

Community Air Initiatives

Wilmington, Carson and West Long Beach Community Steering Committee Meeting #1

*Tuesday, October 30, 2018
Wilmington, CA*



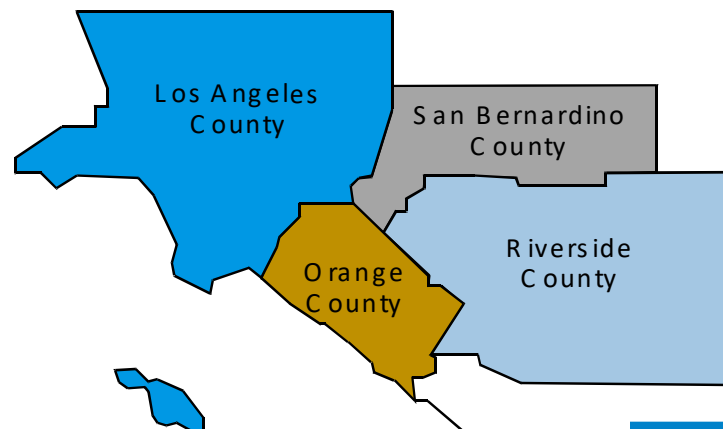


Who is the SCAQMD?

Regional Government Agency Responsible for Protecting Our Residents from the Health Effects of Air Pollution

What we do

- Develop **Air Quality Management Plan**
- Adopt air quality **rules and regulations**
- Issue **permits**
- Conduct periodic **inspections** and respond to **air quality complaints**
- **Enforce District rules** through inspections and complaints
- Issue **violations** and assess **penalties** as appropriate
- Develop and deploy **clean technology**
- Conduct **air monitoring**
- **Engage** with all stakeholders through **public outreach**



Relevant Agencies and Authorities

National

U.S. Environmental Protection Agency



State

California Occupational Safety and Health Administration



California Air Resources Board



Department of Toxic Substances Control



The Office of Environmental Health Hazard Assessment



Regional / Local

South Coast Air Quality Management District



Los Angeles County Department of Public Health



Long Beach Department of Health and Human Services



Southern California Association of Governments



City of Long Beach



Land use authority

City of Carson



City of Los Angeles



Air Quality: Regulatory Structure

U.S. Environmental Protection Agency

- Adopts Health-Based National Air Quality Standards
- Regulates Interstate Sources (Trucks, Trains, etc.)



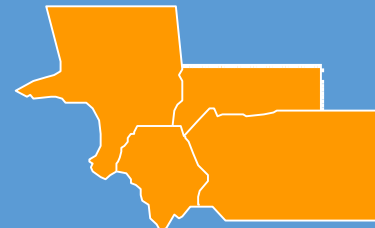
California Air Resources Board

- Adopts Health-Based State Air Quality Standards
- Regulates Cars, Trucks, Fuels, Consumer Products

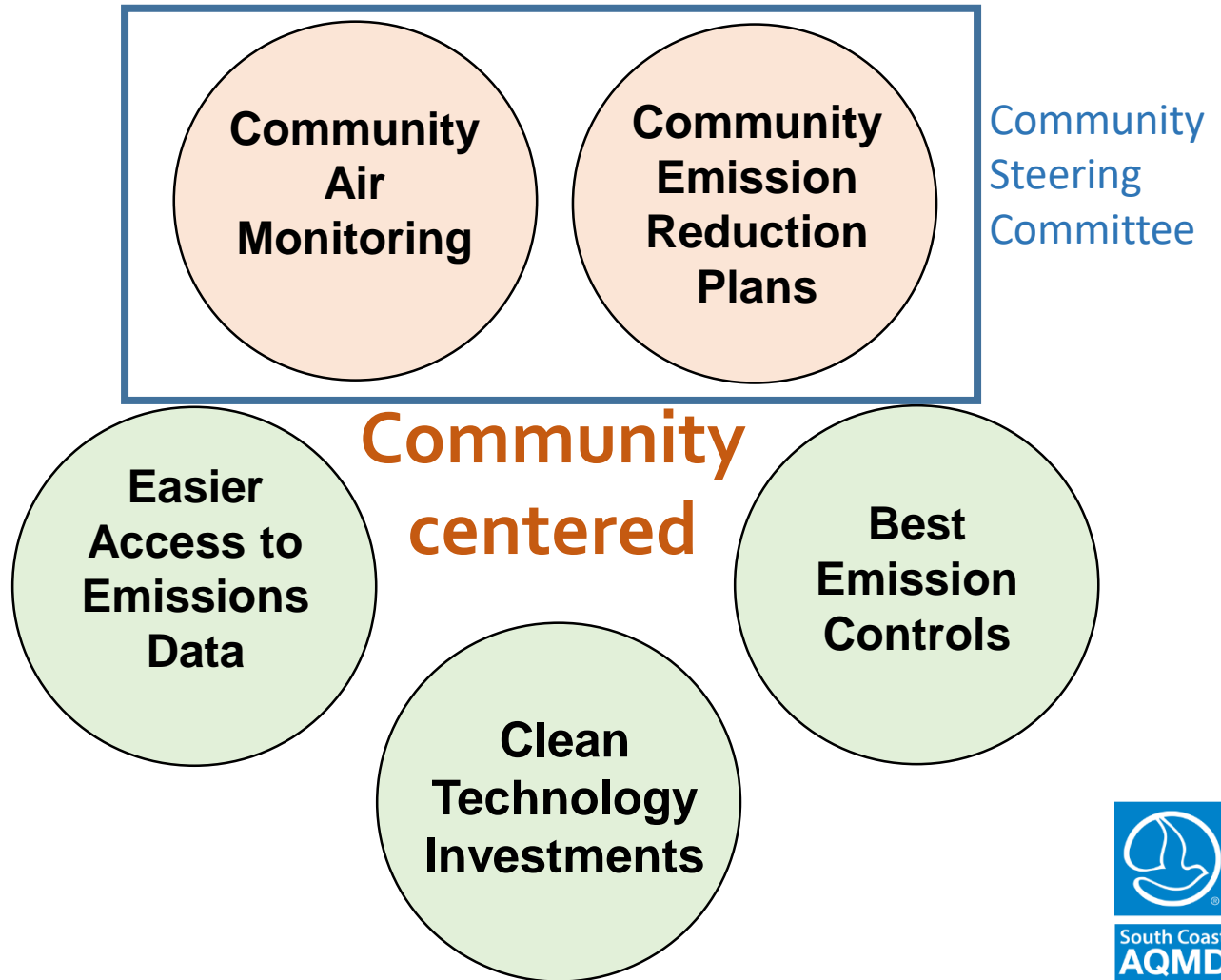


Local Air Districts (SCAQMD)

- Monitor Air Quality; Issue Health Alerts
- Prepare Clean Air Plans
- Regulate over 27,000 Stationary Sources
- Issue over 10,000 permits annually



Key elements of AB 617



Key milestones in statute

2019

Jul

July 1 – Deadline for SCAQMD to deploy **air monitoring** for **YEAR 1 communities**

2019

Sep

Sept 27 – Deadline for SCAQMD to adopt **emissions reduction plans** for **YEAR 1 communities**

2023

Dec

December 31 – Deadline for SCAQMD to implement **Best Available Retrofit Control Technology (BARCT)**



Community Steering Committee

Purpose

Identify and prioritize air pollution issues

Provide input on community definition

Guide strategies for:

- **Community air monitoring**
- **Emissions reduction program**

Develop approaches and assist with community outreach

Track progress

Who should/will be part of it?



