologies Manager
South Coast Air Quality Management District*



Why Do We Monitor Air Pollution?



What Are The Sources Of Air Pollution in this Community?

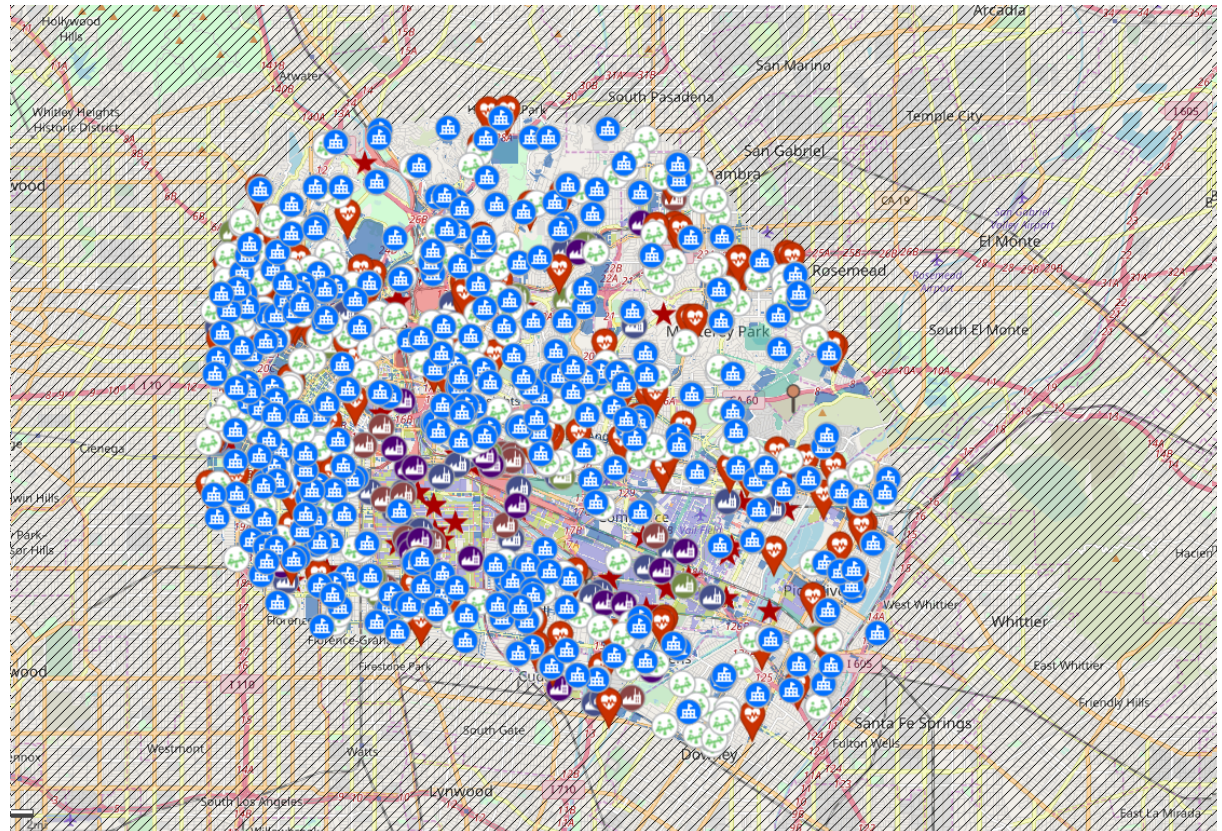


Sources of Air Pollution and Monitoring Challenges

Sensitive Receptors,
Industrial Facilities,
and Residential,
Commercial and
Industrial Land Use

Monitoring Challenges

- Complex variety of emission sources
- Variety of air pollutants
- Large study area
- Monitor siting
- Complex meteorology



