Chapter 3: Community Profile

Introduction

It is essential to understand the characteristics of a community and the profile of air pollution sources in order to address community air quality priorities. The following community profile provides a general overview of the East Los Angeles, Boyle Heights, West Commerce (ELABHWC) community, including the types of air pollution impacting the community, and a characterization of public health and socioeconomic factors. In addition,

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Chapter 3 Highlights

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- The community profile is based on input from the Community Steering Committee throughout the CERP development process
- The Community Steering Committee identified the top air quality priorities to be addressed in the CERP
- Data on land use, toxic air pollution impacts, public health factors, and social and economic factors in the community provides useful background information
- Information about the sources of air pollution in this community is presented in a "source attribution" analysis [currently under development]

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this section includes information about the community boundary that reflects input from the Community Steering Committee (CSC), a summary of the air pollution concerns identified by the community, and the air quality priorities based on CSC and public input. These air quality priorities are addressed in the Community Emission Reduction Plan (CERP) actions, described in Chapter 5.

Community Boundary, Air Quality Concerns and Air Quality Priorities

During monthly CSC meetings, committee members, members of the public, and South Coast AQMD staff worked together to shape the elements and actions described in this Plan. Topics discussed with the CSC include:

- What should be the community **boundaries** for the AB 617 community plans?
- What **air quality concerns** does the community have?
- What are the top **air quality priorities** that the community would like to address through the AB 617 CERP?
- What **priority actions** should be included in the CERP?
- What should the **goals** for the priority actions include?
- Any additional **feedback on the Draft CERP**

The process is summarized in Table 3-1. CSC members discussed which geographic areas should be included within the community boundary, shown in Figure 3-1. The East Los Angeles, Boyle Heights, West Commerce CSC established two distinct community boundaries to represent this community for the purpose of AB 617 community plan implementation. The "Impacted Community" boundary focuses on the places in the community where people live, work, go to

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school, and spend the majority of their time. The "Emissions Study Area" boundary includes both the Impacted Community and additional air pollution sources (e.g. facilities and major truck routes) that may affect the Impacted Community. Regions within and near either community boundary will benefit from the emissions reductions within the boundary.

The CSC and members of the public participated in an interactive mapping activity to identify community air quality concerns, which were posted on the webpage[1]. These community air quality concerns are shown in Figure 3-1 and listed in Figure 3-2. The vast majority of the concerns identified were within the Emissions Study Area.

Next, the air quality concerns were grouped into categories (e.g. metal processing, truck and automobile traffic, railyards, etc.), and the CSC and members of the public prioritized the top air quality concerns. CSC members were invited to provide ideas and input on CERP actions and also meet with South Coast AQMD staff to draft CERP actions together. The highest priority actions were included in the draft CERP based on input from the CSC members.

The work to implement the CERP and CAMP[2] is dynamic, thus certain action items have been written with built-in flexibility to permit necessary adjustments as new information becomes available. South Coast AQMD staff is committed to working with CSC members to evaluate ongoing actions and progress.

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[1] Interactive map of air quality concerns in the East Los Angeles, Boyle Heights, West Commerce community: https://scaqmd-online.maps.arcgis.com/apps/View/index.html?appid=3e6b40c9a9d94d01bf8d1cc02767370c&extent=-118.2963,33.9664,-118.0650,34.0778

[2] Community Air Monitoring Plan (CAMP) for the East Los Angeles, Boyle Heights, West Commerce community: http://www.aqmd.gov/docs/default-source/ab-617-ab-134/camps/elabhwc-camp.pdf?sfvrsn=4

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Table 3-1. Process of CSC Input on CERP elements

