Volume II

Appendices A – D & J-b

SANTA ANA GENERAL PLAN UPDATE

golden city beyond
A SHARED VISION FOR SANTA ANA

Recirculated
Draft Program Environmental Impact Report

State Clearinghouse #2020029087

August 2021

Prepared for:
City of Santa Ana
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VOLUME II – Appendices A through D & J-b

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PLACEWORKS

GENERAL PLAN UPDATE RECIRCULATED DRAFT PEIR

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California Environmental Quality Act

NOTICE OF PREPARATION AND SCOPING MEETING

Date: February 26, 2020
To: Responsible Agencies and Interested Parties
Subject: Notice of Preparation and Scoping Meeting for the Santa Ana General Plan Program Environmental Impact Report

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To: Reviewing Agencies and Other Interested Parties

Project Title: Santa Ana General Plan

Project Applicant: City of Santa Ana

Notice of Preparation Review Period: 2/26/20 through 3/27/2020 (30 days)

Scoping Meeting: Thursday, March 5, 2020, Santa Ana Police Community Room

NOTICE IS HEREBY GIVEN that the City of Santa Ana (City) will prepare a program environmental impact report (EIR) for the Santa Ana General Plan. The City is the lead agency for the project. The purpose of this notice is (1) to serve as a Notice of Preparation of an EIR pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15082, (2) to advise and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed project, and (3) to notice the public scoping meeting.

The City determined that the proposed project would require preparation of a full-scope EIR; thus, an Initial Study was not prepared in conjunction with this Notice of Preparation.

1. Introduction

The City's General Plan was last comprehensively updated in 1982. Various updates to the City's Land Use Element, Circulation Element, Urban Design Element and Economic Development were completed in 1998. In March 2014 the City Council adopted the Santa Ana Strategic Plan. The Strategic Plan was the result of an extensive community outreach process and established specific goals, objectives and strategies to guide the City's major efforts. One of the key strategies identified is to complete a comprehensive update of the City's Existing General Plan. The updated General Plan will provide long-term policy direction to guide the physical development, quality of life, economic health, and sustainability of the Santa Ana community through 2045. The updated General Plan will address the eight topics required by state law as well as five optional topics. The topic of housing will also be addressed as a separate effort in late 2021 in accordance with state law.

2. Environmental Setting

Project Location

The City of Santa Ana encompasses roughly 27 square miles of land in central Orange County. The cities of Orange and Costa Mesa border Santa Ana to the north and south, respectively. Santa Ana's western border connects with the cities of Garden Grove, Westminster, and Fountain Valley, while Santa Ana's eastern border touches the cities of Irvine and Tustin. Regional connectivity to the City of Santa Ana is provided by interstates 15 and 405 and by State Routes 22 and 55. The City of Santa Ana is the second largest city in Orange County in terms of both population (approximately 340,000 residents as of 2019) and workers (approximately 160,000 jobs as of 2019).

3. Project Description

The City of Santa Ana is in the process of preparing a comprehensive update to its existing General Plan. Santa Ana's "Golden City Beyond: A Shared Vision" General Plan is expected to be completed in 2020 and will guide the City's development and conservation for the next 25 years through 2045. The update will provide long-term policy direction and communicate the vision, values, and goals for the City's physical development, fiscal and environmental sustainability, and overall quality of life. The new Santa Ana General Plan will serve to identify areas of opportunity and provide options to enhance development potential in key areas of the city while bringing the City into compliance with recent state laws and reflect updates to current conditions and input from the general public, city staff, and other stakeholders.

Santa Ana's General Plan is based on a vision statement and core values established as part of an extensive multi-year community outreach effort, a Technical Advisory Committee, and a General Plan Advisory Group.

Vision Statement

"Santa Ana is a city that promotes the physical, social, and economic health and wellness of our people and our community. We celebrate our past, embrace the power of diversity, and work together to create economic and educational opportunities for the next generation, leading to a more sustainable and prosperous future."

Core Values

- **Health.** The people of Santa Ana value a physical environment that encourages healthy lifestyles, a planning process that ensures that health impacts are considered, and a community that actively pursues policies and practices that improve the health of our residents.
- **Equity**. Our residents value taking all necessary steps to ensure equitable outcomes, expanding access to the tools and resources that residents need, and to balance competing interests in an open and democratic manner.
- **Sustainability.** Santa Ana values land use decisions that benefit future generations, plans for the impacts of climate change, and incorporates sustainable design practices at all level of the planning process.
- **Culture.** Our community values efforts that celebrate our differences as a source of strength, preserve and build upon existing cultural resources, and nurture a citywide culture of empowered residents.
- **Education.** We are a city that values the creation of lifelong learners, the importance of opening up educational opportunities to all residents and investing in educational programs that advance our residents' economic wellbeing.

General Plan Topics

State law requires that a general plan address eight specific topics, which each topic commonly presented as an element of the general plan. State law gives jurisdictions the discretion to incorporate optional topics and to address any of these topics in a single element or across multiple elements of the general plan. Santa Ana's General Plan will address the following eight mandatory and five optional topics:

Mandatory Topics

- Land Use
- Circulation
- Housing*
- Environmental Justice**
- Open Space
- Conservation
- Safety
- Noise

Optional Topics

- Health and Wellness
- Historic Preservation
- Urban Design
- Economic Prosperity
- Community Services

** The updated General Plan will incorporate the current 2014–2021 Housing Element and no substantive changes are anticipated as part of the comprehensive general plan update. The topic of housing will be addressed as a separate effort in late 2021 in accordance with state law.*

*** The topic of environmental justice will be incorporated throughout the General Plan, with goals and policies incorporated into multiple elements.*

Project Buildout

In coordination with the General Plan Advisory Group, the City identified five areas suited for new growth and development: South Main Street, Grand Avenue/17th Street, West Santa Ana Boulevard, 55 Freeway/Dyer Road, and South Bristol Street. These five areas are located along major travel corridors, the future OC Streetcar line, and/or linked to the Downtown. In general, many areas currently designated for General Commercial and Professional Office are expanding opportunities for residential development through a proposed change to the Urban Neighborhood or District Center General Plan land use designations. Industrial Flex would be introduced where Industrial land use designations currently exist within each of the five focus areas in order to allow for cleaner industrial and commercial uses with live-work opportunities.

There are seven other planning areas that represent specific plans and other special zoning areas that were previously adopted: Adaptive Reuse Overlay (2014), Bristol Street Corridor Specific Plan (1991/2018), Harbor Mixed Use Corridor Specific Plan (2014), MainPlace Specific Plan (2019), Metro East Overlay Zone (2007/2018), Midtown Specific Plan (1996), and Transit Zoning Code Specific Development (2010). The potential for new development in these areas is based on the forecasted buildout at the time of the respective zoning document's adoption, minus the amount of new development built between their adoption date and 2019. The most recent adoption/amendment date for each zoning document is noted in parentheses.

Growth outside of the focus areas and special planning areas is expected to be incremental and limited. Some growth was projected for the professional office surrounding the Orange County Global Medical Center and along Broadway north of the Midtown Specific Plan. Some growth was also projected for the commercial and retail area south of the West Santa Ana Boulevard focus area. Finally, some additional residential development is expected to occur on a small portion (five percent) of single-family and multi-family lots through the construction of second units.

Table 1 provides a statistical summary of the buildout potential associated with the General Plan compared to existing conditions. Figure 1 displays the draft General Plan Land Use Map while Figure 2 illustrates the boundaries of the five focus areas and special planning areas.

4. Probable Environmental Effects

The City has determined that a Program EIR will be prepared for the proposed General Plan. Section 15168 of the CEQA Guidelines states that a Program EIR may be prepared on a series of actions that can be characterized as one large project and are related either: 1) geographically; 2) as logical parts in the chain of contemplated actions; 3) in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or 4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways.

The Program EIR will be prepared in accordance with the requirements of CEQA Statute and Guidelines, as amended. Pursuant to Section 15146 of the CEQA Guidelines, the degree of specificity in the Program EIR will correspond to the degree of specificity involved in the proposed General Plan. The EIR will focus on the primary effects that can be expected to follow from adoption of the proposed project and will not be as detailed as an EIR on the specific development or construction projects that may follow. Based on the City's preliminary analysis of the project, the following environmental impact categories and their associated impact thresholds will be examined in the Program EIR:

Aesthetics
Agricultural/Forest Resources
Air Quality
Biological Resources
Cultural Resources
Energy
Geology and Soils
Greenhouse Gas Emissions
Hazards/Hazardous Materials
Hydrology/Water Quality
Land Use/Planning
Mineral Resources
Noise
Population/Housing
Public Services
Recreation
Transportation
Tribal Cultural Resources
Utilities/Service Systems
Wildfire

The Draft EIR will address the short- and long-term effects of the General Plan on the environment. Mitigation measures will be proposed for impacts that are determined to be significant. A mitigation monitoring program will also be developed as required by Section 15150 of the CEQA Guidelines.

5. Public Review Period

This NOP will be available for a 30-day public review period from **February 26, 2020,** to **March 27, 2020,** on the City's website at https://www.santa-ana.org/general-plan. Hard copies will also be available at:

City of Santa Ana, Planning Division
20 Civic Center Plaza, M-20
Santa Ana, CA 92701

City of Santa Ana Public Library
26 Civic Center Plaza
Santa Ana, CA 92701

The City is seeking input from both agencies and members of the public on the scope and content of the environmental information and analysis in the EIR. Due to the time limits mandated by state law, written comments must be sent via mail, e-mail, or fax no later than 5:00 PM on **Thursday March 27, 2020**. Please send your comments at the earliest possible date to:

Verny Carvajal, Principal Planner
City of Santa Ana Planning and Building Agency
PO BOX 1988 (M-20)
Santa Ana, CA 92702
Email: VCarvajal@santa-ana.org

6. Public Scoping Meeting

Pursuant to the California Public Resources Code Section 21083.9, the City will conduct a public scoping meeting. This meeting will provide a public forum for information dissemination and dialogue regarding the components of the proposed project and the environmental review process. Please note the main purpose of the public scoping meeting is to provide a project description and solicit comments to refine and/or expand the scope of the EIR. **Although staff will summarize the issues raised at these meetings, anyone wishing to make formal comments on the scope of the EIR must do so in writing.** The public scoping meeting will be held on:

Date: Thursday, March 5, 2020
Time: from 6:00 to 7:30 PM
Location: Santa Ana Police Community Room, 60 Civic Center Plaza, Santa Ana, CA 92701

Table 1 Existing Conditions, Potential Growth, and Buildout Conditions in Santa Ana, 2020 to 2045

	EXISTING [1]			GROWTH [2]			BUILDOUT		
PLANNING AREA	Housing Units	Bldg. Sq. Ft.[3]	Jobs	Housing Units	Bldg. Sq. Ft.[3]	Jobs	Housing Units	Bldg. Sq. Ft.[3]	Jobs
FOCUS AREAS	**6,380**	**12,849,259**	**29,931**	**17,481**	**3,233,332**	**9,542**	**23,861**	**16,082,591**	**39,473**
55 Freeway/Dyer Road	1,221	5,094,557	10,401	8,731	1,434,665	3,849	9,952	6,529,222	14,250
Grand Avenue/17th Street	561	1,400,741	3,568	1,667	-689,325	-1,929	2,228	711,416	1,639
South Bristol Street	220	1,577,511	3,337	5,233	3,508,975	11,319	5,453	5,086,486	14,656
South Main Street	1,720	1,685,978	3,455	588	-739,316	-1,304	2,308	946,662	2,151
West Santa Ana Boulevard	2,658	3,090,472	9,170	1,262	-281,667	-2,393	3,920	2,808,805	6,777
SPECIFIC PLAN / SPECIAL ZONING	**4,685**	**13,924,891**	**38,548**	**15,839**	**3,033,554**	**1,154**	**20,524**	**16,958,445**	**39,702**
Adaptive Reuse Overlay Zone [4]	260	976,935	3,043	1,000	0	-476	1,260	976,935	2,567
Bristol Street Corridor Specific Plan	136	140,348	294	-1	2,791	-12	135	143,139	282
Harbor Corridor Specific Plan	1,324	1,767,937	3,286	3,298	200,045	-1,708	4,622	1,967,982	1,578
Main Place Specific Plan	0	1,108,080	2,216	1,900	1,318,843	3,164	1,900	2,426,923	5,380
Metro East Overlay Zone	844	2,516,056	7,524	4,707	2,169,891	4,734	5,551	4,685,947	12,258
Midtown Specific Plan	607	1,885,065	4,824	0	-66,812	-209	607	1,818,253	4,615
Transit Zoning Code	1,514	5,530,470	17,361	4,935	-591,204	-4,339	6,449	4,939,266	13,022
ALL OTHER AREAS OF THE CITY [5]	**67,727**	**39,772,550**	**92,004**	**2,847**	**552,536**	**3,666**	**70,574**	**40,325,086**	**95,670**
CITYWIDE TOTAL	**78,792**	**66,546,700**	**160,483**	**36,167**	**6,819,422**	**14,362**	**114,959**	**73,366,122**	**174,845**

Source: City of Santa Ana, 2020.

1. Existing represents conditions as of December 2019 as derived from the City of Santa Ana Planning Information Network and projects already under construction per the January 2020 monthly development project report.
2. The potential growth for new development in specific plan/special zoning area is based on the forecasted buildout at the time of the respective zoning document's adoption, minus the amount of new development built between its adoption date and 2019.
3. Only includes nonresidential building square footage.
4. The figures shown on the row for the Adaptive Reuse Overlay represents parcels that are exclusively in the Adaptive Reuse Overlay boundary. Figures for parcels that are within the boundaries of both the Adaptive Reuse Overlay Zone and a specific plan, other special zoning, or focus area boundary are accounted for in the respective specific plan, other special zoning, or focus area.
5. The City has included an assumption for growth on a small portion (five percent) of residential parcels through the construction of second units, which is distributed throughout the City and is not concentrated in a subset of neighborhoods. Additional growth includes known projects in the pipeline and an increase of 10 percent in building square footage and employment for the professional office surrounding the Orange County Global Medical Center and along Broadway north of the Midtown Specific Plan, as well as the commercial and retail area south of the West Santa Ana Boulevard focus area.