Active residents and community leaders



Local business owners or workers



Community organizations

Others

Agencies, e.g. Local land use, public health, etc.

Community Air Initiatives Program Structure and Timeline



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

Air Quality: Background



What's in the air?

Gases:

- Oxygen
- Carbon Dioxide
- Sulfur Oxides,
- Nitrogen Oxides,
- Volatile Organic Compounds
- Ozone
- Water Vapor
- Other

Particulate Matter:

- Dust
- Smoke particles
- Diesel PM
- Water droplets
- Sea Spray
- other

When does it become air pollution?

When their **concentration is high enough** for a **long enough period of time** to cause damage in human health and/or the environment

Key types of air pollution



Greenhouse Gases



Criteria Pollutants



Toxic Air Contaminants

Global

Regional

Local

Examples:

- Carbon Dioxide (CO₂)
- Methane (CH₄)
- Chlorofluorocarbons (CFCs)
- Hydrofluorocarbons (HFCs)
- Nitrous Oxide (N₂O)

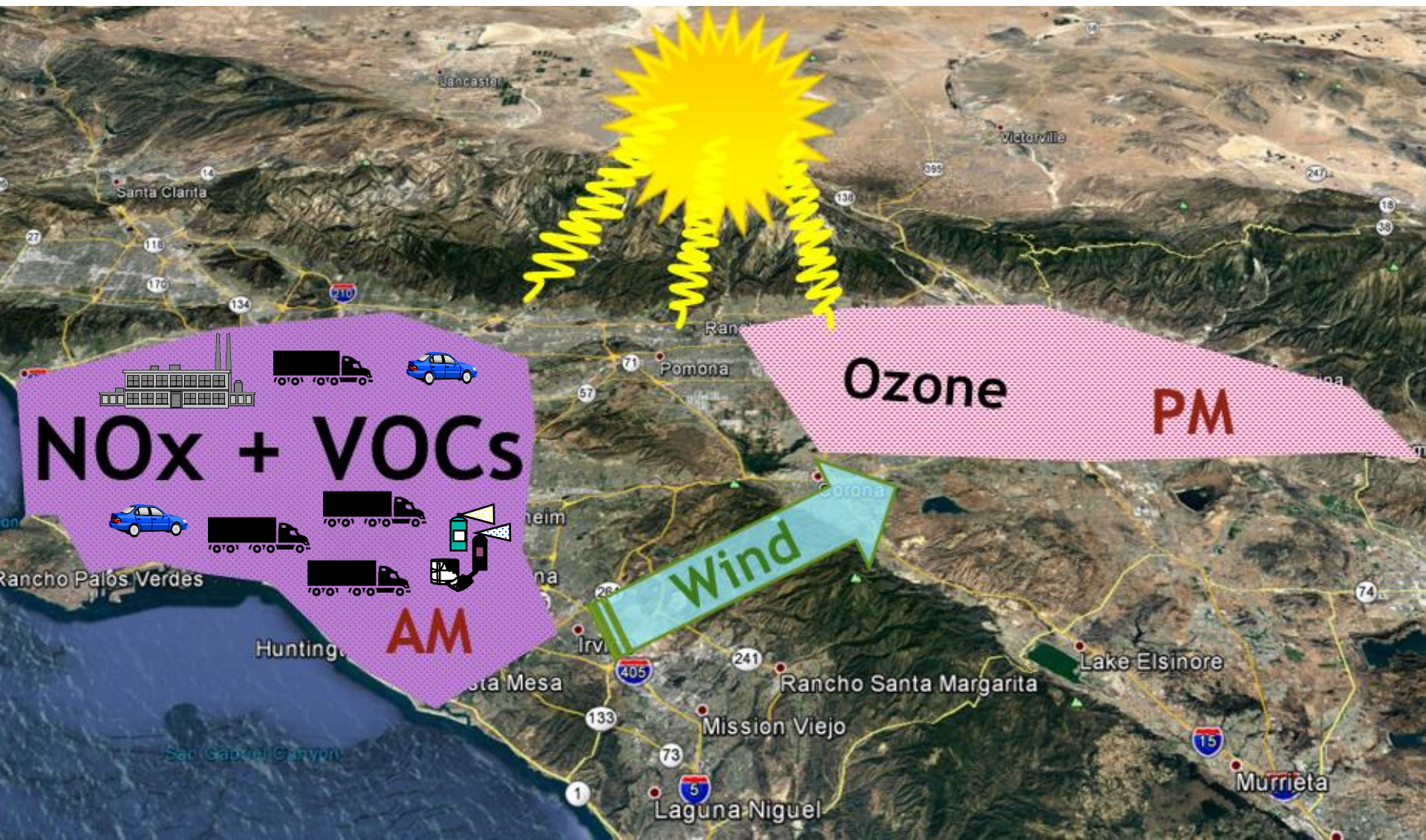
Examples:

- Carbon Monoxide (CO)
- Lead (Pb)
- Nitrogen Dioxide (NO₂)
- **Particulate Matter (PM)**
- **Ozone (O₃)**
- Sulfur Dioxide (SO₂)

Examples:

- Diesel PM
- Arsenic
- Hexavalent Chromium
- Benzene
- Nickel
- Mercury
- ... dozens more

Ozone is one of the main components of our regional smog

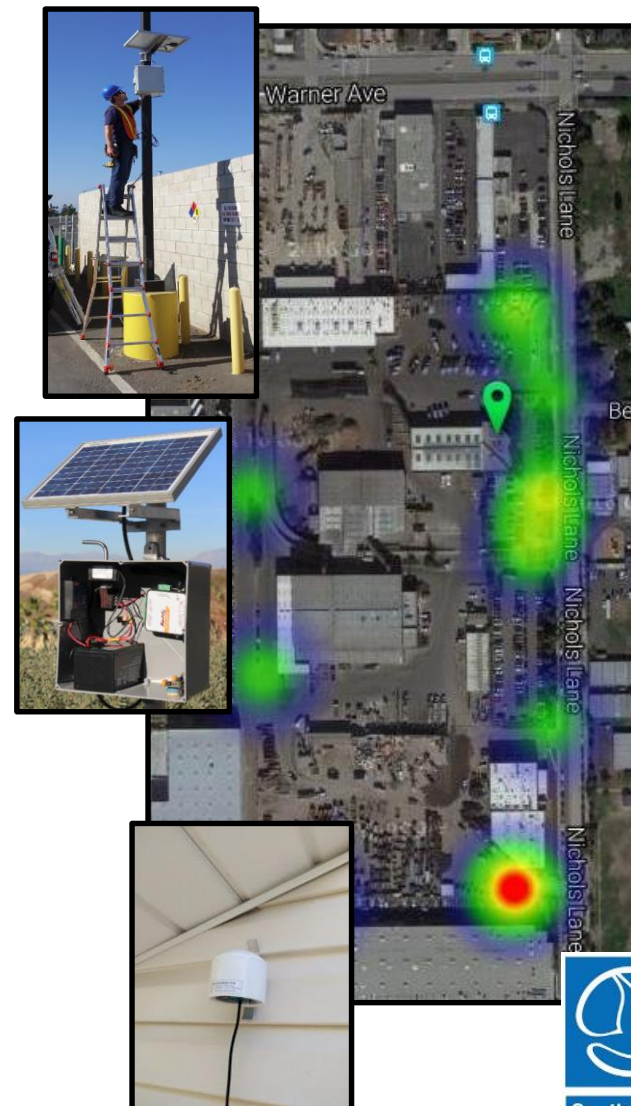


Monitoring efforts

Regulatory monitoring stations



Low-Cost Sensor Networks



Mobile Laboratories



Air Quality Planning

Understand what, where, when
and how much air pollution is
being emitted today.