Different Types of Air Monitoring

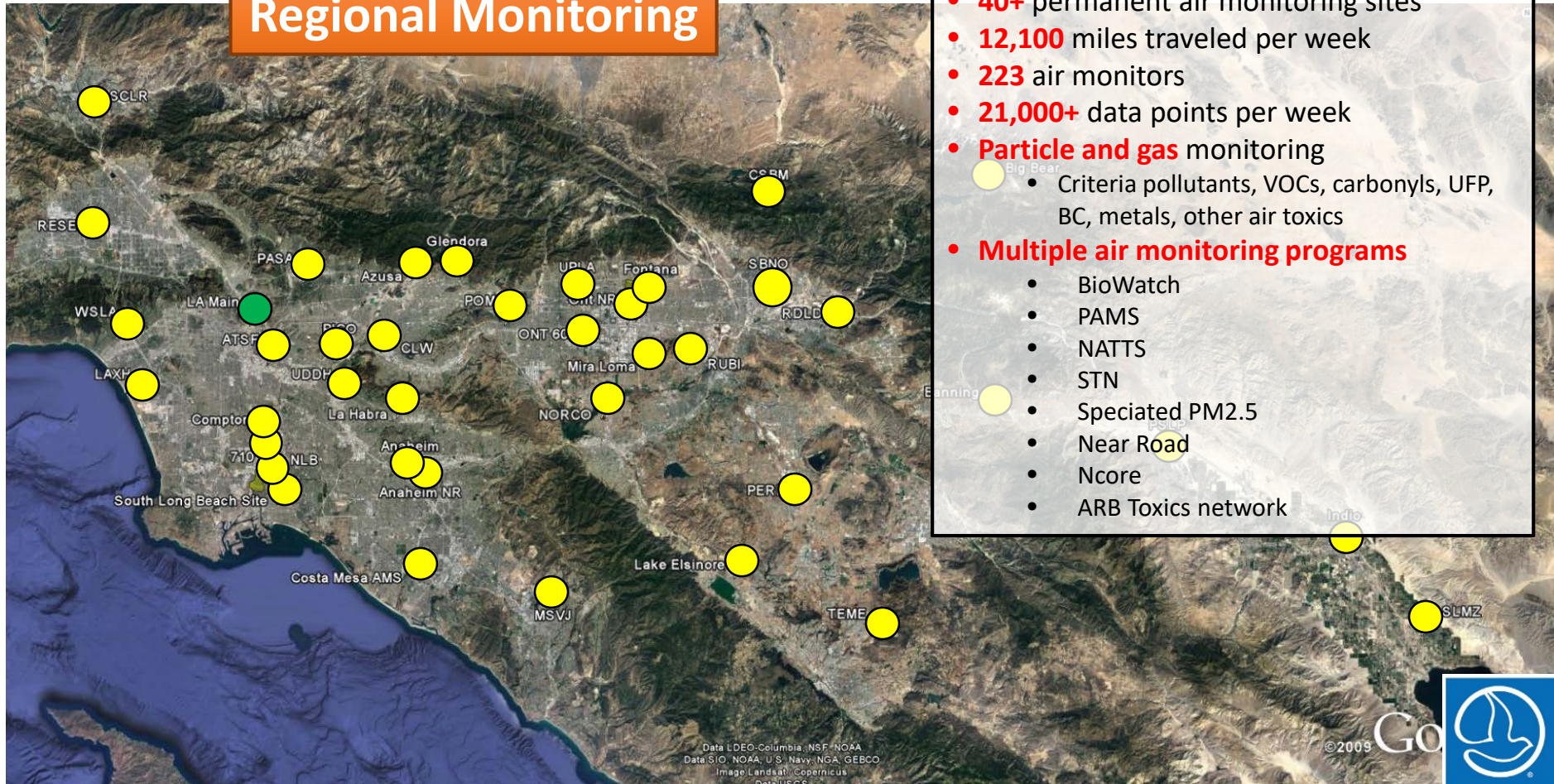


What types of monitoring are we doing in Boyle Heights/East Los Angeles/West Commerce?