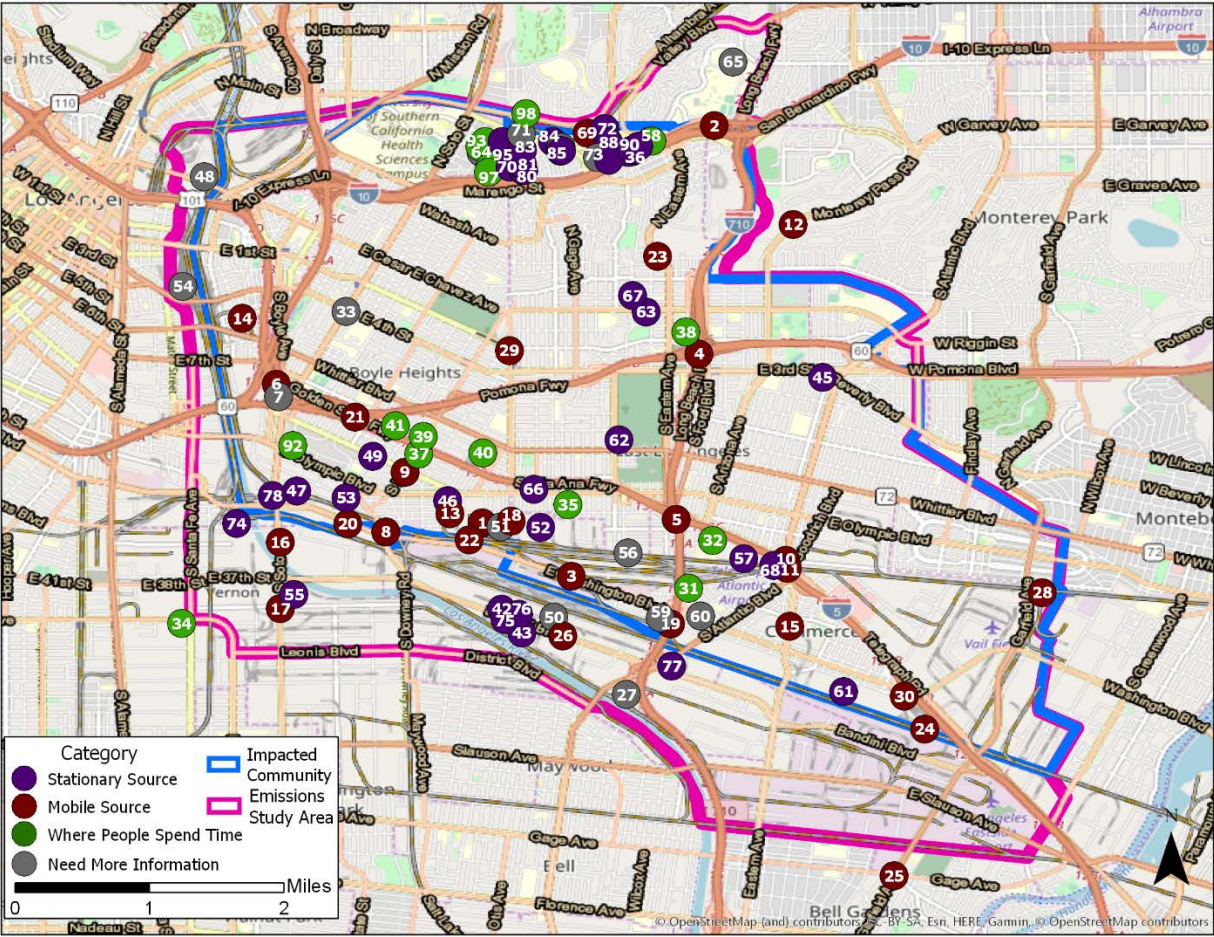| CSC Meeting #	Discussion Topic(s)	What type of input did the CSC give?	How was this CSC input used in the CERP development process?
#1 November 2018	Community Air Quality Concerns and Community Boundary	Refined community **boundaries**. Identified community air quality **concerns**. Outcome: list of air quality concerns	**Boundaries** were used to define focus area for CERP actions (see Meetings #4-5). **Concerns** were prioritized for inclusion in Plans (see Meeting #3).
#2 January 2019	Community Boundary	Refined **community boundaries**. Outcome: community boundary	**Boundaries** were used to define focus area for CERP actions (see Meetings #4-5).
#3 February 2019	Air Quality Concern Prioritization	Prioritized which concerns would be addressed in Plans. Outcome: air quality priorities	Actions were developed for **air quality priorities** (Meetings #4 and #5)
#4 March 2019	Strategies & Proposed Actions (Part 1)	Ideas for **actions** can be written into the Plans. Staff will work with CSC members to write CERP actions. Outcome: draft focused list of actions for CERP **Community bus tour** provided additional insight on community concerns and experiences.	Feedback on actions were used to develop the list of **priority actions** (Meeting #6).
#5 April 2019	Strategies & Proposed Actions (Part 2), Draft CAMP, and Draft CERP Table of Contents & Action Template		
#6 May 2019	Focused list of CERP Actions ("priority actions")	Provided feedback on which **priority actions** should be included in CERP. Outcome: list of priority actions for CERP	Feedback on actions were used to finalize the list of **priority actions** to be included in the **Draft CERP.**
#7 June 2019	Draft CERP, Goals for each CERP Action (Part 1)	Feedback on **Draft CERP**. Ideas for specific goals for each CERP action. Outcome: Revised Draft CERP	Feedback on **Draft CERP** and ideas for specific goals will be used to inform the **Draft Final CERP** in the Board package.
#8 July 2019	Goals for each CERP Action (Part 2)		
#9 August 2019	Final Discussion of Draft CERP	**Final revisions** for Draft CERP before it is submitted to South Coast AQMD Board for consideration. Outcome: Draft Final CERP and Appendices	Final comments to be addressed in **Draft Final CERP** that is part of the Board package.