Predict how those emission will
change in the future (population
and economic growth, adopted
regulations, etc.)

Estimate air quality impacts and
emission reductions needed to
achieve goals

Develop measures to achieve
desired emission reductions

Implement measures, track
progress

Emissions inventory
(Base Year)

Emission inventory
(Future Baseline)

Modeling

Strategy
Development

Accountability
(Monitoring,
Modeling, etc.)

What types of measures might we develop for these community plans?

Regulatory actions along with **focused enforcement** and timelines:

- Driven by data
- Enforceable agreements
- Rule development



Incentive funding to provide investments in:

- Cleaner technologies
- Needed infrastructure

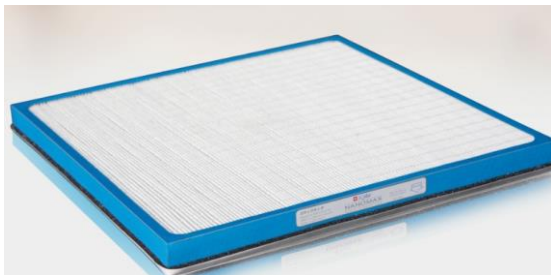


A white Volvo truck with 'HE' branding on the cab and trailer, parked outdoors. The truck is a semi-truck with a white cab and a white trailer. The number '351056' is visible on the side of the cab. The background shows a clear blue sky and some distant hills.

- **Alternative trucks routes or timing**
- **Storage and container staging facilities**
- **Reducing vehicle miles travelled**



- Local government agencies (Public Health)
- Local land use planning



- Air filtration
- Buffers
- Vegetation barriers

Los Angeles

San Bernardino

Existing Air Pollution Data

Riverside

Orange

**Wilmington, Carson
and West Long Beach Community**



Community Demographic Factors and Facilities

Community	Wilmington W Long Beach Carson
Population	261267
Population Density (people/km2)	2097
Area (km2)	125
Number of facilities	
AB2588	*24
TitleV	54
Superfund Sites	0
Rule 1469	6
Rule 1426	1
Rule 1407 & Rule 1420	1
Total of Regulation XIV facilities	8

* Active facilities in 2017

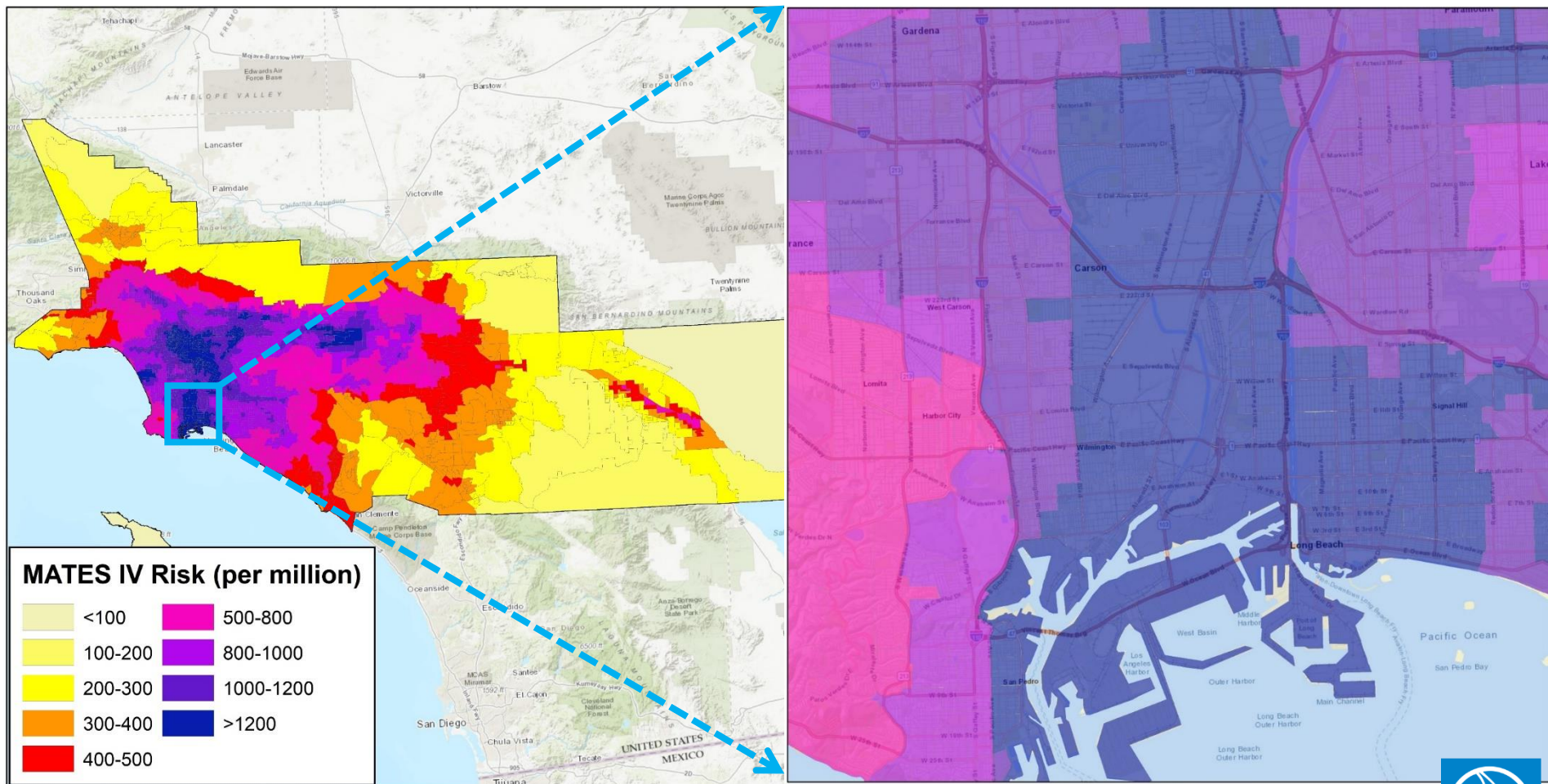
Regulation /Program	Description
Title V	Large facilities subject to Title V permit requirements
AB2588	Air Toxics Hot Spot Program
R1469	Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations
R1426	Emissions from Metal Finishing Operations
R1407	Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Ferrous Metal Melting Operations
R1420	Emissions Standard for Lead