Figure 1 - Proposed General Plan Land Use

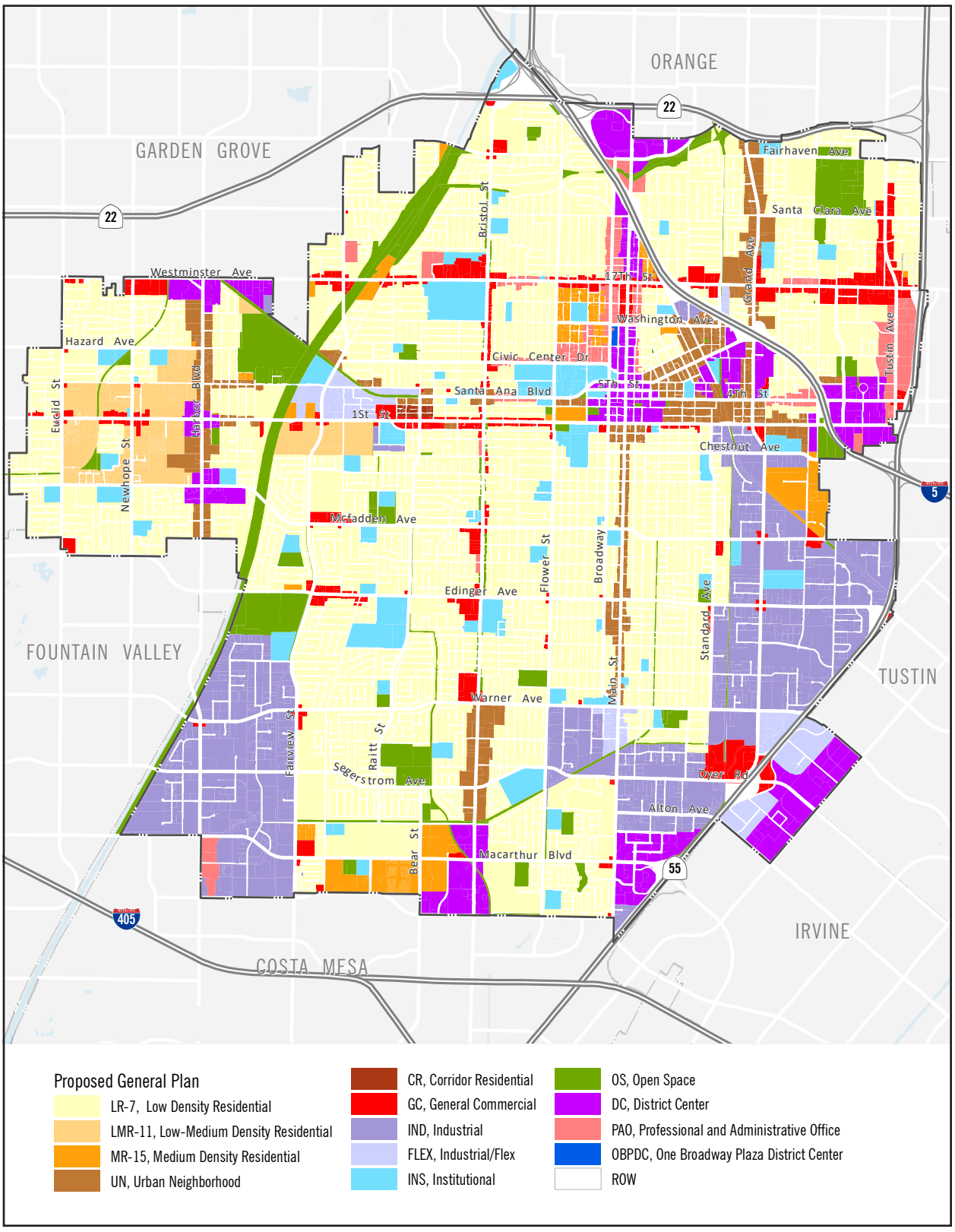
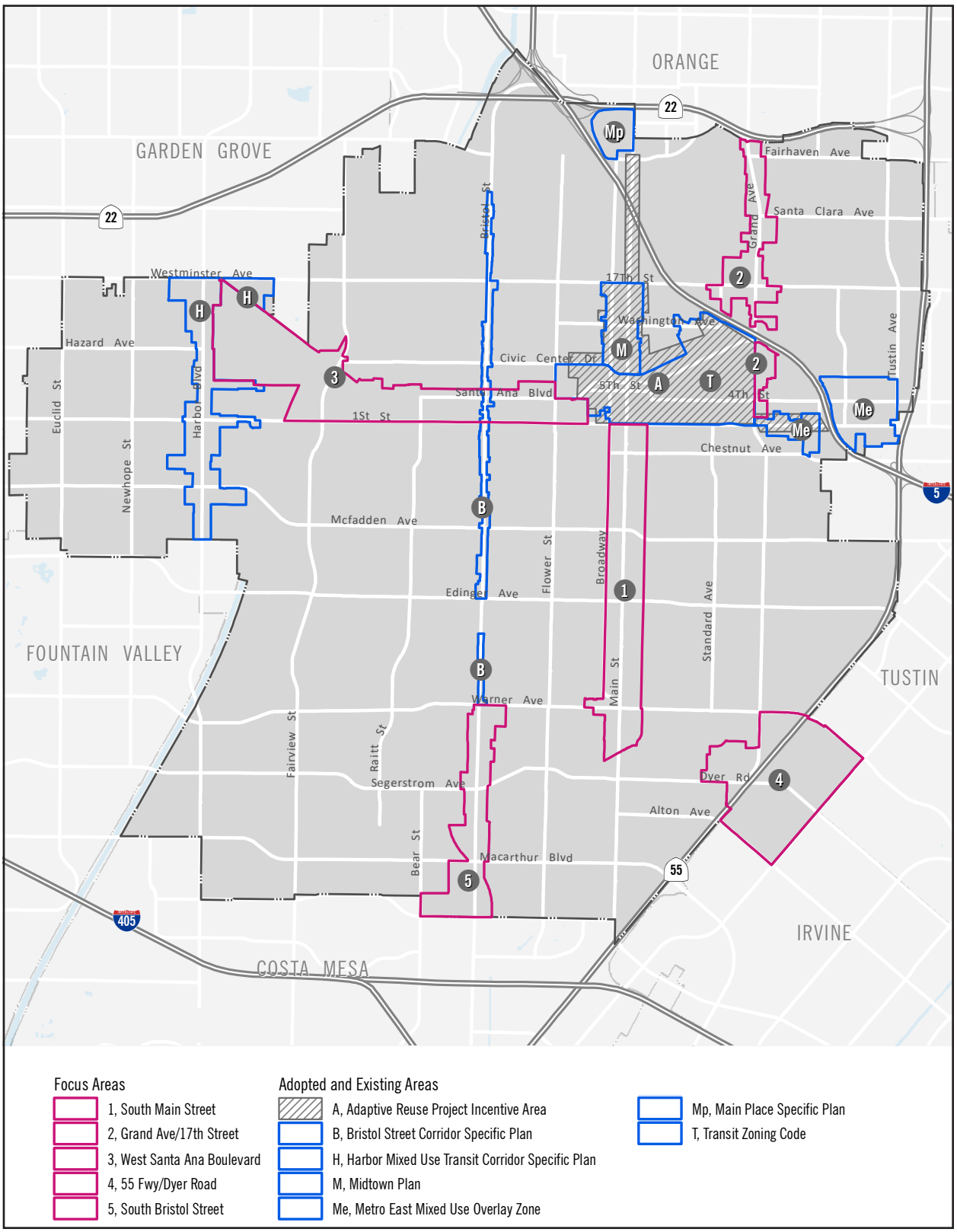


Figure 2 - Proposed General Plan Focus Areas and Other Special Planning Areas



PlaceWorks

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

March 16, 2020

Verny Carvajal, Principal Planner
City of Santa Ana
Planning and Building Agency
PO BOX 1988 (M-20)
Santa Ana, CA 92702

Via E-mail

Dear Mr. Carvajal:

Notice of Preparation
for the City of Santa Ana General Plan Environmental Impact Report

The Metropolitan Water District of Southern California (Metropolitan) has reviewed the Notice of Preparation for the City of Santa Ana General Plan Environmental Impact Report (Plan). The proposed General Plan update will reflect goals set in the 2014 Santa Ana Strategic Plan, state law, and provide guidance on long-term policy regarding physical development, quality of life, economic health, and sustainability through 2045. The City of Santa Ana is the CEQA Lead Agency. This letter contains Metropolitan's comments as a potentially affected public agency.

Metropolitan is a public agency and regional water wholesaler. It is comprised of 26 member public agencies, serving approximately 19 million people in portions of six counties in Southern California, including Riverside County. Metropolitan's mission is to provide its 5,200 square mile service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Metropolitan owns and operates the Orange County Feeder, East Orange County Feeder 2 and Santa Ana Cross Feeder pipelines in the plan area. The Orange County Feeder and East Orange County Feeder pipelines vary from 36-79 inches-inside-diameter and run north-south through the plan area. Santa Ana Cross Feeder is 18-20 inches-inside-diameter and runs east-west through the center of the plan area. The pipelines distribute treated water (drinking water) to Orange County member agencies. See attached map for locations of Metropolitan infrastructure, referenced above.

Metropolitan is concerned with indirect effects to Metropolitan's facilities that may result. Future development and land use conditions associated with the proposed plan must not restrict any of Metropolitan's day-to-day operations, access or repair to these facilities. Metropolitan must be allowed to maintain its rights-of-way and requires unobstructed access to its facilities in order to maintain and repair its system. In order to avoid potential conflicts with Metropolitan's facilities

and rights-of-way, we require that any design plans for any activity in the area of Metropolitan's pipelines or facilities be submitted for our review and written approval. Metropolitan will not permit procedures that could subject the pipeline to excessive vehicle, impact or vibratory loads.

Detailed prints of drawings of Metropolitan's pipelines and rights-of-way may be obtained by calling Metropolitan's Substructures Information Line at (213) 217-7663. To assist applicants in preparing plans that are compatible with Metropolitan's facilities and easements, we have attached the "Guidelines for Improvements and Construction Projects Proposed in the Area of Metropolitan's Facilities and Rights-of-Way." Please note that all submitted designs or plans must clearly identify Metropolitan's facilities and rights-of-way.

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future documentation and plans for this project. Please contact Ms. Jolene Ditmar at (213) 217-6184 or jditmar@mwdh2o.com if you require further assistance.

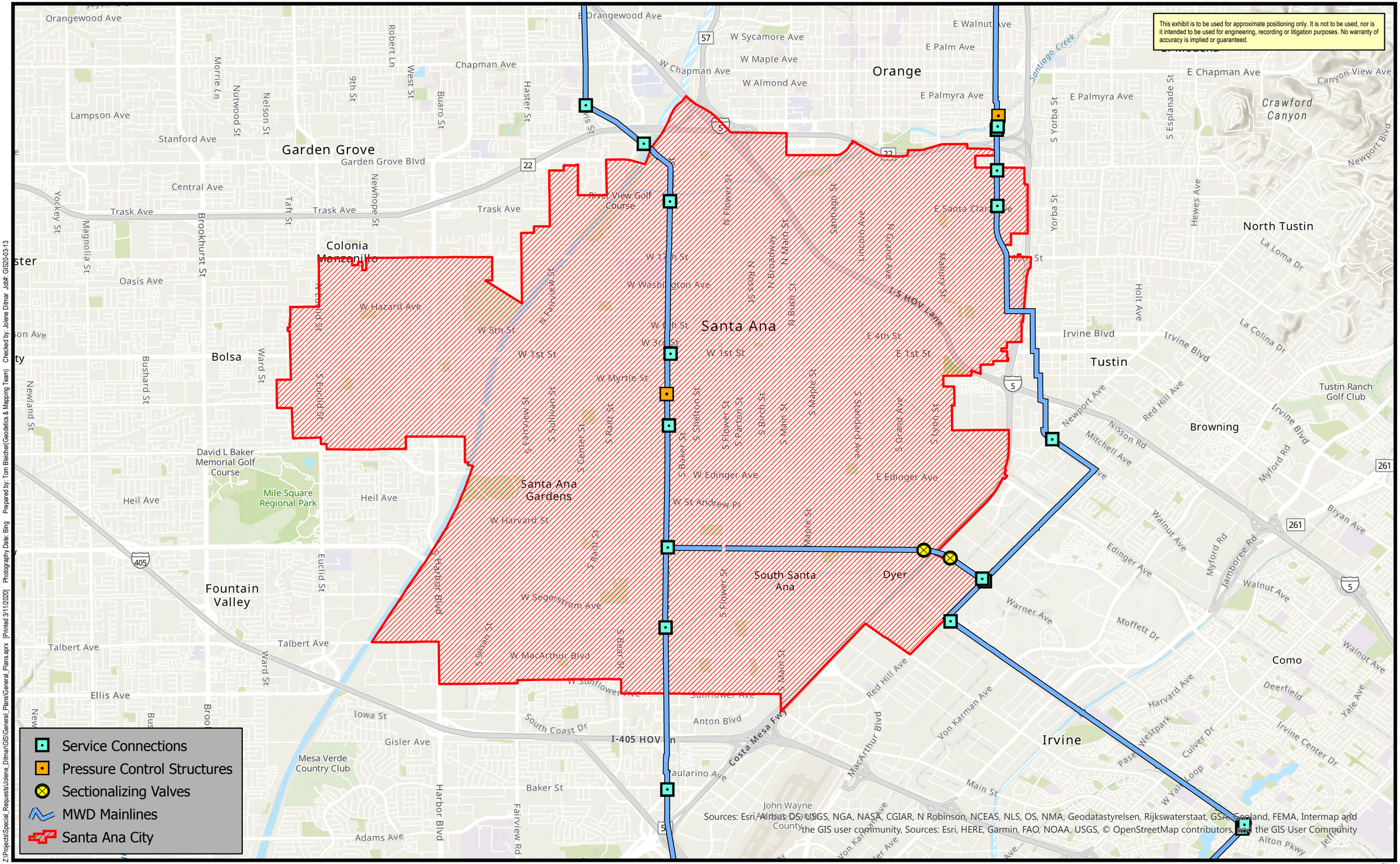
Very truly yours,

Sean Carlson
Team Manager, Environmental Planning Section

JD:ds
SharePoint\City of Santa Ana_Santa Ana General Plan Comment Letter

Enclosures:

(1) Map
(2) Guidelines for Improvements and Construction Projects Proposed in the Area of Metropolitan's Facilities and Rights-of-Way



Prepared by: Tom Bleicher(Geodetics & Mapping Team) Checked by: Jolene Dilmar Job#: GIS20-03-13
Photography Date: Bing [Printed 3/11/2020]
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The Metropolitan Water District of Southern California
Engineering Services Group

City of Santa Ana General Plan Update

MWD Distribution System

Guidelines for Improvements and Construction Projects Proposed in the Area of Metropolitan's Facilities and Rights-of-Way

July 2018

Prepared By:
The Metropolitan Water District of Southern California
Substructures Team, Engineering Services
700 North Alameda Street
Los Angeles, California 90012

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Additional Copies: To obtain a copy of this document, please contact the Engineering Services Group, Substructures Team.

Disclaimer

Metropolitan assumes no responsibility for the accuracy of the substructure information herein provided. The user assumes responsibility for verifying substructure locations before excavating and assumes all liability for damage to Metropolitan's facilities as a result of such excavation. Additionally, the user is cautioned to conduct surveys and other field investigations as deemed prudent, to assure that project plans are correct. The appropriate representative from Metropolitan must be contacted at least two working days, before any work activity in proximity to Metropolitan's facilities.

It generally takes 30 days to review project plans and provide written responses. Metropolitan reserves the right to modify requirements based on case-specific issues and regulatory developments.

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Initial Release	*July 2018*

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1.0 GENERAL INFORMATION

Note: Underground Service Alert at 811 must be notified at least two working days before excavating in proximity to Metropolitan's facilities.

1.1 Introduction

These guidelines provide minimum design and construction requirements for any utilities, facilities, developments, and improvements, or any other projects or activities, proposed in or near Metropolitan Water District of Southern California (Metropolitan) facilities and rights-of-way. Additional conditions and stipulations may also be required depending on project and site specific conditions. Any adverse impacts to Metropolitan's conveyance system, as determined by Metropolitan, will need to be mitigated to its satisfaction.

All improvements and activities must be designed so as to allow for removal or relocation at builder or developer expense, as set forth in the paramount rights provisions of Section 20.0. Metropolitan shall not be responsible for repair or replacement of improvements, landscaping or vegetation in the event Metropolitan exercises its paramount rights powers.

1.2 Submittal and Review of Project Plans/Utilities and Maps

Metropolitan requires project plans/utilities be submitted for all proposed activities that may impact Metropolitan's facilities or rights-of-way. Project plans shall include copies of all pertinent utilities, sewer line, storm drain, street improvement, grading, site development, landscaping, irrigation and other plans, all tract and parcel maps, and all necessary state and federal environmental documentation. Metropolitan will review the project plans and provide written approval, as it pertains to Metropolitan's facilities and rights-of-way. Written approval from Metropolitan must be obtained, prior to the start of any activity or construction in the area of Metropolitan's facilities or rights-of-way. Once complete project plans and supporting documents are submitted to Metropolitan, it generally takes 30 days to review and to prepare a detailed written response. Complex engineering plans that have the potential for significant impacts on Metropolitan's facilities or rights-of-way may require a longer review time.

Project plans, maps, or any other information should be submitted to Metropolitan's Substructures Team at the following mailing address:

Attn: Substructures Team
The Metropolitan Water District of Southern California
700 North Alameda St.
Los Angeles, CA 90012

General Mailing Address: P.O. Box 54153
Los Angeles, CA 90054-0153

Email: EngineeringSubstructures@mwdh2o.com

For additional information, or to request prints of detailed drawings for Metropolitan's facilities and rights-of-way, please contact Metropolitan's Substructures Team at 213-217-7663 or EngineeringSubstructures@mwdh2o.com.

1.3 Identification of Metropolitan's Facilities and Rights-of-Way

Metropolitan's facilities and rights-of-way must be fully shown and identified as Metropolitan's, with official recording data, on the following:

A. All applicable plans

B. All applicable tract and parcel maps

Metropolitan's rights-of-ways and existing survey monuments must be tied dimensionally to the tract or parcel boundaries. Metropolitan's Records of Survey must be referenced on the tract and parcel maps with the appropriate Book and Page.

2.0 General Requirements

2.1 Vehicular Access

Metropolitan must have vehicular access along its rights-of-way at all times for routine inspection, patrolling, operations, and maintenance of its facilities and construction activities. All proposed improvements and activities must be designed so as to accommodate such vehicular access.

2.2 Fences

Fences installed across Metropolitan's rights-of-way must include a 16-foot-wide gate to accommodate vehicular access by Metropolitan. Additionally, gates may be required at other specified locations to prevent unauthorized entry into Metropolitan's rights-of-way.

All gates must accommodate a Metropolitan lock or Knox-Box with override switch to allow Metropolitan unrestricted access. There should be a minimum 20-foot setback for gates from the street at the driveway approach. The setback is necessary to allow Metropolitan vehicles to safely pull off the road prior to opening the gate.