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Figure 3-1. Impacted Community and Emissions Study Area boundaries of the East Los Angeles, Boyle Heights, West Commerce community

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Figure 3-2. List of air quality concerns identified by the CSC and members of the public

Label	Concern Name	Category	Label	Concern Name	Category
1	Preferred cold service business	Mobile Source	51	Refinery	Need More Info
2	Metrolink	Mobile Source	52	99 Cents facility	Stationary Source
3	BNSF Railyard/Union Pacific	Mobile Source	53	Textile Companies – A Plus Fabrics	Stationary Source
4	710/60 Fwy Intersection	Mobile Source	54	Tire Shops, other industry	Need More Info
5	710/5 Fwy Intersection	Mobile Source	55	Farmer John	Stationary Source
6	East LA Interchange	Mobile Source	56	Construction of cold storage	Need More Info
7	Transfer Yard	Need More Info	57	Adel Wiggins Group-Industry	Stationary Source
8	Truck Route	Mobile Source	58	Metal facility	Need More Info
9	Truck Route on Lorena St.	Mobile Source	59	Industrial Sources	Need More Info
10	Trucks	Mobile Source	60	Oil Production	Need More Info
11	Trains	Mobile Source	61	Refuse of Energy Facility	Stationary Source
12	Warehouses	Mobile Source	62	Calvary Cemetery	Stationary Source
13	Trucks Idling	Mobile Source	63	De La Rosa Auto Services	Stationary Source
14	Trucks Idling	Mobile Source	64	Pollution around Murchison St.	Need More Info
15	Truck Route	Mobile Source	65	Sulfur smell near CSULA	Need More Info
16	Truck Route	Mobile Source	66	Soil remediation from closed gasoline retail	Need More info
17	Trucks	Mobile Source	67	Soil remediation from closed gasoline retail	Need More Info
18	Trucks	Mobile Source	68	Plating Site	Stationary Source
19	710 Fwy	Mobile Source	69	Hai's Trucking	Mobile Source
20	Truck Route	Mobile Source	70	JSL Foods	Stationary Source
21	Freeway Interchange	Mobile Source	71	Xebec Developer/Last Mile Infill	Need More Info
22	Trains and Trucks Idling	Mobile Source	72	Polychemie	Stationary Source
23	Heavy Industry	Mobile Source	73	Republic Services	Need More Info
24	BNSF Intermodal Railyard	Mobile Source	74	Darling Delaware	Stationary Source
25	Traffic	Mobile Source	75	Baker Commodities	Stationary Source
26	Bandini Blvd	Mobile Source	76	West Coast Rendering	Stationary Source
27	Construction of CEMEX	Need More Info	77	D & D Cremation Services	Stationary Source
28	Rail Traffic	Mobile Source	78	Toxic Waste Handlers	Stationary Source
29	Truck Traffic	Mobile Source	79	Accurate Plating Co	Stationary Source
30	Truck Traffic	Mobile Source	80	Cardenas Auto/Body Repair	Stationary Source
31	Bandini Park	Where People Spend Time	81	B and B Towing Service	Stationary Source
32	Bristow Park	Where People Spend Time	82	Southland Disposal	Stationary Source
33	New School development at old Lincoln Hospital	Need More Info	83	GU's Recycling	Stationary Source
34	Vernon City Elementary School	Where People Spend Time	84	AMS Auto Buy	Stationary Source
35	Eastman Avenue Elementary School	Where People Spend Time	85	R G Diecutting & Foil Graphics	Stationary Source