**Wilmington, Carson
and West Long Beach Community**

Currently Available Studies

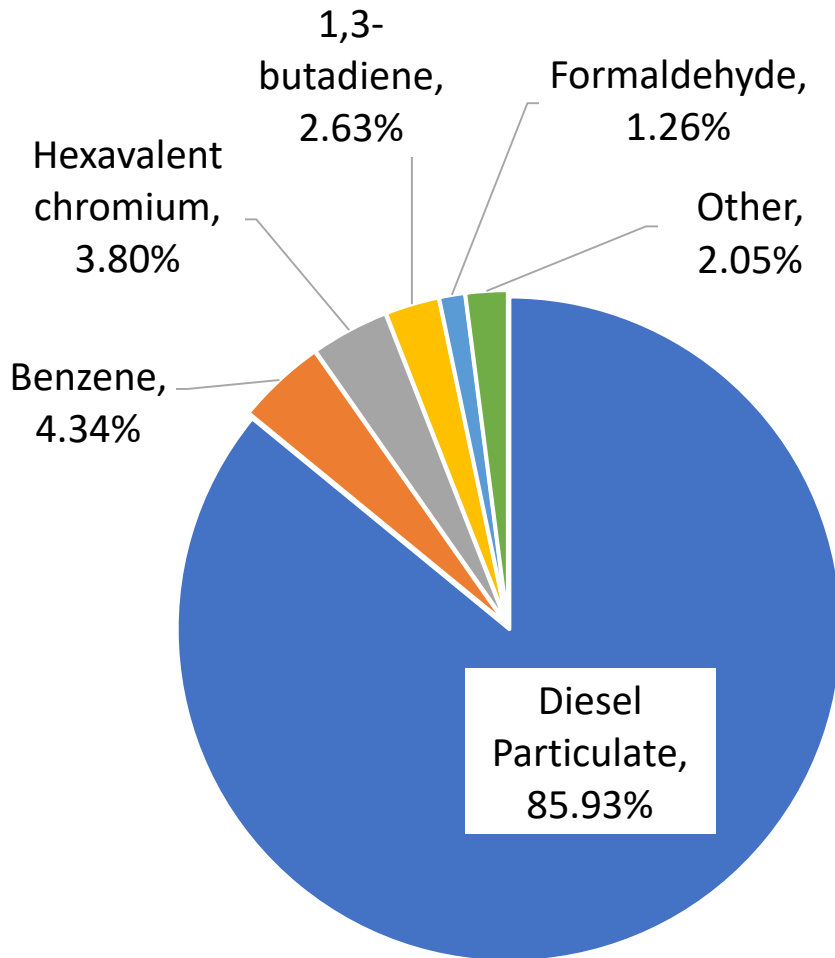
- Multiple Air Toxics Exposure Study IV
 - Conducted in 2012-2013
 - Estimated air toxics exposure and its sources through emissions inventory, modeling, and monitoring
- AB 2588 Air Toxics “Hot Spots” Program
 - Estimated emissions and health risks from facilities subject to the program
 - 24 active facilities are located in the community.
- Other monitoring and health studies
 - Refinery monitoring pilots
 - USC Children’s Health Studies

Air Toxics Cancer Risk (MATES IV)



Wilmington, Carson
and West Long Beach Community

Cancer Risk-Weighted Air Toxics Emissions



Air Toxic Species	Contribution (%)
Diesel Particulate	85.93%
Benzene	4.34%
Hexavalent chromium	3.80%
1,3-butadiene	2.63%
Formaldehyde	1.26%
Arsenic	0.38%
p-dichlorobenzene	0.37%
Perchloroethylene	0.33%
Cadmium	0.28%
Naphtalene	0.20%
Acetaldehyde	0.19%
Nickel	0.18%
Methylene Chloride	0.08%
Trichloroethylene	0.04%
Lead	0.01%

Wilmington, Carson
and West Long Beach Community

Emission Source Categories

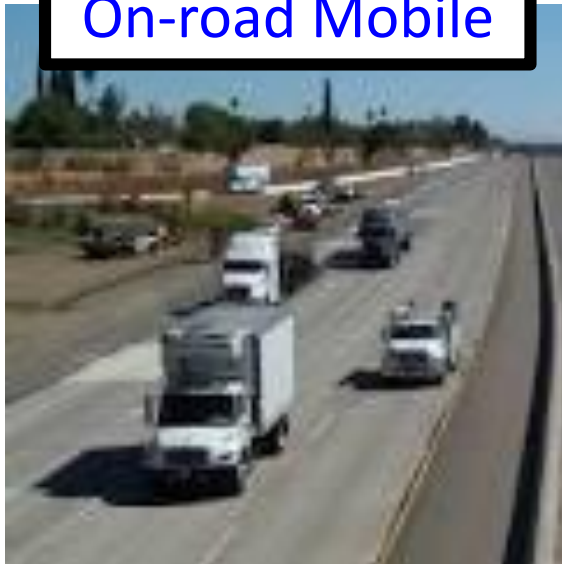
Point



Area



On-road Mobile

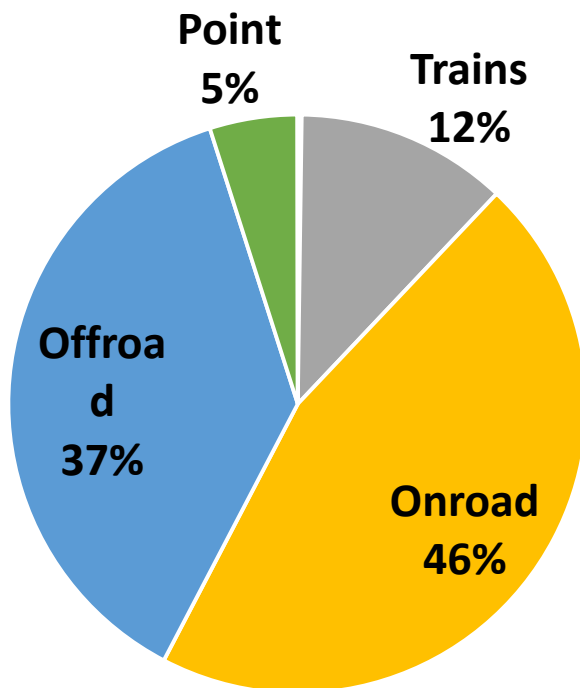


Off-road Mobile

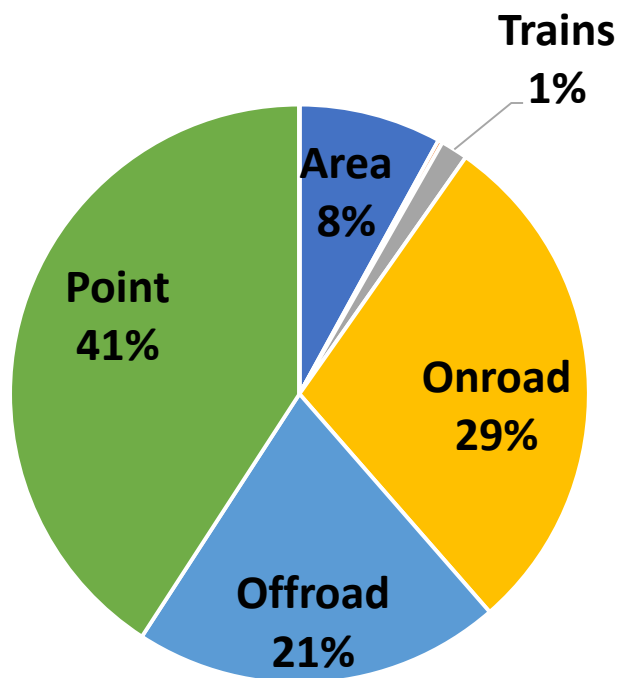


What are the Sources of Air Toxic Emissions?