- SCAQMD has been conducting monitoring in this community ahead of AB 617 monitoring schedule
 - Permanent monitoring programs (Fixed Network, Regulatory, Exide)
 - Sensor deployment in communities (EPA STAR Grant)
 - [Visit monitoring posters to learn more](#)
 - Other monitoring studies (MATES, sensor networks, NASA ROSES)
 - [Visit monitoring posters to learn more](#)
 - Complaints (**1-800-CUT SMOG**[®])
- We will work with Community Steering Committees to ensure we are addressing the top priorities
- We use a combination of methods
 - **Traditional methods** – Criteria pollutants (FRM, FEM, EPA Guidance)
 - **Advanced methods** – Air toxics (sensors, remote sensing, mobile platforms)

Permanent Monitoring Programs (Fixed Network, Regulatory)

Regional Monitoring



- **40+** permanent air monitoring sites
- **12,100** miles traveled per week
- **223** air monitors
- **21,000+** data points per week
- **Particle and gas** monitoring
 - Criteria pollutants, VOCs, carbonyls, UFP, BC, metals, other air toxics
- **Multiple air monitoring programs**
 - BioWatch
 - PAMS
 - NATTS
 - STN
 - Speciated PM2.5
 - Near Road
 - Ncore
 - ARB Toxics network

Data: LDEO-Columbia, NSF, NOAA
Data: SIO, NOAA, U.S. Navy, NGA, GEBCO
Image: Landsat, Copernicus
Data: USGS

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South Coast
AQMD

Air Monitoring at Exide

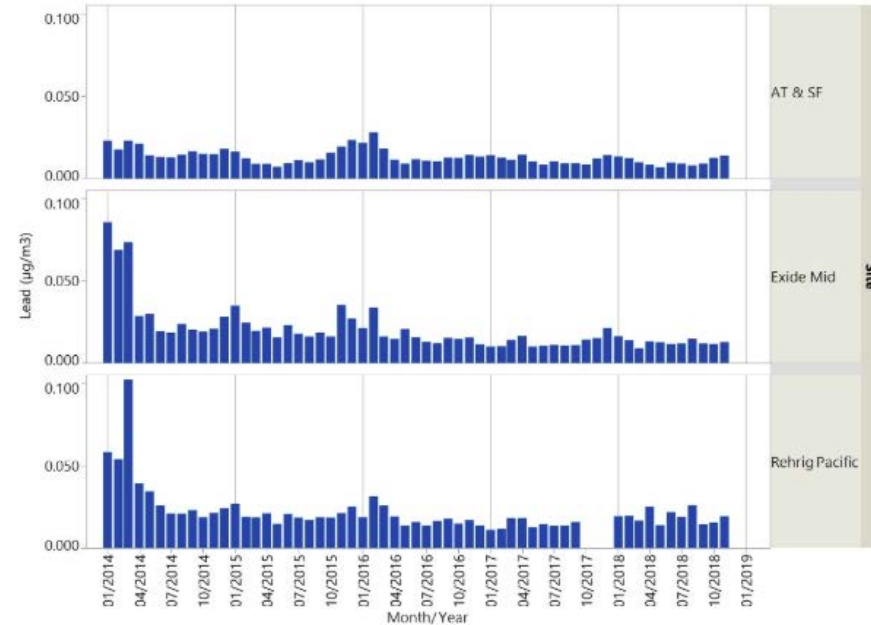
Fenceline Emission Source Monitoring

Reasoning:

- SCAQMD has been conducting Lead and Arsenic monitoring at Exide since 2007
- Exide also conducts Lead and Arsenic monitoring to satisfy Rule 1420.1 monitoring requirements

Findings:

- Overall decreasing trend in Lead levels since the adoption of Rule 1420.1 in 2008