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Label	Concern Name	Category	Label	Concern Name	Category
36	Daycares near Valmont Coatings	Need More Info	86	D & S Autowrecking	Need More Info
37	De La Hoya Ánimo Charter High School	Where People Spend Time	87	New California Bumpers	Stationary Source
38	Volunteers of America Humphreys Head Start	Where People Spend Time	88	STIC-Adhesive Products Co	Stationary Source
39	Lorena Street Elementary School	Where People Spend Time	89	Foote Axle & Forge	Stationary Source
40	Odd Fellows Cemetery	Where People Spend Time	90	Valmont Coating Industries	Stationary Source
41	Garcia Park	Where People Spend Time	91	Ponce's Body	Stationary Source
42	Exide Technologies	Stationary Source	92	Carmen Lomas Garza Primary Center	Where People Spend Time
43	West Coast Rendering	Stationary Source	93	Murchison Street Elementary	Where People Spend Time
44	Valmont Coatings	Stationary Source	94	Murchison Street Early Education Center	Where People Spend Time
45	San Cris Autobody Shop	Stationary Source	95	Ramona Gardens Housing Projects	Need More Info
46	Brite Plating Co/Metal Finishing Marketers	Stationary Source	96	Ramona Head Start/State Pre-School	Where People Spend Time
47	Toxic Waste Recycling Plant – Mana Scrap Recycling Facility	Stationary Source	97	Boys and Girls Club	Where People Spend Time
48	Gravel Grinding	Need More Info	98	Ming Ya Buddhist Association	Where People Spend Time
49	Odors	Need More Info	99	The Floricanto Center for the Preforming Arts	Where People Spend Time
50	Dioxin and Furan Concerns	Need More Info			

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The South Coast AQMD develops and enforces air pollution regulations to reduce emissions, improve air quality and protect public health. Many South Coast AQMD rules are related to a specific type of operation or pollution source. Figure 3-3 describes the number of facilities in this community that are subject to some key South Coast AQMD rules to control emissions from facilities processing metals. The figure also includes information about facilities that are in key state and federal programs, which include major sources of air pollution or other types of environmental pollution.

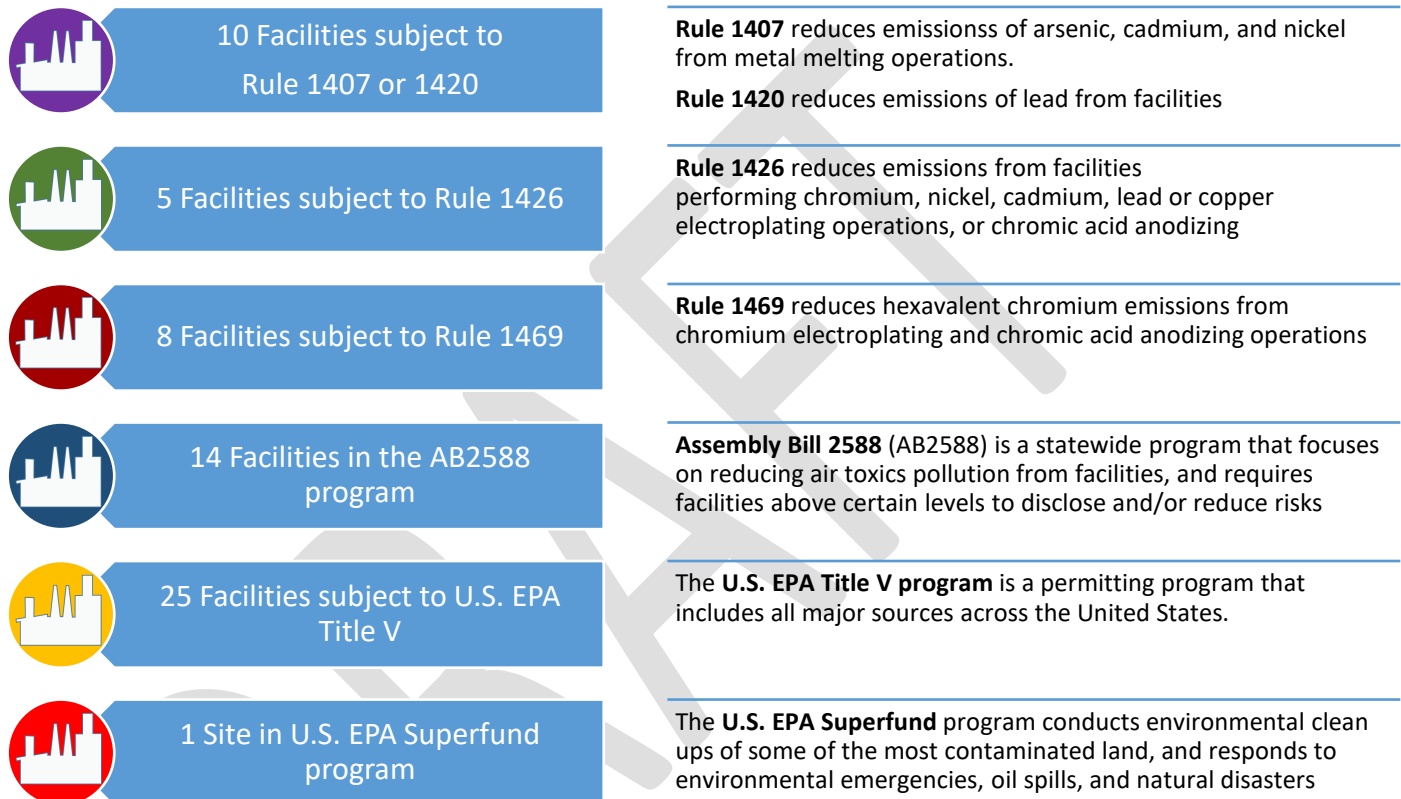|	
10 Facilities subject to Rule 1407 or 1420	**Rule 1407** reduces emissionss of arsenic, cadmium, and nickel from metal melting operations. **Rule 1420** reduces emissions of lead from facilities
5 Facilities subject to Rule 1426	**Rule 1426** reduces emissions from facilities performing chromium, nickel, cadmium, lead or copper electroplating operations, or chromic acid anodizing
8 Facilities subject to Rule 1469	**Rule 1469** reduces hexavalent chromium emissions from chromium electroplating and chromic acid anodizing operations
14 Facilities in the AB2588 program	**Assembly Bill 2588** (AB2588) is a statewide program that focuses on reducing air toxics pollution from facilities, and requires facilities above certain levels to disclose and/or reduce risks
25 Facilities subject to U.S. EPA Title V	The **U.S. EPA Title V program** is a permitting program that includes all major sources across the United States.
1 Site in U.S. EPA Superfund program	The **U.S. EPA Superfund** program conducts environmental clean ups of some of the most contaminated land, and responds to environmental emergencies, oil spills, and natural disasters