2.3 Driveways and Ramps

Construction of 16-foot-wide commercial-type driveway approaches is required on both sides of all streets that cross Metropolitan's rights-of-way. Access ramps, if necessary, must be a minimum of 16 feet wide.

There should be a minimum 20-foot setback for gates from the street at the driveway approach. Grades of ramps and access roads must not exceed 10 percent; if the slope of an access ramp or road must exceed 10 percent due to topography, then the ramp or road must be paved.

2.4 Walks, Bike Paths, and Trails

All walkways, bike paths, and trails along Metropolitan's rights-of-way must be a minimum 12-foot wide and have a 50-foot or greater radius on all horizontal curves if also used as Metropolitan's access roads. Metropolitan's access routes, including all walks and drainage facilities crossing the access routes, must be constructed to American Association of State Highway and Transportation Officials (AASHTO) H-20 loading standards (see Figure 1). Additional requirements will be placed on equestrian trails to protect the water quality of Metropolitan's pipelines and facilities.

2.5 Clear Zones

A 20-foot-wide clear zone is required to be maintained around Metropolitan's manholes and other above-ground facilities to accommodate vehicular access and maintenance. The clear zone should slope away from Metropolitan's facilities on a grade not to exceed 2 percent.

2.6 Slopes

Cut or fill slopes proposed within Metropolitan's rights-of-way must not exceed 10 percent. The proposed grade must not worsen the existing condition. This restriction is required to facilitate Metropolitan use of construction and maintenance equipment and allow uninhibited access to above-ground and below-ground facilities.

2.7 Structures

Construction of structures of any type is not allowed within the limits of Metropolitan's rights-of-way to avoid interference with the operation and maintenance of Metropolitan's facilities and possible construction of future facilities.

Footings and roof eaves of any proposed buildings adjacent to Metropolitan's rights-of-way must meet the following criteria:

A. Footings and roof eaves must not encroach onto Metropolitan's rights-of-way.

B. Footings must not impose any additional loading on Metropolitan's facilities.

C. Roof eaves must not overhang onto Metropolitan's rights-of-way.

Detailed plans of footings and roof eaves adjacent to Metropolitan's rights-of-way must be submitted for Metropolitan's review and written approval, as pertains to Metropolitan's facilities.

2.8 Protection of Metropolitan Facilities

Metropolitan facilities within its rights-of-way, including pipelines, structures, manholes, survey monuments, etc., must be protected from damage by the project proponent or property owner, at no expense to Metropolitan. The exact location, description and method of protection must be shown on the project plans.

2.9 Potholing of Metropolitan Pipelines

Metropolitan's pipelines must be potholed in advance, if the vertical clearance between a proposed utility and Metropolitan's pipeline is indicated to be 4 feet or less. A Metropolitan representative must be present during the potholing operation and will assist in locating the pipeline. Notice is required, a minimum of three working days, prior to any potholing activity.

2.10 Jacked Casings or Tunnels

A. General Requirements

Utility crossings installed by jacking, or in a jacked casing or tunnel under/over a Metropolitan pipeline, must have at least 3 feet of vertical clearance between the outside diameter of the pipelines and the jacked pipe, casing, or tunnel. The actual

cover over Metropolitan's pipeline shall be determined by potholing, under Metropolitan's supervision.

Utilities installed in a jacked casing or tunnel must have the annular space between the utility and the jacked casing or tunnel filled with grout. Provisions must be made for grouting any voids around the exterior of the jacked pipe, casing, or tunnel.

B. Jacking or Tunneling Procedures

Detailed jacking, tunneling, or directional boring procedures must be submitted to Metropolitan for review and approval. The procedures must cover all aspects of operation, including, but not limited to, dewatering, ground control, alignment control, and grouting pressure. The submittal must also include procedures to be used to control sloughing, running, or wet ground, if encountered. A minimum 10-foot clearance must be maintained between the face of the tunneling or receiving pits and outside edges of Metropolitan's facility.

C. Shoring

Detailed drawings of shoring for jacking or receiving pits must be submitted to Metropolitan for review and written-approval. (See Section 10 for shoring requirements).

D. Temporary Support

Temporary support of Metropolitan's pipelines may be required when a utility crosses under a Metropolitan pipeline and is installed by means of an open trench. Plans for temporary support must be reviewed and approved in writing by Metropolitan. (See Section 11, Supports of Metropolitan Facilities).

3.0 Landscaping

3.1 Plans

All landscape plans must show the location and limits of Metropolitan's right-of-way and the location and size of Metropolitan's pipeline and related facilities therein. All landscaping and vegetation shall be subject to removal without notice, as may be required by Metropolitan for ongoing maintenance, access, repair, and construction activities. Metropolitan will not be financially responsible for the removal of any landscaping and vegetation.

3.2 Drought-Tolerant Native and California Friendly Plants

Metropolitan recommends use of drought-tolerant native and California Friendly® plants (excluding sensitive plants) on proposed projects. For more information regarding California Friendly® plants refer to www.bewaterwise.com.

3.3 Trees

Trees are generally prohibited within Metropolitan's rights-of-way as they restrict Metropolitan's ability to operate, maintain and/or install new pipeline(s) located within these rights-of-way. Metropolitan will not be financially responsible for the removal and replacement of any existing trees should they interfere with access and any current or future Metropolitan project located within the right-of-way.

3.4 Other Vegetation

Shrubs, bushes, vines, and groundcover are generally allowed within Metropolitan's rights-of-way. Larger shrubs are not allowed on Metropolitan fee properties; however, they may be allowed within its easements if planted no closer than 15 feet from the outside edges of existing or future Metropolitan facilities. Only groundcover is allowed to be planted directly over Metropolitan pipeline, turf blocks or similar is recommended to accommodate our utility vehicle access. Metropolitan will not be financially responsible for the removal and replacement of the vegetation should it interfere with access and any current or future Metropolitan project.

3.5 Irrigation

Irrigation systems are acceptable within Metropolitan's rights-of-way, provided valves and controllers are located near the edges of the right-of-way and do not interfere with Metropolitan vehicular access. A shutoff valve should also be located along the edge of the right-of-way that will allow the shutdown of the system within the right-of-way should Metropolitan need to do any excavation. No pooling or saturation of water above Metropolitan's pipeline and right-of-way is allowed. Additional restrictions apply to non-potable water such as Recycled Water and are covered on Table 3 of Page 20.

3.6 Metropolitan Vehicular Access

Landscape plans must show Metropolitan vehicular access to Metropolitan's facilities and rights-of-way and must be maintained by the property owner or manager or homeowners association at all times. Walkways, bike paths, and trails within Metropolitan's rights-of-way may be used as Metropolitan access routes. (See Section 2.4, Walks, Bike Paths, and Trails).

4.0 General Utilities

Note: For non-potable piping like sewer, hazardous fluid, storm drain, disinfected tertiary recycled water and recycled water irrigation see Table 1 through Table 3.

4.1 Utility Structures

Permanent utility structures (e.g., manholes, power poles, pull boxes, electrical vaults, etc.) are not allowed within Metropolitan's rights-of-way. Metropolitan requests that all permanent utility structures within public streets be placed as far from its pipelines and facilities as practical, but not closer than 5 feet from the outside edges of Metropolitan facilities.

Note: Non-potable utility pipelines are an exception to the 5-foot minimum clearance. Non-potable utility pipelines should have 10 feet of separation.

4.2 Utility Crossings

Metropolitan requests a minimum of 1 foot of vertical clearance between Metropolitan's pipeline and any utility crossing the pipeline. Utility lines crossing Metropolitan's pipelines must be as perpendicular to the pipeline as possible. Cross-section drawings, showing proposed locations and elevations of utility lines and locations of Metropolitan's pipelines and limits of rights-of-way, must be submitted with utility plans, for all

crossings. Metropolitan's pipeline must be potholed under Metropolitan's supervision at the crossings (See Section 2.9).

4.3 Longitudinal Utilities

Installation of longitudinal utilities is generally not allowed along Metropolitan's rights-of-way. Within public streets, Metropolitan requests that all utilities parallel to Metropolitan's pipelines and appurtenant structures (facilities) be located as far from the facilities as possible, with a minimum clearance of 5 feet from the outside edges of the pipeline.

Note: Non-potable utility pipelines are an exception to the 5-foot minimum clearance. Non-potable utility pipelines should have 10 feet of separation (for more information See Table 1 on Page 18).

4.4 Underground Electrical Lines

Underground electrical conduits (110 volts or greater) which cross a Metropolitan's pipeline must have a minimum of 1 foot of vertical clearance between Metropolitan's pipeline and the electrical lines. Longitudinal electrical lines, including pull boxes and vaults, in public streets should have a minimum separation of 5 feet from the edge of a Metropolitan pipeline or structures.

4.5 Fiber Optic Lines

Fiber optic lines installed by directional boring require a minimum of 3 feet of vertical clearance when boring is over Metropolitan's pipelines and a minimum of 5 feet of vertical clearance when boring is under Metropolitan's pipelines. Longitudinal fiber optic lines, including pull boxes, in public streets should have a minimum separation of 5 feet from the edge of a Metropolitan pipelines or structures. Potholing must be performed, under Metropolitan's supervision, to verify the vertical clearances are maintained.

4.6 Overhead Electrical and Telephone Lines

Overhead electrical and telephone lines, where they cross Metropolitan's rights-of-way, must have a minimum 35 feet of clearance, as measured from the ground to the lowest point of the overhead line. Overhead electrical lines poles must be located at least 30 feet laterally from the edges of Metropolitan's facilities or outside Metropolitan's right-of-way, whichever is greater.

Longitudinal overhead electrical and or telephone lines in public streets should have a minimum separation of 10 feet from the edge of a Metropolitan pipelines or structures where possible.

4.7 Sewage Disposal Systems

Sewage disposal systems, including leach lines and septic tanks, must be a minimum of 100 feet from the outside limits of Metropolitan's rights-of-way or the edge of its facilities, whichever is greater. If soil conditions are poor, or other adverse site-specific conditions exist, a minimum distance of 150 feet is required. They must also comply with local and state health code requirements as they relate to sewage disposal systems in proximity to major drinking water supply pipelines.

4.8 Underground Tanks

Underground tanks containing hazardous materials must be a minimum of 100 feet from the outside limits of Metropolitan's rights-of-way or edge of its facilities, whichever is greater. In addition, groundwater flow should be considered with the placement of underground tanks down-gradient of Metropolitan's facilities.

5.0 Specific Utilities: Non-Potable Utility Pipelines

In addition to Metropolitan's general requirements, installation of non-potable utility pipelines (e.g., storm drains, sewers, and hazardous fluids pipelines) in Metropolitan's rights-of-way and public street rights-of-way must also conform to the State Water Resources Control Board's Division of Drinking Water (DDW) regulation (Waterworks Standards) and guidance for separation of water mains and non-potable pipelines and to applicable local county health code requirements. Written approval is required from DDW for the implementation of alternatives to the Waterworks Standards and, effective December 14, 2017, requests for alternatives to the Waterworks Standards must include information consistent with: DDW's Waterworks Standards Main Separation Alternative Request Checklist.

In addition to the following general guidelines, further review of the proposed project must be evaluated by Metropolitan and requirements may vary based on site specific conditions.

A. Sanitary Sewer and Hazardous Fluids (General Guideline See Table 1 on Page 18)

B. Storm Drain and Recycled Water (General Guideline See Table 2 on Page 19)

C. Irrigation with Recycled Water (General Guideline See Table 3 on Page 20)

D. Metropolitan generally does not allow Irrigation with recycled water to be applied directly above its treated water pipelines

E. Metropolitan requests copies of project correspondence with regulating agencies (e.g., Regional Water Quality Control Board, DDW); regarding the application of recycled water for all projects located on Metropolitan's rights-of-way

6.0 Cathodic Protection/Electrolysis Test Stations

6.1 Metropolitan Cathodic Protection

Metropolitan's existing cathodic protection facilities in the vicinity of any proposed work must be identified prior to any grading or excavation. The exact location, description, and type of protection must be shown on all project plans. Please contact Metropolitan for the location of its cathodic protection stations.

6.2 Review of Cathodic Protection Systems

Metropolitan must review any proposed installation of impressed-current cathodic protection systems on pipelines crossing or paralleling Metropolitan's pipelines to determine any potential conflicts with Metropolitan's existing cathodic protection system.

7.0 Drainage

7.1 Drainage Changes Affecting Metropolitan Rights-of-Way

Changes to existing drainage that could affect Metropolitan's rights-of-way require Metropolitan's approval. The project proponent must provide acceptable solutions to ensure Metropolitan's rights-of-way are not negatively affected by changes in the drainage conditions. Plans showing the changes, with a copy of a supporting hydrology report and hydraulic calculations, must be submitted to Metropolitan for review and approval. Long term maintenance of any proposed drainage facilities must be the responsibility of the project proponent, City, County, homeowner's association, etc., with a clear understanding of where this responsibility lies. If drainage must be discharged across Metropolitan's rights-of-way, it must be carried across by closed conduit or lined open channel and must be shown on the plans.

7.2 Metropolitan's Blowoff and Pumpwell Structures

Any changes to the existing local watercourse systems will need to be designed to accommodate Metropolitan's blowoff and pumpwell structures, which periodically convey discharged water from Metropolitan's blowoff and pumping well structures during pipeline dewatering. The project proponents' plans should include details of how these discharges are accommodated within the proposed development and must be submitted to Metropolitan for review and approval. Any blowoff discharge lines impacted must be modified accordingly at the expense of the project proponent.

8.0 Grading and Settlement

8.1 Changes in Cover over Metropolitan Pipelines

The existing cover over Metropolitan's pipelines must be maintained unless Metropolitan determines that proposed changes in grade and cover do not pose a hazard to the integrity of the pipeline or an impediment to its maintenance capability. Load and settlement or rebound due to change in cover over a Metropolitan pipeline or ground in the area of Metropolitan's rights-of-way will be factors considered by Metropolitan during project review.

In general, the minimum cover over a Metropolitan pipeline is 4 feet and the maximum cover varies per different pipeline. Any changes to the existing grade may require that Metropolitan's pipeline be potholed under Metropolitan's supervision to verify the existing cover.

8.2 Settlement

Any changes to the existing topography in the area of Metropolitan's pipeline or right-of-way that result in significant settlement or lateral displacement of Metropolitan's pipelines are not acceptable. Metropolitan may require submittal of a soils report showing the predicted settlement of the pipeline at 10-foot intervals for review. The data must be carried past the point of zero change in each direction and the actual size and varying depth of the fill must be considered when determining the settlement. Possible settlement due to soil collapse, rebound and lateral displacement must also be included.

In general, the typical maximum allowed deflection for Metropolitan's pipelines must not exceed a deflection of 1/4-inch for every 100 feet of pipe length. Metropolitan may require additional information per its Geotechnical Guidelines. Please contact Metropolitan's Substructures Team for a copy of the Geotechnical Guidelines.

9.0 Construction Equipment

9.1 Review of Proposed Equipment

Use of equipment across or adjacent to Metropolitan's facilities is subject to prior review and written approval by Metropolitan. Excavation, backfill, and other work in the vicinity of Metropolitan's facilities must be performed only by methods and with equipment approved by Metropolitan. A list of all equipment to be used must be submitted to Metropolitan a minimum of 30 days before the start of work.

A. For equipment operating within paved public roadways, equipment that imposes loads not greater than that of an AASHTO H-20 vehicle (see Figure 1 on Page 21) may operate across or adjacent to Metropolitan's pipelines provided the equipment operates in non-vibratory mode and the road remains continuously paved.

B. For equipment operating within unpaved public roadways, when the total cover over Metropolitan's pipeline is 10 feet or greater, equipment imposing loads no greater than those imposed by an AASHTO H-20 vehicle may operate over or adjacent to the pipeline provided the equipment is operated in non-vibratory mode. For crossings, vehicle path shall be maintained in a smooth condition, with no breaks in grade for 3 vehicle lengths on each side of the pipeline.

9.2 Equipment Restrictions

In general, no equipment may be used closer than 20 feet from all Metropolitan above-ground structures. The area around the structures should be flagged to prevent equipment encroaching into this zone.

9.3 Vibratory Compaction Equipment

Vibratory compaction equipment may not be used in vibratory mode within 20 feet of the edge of Metropolitan's pipelines.

9.4 Equipment Descriptions

The following information/specifications for each piece of equipment should be included on the list:

A. A description of the equipment, including the type, manufacturer, model year, and model number. For example, wheel tractor-scraper, 1990 Caterpillar 627E.

B. The empty and loaded total weight and the corresponding weight distribution. If equipment will be used empty only, it should be clearly stated.

C. The wheel base (for each axle), tread width (for each axle), and tire footprint (width and length) or the track ground contact (width and length), and track gauge (center to center of track).