Diesel Particulate



Benzene



On-Going and Near-Future Analysis

- Multiple Air Toxics Exposure Study V: 2018 – 2019
- Advanced monitoring using optical remote sensing, aircrafts and mobile platforms
- Fenceline and community air monitoring at and near refineries under Rule 1180



Wilmington, Carson
and West Long Beach Community

Summary of the Air Pollution Emission Profiles by Major Source Category

- Air toxics cancer risk is mostly driven by Diesel PM from both on-road and off-road mobile sources
 - VOC and metal emissions from all types of sources are also important (including stationary sources)
- There is a lot of existing data that can be used as the basis for plan development
- We are working on new data, modeling and monitoring, which will inform planning efforts when available



Community “Boundaries”

**Wilmington, Carson
and West Long Beach Community**

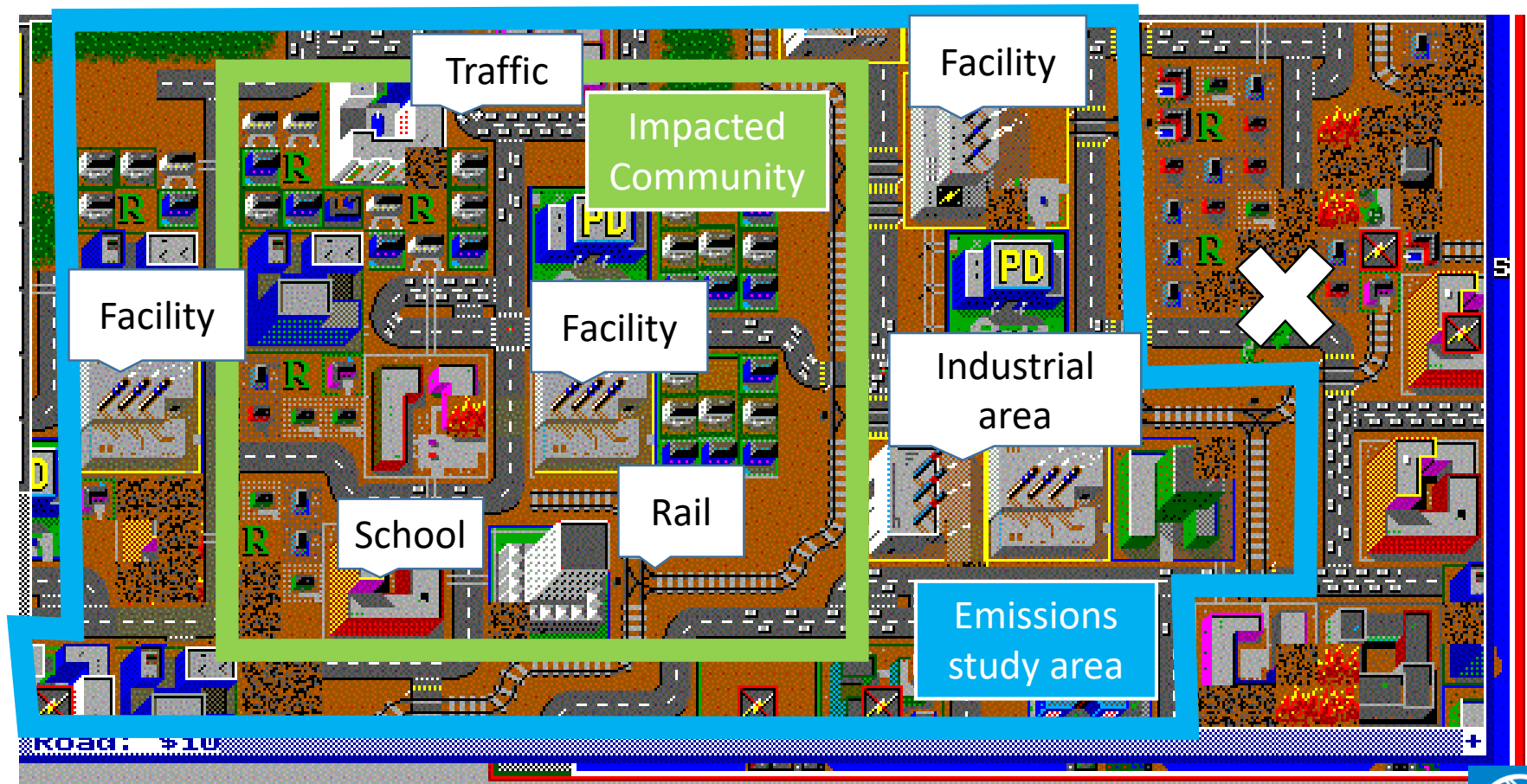


Community “Boundaries”

- Purpose: to guide where AB 617 resources in this community will be focused
- How to do this:
 1. Identify the main “impacted area”
 2. Identify “emissions study area” which includes the “impacted area”, plus nearby air pollution sources

NOTE: Neighborhoods outside the “impacted area” will still benefit from reducing air pollution emissions near the boundary.