Figure 3-3. Key stationary sources in the East Los Angeles, Boyle Heights, West Commerce community, by regulatory program

The following air quality priorities for the CERP were identified by the CSC and members of the public for the East Los Angeles, Boyle Heights, West Commerce community:

- Neighborhood and freeway traffic (trucks and automobiles)
- Railyards
- Metal processing facilities
- Rendering facilities
- Auto Body shops
- Exposure reduction for sensitive populations in schools and childcare centers
- General concerns about industrial facilities, including a waste transfer station

Actions to address each of these air quality priorities are described in Chapter 5.

The South Coast AQMD and the California Air Resources Board (CARB) both develop and enforce air pollution regulations to improve air quality and protect public health. While CARB has primary authority over mobile sources, the South Coast AQMD has authority over stationary sources and "indirect sources", which are facilities that attract mobile sources. Examples of indirect sources include warehouses and railyards. Specific information about ongoing rule development that is relevant to these air quality priorities is provided in Chapter 5.

Community Air Pollution Profile and Related Data

Understanding what air pollution sources exist in the community and what air pollutants come from these sources helps identify key issues that can be addressed through CERP actions. This section presents data based on previous cumulative impact studies[3] to describe the impacts of toxic air pollutants in this community, as well as other environmental pollution, public health factors, and social and economic factors that make people more sensitive or vulnerable to the health effects of pollution[4].

The East Los Angeles, Boyle Heights, West Commerce community is shown in Figure 3-1. The Impacted Community includes a land area of 18.96 square miles, and the Emission Study Area includes an area of 25.59 square miles. About 41% of this land area is used for residential living, 19% is zoned for commercial uses, 21% is zoned for industrial uses, and 10% is used for freeways, roadways, and land used for utilities and communications services (Figure 3-4).[5]

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[3] More information regarding MATES IV and the final report can be found on South Coast AQMD's website at: http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/matesiv.

[4] Office of Environmental Health Hazard Assessment. CalEnviroScreen 3.0. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30

[5] Land use refers to how certain areas of land are classified for development and use. Land use data is often used for city or county planning, such as the placement of housing developments and transportation hubs. Land use data is derived from the 2016 Southern California Association of Governments (SCAG) Regional Transportation Plan/ Sustainable Communities Strategy, which is based on 2012 data.