10.0 Excavations Close to Metropolitan Facilities

10.1 Shoring Design Submittal

Excavation that impacts Metropolitan's facilities requires that the contractor submit an engineered shoring design to Metropolitan for review and acceptance a minimum of 30 days before the scheduled start of excavation. Excavation may not begin until the shoring design is accepted in writing by Metropolitan.

Shoring design submittals must include all required trenches, pits, and tunnel or jacking operations and related calculations. Before starting the shoring design, the design engineer should consult with Metropolitan regarding Metropolitan's requirements, particularly as to any special procedures that may be required.

10.2 Shoring Design Requirements

Shoring design submittals must be stamped and signed by a California registered civil or structural engineer. The following requirements apply:

A. The submitted shoring must provide appropriate support for soil adjacent to and under Metropolitan's facilities.

B. Shoring submittals must include detailed procedures for the installation and removal of the shoring.

C. Design calculations must follow the Title 8, Chapter 4, Article 6 of the California Code of Regulations (CCR) guidelines. Accepted methods of analysis must be used.

D. Loads must be in accordance with the CCR guidelines or a soils report by a geotechnical consultant.

E. All members must be secured to prevent sliding, falling, or kickouts.

Metropolitan's pipelines must be located by potholing under Metropolitan's supervision before the beginning construction. Use of driven piles within 20 feet of the centerline of Metropolitan's pipeline is not allowed. Piles installed in drilled holes must have a minimum 2-foot clearance between Metropolitan's pipeline and the edge of the drilled hole, and a minimum of 1-foot clearance between any part of the shoring and Metropolitan's pipeline.

11.0 Support of Metropolitan Facilities

11.1 Support Design Submittal

If temporary support of a Metropolitan facility is required, the contractor shall submit a support design plan to Metropolitan for review and approval a minimum of 30 days before the scheduled start of work. Work may not begin until the support design is approved in writing by Metropolitan. Before starting design, the design engineer should consult with Metropolitan regarding Metropolitan's requirements.

11.2 Support Design Requirements

Support design submittals must be prepared, stamped, and signed by a California registered civil or structural engineer. The following requirements apply:

A. Support drawings must include detailed procedures for the installation and removal of the support system.

B. Design calculations must follow accepted practices, and accepted methods of analysis must be used.

C. Support designs must show uniform support of Metropolitan's facilities with minimal deflection.

D. The total weight of the facility must be transferred to the support system before supporting soil is fully excavated.

E. All members must be secured to prevent sliding, falling, or kickouts.

12.0 Backfill

12.1 Metropolitan Pipeline Not Supported

In areas where a portion of Metropolitan pipeline is not supported during construction, the backfill under and to an elevation of 6 inches above the top of the pipeline must be one-sack minimum cement sand slurry. To prevent adhesion of the slurry to Metropolitan's pipeline, a minimum 6-mil-thick layer of polyethylene sheeting or similar approved sheeting must be placed between the concrete support and the pipeline.

12.2 Metropolitan Pipeline Partially Exposed

In areas where a Metropolitan pipeline is partially exposed during construction, the backfill must be a minimum of 6 inches above the top of the pipeline with sand compacted to minimum 90 percent compaction.

12.3 Metropolitan Cut and Cover Conduit on Colorado River Aqueduct (CRA)

In areas where a Metropolitan cut and cover conduit is exposed, the following guidelines apply:

A. No vehicle or equipment shall operate over or cross the conduit when the cover is less than 3 feet.

B. Track-type dozer with a gross vehicle weight of 12,000 lbs or less may be used over the conduit when the cover is a minimum of 3 feet.

C. Wheeled vehicles with a gross vehicle weight of 8,000 lbs or less may operate over the conduit when the cover is a minimum of 4 feet.

D. Tracked dozer or wheeled vehicle should be used to push material over the conduit from the side.

E. Tracked dozer or wheeled vehicle should gradually increase cover on one side of the conduit and then cross the conduit and increase cover on the other side of the conduit. The cover should be increased on one side of the conduit until a maximum of 2 feet of fill has been placed. The cover over the conduit is not allowed to be more than 2 feet higher on one side of the conduit than on the other side.

F. The cover should be gradually increased over the conduit until the grade elevations have been restored.

13.0 Piles

13.1 Impacts on Metropolitan Pipelines

Pile support for structures could impose lateral, vertical and seismic loads on Metropolitan's pipelines. Since the installation of piles could also cause settlement of Metropolitan pipelines, a settlement and/or lateral deformation study may be required for pile installations within 50 feet of Metropolitan's pipelines. Metropolitan may require additional information per its Geo-technical Guidelines for pile installation. Please contact Metropolitan's Substructures Team for a copy of the Geotechnical Guidelines.

13.2 Permanent Cast-in-place Piles

Permanent cast-in-place piles must be constructed so that down drag forces of the pile do not act on Metropolitan's pipeline. The pile must be designed so that down drag forces are not developed from the ground surface to springline of Metropolitan's pipeline.

Permanent cast-in-place piles shall not be placed closer than 5 feet from the edge of Metropolitan's pipeline. Metropolitan may require additional information per its Geo-technical Guidelines for pile installation. Please contact Metropolitan's Substructures Team for a copy of the Geotechnical Guidelines.

14.0 Protective Slabs for Road Crossings Over Metropolitan Pipelines

Protective slabs must be permanent cast-in-place concrete protective slabs configured in accordance with Drawing SK-1 (See Figure 2 on Page 22).

The moments and shear for the protective slab may be derived from the American Association of State Highway and Transportation Officials (AASHTO). The following requirements apply:

A. The concrete must be designed to meet the requirements of AASHTO

B. Load and impact factors must be in accordance with AASHTO. Accepted methods of analysis must be used.

C. The protective slab design must be stamped and signed by a California registered civil or structural engineer and submitted to Metropolitan with supporting calculations for review and approval.

Existing protective slabs that need to be lengthened can be lengthened without modification, provided the cover and other loading have not been increased.

15.0 Blasting

At least 90 days prior to the start of any drilling for rock excavation blasting, or any blasting in the vicinity of Metropolitan's facilities, a site-specific blasting plan must be submitted to Metropolitan for review and approval. The plan must consist of, but not be limited to, hole diameters, timing sequences, explosive weights, peak particle velocities (PPV) at Metropolitan pipelines/structures, and their distances to blast locations. The PPV must be estimated based on a site-specific power law equation. The power law equation provides the peak particle velocity versus the scaled distance and must be calibrated based on measured values at the site.

16.0 Metropolitan Plan Review Costs, Construction Costs and Billing

16.1 Plan Review Costs

Metropolitan plan reviews requiring 8 labor hours or less are generally performed at no cost to the project proponent. Metropolitan plan reviews requiring more than 8 labor hours must be paid by the project proponent, unless the project proponent has superior rights at the project area. The plan review will include a written response detailing Metropolitan's comments, requirements, and/or approval.

A deposit of funds in the amount of the estimated cost and a signed letter agreement will be required from the project proponent before Metropolitan begins or continues a detailed engineering plan review that exceeds 8 labor hours.

16.2 Cost of Modification of Facilities Performed by Metropolitan

Cost of modification work conducted by Metropolitan will be borne by the project proponent, when Metropolitan has paramount/prior rights at the subject location.

Metropolitan will transmit a cost estimate for the modification work to be performed (when it has paramount/prior rights) and will require that a deposit, in the amount of the estimate, be received before the work will be performed.

16.3 Final Billing

Final billing will be based on the actual costs incurred, including engineering plan review, inspection, materials, construction, and administrative overhead charges calculated in accordance with Metropolitan's standard accounting practices. If the total cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice for the additional amount will be forwarded for payment.

17.0 Street Vacations and Reservation of Easements for Metropolitan

A reservation of an easement is required when all or a portion of a public street where Metropolitan facilities are located is to be vacated. The easement must be equal to the street width being vacated or a minimum 40 feet. The reservation must identify Metropolitan as a "public entity" and not a "public utility," prior to recordation of the vacation or tract map. The reservation of an easement must be submitted to Metropolitan for review prior to final approval.

18.0 Metropolitan Land Use Guidelines

If you are interested in obtaining permission to use Metropolitan land (temporary or long term), a Land Use Form must be completed and submitted to Metropolitan for review and consideration. A nonrefundable processing fee is required to cover Metropolitan's costs for reviewing your request. Land Use Request Forms can be found at:

http://mwdh2o.com/PDF_Doing_Your_Business/4.7.1_Land_Use_Request_form_revised.pdf

The request should be emailed to RealEstateServices@mwdh2o.com,or contact the Real Property Development and Management (RPDM) Group at (213) 217-7750.

After the initial application form has been submitted, Metropolitan may require the following in order to process your request:

A. A map indicating the location(s) where access is needed, and the location & size (height, width and depth) of any invasive subsurface activity (boreholes, trenches, etc.).

B. The California Environmental Quality Act (CEQA) document(s) or studies that have been prepared for the project (e.g., initial study, notice of exemption, Environmental Impact Report (EIR), Mitigated Negative Declaration (MND), etc.).

C. A copy of an ACORD insurance certification naming Metropolitan as an additional insured, or a current copy of a statement of self-insurance.

D. Confirmation of the legal name of the person(s) or entity(ies) that are to be named as the permittee(s) in the entry permit.

E. Confirmation of the purpose of the land use.

F. The name of the person(s) with the authority to sign the documents and any specific signature title block requirements for that person or any other persons required to sign the document (i.e., legal counsel, Board Secretary/Clerk, etc.).

G. A description of any vehicles that will have access to the property. The exact make or model information is not necessary; however, the general vehicle type, expected maximum dimensions (height, length, width), and a specific maximum weight must be provided.

Land use applications and proposed use of the property must be compatible with Metropolitan's present and/or future use of the property. Any preliminary review of your request by Metropolitan shall not be construed as a promise to grant any property rights for the use of Metropolitan's property.

19.0 Compliance with Environmental Laws and Regulations

As a public agency, Metropolitan is required to comply with all applicable environmental laws and regulations related to the activities it carries out or approves. Consequently, project plans, maps, and other information must be reviewed to determine Metropolitan's obligations pursuant to state and federal environmental laws and regulations, including, but not limited to:

A. California Environmental Quality Act (CEQA) (Public Resources Code 21000-21177) and the State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 1500-15387)

B. Federal Endangered Species Act (ESA) of 1973, 16 U.S.C. §§ 1531, et seq.

C. California Fish and Game Code Sections 2050-2069 (California ESA)

D. California Fish and Game Code Section 1602

E. California Fish and Game Code Sections 3511, 4700, 5050 and 5515 (California fully protected species)

F. Federal Migratory Bird Treaty Act (MBTA), 16 U.S.C. §§ 703-712

G. Federal Clean Water Act (including but not limited to Sections 404 and 401) 33 U.S.C. §§ 1342, 1344)

H. Porter Cologne Water Quality Control Act of 1969, California Water Code §§ 13000-14076.

I. Title 22, California Code of Regulations, Chapter 16 (California Waterworks Standards), Section 64572 (Water Main Separation)

Metropolitan may require the project applicant to pay for any environmental review, compliance and/or mitigation costs incurred to satisfy such legal obligations.

20.0 Paramount Rights / Metropolitan's Rights within Existing Rights-of-Way

Facilities constructed within Metropolitan's rights-of-way shall be subject to the paramount right of Metropolitan to use its rights-of-way for the purpose for which they were acquired. If at any time Metropolitan or its assigns should, in the exercise of their rights, find it necessary to remove or relocate any facilities from its rights-of-way, such removal and replacement or relocation shall be at the expense of the owner of the facility.

21.0 Disclaimer and Information Accuracy

Metropolitan assumes no responsibility for the accuracy of the substructure information herein provided. The user assumes responsibility for verifying substructure locations before excavating and assumes all liability for damage to Metropolitan's facilities as a result of such excavation. Additionally, the user is cautioned to conduct surveys and other field investigations as you may deem prudent, to assure that your project plans are correct. The relevant representative from Metropolitan must be called at least two working days, before any work activity in proximity to Metropolitan's facilities.

It generally takes 30 days to review project plans and provide written responses. Metropolitan reserves the right to modify requirements based on case-specific issues and regulatory developments.

Table 1: General Guidelines for Pipeline Separation between Metropolitan's Pipeline[1] and Sanitary Sewer[2] or Hazardous Fluid Pipeline[3]

Pipeline Crossings	Metropolitan requires that sanitary sewer and hazardous fluid pipelines that cross Metropolitan's pipelines have special pipe construction (no joints) **and** secondary containment[4]. This is required for the full width of Metropolitan's rights-of-way or within 10 feet tangent to the outer edges of Metropolitan's pipeline within public streets. Additionally, sanitary sewer and hazardous fluid pipelines crossing Metropolitan's pipelines must be perpendicular and maintain a minimum 1-foot vertical clearance between the top and the bottom of Metropolitan's pipeline and the pipe casing. These requirements apply to all sanitary sewer crossings regardless if the sanitary sewer main is located below or above Metropolitan's pipeline.
Parallel Pipeline	Metropolitan generally does not permit the installation of longitudinal pipelines along its rights-of-way. Within public streets, Metropolitan requires that all parallel sanitary sewer, hazardous fluid pipelines and/or non-potable utilities be located a minimum of 10 feet from the outside edges of Metropolitan's pipelines. When 10-foot horizontal separation criteria cannot be met, longitudinal pipelines require special pipe construction (no joints) **and** secondary containment[4].
Sewer Manhole	Sanitary sewer manholes are not allowed within Metropolitan's rights-of-way. Within public streets, Metropolitan requests manholes parallel to its pipeline be located a minimum of 10 feet from the outside edges of its pipelines. When 10 foot horizontal separation criteria cannot be met, the structure must have secondary containment[5].

Notes:

[1] Separation distances are measured from the outer edges of each pipe.

[2] Sanitary sewer requirements apply to all recycled water treated to less than disinfected tertiary recycled water (disinfected secondary recycled water or less). Recycled water definitions are included in Title 22, California Code of Regulations, Chapter 3 (Water Recycling Criteria), Section 60301.

[3] Hazardous fluids include e.g., oil, fuels, chemicals, industrial wastes, wastewater sludge, etc.

[4] Secondary Containment for Pipeline - Secondary containment consists of a continuous pipeline sleeve (no joints). Examples acceptable to Metropolitan include welded steel pipe with grout in annular space and cathodic protection (unless coated with non-conductive material) and High Density Polyethylene (HDPE) pipe with fusion-welded joints.

[5] Secondary Containment for Structures – Secondary containment consists of external HDPE liner or other approved method.

Table 2: General Guidelines for Pipeline Separation between Metropolitan's Pipeline[1] and Storm Drain and/or Disinfected Tertiary Recycled Water[2]

Pipeline Crossings	Metropolitan requires crossing pipelines to be special pipe construction (no joints) or have secondary containment[3] within 10-feet tangent to the outer edges of Metropolitan's pipeline. Additionally, pipelines crossing Metropolitan's pipelines must be perpendicular and maintain a minimum 1-foot vertical clearance.
Parallel Pipeline	Metropolitan generally does not permit the installation of longitudinal pipelines along its rights-of-way. Within public streets, Metropolitan requests that all parallel pipelines be located a minimum of 10 feet from the outside edges of Metropolitan's pipelines. When 10-foot horizontal separation criteria cannot be met, special pipe construction (no joints) or secondary containment[3] are required.
Storm Drain Manhole	Permanent utility structures (e.g., manhole. catch basin, inlets) are not allowed within Metropolitan's rights-of-way. Within public streets, Metropolitan requests all structures parallel to its pipeline be located a minimum of 10 feet from the outside edges of its pipelines. When 10 foot horizontal separation criteria cannot be met, the structure must have secondary containment[4].

Notes:

[1] *Separation distances are measured from the outer edges of each pipe.*

[2] *Disinfected tertiary recycled water as defined* in Title 22, California Code of Regulations, Chapter 3 (*Water Recycling Criteria*), Section 60301.