Community Boundaries - Example

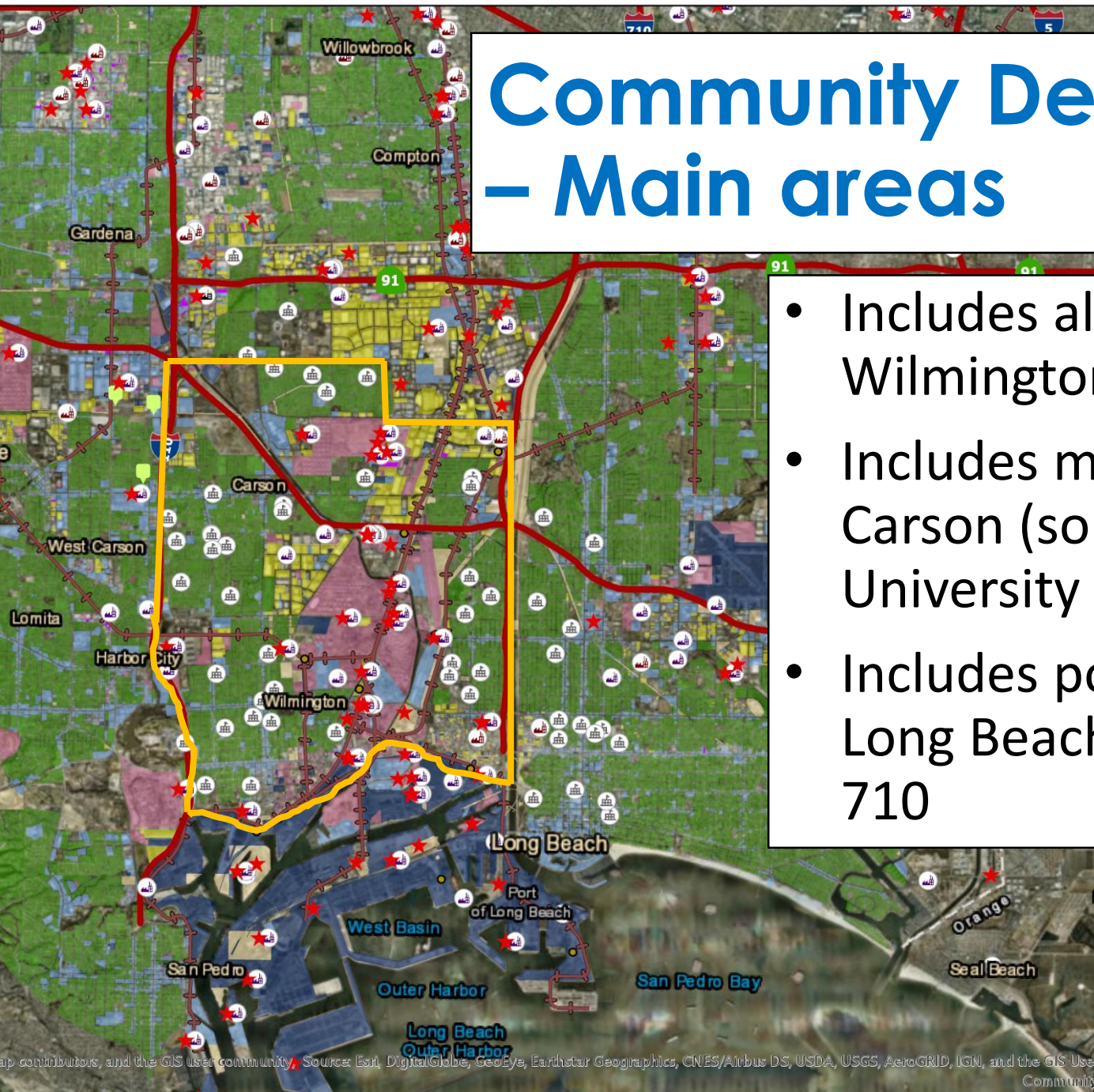


Community Boundaries - Options

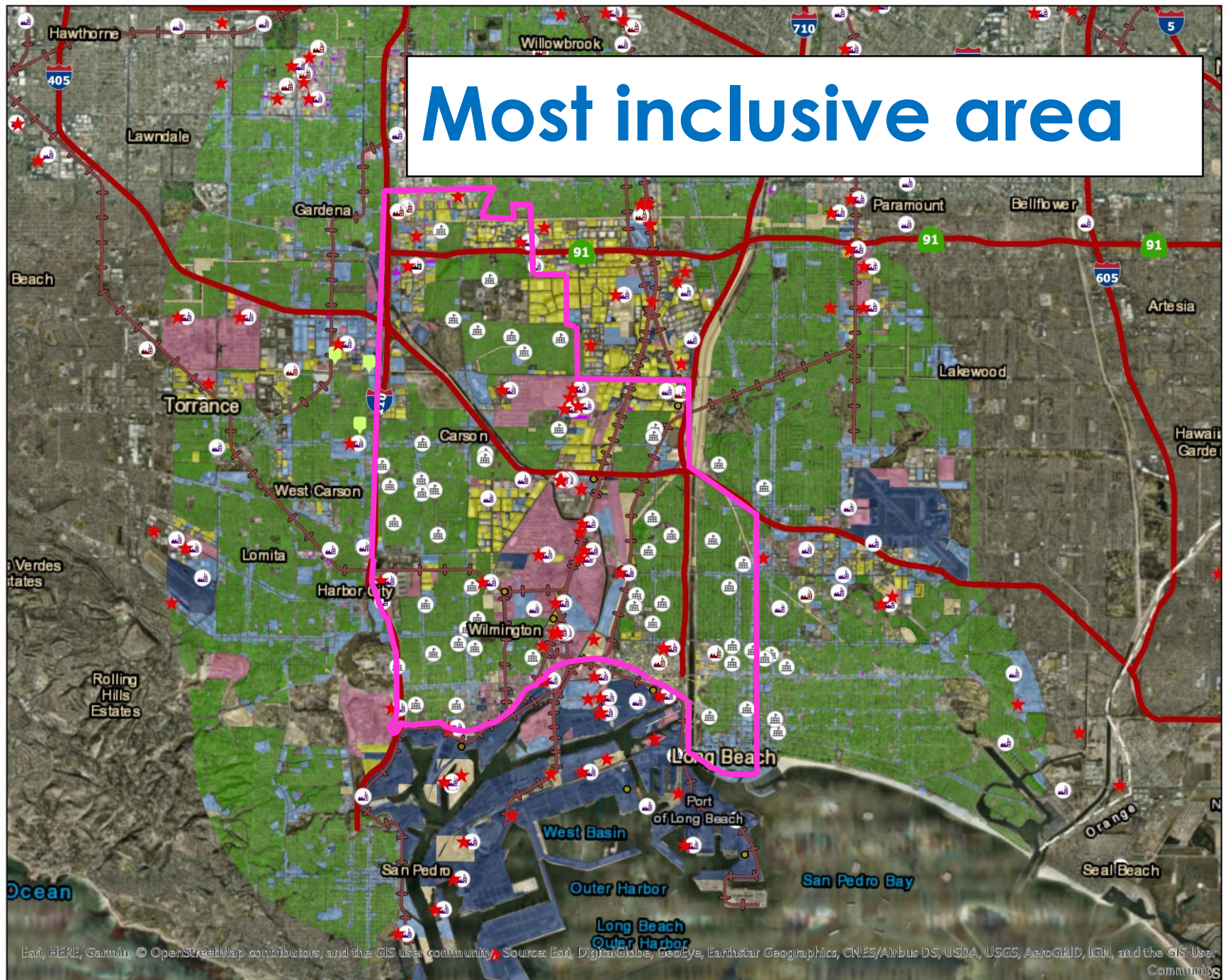
- This would designate the “Impacted Community”
- Community Steering Committee members can vote for your preferred boundaries
- Considerations:
 - First Question: northern boundary (Carson area)
 - Second Question: eastern boundary (Long Beach area)

Community Definition – Main areas

- Includes all of Wilmington
- Includes most of Carson (south of University Dr.)
- Includes portion of Long Beach west of I-710