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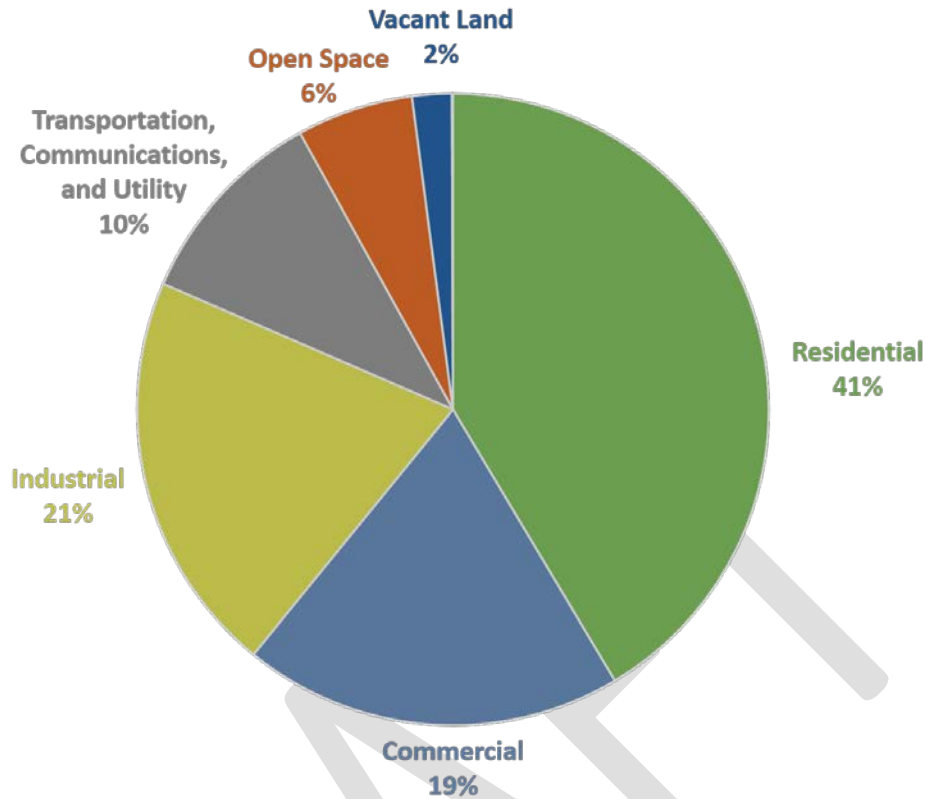Discussion Draft, version 062119

Figure 3-4. Land use profile in East Los Angeles, Boyle Heights, West Commerce

Air toxics are one group of air pollutants that can affect public health on a local community scale. This includes pollutants from diesel exhaust, metal particulate pollutants (e.g. hexavalent chromium, lead, arsenic, nickel, etc.), and gases (e.g. benzene, formaldehyde, etc.). The South Coast AQMD conducts the Multiple Air Toxics Exposure Study (MATES) every few years to understand the cumulative health impacts of air toxics in communities across the region. The most recently completed study was MATES IV, which was conducted in 2012-2013, and used air toxics monitoring, emissions inventories, modeling, and health risk assessment techniques to calculate the cancer risk due to toxic air pollutants ("air toxics cancer risk").[6] MATES V is currently in progress. Based on MATES IV modeled data, approximately three-quarters of the air toxics cancer risk in the Basin is due to diesel particulate matter (Figure 3-5). The average air toxics cancer risk in the East Los Angeles, Boyle Heights, West Commerce community is higher than the Basin-wide average, and dominated by diesel particulate matter.

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[6] More information regarding MATES IV and the final report can be found on South Coast AQMD's website at: http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/matesiv.

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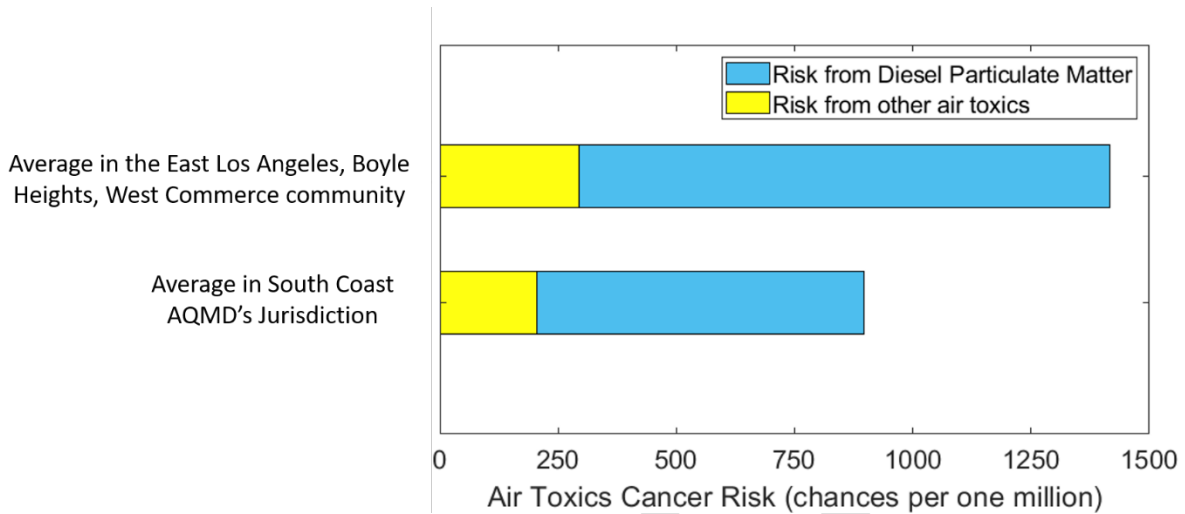Discussion Draft, version 062119