[3] *Secondary Containment for Pipeline - Secondary containment consists of a continuous pipeline sleeve (no joints). Examples acceptable to Metropolitan include welded steel pipe with grout in annular space and cathodic protection (unless coated with non-conductive material) and High Density Polyethylene (HDPE) pipe with fusion-welded joints.*

[4] *Secondary Containment for Structures – Secondary containment consists of external HDPE liner or other approved method.*

Table 3: General Guidelines for Pipeline Separation[1] between Metropolitan's Pipeline and Recycled Water[2,4] Irrigations

Pressurized recycled irrigation mainlines	• Crossings - must be perpendicular and maintain a minimum 1-foot vertical clearance. Crossing pressurized recycled irrigation mainlines must be special pipe construction (no joints) or have secondary containment[3] within 10-feet tangent to the outer edges of Metropolitan's pipeline. • Longitudinal - must maintain a minimum 10-foot horizontal separation and route along the perimeter of Metropolitan's rights-of-way where possible.
Intermittently Energized Recycled Water Irrigation System Components	• Crossings - must be perpendicular and maintain a minimum 1-foot vertical clearance. Crossing irrigation laterals within 5-feet tangent to the outer edges of Metropolitan's pipeline must be special pipe construction (no joints) or have secondary containment[3]. • Longitudinal – must maintain a minimum 5-foot horizontal separation between all intermittently energized recycled water irrigation system components (e.g. irrigation lateral lines, control valves, rotors) and the outer edges of Metropolitan's pipeline. Longitudinal irrigation laterals within 5-feet tangent to the outer edges of Metropolitan's pipeline must be special pipe construction (no joints) or have secondary containment[3].
Irrigation Structures	Irrigation structures such as meters, pumps, control valves, etc. must be located outside of Metropolitan's rights-of-way.
Irrigation spray rotors near Metropolitan's aboveground facilities	Irrigation spray rotors must be located a minimum of 20-foot from any Metropolitan above ground structures with the spray direction away from these structures. These rotors should be routinely maintained and adjusted as necessary to ensure no over-spray into 20-foot clear zones.
Irrigations near open canals and aqueducts	Irrigation with recycled water near open canals and aqueducts will require a setback distance to be determined based on site-specific conditions. Runoff of recycled water must be contained within an approved use area and not impact Metropolitan facilities. Appropriate setbacks must also be in place to prevent overspray of recycled water impacting Metropolitan's facilities.

Notes:

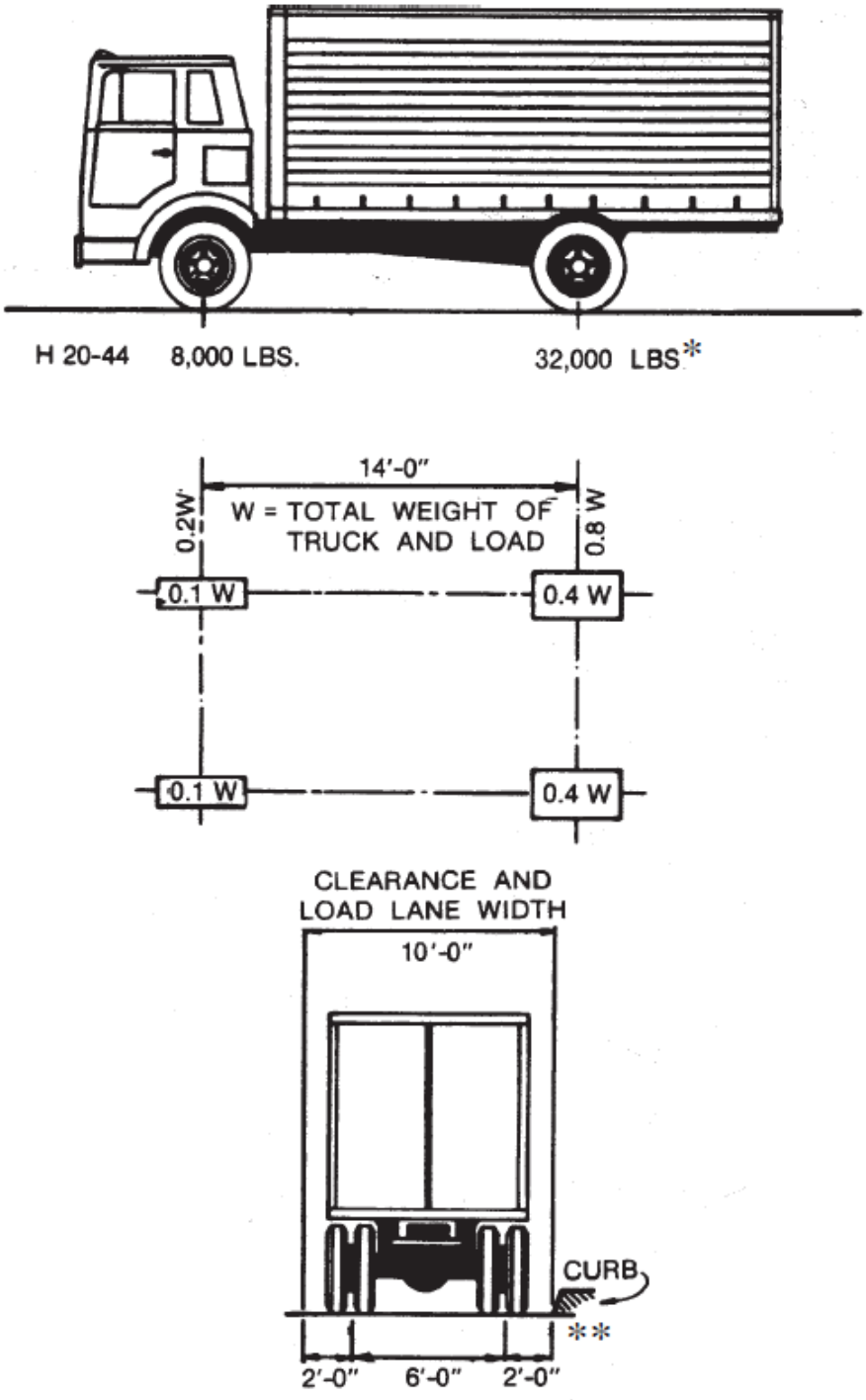
[1] *Separation distances are measured from the outer edges of each pipe.*

[2] *Requirements for recycled water irrigation apply to all levels of treatment of recycled water for non-potable uses.* Recycled water definitions are included in Title 22, California Code of Regulations, Chapter 3 (*Water Recycling Criteria*), Section 60301.

[3] *Secondary Containment for Pipeline - Secondary containment consists of a continuous pipeline sleeve (no joints). Examples acceptable to Metropolitan include welded steel pipe with grout in annular space and cathodic protection (unless coated with non-conductive material) and High Density Polyethylene (HDPE) pipe with fusion-welded joints.*

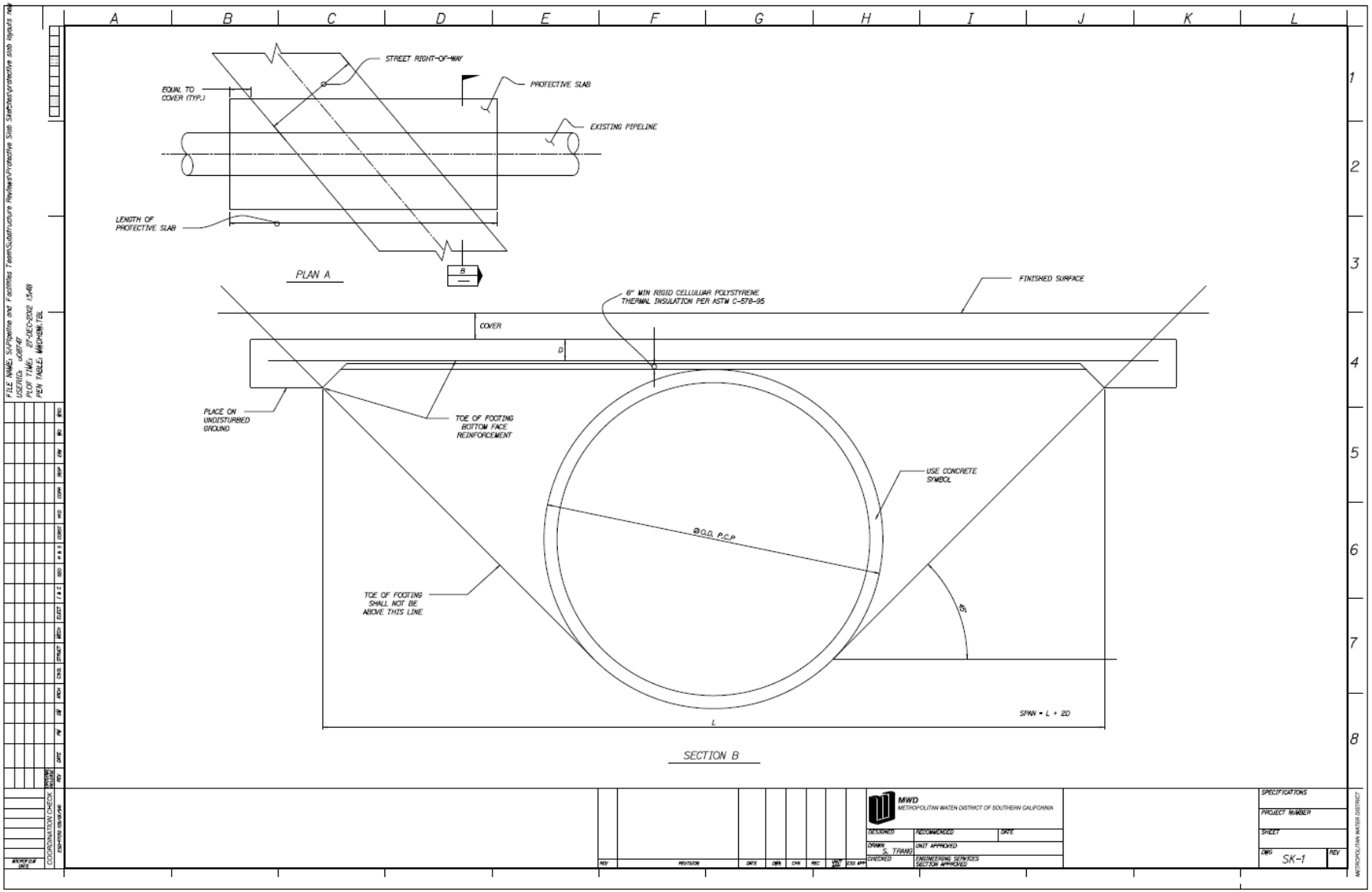
[4] *Irrigation with recycled water shall not be applied directly above Metropolitan's treated water pipelines.*

Figure 1: AASHTO H-20 Loading



Note: The H loadings consist of a two-axle truck or the corresponding lane loadings as illustrated above. The H loadings are designated "H" followed by a number indicating the gross weight in tons of the standard truck.

Figure 2: Drawing SK-1



SENT VIA E-MAIL: March 17, 2020

VCarvajal@santa-ana.org
Verny Carvajal, Principal Planner
City of Santa Ana, Planning and Building Agency
P.O. Box 1988 (M-20)
Santa Ana, CA 92702

Notice of Preparation of a Program Environmental Impact Report for the Proposed Santa Ana General Plan

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. South Coast AQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the Proposed Project that should be included in the Program Environmental Impact Report (EIR). Please send South Coast AQMD a copy of the Program EIR upon its completion and public release. Note that copies of the Program EIR that are submitted to the State Clearinghouse are not forwarded to South Coast AQMD. Please forward a copy of the Program EIR directly to South Coast AQMD at the address shown in the letterhead. **In addition, please send with the Program EIR all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files[1]. These include emission calculation spreadsheets and modeling input and output files (not PDF files). Without all files and supporting documentation, South Coast AQMD staff will be unable to complete our review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

South Coast AQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. South Coast AQMD staff recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analyses. Copies of the Handbook are available from the South Coast AQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on South Coast AQMD's website at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). South Coast AQMD staff also recommends that the Lead Agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

On March 3, 2017, the South Coast AQMD's Governing Board adopted the 2016 Air Quality Management Plan (2016 AQMP), which was later approved by the California Air Resources Board on March 23, 2017.

[1] Pursuant to the CEQA Guidelines Section 15174, the information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP provides a regional perspective on air quality and the challenges facing the South Coast Air Basin. The most significant air quality challenge in the Basin is to achieve an additional 45 percent reduction in nitrogen oxide (NOx) emissions in 2023 and an additional 55 percent NOx reduction beyond 2031 levels for ozone attainment. The 2016 AQMP is available on South Coast AQMD's website at: http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan.

South Coast AQMD staff recognizes that there are many factors Lead Agencies must consider when making local planning and land use decisions. To facilitate stronger collaboration between Lead Agencies and South Coast AQMD to reduce community exposure to source-specific and cumulative air pollution impacts, South Coast AQMD adopted the Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning in 2005[2]. This Guidance Document provides suggested policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. South Coast AQMD staff recommends that the Lead Agency review this Guidance Document as a tool when making local planning and land use decisions. Additional guidance on siting incompatible land uses (such as placing homes near freeways or other polluting sources) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: http://www.arb.ca.gov/ch/handbook.pdf. Guidance[3] on strategies to reduce air pollution exposure near high-volume roadways can be found at: https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF.

South Coast AQMD has also developed both regional and localized air quality significance thresholds. South Coast AQMD staff requests that the Lead Agency compare the emissions to the recommended regional significance thresholds found here: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf. In addition to analyzing regional air quality impacts, South Coast AQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the Proposed Project, it is recommended that the Lead Agency perform a localized analysis by either using the LSTs developed by South Coast AQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

When specific development is reasonably foreseeable as result of the goals, policies, and guidelines in the Proposed Project, the Lead Agency should identify any potential adverse air quality impacts and sources of air pollution that could occur using its best efforts to find out and a good-faith effort at full disclosure in the EIR. The degree of specificity will correspond to the degree of specificity involved in the underlying activity which is described in the EIR (CEQA Guidelines Section 15146). When quantifying air quality emissions, emissions from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources,

[2] South Coast AQMD. 2005. Accessed at: http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

[3] In April 2017, CARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*, to supplement CARB's Air Quality and Land Use Handbook: A Community Health Perspective. This technical advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. The technical advisory is available at: https://www.arb.ca.gov/ch/landuse.htm.

such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, for phased projects where there will be an overlap between construction and operational activities, emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA *operational* thresholds to determine the level of significance.

If the Proposed Project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

Mobile Source Health Risk Assessment

Notwithstanding the court rulings, South Coast AQMD staff recognizes that the Lead Agencies that approve CEQA documents retain the authority to include any additional information they deem relevant to assessing and mitigating the environmental impacts of a project. Because of South Coast AQMD staff's concern about the potential public health impacts of siting sensitive populations within close proximity of freeways and other sources of air pollution, South Coast AQMD staff recommends that, prior to approving the project, Lead Agencies consider the impacts of air pollutants on people who will live in a new project and provide mitigation where necessary.

Based on review of Figure 1 enclosed in the Notice of Preparation, South Coast AQMD staff found that sensitive land uses (e.g., residential uses) may be located within close proximity to Interstate 5 and State Route 22. Sensitive receptors would be exposed to diesel particulate matter (DPM) emitted from heavy-duty, diesel-fueled on-road vehicles. DMP is a toxic air contaminant and a carcinogen. Since sensitive receptors would be exposed to toxic emissions, South Coast AQMD staff recommends that the Lead Agency conduct a mobile source health risk assessment (HRA)[4] in the Program EIR to disclose the potential health risks[5]. The HRA will facilitate the purpose and goal of CEQA on public disclosure and enable decision-makers with meaningful information to make an informed decision on project approval. This will also foster informed public participation by providing the public with useful information that is needed to understand the potential health risks from living and working within close proximity to freeways.

Mitigation Measures

If the Proposed Project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. Pursuant to CEQA Guidelines Section 15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying possible mitigation measures for the Proposed Project, including:

- Chapter 11 "Mitigating the Impact of a Project" of South Coast AQMD's *CEQA Air Quality Handbook*
- South Coast AQMD's CEQA web pages available here: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies

[4] South Coast AQMD. *Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*. Accessed at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis.

[5] South Coast AQMD has developed the CEQA significance threshold of 10 in one million for cancer risk. When South Coast AQMD acts as the Lead Agency, South Coast AQMD staff conducts a HRA, compares the maximum cancer risk to the threshold of 10 in one million to determine the level of significance for health risk impacts, and identifies mitigation measures if the risk is found to be significant.

- South Coast AQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions and Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities
- California Air Pollution Control Officers Association's (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

Health Risks Reduction Strategies

As stated above, the Proposed Project is located within close proximity to freeways. Many strategies are available to reduce exposures, including, but are not limited to, building filtration systems with MERV 13 or better, or in some cases, MERV 15 or better is recommended; building design, orientation, location; vegetation barriers or landscaping screening, etc. Enhanced filtration units are capable of reducing exposures. Installation of enhanced filtration units can be verified during occupancy inspection prior to the issuance of an occupancy permit.