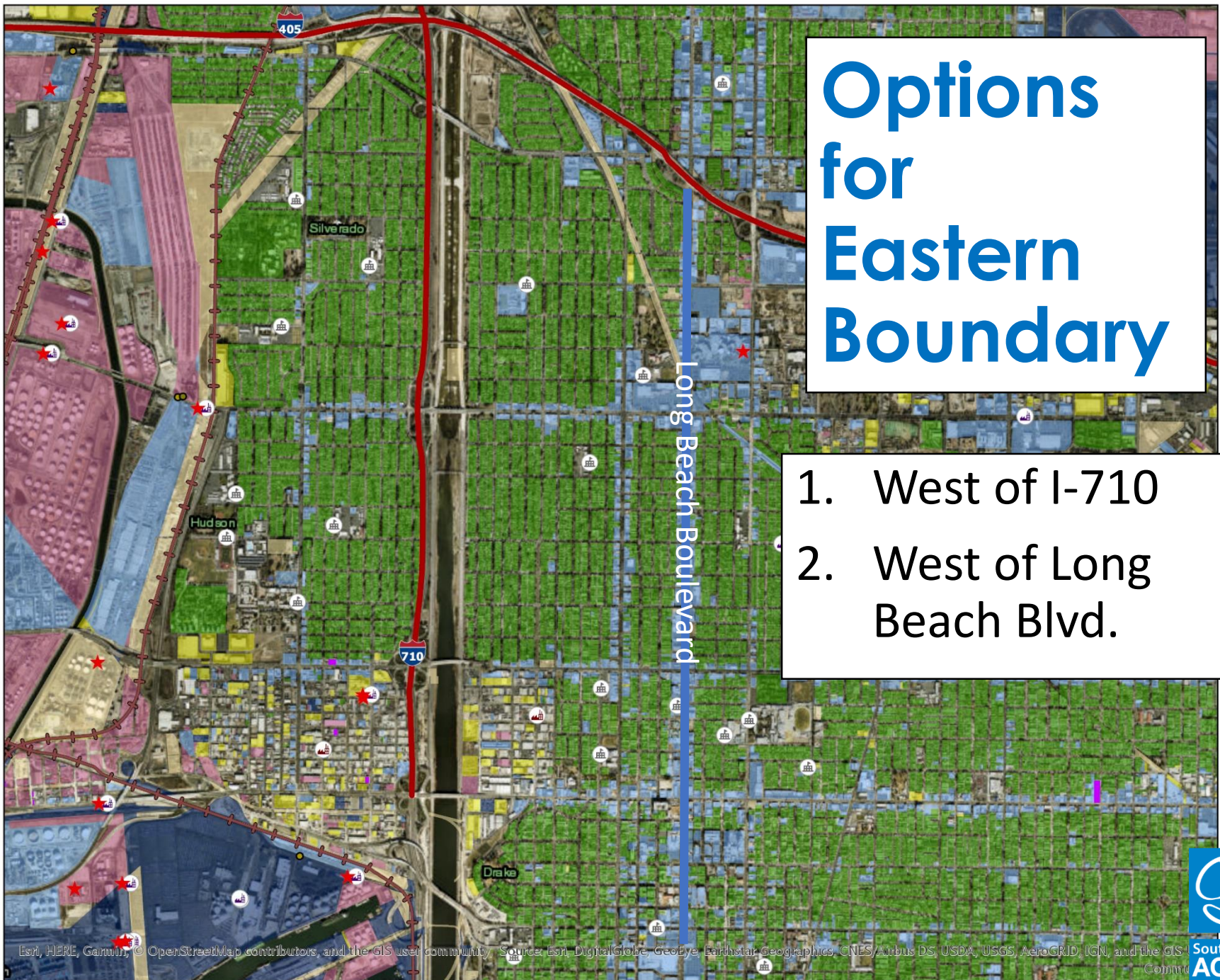


Most inclusive area

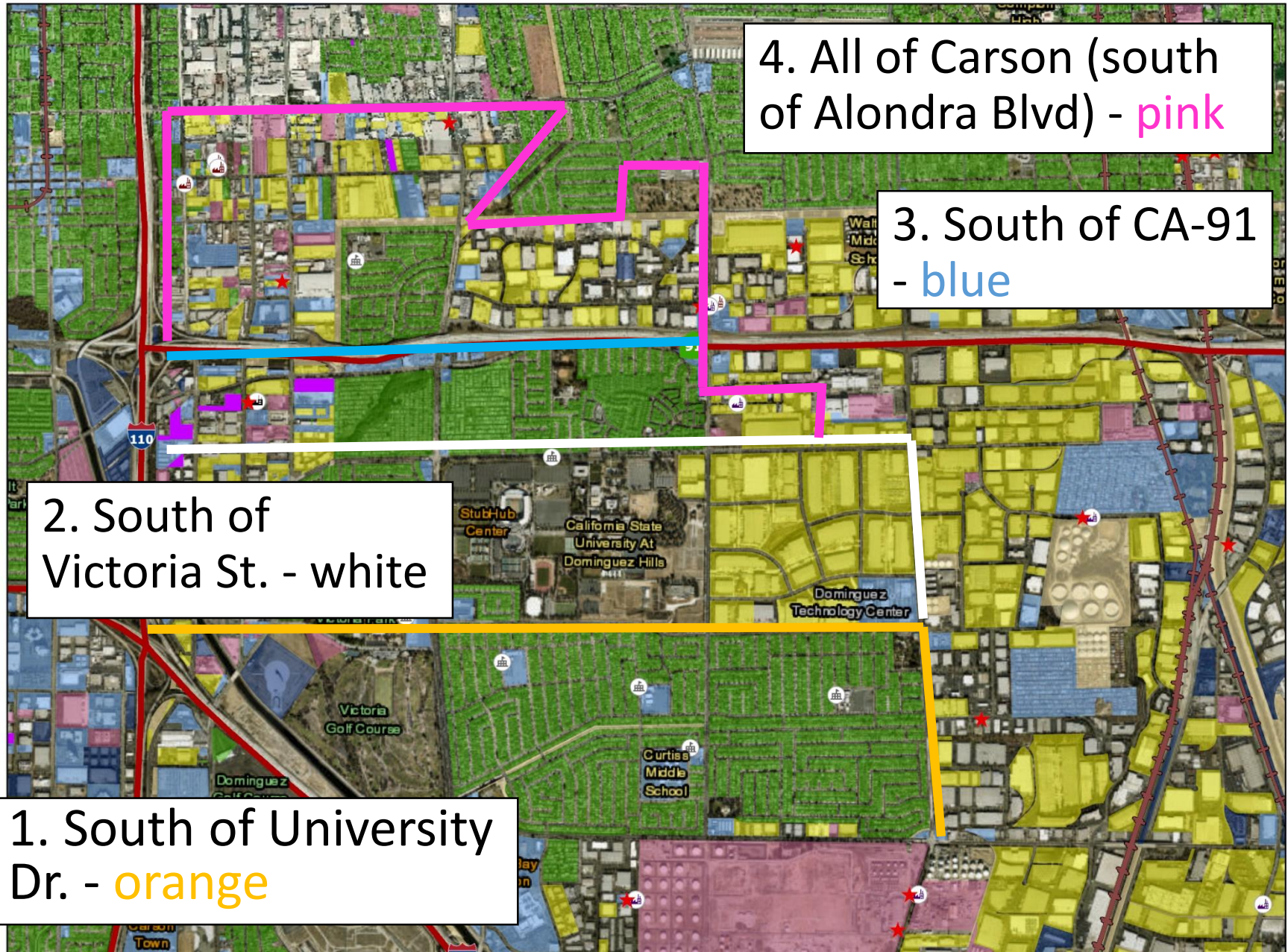


Options for Eastern Boundary

1. West of I-710
2. West of Long Beach Blvd.



Options for Northern Boundary



Air Quality Concerns Mapping Activity

Purpose:

- To get input about specific air quality concerns in this community
 - Which facilities
 - Which areas
 - Which concerns

What we will do with this information:

- Organize list of concerns
- Evaluate how they compare with the technical data
- Work with CSC to prioritize concerns that can be addressed through AB 617 Community Air Initiatives in this community



A large silver tanker truck is driving on a two-lane highway that curves through a dry, hilly landscape under a clear blue sky. The truck's polished tank reflects the surrounding environment. The truck is a green and silver M/A Bee model, with the company name visible on the side and rear. The license plate is 4GZ7883. A semi-transparent white box with a black border is overlaid on the center of the image, containing the text "Clean Air Incentives".