Sensor Deployment in East LA

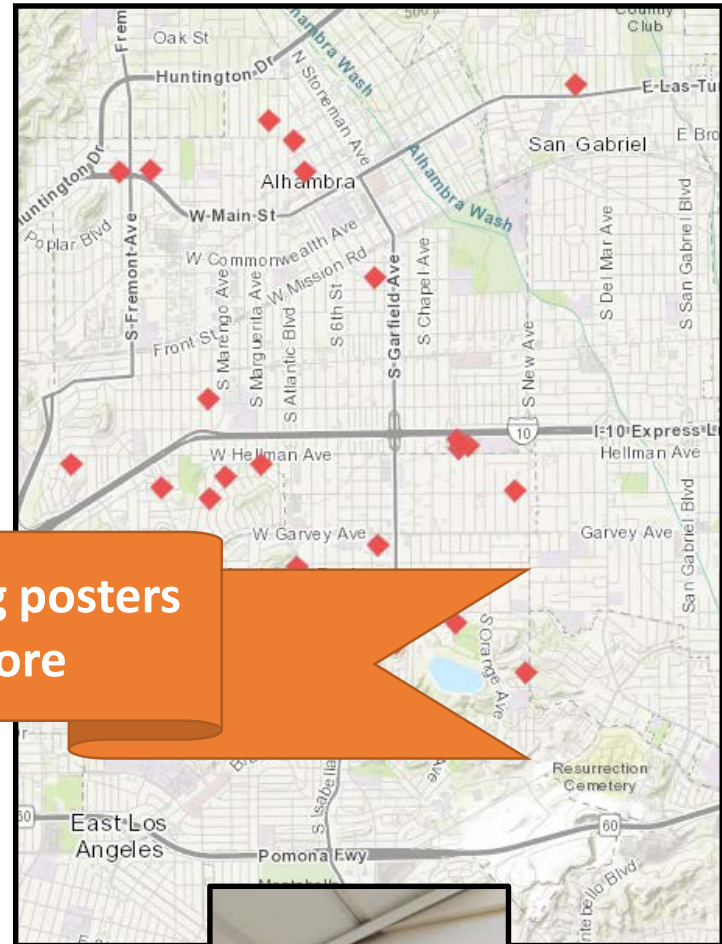
Community Monitoring

U.S. EPA STAR Grant

Purpose: to engage, educate and empower California communities on the use and cost of "low-cost" air monitoring and targeting:

- Communities in Environmental Justice areas
- Communities near specific sources of air pollution

Visit monitoring posters to learn more



AB 617 Community Monitoring Design

Transitioning into AB 617 Monitoring

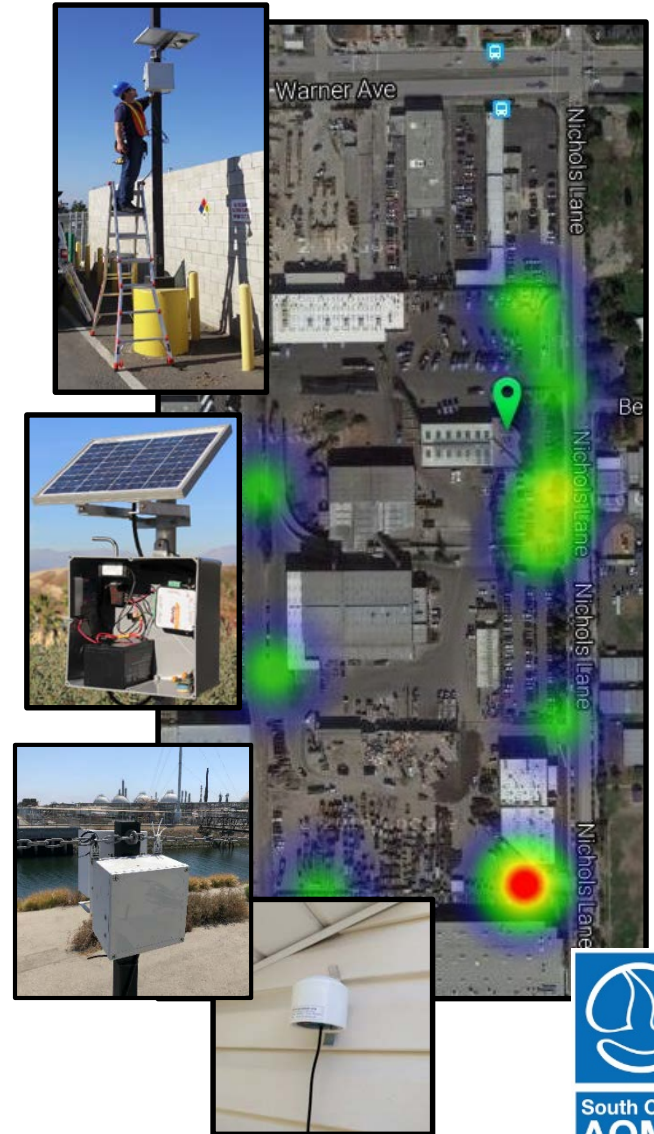


AB 617 Monitoring Efforts

Regulatory monitoring stations



Low-Cost Sensor Networks



Mobile Platforms



New Approaches in Air Pollution Monitoring

Mobile Platforms



Traditional Monitoring



Low-Cost Sensors



Visit monitoring posters to learn more

Limited to Governments, Industry and Researchers

and Researchers

Expanded Use by Communities and the Public

Covers a Large Area, Identifying Hot-Spots and Emissions Sources, High-Time Resolution
is data collected?