Enhanced filtration systems have limitations. South Coast AQMD staff recommends that the Lead Agency consider the limitations of the enhanced filtration. For example, in a study that South Coast AQMD conducted to investigate filters[6], a cost burden is expected to be within the range of $120 to $240 per year to replace each filter. The initial start-up cost could substantially increase if an HVAC system needs to be installed. In addition, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy costs to the sensitive receptors (e.g., residents). It is typically assumed that the filters operate 100 percent of the time while sensitive receptors at the Proposed Project are indoors, and the environmental analysis does not generally account for the times when sensitive receptors have their windows or doors open or are in common space areas of the project. In addition, these filters have no ability to filter out any toxic gases from vehicle exhaust. Therefore, the presumed effectiveness and feasibility of any filtration units should be carefully evaluated in more detail prior to assuming that they will sufficiently alleviate exposures to DPM emissions.

Because of the limitations, to ensure that enhanced filters are enforceable throughout the lifetime of the Proposed Project as well as effective in reducing exposures to DPM emissions, South Coast AQMD staff recommends that the Lead Agency provide additional details regarding the ongoing, regular maintenance and monitoring of filters in the environmental analysis. To facilitate a good faith effort at full disclosure and provide useful information to people who will live at the Proposed Project, the environmental analysis should include the following information, at a minimum:

- Disclose the potential health impacts to sensitive receptors from living in close proximity of sources of air pollution and the reduced effectiveness of air filtration system when windows are open and/or when receptors are outdoor (e.g., in the common and open space areas);
- Identify the responsible implementing and enforcement agency such as the Lead Agency to ensure that enhanced filtration units are installed on-site at the Proposed Project before a permit of occupancy is issued;
- Identify the responsible implementing and enforcement agency such as the Lead Agency to ensure that enhanced filtration units are inspected regularly;
- Provide information to sensitive receptors on where the MERV filers can be purchased;
- Disclose the potential increase in energy costs for running the HVAC system to sensitive receptors;
- Provide recommended schedules (e.g., once a year or every six months) for replacing the enhanced filtration units to sensitive receptors;

[6] This study evaluated filters rated MERV 13 or better. Accessed at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf. Also see 2012 Peer Review Journal article by South Coast AQMD: https://onlinelibrary.wiley.com/doi/10.1111/ina.12013.

- Identify the responsible entity such as sensitive receptors themselves (e.g., residents), Homeowner's Association, or property management for ensuring enhanced filtration units are replaced on time, if appropriate and feasible (if sensitive receptors should be responsible for the periodic and regular purchase and replacement of the enhanced filtration units, the Lead Agency should include this information in the disclosure form);
- Identify, provide, and disclose any ongoing cost sharing strategies, if any, for the purchase and replacement of the enhanced filtration units;
- Set City-wide or Project-specific criteria for assessing progress in installing and replacing the enhanced filtration units; and
- Develop a City-wide or Project-specific process for evaluating the effectiveness of the enhanced filtration units at the Proposed Project.

Alternatives

If the Proposed Project generates significant adverse air quality impacts, CEQA requires the consideration and discussion of alternatives to the project or its location which are capable of avoiding or substantially lessening any of the significant effects of the project. The discussion of a reasonable range of potentially feasible alternatives, including a "no project" alternative, is intended to foster informed decision-making and public participation. Pursuant to CEQA Guidelines Section 15126.6(d), the Program EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project.

Permits

If implementation of the Proposed Project requires a permit from South Coast AQMD, South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the Program EIR. For more information on permits, please visit South Coast AQMD's webpage at: http://www.aqmd.gov/home/permits. Questions on permits can be directed to South Coast AQMD's Engineering and Permitting staff at (909) 396-3385.

Data Sources

South Coast AQMD rules and relevant air quality reports and data are available by calling the South Coast AQMD's Public Information Center at (909) 396-2001. Much of the information available through the Public Information Center is also available via the South Coast AQMD's webpage (http://www.aqmd.gov).

South Coast AQMD staff is available to work with the Lead Agency to ensure that project's air quality impacts are accurately evaluated and mitigated where feasible. Please contact me at lsun@aqmd.gov, should you have any questions.

Sincerely,

Lijin Sun

Lijin Sun, J.D.
Program Supervisor, CEQA IGR
Planning, Rule Development & Area Sources

LS
ORC200303-03
Control Number

GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

March 20, 2020

Project Name: Santa Ana General Plan

Dear Verny Carvajal,

Thank you for your letter dated February 26, 2020 regarding AB52 consultation. The above proposed project location is within our Ancestral Tribal Territory; therefore, our Tribal Government requests to schedule a consultation with you as the lead agency, to discuss the project and the surrounding location in further detail.

Please contact us at your earliest convenience. ***Please Note:AB 52, "consultation" shall have the same meaning as provided in SB 18 (Govt. Code Section 65352.4).***

Thank you for your time,

Andrew Salas, Chairman
Gabrieleno Band of Mission Indians – Kizh Nation
1(844)390-0787

AIRPORT LAND USE COMMISSION
FOR ORANGE COUNTY
3160 Airway Avenue • Costa Mesa, California 92626 • 949.252.5170 fax: 949.252.6012

March 26, 2020

Verny Carvajal, Principal Planner
City of Santa Ana Planning and Building Agency
P.O. Box 1988, M-20
Santa Ana, CA 92702

Subject: Comments on the Notice of Preparation of Program Environmental Impact Report (EIR) for Santa Ana General Plan

Dear Mr. Carvajal:

Thank you for the opportunity to review the Notice of Preparation (NOP) for the City of Santa Ana General Plan in the context of the *Airport Environs Land Use Plan (AELUP) for John Wayne Airport (JWA)*. We wish to offer the following comments and respectfully request consideration of these comments as you proceed with your DEIR and General Plan Update.

The City of Santa Ana is located within the AELUP Notification Area for JWA. The DEIR and General Plan should address height restrictions and imaginary surfaces by discussing Federal Aviation Administration (FAA) Federal Aviation Regulation (FAR) Part 77 as the criteria for determining height restrictions for projects located within the airport planning area. To ensure the safe operation of aircraft activity at JWA, structures anywhere in the JWA airport planning area should not exceed the applicable elevations defined in FAR Part 77 (Objects Affecting Navigable Air Space). The General Plan should include height policy language and a mitigation measure in the EIR that states that no buildings will be allowed to penetrate the FAR Part 77 imaginary surfaces for JWA to ensure the protection of its airspace.

Development proposals within the City, which include the construction or alteration of structures more than 200 feet above ground level, require filing with the FAA and Airport Land Use Commission (ALUC) notification. Projects meeting this threshold must comply with procedures provided by Federal and State law, and with all conditions of approval imposed or recommended by FAA and ALUC including filing a Notice of Proposed Construction or Alteration (FAA Form 7460-1). Depending on the maximum building heights that will be allowed within the General Plan, the City may wish to consider a mitigation and condition of approval specifying this 200 feet above ground level height

threshold. In addition, any project that penetrates the Notification Surface for JWA is required to file FAA Form 7460-1.

Portions of the City of Santa Ana fall within the 60 and 65 dB CNEL noise contours for JWA including a portion of the 55 Freeway/Dyer Road planning area. The DEIR and General Plan Update should include policies and mitigations for development within these contours, especially if mixed-use/residential development would be permitted. Per the *AELUP for JWA*, all residential units within the 65 dB CNEL contour are typically inconsistent in this area unless it can be shown conclusively that such units are sufficiently sound attenuated for present and projected noise exposure so as not to exceed an interior standard of 45 dB CNEL. However, the ALUC recommends that residential uses not be permitted within the 65 dB CNEL contour. As for residential development within the 60 dB CNEL contour, the ALUC may not find residential units incompatible in this area, but would strongly recommend that residential units be limited or excluded from this area unless sufficiently sound attenuated not to exceed an interior level of 45 dB.

We also recommend that the DEIR and the General Plan Update identify if the development of heliports will be allowed within your jurisdiction. Should the development of heliports occur within your jurisdiction, proposals to develop new heliports may be submitted through the City to the ALUC for review and action pursuant to Public Utilities Code Section 21661.5. Proposed heliport projects must comply fully with the state permit procedure provided by law and with all conditions of approval imposed or recommended by FAA, by the ALUC for Orange County and by Caltrans/Division of Aeronautics.

To address consistency with the *AELUP for Heliports* we suggest adding the following language to your General Plan Update and inclusion as a mitigation measure in the EIR:

> "The City will ensure that development proposals including the construction or operation of a heliport or helistop comply fully with permit procedures under State law, including referral of the project to the ALUC by the applicant, and with all conditions of approval imposed or recommended by the Federal Aviation Administration (FAA), ALUC, and Caltrans, including the filing of a Form 7480-1 (Notice of Landing Area Proposal) with the FAA. This requirement shall be in addition to all other City development requirements."

Section 21676 of the PUC requires that prior to the adoption or amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the Airport Land Use Commission pursuant to Section 21675, the local agency shall first refer the proposed action to the ALUC. We recommend that the City include policy in its General Plan and a mitigation measure in the EIR that states that the City shall refer projects to the Airport Land Use Commission (ALUC) for Orange County as required by Section 21676 of the California Public Utilities Code to determine consistency of projects with the *AELUP for JWA.*

The Commission requests that referrals for determinations be submitted to the ALUC after the city's Planning Commission hearing and before the City Council action. Since the ALUC meets on the third Thursday afternoon of each month, submittals must be received in the ALUC office by the first of the month to ensure sufficient time for review, analysis, and agendizing. For additional information, please contact Julie Fitch at (949) 252-2584 or at jfitch@ocair.com.

Sincerely,

Lea U. Choum
Executive Officer

cc: Airport Land Use Commissioners

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

March 26, 2020

Mr. Verny Carvajal
City of Santa Ana
PO Box 1988 (M-20)
Santa Ana, CA 92702

Dear Mr. Carvajal:

Subject: Santa Ana General Plan Program Environmental Impact Report (PROJECT) NOTICE OF PREPARATION (NOP) OF A PROGRAM ENVIRONMENTAL IMPACT REPORT (PEIR) SCH# 2020029087

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) of a Program Environmental Impact Report (PEIR) from the City of Santa Ana (City) for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources, and holds those resources in trust by statute for all the people of the state. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

PROJECT DESCRIPTION SUMMARY

Proponent: City of Santa Ana (City)
Objective: The objective of the Project is to update the City's existing General Plan to guide development and conservation for the next 25 years through 2045. Five regions are identified as focus areas to be enhanced through development.

1 CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Location: The City of Santa Ana encompasses roughly 27 square miles of land in central Orange County. The City is bordered to the north by Orange, to the south by Costa Mesa, to the west by Garden Grove, Westminster, and Fountain Valley, and to the east by Tustin and Irvine. The Santa Ana River traverses through the northwestern quadrant of the City. Special status species with the potential to occur in the region include: Steelhead - southern California Distinct Population Segment (DPS) (*Oncorhynchus mykiss irideus*; Endangered Species Act (ESA) listed endangered), coast horned lizard (*Phrynosoma blainvillii*; California Species of Special Concern (SSC)), Crotch bumble bee (*Bombus crotchii*; Candidate for CESA-listed endangered), Mexican long-tongued bat (*Choeronycteris mexicana*; SSC), and American peregrine falcon (*Falco peregrinus anatum*; FPS).

Timeframe: The comprehensive update to the exiting General Plan is anticipated to be completed in 2020 and will guide development and conservation through 2045.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Based on the potential for the Project to have a significant impact on biological resources, CDFW agrees that a Program Environmental Impact Report is appropriate for the Project.

I. Potential Impacts to Santa Ana River

Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS?

COMMENT #1:

Issue: The Proposed General Plan focus area along West Santa Ana Boulevard intersects the Santa Ana River corridor as well as adjacent open space areas. Development within that focus area may potentially affect biological resources associated with riparian habitat or neighboring open space.

CDFW Recommendations To Minimize Significant Impacts:

1. The Proposed General Plan focus area along West Santa Ana Boulevard intersects the Santa Ana River corridor. Historically, the Santa Ana River and tributaries supported federally endangered southern California steelhead (https://wildlife.ca.gov/Conservation/Fishes/Coastal-Rainbow-Trout-Steelhead). California Fish and Game Code § 5901 states that it is unlawful to construct or maintain any device or contrivance that prevents, impedes, or tends to prevent or impede the passing of fish up and down stream.

In accordance with California Fish and Game Code, we recommend that the PEIR include an analysis of any proposed major stream crossings in the context of fish passage. The analysis should include, but not be limited to, steelhead presence or historic presence, existing conditions including habitat and barrier assessments, any known projects to remove barriers or

restore habitat that would affect or be affected by this project, and cumulative impacts to steelhead populations and/or habitat resulting from this project.

2. CDFW has responsibility for wetland and riparian habitats. It is the policy of CDFW to strongly discourage development in wetlands or conversion of wetlands to uplands. We oppose any development or conversion that would result in a reduction of wetland acreage or wetland habitat values, unless, at a minimum, project mitigation assures there will be "no net loss" of either wetland habitat values or acreage. Development and conversion include but are not limited to conversion to subsurface drains, placement of fill or building of structures within the wetland, and channelization or removal of materials from the streambed. All wetlands and watercourses, whether ephemeral, intermittent, or perennial, should be retained and provided with substantial setbacks that preserve the riparian and aquatic values and maintain their value to on-site and off-site wildlife populations. Mitigation measures to compensate for impacts to mature riparian corridors must be included in the PEIR and must compensate for the loss of function and value of a wildlife corridor.

3. CDFW considers adverse impacts to a species protected by the California Endangered Species Act (CESA), for the purposes of CEQA, to be significant without mitigation. As to CESA, take of any endangered, threatened, or candidate species that results from the project is prohibited, except as authorized by state law (Fish & G. Code, §§ 2080, 2085). Consequently, if any associated Project, Project construction, or any Project-related activity during the life of the Project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the project proponent seek appropriate take authorization under CESA prior to implementing the project. Appropriate authorization from CDFW may include an incidental take permit (ITP) or a consistency determination in certain circumstances, among other options (Fish and G. Code §§ 2080.1, 2081, subds. (b),(c)). Early consultation is encouraged, as significant modification to a project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP unless the project CEQA document addresses all project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA ITP.

Mitigation for the Project-related Biological Impacts

4. The PEIR should include measures to fully avoid and otherwise protect Rare Natural Communities from project-related impacts. CDFW considers these communities as threatened habitats having both regional and local significance.

5. For proposed preservation and/or restoration, the PEIR should include measures to perpetually protect the targeted habitat values from direct and indirect negative impacts. The objective should be to offset the project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a data base which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP of a PEIR to assist the City in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Jessie Lane, environmental scientist at (858) 636-3159 or Jessie.Lane@wildlife.ca.gov.

Sincerely,

David A. Mayer
Acting Environmental Program Manager
South Coast Region

ec: Office of Planning and Research, State Clearinghouse, Sacramento

REFERENCES

Cowardin, Lewis M., et al. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service.

Sawyer, J. O., T. Keeler-Wolf and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society Press, Sacramento.

Community Development Department

TUSTIN

BUILDING OUR FUTURE
HONORING OUR PAST

March 26, 2020

Mr. Verny Carvajal
Principal Planner
City of Santa Ana
Planning and Building Agency
PO BOX 1988 (M-20)
Santa Ana, CA 92702

SUBJECT: REVIEW OF NOTICE OF PREPARATION OF A DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE CITY OF SANTA ANA GENERAL PLAN

Dear Mr. Carvajal:

Thank you for the opportunity to provide comments on the Notice of Preparation (NOP) of a Program Environmental Impact Report (PEIR) for the City of Santa Ana General Plan. According to the NOP, the proposed General Plan will guide the City of Santa Ana's development for the next 25 years and will provide options to increase development potential in several areas of the City while bringing the City into compliance with recent state laws and reflecting community input and updates to current conditions

The proposed General Plan envisions up to 36,167 additional housing units, 6,819,422 square feet of additional nonresidential space, and 14,362 new jobs between 2020 and 2045. As proposed, 13,438 of these housing units and 3,604,556 square feet of the commercial space could be built in close proximity to Tustin within the Metro East Overlay Zone and the 55 Freeway/Dyer Road Focus Area.

The City of Tustin offers the following comments at this time:

1. **Land Use Intensification** - The City of Tustin is concerned with the significant changes in land uses (i.e., from commercial and industrial buildings to residential mixed use) along Red Hill Avenue and Dyer Road that are proposed by the Santa Ana General Plan, the Bowery project, or that have occurred recently with the approval and construction of The Heritage project at 2001 East Dyer Road. These land use changes could result in significant traffic and park impacts and affect planned mitigations. The cumulative impacts to traffic and parks are likely to be substantial. Therefore, there should be detailed overall projections of the anticipated changes in land uses in the PEIR, so the cumulative impacts related to traffic and parks and the associated mitigation can be documented.

2. **Technical Analyses** – It is unclear how the development potential identified in Table 1 of the NOP was calculated. No technical analyses or supporting documentation was provided with the NOP. Undoubtably there will be capacity issues that need to be addressed in accommodating the proposed development. No project alternative was identified in the NOP, yet there have been project alternatives identified for the Focus Areas. How was the development potential identified in Table 1 of the NOP concluded to be the preferred option? There does not appear to be any conclusive analysis provided within public documents available on the City of Santa Ana website.