Clean Air Incentives



SCAQMD's Main Incentive Programs



Carl Moyer Program

- Trucks
- Transit buses
- Refuse trucks
- Public agency/utility vehicles
- Emergency vehicles
- Construction/Ag
- Marine Vessels
- Shore Power
- Locomotives
- Cargo Handling
- Infrastructure



www.AQMD.gov/Moyer



- 1998 – Present
- \$467 Million
- 6,708 vehicles
- Emissions Reduced (tpy):
NOx: 7,598 PM: 222

Prop 1B

- Trucks & TRU
- Locomotives
- Shore Power
- Cargo Handling



- 2009 - Present
- \$485 Million
- >7,300 vehicles
- Emissions Reduced (tpy):
NOx: 7,086 PM: 220

SCAQMD's Main Incentive Programs

Replace Your Ride

- Light-Duty Vehicles
- Alternative Mobility Options (transit passes, Uber, Lyft)
- Electric vehicle chargers

www.ReplaceYourRide.com



- 2015 - Present
- \$24 Million
- 3,100 vehicles
- Emissions Reduced (tpy):
NOx: 29 HC: 67 CO: 8,031

Lower Emission School Bus Program

- School buses
- Infrastructure
- CNG tank replacements



- 2001 - Present
- \$280 Million
- 5,000 vehicles
- Emissions Reduced (tpy):
NOx: 219 PM: 25

Incentive Projects for Community Air Protection

Carl Moyer and Prop1B (AB134)



- \$101 million project funds from AB 134
- 89% are located in disadvantaged and low-income communities



Projects include:

- Heavy-duty trucks, refuse collection vehicles, food delivery trucks – 90% cleaner than current standards
- Off-road equipment – cleanest equipment available
- Infrastructure



- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">➤ Wilmington, W Long Beach, Carson (\$9,036,563)➤ Pacifica Trucks, LLC➤ Ventura Transfer Company➤ TKS Leasing, LLC➤ Tricon Transportation Inc.➤ Coachwest Transportation Inc.➤ CSC Logistics Inc.➤ Toll Global Forwarding SCS (USA), Inc.➤ Fred Martinez➤ USA Waste of California, Inc.➤ G & M Leasing Company➤ Hudson Group (HG) Retail LLC➤ Clean Energy Fuels | <ul style="list-style-type: none">➤ Carnage Fish Company, Inc.➤ Clinton Nguyen➤ Daniel Hernandez Fishing Adventures➤ Harbor Breeze Corp.➤ Long Beach Anglers, Inc.➤ Seal Beach Anglers, Inc.➤ Seamus Callahan➤ Toronado Sportfishing, Inc.➤ SA Recycling, LLC➤ Cal Cartage Warehouse & Transloading LLC. |
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Incentives for Community Air Protection

Early actions
to reduce
emissions

AB134 (2017)
SB856 (2018)

Reducing
emissions in
**disadvantaged
and low-income
communities**

AB134

- \$107.5 million to SCAQMD
- Carl Moyer Program (up to 40% for clean truck projects)

SB 856

- \$245 million (statewide)
- Mobile Sources
- Charging Infrastructure
- Stationary Sources
- Projects for community Emission Reduction Plans

New Opportunities from Second Year Incentive Funds

- \$245 million statewide in Community Air Protection Funds for:
 - Mobile source projects, again through Moyer and Proposition 1B
 - Zero-emission charging infrastructure, especially for medium and heavy-duty vehicles
 - Stationary source projects to reduce air toxics and criteria pollutants
 - Projects and programs in Community Emission Reduction Programs



- Project allocations to be consistent with community priorities
- Early or extra emission reductions – beyond rules and regs
- Cannot fund equipment at Cap-and-Trade facilities
 - Address through other measures
- Statute puts priority on zero-emission equipment



Developing New Incentive Projects

- Guidelines needed for added incentive strategies
- What are the pollutants that pose higher risk, and where do they come from?



- Risk-weighted emissions inventory for this area suggests:
 - Diesel particulate from trucks, heavy equipment, water transportation
 - Hexavalent chromium from plating and polishing, metal product fabrication, scrap and waste materials, aircraft parts & equipment
 - Lesser but measureable impacts: Benzene, PAHs, naphthalene from chemical storage tanks, petroleum bulk stations and terminals, industrial chemicals



Other sources in the Community Emission Reduction Program?



Next Steps on New CAP Incentives

- CARB seeks your comments and ideas on the key sources to address with incentive funds!
 - Tonight
 - Other meetings or phone calls
 - Emails to carlhelp@arb.ca.gov
- Develop new guidelines in first half of 2019
 - Add key stationary sources with incentives potential
 - Consider new mobile sources (e.g., lawn and garden)
 - Other programs/projects identified in CERPs
- Continue progress on mobile sources and zero-emission infrastructure as new guidelines are developed



Steering Committee Charter and Meeting Logistics



CSC charter

What is it?

A document that **outlines the conditions** under which the community steering committee is organized, and defines its goals, membership process, roles and responsibilities



Why is it needed?

It formally **authorizes the existence of the committee** and provides a reference source for the future. The charter gives a direction and a purpose from start to end.

How is it approved?

All community members must approve CSC charter **by signing the CSC participation agreement**. By doing this, each CSC member agrees to the principles, goals and expected conduct during the development of the Community Air Plan

Some questions for the CSC

1. Any feedback on the charter?
2. Would it be helpful if we had a short bio from everyone that we can post on our website?
3. We are thinking of putting together a single Community Initiative Technical Advisory Group
 - Discuss data and methods for modeling, monitoring, inventory
 - 2-3 members from each of our three Year 1 communities plus technical experts
 - Quarterly meetings
 - Would anyone here like to be part of it? Any nominations?
4. Any agenda requests?

Next Steps

- Complete the Survey
 - We will share results, which will help us plan future meetings
- Materials to review before the next meeting:
 - Final charter, for you to sign and return
 - Summary of air pollution concerns identified today
- Next meeting: January 2019 (date TBD)
- Likely Topics:
 - Air pollution monitoring
 - Prioritization of community air pollution concerns
 - Rulemaking update on Best Available Retrofit Control Technology

Questions?

More information on AB 617:

www.aqmd.gov/AB617

Email: AB617@aqmd.gov

Follow us [@SouthCoastAQMD](https://www.instagram.com/SouthCoastAQMD)