Compliance Monitoring, Enforcement, Trends, Research

Citizen Science, Educational Tool, High-Time Resolution Real-Time Data

Scientific Reports and Summaries
is data processed?

Government Websites, Permit Records, Research Databases

Community Engagement, Increased Data Availability

Air Monitoring Benefits and Limitations

		Reference Monitors	Low Cost Sensor Networks	Mobile Monitoring & Surveys
Applications	Track progress	✓	✓	
	Identify emission sources		✓	✓
	Identify “hot-spots”		✓	✓
Benefits	Compliance action	+		
	Good detection capability	+		+
	Continuous data		+	+
	Real time data		+	
Limitations	High Cost	✗		✗
	Number of pollutants detected		✗	
	Low accuracy/precision		✗	

Working with the CSC Group



**Define Goals
and Objectives
of Air
Monitoring**



CSC Meeting #3



**Identify
Pollutants of
Interest and
Recommend
Appropriate
Monitoring
Technologies**



CSC Meeting #3



**Develop
Community Air
Monitoring
Plan**



May 1st, 2019



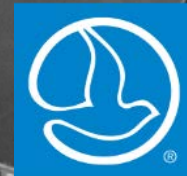
**Begin Air
Monitoring in
Priority Areas**



July 1st, 2019



Questions?



South Coast
AQMD

CSC charter and other important items

1. Updated CSC charter

- Very few comments received – only minor wording changes for clarity
- Please sign and return to SCAQMD staff **today, or by Jan 31, 2019**

2. Biographies

- Please email to ab617@aqmd.gov as soon as possible so we can post on the webpage

3. Community Tour, including Facility Tour(s)

- Purpose: Providing committee members with an opportunity to share and gain a further understanding of key concerns in the community, as well as operations and clean air technologies at facilities
- Any volunteers/suggestions?

Meeting facilitator – Update

SCAQMD staff contacted facilitators suggested by CSC members, and are evaluating the firms for best fit.

Facilitator - Key Roles

- Keep meeting on topic (based on agenda items)
- Make sure participants understand and adhere to the rules stated in the CSC charter
- Help committee members have ownership of the process by ensuring that they make key and timely contributions
- Guide committee members to listen to each other
- Prevent any one participant from dominating the conversation, and seek to obtain as much valuable input as possible (including minority voices) before closing a discussion
- Ensure that the meeting ends on time

Current progress

What we've done so far:

- Discussed background on:
 - AB 617 program
 - Air pollution basics
 - Air pollution data in this community
 - Air monitoring technologies
- Gathered input on community air quality issues
- Gathered input on community boundaries

Likely topics for Meeting #3:

- Prioritization of air quality issues
 - To address through air monitoring and/or emission reduction plans
- Potential strategies
- Enforcement overview
- Update on RECLAIM/BARCT rule development (possibly Meeting #4)

Technical Advisory Group (TAG)

Purpose: Provide technical input on data and methods for modeling, monitoring, inventory

Current volunteers from this CSC:

Name	Affiliation
Hector Garcia	Our Lady of Victory Catholic Church
Marisa Blackshire	BNSF Railway
Hector-Alessandro Negrete	Boyle Heights Neighborhood Council
Rafael Yanez	East Los Angeles Resident

**All meetings
are open to the
public**

First TAG meeting is being scheduled for **February 27, 2019**

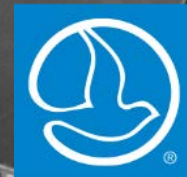
Thank you
for the hard work!

More information on AB 617:

www.aqmd.gov/AB617

Email: AB617@aqmd.gov

Follow us **@SouthCoastAQMD**



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