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Therefore, the Draft PEIR should identify project alternatives and provide the technical analyses which identify that the proposed development can be accommodated with the appropriate facilities and levels of service. Apart from community outreach efforts, there appears to have been no technical evaluation of the proposed General Plan Update provided to the public.

3. **Parks and Open Space** – Resident feedback within the Community Outreach – The First Conversation Executive Summary noted the lack of open space, need for better park maintenance, lack of community centers, and unsafe parks within Santa Ana. However, neither of the project alternatives presented through community outreach identified any open space proposed within the 55 Freeway/Dyer Road Focus Area. The City of Santa Ana Municipal Code requires residential projects to pay park acquisition and development fees or dedicate land for park and recreational purposes. It is unclear from the NOP whether any additional park land or open space is proposed as part of the Santa Ana General Plan Update. According to Figure 1 of the NOP, no additional open space is proposed in the 55 Freeway/Dyer Road Focus Area. Open space within future residential projects that may include private open space and perimeter open space is not equivalent to park land provided. In any event, the Santa Ana General Plan should require land for park and recreational purposes to meet the City of Santa Ana's minimum standard of "two (2) acres of property devoted to parks and recreational purposes for each thousand (1,000) persons residing within the City of Santa Ana." There is an average 2018 household size of 4.5 persons in the City of Santa Ana per the Southern California Association of Government's 2019 Profile of the City of Santa Ana. This equates to a minimum of approximately 89.6 acres of new parkland needed to serve the 9,952 housing units projected at build-out for the Focus Area, as there are no park facilities currently existing in the Focus Area.

It is also notable that the Santa Ana goal of two (2) acres per 1,000 residents falls short of the widely held minimum standard of three (3) acres per 1,000 residents as established under the Quimby Act (CA Government Code Section 66477). As shown in the table below, the minimum General Plan park acreage goals of many surrounding jurisdictions are higher than that of Santa Ana.

City	General Plan Minimum Parkland Acreage Goal
Costa Mesa	4.26 acres per 1,000 residents
Fountain Valley	13.2 acres per 1,000 residents (existing); 3-5 acre goal
Garden Grove	2.0 acres per 1,000 residents for parkland; 5.0 acres per 1,000 residents for open space
Irvine	5.0 acres per 1,000 residents
Orange	3.0 acres per 1,000 residents
Santa Ana	2.0 acres per 1,000 residents
Tustin	3.0 acres per 1,000 residents
Westminster	3.0 acres per 1,000 residents

Policy 1.4 – Park Connectivity of the Open Space Element from the Santa Ana General Plan Policy Framework (GPPF) proposes to establish and enhance options for residents to access existing and new park facilities through safe walking, bicycling, and transit routes. There is a

fragmented and absent sidewalk network and there are no parkland facilities existing within the 55 Freeway/Dyer Road Focus Area. Further, the 55 Freeway creates a barrier to those properties currently proposed for residential uses. The closest park facilities are across Red Hill Avenue within Tustin Legacy and are within both biking and walking distance of the Focus Area.

The proposed Veterans Sports Park at Tustin Legacy, for example, will be three times larger and about half the distance from the Project site than the closest park in Santa Ana and will offer new, state of art facilities that will be attractive to park users. The analysis in the PEIR should consider the quality, amenities, and attractiveness of nearby parks when estimating park usage.

If additional sufficient parkland is not identified in the Santa Ana General Plan, residents of future projects may be unable to find adequate parks in Santa Ana and may negatively impact parks and overburden parkland facilities in adjacent jurisdictions, including Tustin. These impacts must be mitigated. An analysis in the PEIR of the proposed compliance with the City of Santa Ana's park standards should focus on the potential to physically deteriorate existing and future recreational facilities in the City of Tustin, as the nearest existing and planned large scale recreational facilities to the 55 Freeway/Dyer Road Focus Area are located in the City of Tustin.

The apparent lack of commitment to open space and parkland by the City of Santa Ana is troubling given the Focus Area's adjacency to the City of Tustin and Tustin Legacy. Community outreach identified Santa Ana residents' need for additional and better park facilities. It is highly likely that residents within the Focus Area will use Tustin Legacy park facilities due to their close proximity, convenience, safety, and likely enhanced level of maintenance compared to Santa Ana park facilities based on resident feedback obtained from Santa Ana's community outreach. This will place an unplanned and undue burden on Tustin Legacy facilities.

4. **Parks and Open Space Studies** - A comprehensive study of parkland demand should be conducted to evaluate the impacts of the General Plan buildout on Tustin facilities. It is recommended that the minimum park facilities as required by the General Plan be accommodated within the Focus Area. Thresholds tied to the development and upzoning of any properties should be required to ensure the development of the minimum parkland facilities within the Focus Area. The PEIR should also include a study that analyzes how far residents in a suburban community are willing to travel to reach a community park. As a comparison, the study should also analyze the distances from other similar existing City of Santa Ana residential neighborhoods to their nearest community parks.

5. **District Center Land Use - 55 Freeway/Dyer Road Focus Area** – The PowerPoint presentation for the General Plan Land Use Community Workshop for the 55 Freeway/Dyer Road Focus Area held on April 29, 2019, identified two (2) project alternatives which offer varying levels of increased commercial and residential intensities. Stated goals for the Focus Area include, but are not limited to the following: 1. Protect industrial and office

employment base, 2. Provide complementary housing at the City's edge, and 3. Maintain hotel and commercial uses.

According to Table 1 of the NOP, the development of an additional 8,731 housing units is proposed within the Focus Area. Currently the District Center Land Use Designation allows for up to 90 dwelling units per acre as a maximum residential density. Alternative 1 considers only the addition of the Bowery project located at 2300 Red Hill Avenue which proposes 1,150 dwelling units. Alternative 2 proposes an increased area for residential mixed-use development of what appears to be approximately 53 acres overall. If developed at the maximum residential density allowed (90 du/ac.) this area would yield approximately 4,770 dwelling units.

It is unclear where the additional housing units noted within Table 1 would be located. The level of development noted in Table 1 does not appear to align with the vision represented to the public in the two (2) development alternatives. This appears to run contrary to the Focus Area goal of protecting the industrial and office employment base by eroding commercially used properties.

An accurate representation of the vision for the area should be provided to the public along with the technical analysis to justify that the development potential can be accommodated. A residential unit cap may be needed similar to that of the Irvine Business Complex in the City of Irvine to ensure adherence with the General Plan vision and goals.

6. **Affordable Housing** – There is no mention in the NOP of affordable housing to be provided in conjunction with the proposed upzoning of properties. The lack of affordable housing within Santa Ana was noted as a concern to residents in the Community Outreach – The First Conversation Executive Summary. Potential density bonus units should be identified and evaluated for their impacts when evaluating buildout capacity.

7. **Land Use Compatibility** – The General Plan proposes to introduce residential uses into what is predominately an office and industrial business park area. This has already occurred in a piecemeal approach with the Heritage Project located at 2001 E. Dyer Road. The GPPF from December 2018 identifies Land Use Policy 1.1 Compatible Uses. The General Plan Update should identify how these land uses such as industrial and residential will co-exist directly adjacent to one another. Facility improvements required to "enhance livability and promote healthy lifestyles" should be identified and a course of action for implementation provided. As an example, a significant portion of the area does not have sidewalks which presents a mobility issue for future residents.

8. **Noise** - The 55 Freeway/Dyer Road Focus Area lies within the John Wayne Airport (JWA) flightpath, with a substantial portion of the area included within the 65 dB(A) and 60 dB(A) CNEL contours (2016 Baseline). Policy 3.1 of the Noise Element from the GPPF does not support residential development within the 65 dB(A) CNEL noise contour. Areas falling within the 65 dB(A) CNEL noise contour should be clearly identified in the PEIR and restricted so as not to allow residential development.

Policy 2.2 – Stationary Related Noise of the Noise Element from the GPPF seeks to minimize noise impacts from commercial and industrial facilities adjacent to residential uses. Mitigation measures will need to be identified as to how this goal will be achieved with the introduction of residential uses in the Focus Area which currently consists of predominately office and industrial uses.

9. **Traffic/Circulation** - Due to land use changes contemplated in Santa Ana's proposed General Plan, a Traffic Impact Analysis (TIA) is required. The Study Area should include Tustin arterial roadways within the area between Barranca Parkway/Dyer Road and the I-5 Freeway and between the SR-55 Freeway and Jamboree Road. The greatest potential impacts are anticipated to occur along Red Hill Avenue, Warner Avenue, and Barranca Parkway. The intersections of Tustin Ranch Road-Von Karman Avenue/Barranca Parkway and Red Hill Avenue/Warner Avenue are especially sensitive to additional impacts, as they are already expected to operate at capacity at Long-Term Buildout. The Red Hill Avenue /I-5 Ramp intersections along with the adjacent intersections at Nisson Road and El Camino Real should also be included.

10. **Traffic/Circulation** - The newly installed landscaped median on Red Hill Avenue between Warner Avenue and Carnegie Avenue currently prevents left turn ingress and egress at driveways along the westerly side of Red Hill Avenue along the frontage of contemplated development. Due to the high speeds and traffic volume on Red Hill Avenue, the City is not supportive of an additional traffic signal to serve proposed development, nor the installation of median breaks to provide turning movements across the median. Any driveways on Red Hill Avenue to serve proposed development will need to only allow right-turn in and right-turn out movements.

11. **Traffic/Circulation** - Any significant development or land use intensification in the 55 Freeway/Dyer Road Focus Area would likely require improvements along southbound Red Hill Avenue i.e., dedicated right-turn lanes on eastbound Warner Avenue and Carnegie Avenue at Red Hill Avenue or right-turn lanes on southbound Red Hill Avenue at Warner Avenue and Carnegie Avenue.

12. **Traffic/Circulation** - Any analysis of Tustin roadways and intersections would need to comply with the most current City of Tustin methodology for such analyses. The traffic analysis should consider cumulative traffic impacts, and all traffic impacts should be mitigated to the greatest extent feasible through the imposition of effective mitigation measures on the project.

13. **Traffic/Circulation** - Due to this project's proximity with the City of Tustin and its potential to significantly impact Tustin roadways, it is requested that an opportunity be extended to Tustin staff to participate in the development of the TIA for the project, and to review the TIA before public release.

Thank you again for the opportunity to provide comments on the proposed City of Santa Ana General Plan project. The City of Tustin would appreciate receiving early responses to our comments as well as a copy of the Draft EIR when it becomes available and all future public hearing notices with respect to this project.

Please provide all future CEQA notices regarding this project to the undersigned pursuant to Public Resources Code Section 21092.2.

If you have any questions regarding the City's comments, please call Scott Reekstin, Principal Planner, at (714) 573-3016 or Krys Saldivar, Public Works Manager, at (714) 573-3172.

Sincerely,

Elizabeth A. Binsack
Community Development Director

cc: Minh Thai, Executive Director, Santa Ana Planning and Building Agency
Phil Johnson, Fire Chief, Orange County Fire Authority
Matthew S. West, City Manager
Nicole Bernard, Assistant City Manager
David Kendig, City Attorney
Stu Greenberg, Police Chief
Jason Al-Imam, Director of Finance
Chris Koster, Director of Economic Development
Douglas S. Stack, Public Works Director
Chad Clanton, Parks and Recreation Director
Ken Nishikawa, Deputy Director of Public Works/Engineering
Justina Willkom, Assistant Director – Planning
Kris Saldivar, Public Works Manager
Scott Reekstin, Principal Planner
Ryan Swiontek, Senior Management Analyst

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ADMINISTRATION (714) 744-7240 fax: (714) 744-7222
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BUILDING DIVISION (714) 744-7200 fax: (714) 744-7245
CODE ENFORCEMENT DIVISION (714) 744-7244 fax: (714) 744-7245

March 26, 2020 #01-20

Verny Carvajal, Principal Planner via email: VCarvajal@santa-ana.org
City of Santa Ana Planning and Building Agency
PO BOX 1988 (M-20)
Santa Ana, CA 92702

Subject: Notice of Preparation (NOP) for Santa Ana General Plan Program Environmental Impact Report

Dear Mr. Carvajal:

Thank you for the opportunity to review and comment on the NOP of a Program Environmental Impact Report (PEIR) for the City of Santa Ana General Plan. The project is a comprehensive update to the City of Santa Ana General Plan. It is our understanding that much of the update will focus on incorporating focused growth areas into the City of Santa Ana General Plan update. For the NOP, details other than proposed General Plan Land Use designations and projected buildout numbers do not appear to be available for review and comment.

Due to the growth areas' proximity to the City of Orange, the City has an interest in ensuring that the Draft PEIR addresses potential adverse impacts to Orange residents and infrastructure. We would appreciate the opportunity to consult on the technical studies, particularly for potential noise and transportation impacts.

We appreciate the opportunity to comment and we look forward to reviewing the Draft PEIR upon completion. If you have any questions, please feel free to contact me, at (714) 744-7237 or at cortlieb@cityoforange.org.

Sincerely,

Chad Ortlieb
Senior Planner
City of Orange

cc: Rick Otto, City Manager
William Crouch, Community Development Director
Chris Cash, Public Works Director
Larry Tay, City Traffic Engineer

OCTA

AFFILIATED AGENCIES

Orange County Transit District

Local Transportation Authority

Service Authority for Freeway Emergencies

Consolidated Transportation Service Agency

Congestion Management Agency

March 26, 2020

Mr. Verny Carvajal
Principal Planner
City of Santa Ana Planning and Building Agency
PO BOX 1988 (M-20)
Santa Ana, CA 92702

Subject: **Notice of Preparation and Scoping Meeting for the Santa Ana General Plan Program Environmental Impact Report**

Dear Mr. Carvajal:

Thank you for providing the Orange County Transportation Authority (OCTA) with a copy of the Notice of Preparation and Scoping Meeting for the Santa Ana General Plan Program Environmental Impact Report. The following comments are provided for your consideration:

- Thank you for keeping OCTA apprised of the Santa Ana's "Golden City Beyond: A Shared Vision" General Plan. Please continue to coordinate with OCTA to maintain consistency between the Circulation Element and the Orange County Master Plan of Arterial Highways.

- Please note that First Street, Irvine Boulevard, Harbor Boulevard, Edinger Avenue, and Warner Avenue are part of the Congestion Management Program Highway System and should be analyzed as such for any potential traffic impacts.

Throughout the development of this project, we encourage communication with OCTA on any matters discussed herein. If you have any questions or comments, please contact me at (714) 560-5907 or at dphu@octa.net.

Sincerely,

Dan Phu
Manager, Environmental Programs

Orange County Transportation Authority
550 South Main Street / P.O. Box 14184 / Orange / California 92863-1584 / (714) 560-OCTA (6282)

SCAG
INNOVATING FOR A BETTER TOMORROW

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March 27, 2020

Mr. Verny Carvajal, Principal Planner
City of Santa Ana Planning and Building Agency
P.O. Box 1988 (M-20)
Santa Ana, California 92701
E-mail: VCarvajal@santa-ana.org

RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Santa Ana General Plan [SCAG NO. IGR10139]

Dear Mr. Carvajal,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Santa Ana General Plan ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for Federal financial assistance and direct Federal development activities, pursuant to Presidential Executive Order 12372. Additionally, SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

SCAG is also the designated Regional Transportation Planning Agency under state law, and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS) pursuant to Senate Bill (SB) 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans.[1] SCAG's feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Community Strategies (RTP/SCS) goals and align with RTP/SCS policies.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Santa Ana General Plan in Orange County. The proposed project includes a General Plan update to identify areas of opportunity, provide options to enhance development potential, and bring the City into compliance with recent state laws, totaling roughly 17,280 acres.

When available, please send environmental documentation to *SCAG's Los Angeles office in Los Angeles (900 Wilshire Boulevard, Ste. 1700, Los Angeles, California 90017) or by email to au@scag.ca.gov* providing, at a minimum, the full public comment period for review.

If you have any questions regarding the attached comments, please contact the Inter-Governmental Review (IGR) Program, attn.: Anita Au, Associate Regional Planner, at (213) 236-1874 or au@scag.ca.gov. Thank you.

Sincerely,

Ping Chang

Ping Chang
Manager, Compliance and Performance Monitoring

[1] Lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the 2016 RTP/SCS for the purpose of determining consistency for CEQA. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a determination of consistency with the 2016 RTP/SCS for CEQA.

COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE SANTA ANA GENERAL PLAN [SCAG NO. IGR10139]

CONSISTENCY WITH RTP/SCS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS. For the purpose of determining consistency with CEQA, lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the RTP/SCS.