Figure 3-5. Air toxics cancer risk, based on MATES IV modeled data

Mobile sources include trucks, ships, trains, cars, buses, and other mobile equipment. Much of this equipment is powered by diesel, which is the air toxic pollutant with the highest impact in this community. The community includes more than 30.5 miles of freeways and 5 railyards, and many of these are located near residential areas (Figure 3-6)
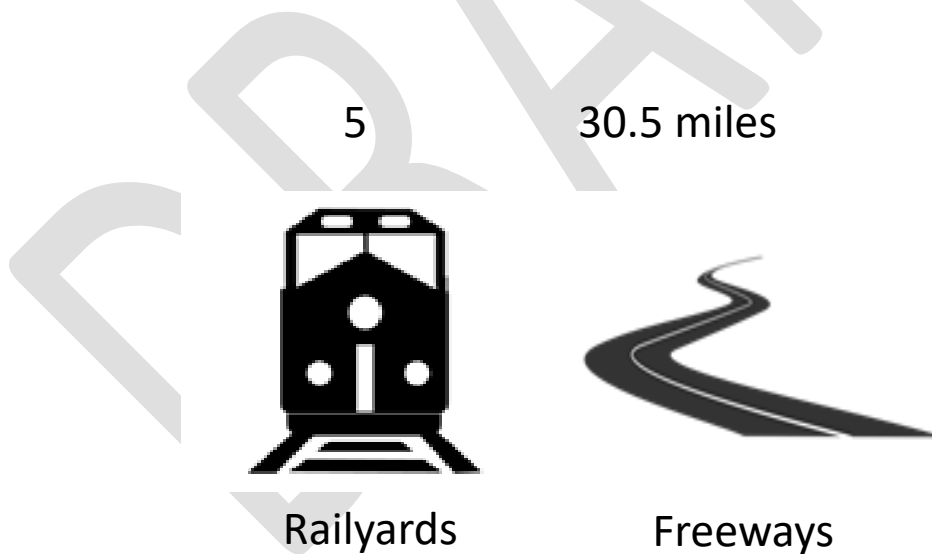
5   30.5 miles

Railyards   Freeways

Figure 3-6. Diesel mobile sources in East Los Angeles, Boyle Heights, West Commerce

Understanding the community's public health and socioeconomic profile helps to provide context for the work being done through this CERP. CalEnviroScreen 3.0 is a screening tool developed by the California Office of Environmental Health Hazard Assessment (OEHHA) that is

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used to identify communities that are most affected by various sources of pollution, and where people are especially vulnerable to pollution's effects. The CalEnviroScreen 3.0 data show that this community has public health factors, as well as social and economic factors, that make the community more sensitive and vulnerable to the harmful effects of air pollution compared to statewide averages (Figure 3-7 and Figure 3-8). These data show that, on average, the East Los Angeles, Boyle Heights, West Commerce community has generally worse public health factors and more social and economic disadvantages compared to California as a whole. The public health factors specifically show that this community has higher rates of emergency department visits for asthma and heart disease, and babies born low weight, compared to statewide averages.
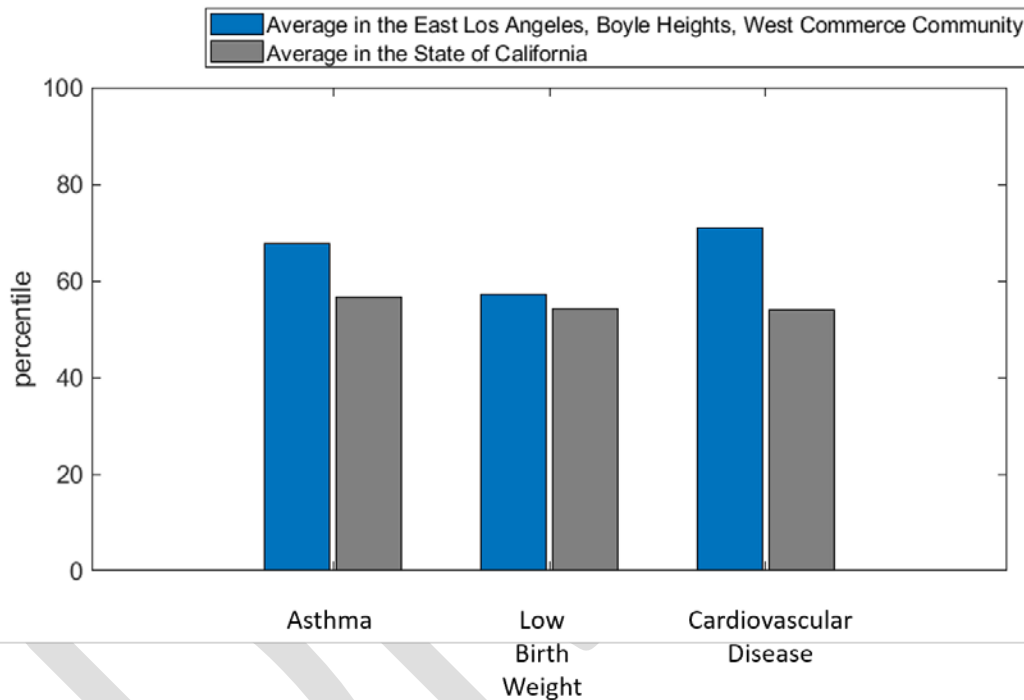

Figure 3-7. CalEnviroScreen 3.0 scores for public health factors in East Los Angeles, Boyle Heights, West Commerce compared to statewide averages

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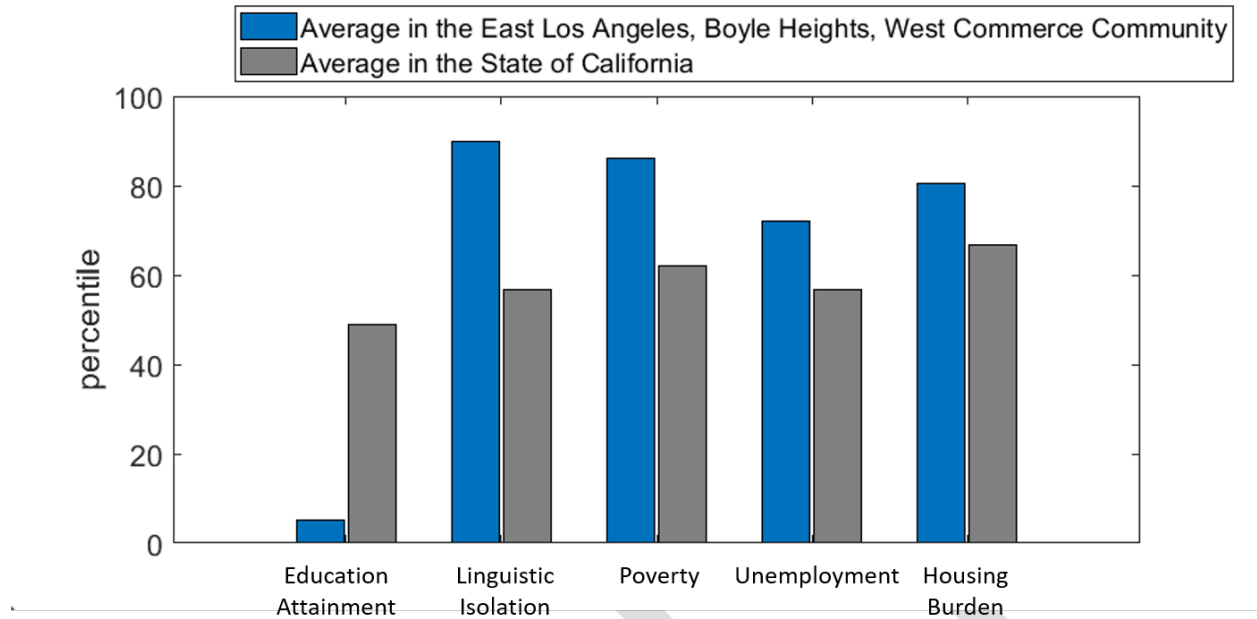Discussion Draft, version 062119

Figure 3-8. CalEnviroScreen 3.0 scores for social and economic factors in East Los Angeles, Boyle Heights, West Commerce compared to statewide averages[7,8]

[Emissions Inventory and Source Attribution analysis to follow in this section]

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[7] The metric of Educational Attainment in CalEnviroScreen 3.0 is defined as the percent of people whose highest level of education is less than a high school education. A lower percentile score shown in the blue bar on the graph for this metric means the community has fewer people who have completed a high school education.

[8] The metric of Linguistic Isolation in CalEnviroScreen 3.0 is defined as the percent of households where no one over age 14 speaks English well. A higher percentile score shown in the blue bar on the graph for this metric means there are more households that meet this definition.

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