Please note the Draft 2020 RTP/SCS (Connect SoCal) was released for public review on November 14, 2019 until January 24, 2019. The Final Connect SoCal is anticipated to be adopted in April 2020. Please refer to Connect SoCal goals and growth forecast for RTP/SCS consistency for future projects. The Draft Connect SoCal can be reviewed here: https://www.connectsocal.org/Pages/Connect-SoCal-Draft-Plan.aspx.

2016 RTP/SCS GOALS

The SCAG Regional Council adopted the 2016 RTP/SCS in April 2016. The 2016 RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health (see http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx). The goals included in the 2016 RTP/SCS may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project within the context of regional goals and policies. Among the relevant goals of the 2016 RTP/SCS are the following:

SCAG 2016 RTP/SCS GOALS	
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region*
RTP/SCS G3:	*Ensure travel safety and reliability for all people and goods in the region*
RTP/SCS G4:	*Preserve and ensure a sustainable regional transportation system*
RTP/SCS G5:	*Maximize the productivity of our transportation system*
RTP/SCS G6:	*Protect the environment and health for our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking)*
RTP/SCS G7:	*Actively encourage and create incentives for energy efficiency, where possible*
RTP/SCS G8:	*Encourage land use and growth patterns that facilitate transit and active transportation*
RTP/SCS G9:	*Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies**
	**SCAG does not yet have an agreed-upon security performance measure.*

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the goals and supportive analysis in a table format. Suggested format is as follows:

SCAG 2016 RTP/SCS GOALS		
	Goal	Analysis
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
etc.		etc.

2016 RTP/SCS STRATEGIES

To achieve the goals of the 2016 RTP/SCS, a wide range of land use and transportation strategies are included in the 2016 RTP/SCS. Technical appendances of the 2016 RTP/SCS provide additional supporting information in detail. To view the 2016 RTP/SCS, please visit: http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx. The 2016 RTP/SCS builds upon the progress from the 2012 RTP/SCS and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that the SCAG region strives toward a more sustainable region, while the region meets and exceeds in meeting all of applicable statutory requirements pertinent to the 2016 RTP/SCS. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

DEMOGRAPHICS AND GROWTH FORECASTS

Local input plays an important role in developing a reasonable growth forecast for the 2016 RTP/SCS. SCAG used a bottom-up local review and input process and engaged local jurisdictions in establishing the base geographic and socioeconomic projections including population, household and employment. At the time of this letter, the most recently adopted SCAG jurisdictional-level growth forecasts that were developed in accordance with the bottom-up local review and input process consist of the 2020, 2035, and 2040 population, households and employment forecasts. To view them, please visit http://www.scag.ca.gov/Documents/2016GrowthForecastByJurisdiction.pdf. The growth forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts			Adopted City of Santa Ana Forecasts		
	Year 2020	Year 2035	Year 2040	Year 2020	Year 2035	Year 2040
Population	19,663,000	22,091,000	22,138,800	340,600	343,400	343,100
Households	6,458,000	7,325,000	7,412,300	76,600	77,700	78,000
Employment	8,414,000	9,441,000	9,871,500	160,600	165,200	166,000

MITIGATION MEASURES

SCAG staff recommends that you review the Final Program Environmental Impact Report (Final PEIR) for the 2016 RTP/SCS for guidance, as appropriate. SCAG's Regional Council certified the Final PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on April 7, 2016 (please see: http://scagrtpscs.net/Pages/FINAL2016PEIR.aspx). The Final PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.

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Midway City Sanitary District

Irvine Ranch Water District

Yorba Linda Water District

March 31, 2020

Verny Carvajal, Principal Planner
City of Santa Ana Planning and Building Agency
PO Box 1988 (M-20)
Santa Ana, CA 92701

SUBJECT: Santa Ana NOP General Plan PEIR

Thank you for the opportunity to review and comment on the subject matter. I would recommend that a sewer study be performed in the future to assure there is adequate sewer capacity.

I would like to bring to your attention that any new or modified connection to Orange County Sanitation District (OCSD) sewer lines will require your agency to coordinate with us and may require a permit. Your contact at OCSD will be Daniel Lee, Engineer, at (714)593-7176 or dlee@ocsd.com.

Thank you for the opportunity to provide input on the City's proposed NOP General Plan PEIR. If you have any questions, please contact Kevin Hadden at (714)593-7462 or khadden@ocsd.com.

Adam Nazaroff
Engineering Supervisor

From:	Ginelle Hardy
To:	Macedonio, Margarita
Cc:	Carvajal, Verny
Subject:	General Plan EIR
Date:	Friday, March 06, 2020 11:48:20 AM

Hello Margarita,
Public review is closing March 27, 2020 for public comments pertaining to the General Plan's EIR. South Main Street is Focus Area #1 potentially affecting Heninger Park properties and residential homes on S. Sycamore (that back up to S. Main St.). It looks like the focus area includes S. Broadway in Heninger Park also!
The March 18th Heninger Park neighborhood meeting would be a timely opportunity to present the General Plan and EIR - as it relates to South Main from 1st Street to W. McFadden, S Sycamore & S. Broadway. Principal Planner, Verny Carvajal may have ideas about how to disperse this information @ our March meeting. Also he may be able to provide printed "Notice of Preparation Review Period" informative flyer, condition growth buildout table 1 and land use & focus area maps.
I will copy Verny this email so he will know my interest in a General Plan & related EIR presentation @ Heninger Park's March 18th neighborhood meeting.
Thank you,
Ginelle Hardy
Heninger Park, President
ginelleann@gmail.com

From:	mjohnston@recupero.net
To:	New General Plan
Subject:	New General Plan Approval
Date:	Tuesday, March 17, 2020 11:12:26 AM

Hello,

I am reaching out to find out if you can share a rough estimate for when the General Plan may be reviewed and potentially approved by the City Council. I saw from the scoping meeting presentation on 3/5 that the draft EIR is expected to be circulated this summer. I am wondering if that means that the General plan will be adopted after the EIR is finalized, so sometime late Fall 2020? I'm just trying to gain a better understanding of timing and know that these things are dynamic. Any light you could shed on the timeline for the update would be greatly appreciated.

Thank you in advance,

Mike Johnston
RECUPERO AND ASSOCIATES, INC.
31877 Del Obispo St., Suite 204
San Juan Capistrano, CA 92675
(949) 429-6300

From:	Justin Esayian
To:	New General Plan
Cc:	Norm Scheel
Subject:	General Plan Update Status
Date:	Wednesday, March 25, 2020 10:26:34 AM

Hello,

I have a few questions/requests regarding the General Plan Update.

1) I wish to receive updates to the progress of the general plan update. Can you please add me to your communication group on emails that will be sent to the public regarding the progress of the GP update?

2) Also, can you please let me know when you expect to have the GP update finalized, given the current environment?

3) Did the public EIR scoping meeting occur on March 5th? If not, are there plans to reschedule this and if so, when would you expect this to occur?

Thank you!

Sincerely,

Justin A. Esayian
Senior Vice President
The Hoffman Company
18881 Von Karman Avenue
Suite 150
Irvine, CA 92612
(949) 705-0921 Direct
(949) 553-8449 Fax

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March 27, 2020

RE: Public Comment on the Scope of the Environmental Impact Report for the Proposed General Plan

The Rise Up Willowick Coalition ("the Coalition") is comprised of residents from the City of Santa Ana, the City of Garden Grove, and neighboring Orange County Cities as well as local organizations whose goal is to ensure that the Willowick Golf Course property ("Willowick") is developed in a way that reflects the local residents needs and vision -- especially the most vulnerable such as, but not limited to, working class individuals, youth, and immigrant residents -- which includes deep affordable housing and open-space use for parkland.

In the process of updating its General Plan, the City of Santa Ana ("the City") proposes new growth and development for five focus areas, including the West Santa Ana Boulevard, which encompasses the Willowick Golf Course, a critical area of advocacy for the Coalition. **With any consideration for land development, it is imperative for the City of Santa Ana to understand and meet the needs of its current residents.**

As a coalition, we surveyed 324 residents of which 95% of respondents lived within a 1 mile-radius of the Willowick property, we hosted monthly community meetings, and we continue to engage our neighbors and fellow residents to shape our community vision for Willowick. Based on this engagement[1], our vision for the future of Willowick includes:

- Parks and open space that are safe, well resourced, and well maintained
- Deeply affordable housing that is accessible to very low-income families
- Well resourced community spaces

The community's vision aligns with residents' needs in the Santa Anita neighborhood. The median family income in the Santa Anita area is approximately $46,000 a year, much lower than Orange County's median income of $92,700[2]. According to the HUD, the residents around the Willowick area are at an extremely to very low-income level. Furthermore, open space is scarce as it only constitutes 4% of the total land in Santa Ana and the investment on parks/open space the city makes is only $47 per resident, while other cities in Orange County enjoy the vast amount of open space available to them[3]. For example, the City of Irvine dedicates approx 30% of land to parks and open space while investing approximately $250 per resident[4].

Given the urgent need for open space in the Santa Anita neighborhood and more broadly in the City of Santa Ana, the Coalition is concerned over the environmental impact of the proposed

[1] Willowick: The Opportunity to Use Public Land for Public Good. 2019. http://riseupwillowick.org/wp-content/uploads/2019/10/riseupwillowickreport.pdf
[2] Ibid.
[3] Trust for Public Land Park Score. 2019. https://www.tpl.org/city/santa-ana-california
[4] Trust for Public Land Park Score. 2019. https://www.tpl.org/city/irvine-california

General Plan updates, especially in regards to open space. As we reviewed the notice provided by the City on the scope of the Environmental Impact Report (the "EIR") for the proposed updated General Plan, we were troubled by the following: 1) the lack of assessment the City is proposing to do in its EIR on the impact of limited open space in the City and 2) the impact of incentivizing development in the five focus areas at the expense of what is already a limited supply of open space in the City as is the case with the inclusion of the entire Willowick site within the West Santa Ana Boulevard focus area. As stated on page 3 of the Notice[5], the focus areas are seen by the City as "suited for new growth and development." **Given that Willowick is the last remaining large-scale, open space site in the City of Santa Ana, it is one of the few viable opportunities to increase urgently needed parkland for residents, and thus, the impacts of depleting this resource need to be thoroughly analyzed by the EIR.**

RECOMMENDATIONS

As the City works to complete the EIR for the proposed General Plan, the Coalition strongly urges it considers the following:

1. The City needs to ensure it is actively working to accomplish the Core Values proposed in the General Plan.
    a. By supporting RUW's vision, the City ensures it is implementing the General Plan's values of health, equity, sustainability, culture, and education given that improving park accessibility improves the overall health of residents by promoting a healthy lifestyle, increases access to a critically needed resource, improves students' academic performance, and invests land use decisions that will benefit many future generations.
    b. The City must intentionally include residents in development processes and must work with the City of Garden Grove to ensure it negotiates in good faith with nonprofit affordable housing and open space developers in order to achieve the community's vision of open space and affordable housing on the Willowick site.

2. The City needs to go above and beyond what the state law requires under CEQA and include an additional the environmental impact category of Open-Space and Parkland as one of its impacted areas of study that the EIR needs to thoroughly assess.
    a. Since this would be a new category, in its EIR, the City must define in detail how it is conducting this analysis.
    b. Any future EIR prepared for development projects in the City, especially a project within the West Santa Ana Boulevard, should include the environmental impact category of Open-Space and Parkland as one of its impacted areas of study.

[5] City of Santa Ana Notice of Preparation and Scoping Meeting. 2020. https://www.santa-ana.org/sites/default/files/pb/general-plan/documents/Final%20NOP_Final.pdf

c. The City should work with residents to ensure this impact category is properly analyzed.

We are available to further discuss our recommendations and are available to meet with City representatives to ensure that the current residents' needs and visions are met and reflected in the EIR for the General Plan and the General Plan. Please contact us at cguerra@riseupwillowick.org with comments or questions.

March 27, 2020

Verny Carvajal, Principal Planner
City of Santa Ana Planning and Building Agency
PO BOX 1988 (M-20) Santa Ana, CA 92702
Email: VCarvajal@santa-ana.org

RE: Environmental Impact Report

Dear Mr. Carvajal:

We submit these comments regarding the City's work on an EIR for the City of Santa Ana's General Plan, and we write to ask that the City ensure that the projects that the City has approved and will seek to approve, not detrimentally affect the environment. We also request that the City ensure that the projects that it approves will affirmatively further fair housing and land use opportunities, as required by state law[1], for its most vulnerable residents.

The need to protect low-income residents in Santa Ana comes at a critical time. As the nation heals from one of the worst public health crises in human memory, the need to provide healthy spaces for Santa Ana residents and their families to thrive is critical. As attorneys and advocates who have helped low-income Santa Ana residents obtain access to the courts, we at the Public Law Center, collaborate with other organizations for sensible strategies to end poverty in Orange County. We also collaborate with stakeholders to create and maintain effective housing policies for lower-income working families. Because we practice in a jurisdiction that lacks local rent control laws, we implore cities, such as the City of Santa Ana, to develop environmental plans that will consider the needs of the City's most vulnerable residents.

In this regard, given the City's large size of 330,000 persons, of about which 60% are renters, we ask of the City to ensure that the environmental projects that it puts forward meet its core values and contribute to the need for cultural pride, good health, and equity and sustainability in land use development. It is our experience that there exists a great need for the City to continue to produce housing for those who have very-low and extremely-low incomes. According to the U.S. Census Bureau's 2013-2017 American Community Survey 5-Year Estimates, residents in the City of Santa Ana have a median household income of just over $57,151, compared to a median income of more than $81,151 for Orange County. According to the May 2017 report by the California Housing Partnership Corporation, median rent in Orange County, which includes the City of Santa Ana, has increased 24% since 2000, while median renter household income has declined by 10%, when adjusted for inflation. Additionally, renters need to earn approximately 3.7 times the state minimum wage to afford base median rent of $2,261 for a two-bedroom

[1] Gov. Code section 8899.50; Gov. Code section 65583, *et seq*.

apartment in Santa Ana. Moreover, according to a recent California Housing Partnership Study, Orange County's lowest-income renters spend 84% of their income on rent, leaving very little to meet other basic human needs such as food and health. Furthermore, in the academic year of 2019, there were approximately 51,482 students in the Santa Ana Unified School District. Of this number, the Santa Ana Unified School District reported enrollment numbers of approximately 46,597 students. Of this number, 40,925 students—87.8%, are economically disadvantaged. Additionally, 5,995 students, or 12.9%, identified as homeless. Moreover, in 2019, 41,115 of the Santa Ana Unified School District's 51,482 students, or 80% were eligible for a free or reduced-cost lunch. Evictions and displacement impose an especially high burden on school-aged children and their families, including increased absences from school and other educational disruption that can have long-lasting effects, such as impacts on mental and physical health, as well as school and social hardships for the affected children and their families. Because of the devastating impacts brought upon by lack of affordable housing opportunities, we ask that the City act in the best interests of its residents to provide clear guidance and direction for its EIR and ensure that it will protect its most vulnerable residents.

Sincerely,

/s/ Ugochi Anaebere-Nicholson
Directing Attorney, Housing and Homelessness Prevention Unit

Dina El Chammas

Subject: FW: Santa Ana General Plan Update - NOP Question

From: Oscar Uranga [mailto:oscar@img-cm.com]
Sent: Tuesday, April 07, 2020 7:20 AM
To: Carvajal, Verny <VCarvajal@santa-ana.org>
Cc: ejzuziak@jzmkpartners.com
Subject: Santa Ana General Plan Update - NOP Question

Hey Verny,

What are the proposed changes to the Urban Neighborhood land use designation (highlighted below)?

GP Update NOP - Project Buildout
In coordination with the General Plan Advisory Group, the City identified five areas suited for new growth and development: South Main Street, Grand Avenue/17th Street, West Santa Ana Boulevard, 55 Freeway/Dyer Road, and South Bristol Street. These five areas are located along major travel corridors, the future OC Streetcar line, and/or linked to the Downtown. In general, many areas currently designated for General Commercial and Professional Office are expanding opportunities for residential development through a proposed change to the Urban Neighborhood or District Center General Plan land use designations. Industrial Flex would be introduced where Industrial land use designations currently exist within each of the five focus areas in order to allow for cleaner industrial and commercial uses with live-work opportunities.
Thanks,

Oscar Uranga, PMP
Principal
IMG Construction Management
19782 Macarthur Blvd, Suite 300 | Irvine, CA 92612
C: 949.933.4103 | Oscar@img-cm.com

From: Pat Coleman
To: New General Plan
Subject: General Plan Scoping
Date: Friday, March 27, 2020 5:00:38 PM

Regarding the Scope of the EIR for the City of Santa Ana General Plan Update:

Please include some of the older City parks when assessing for Historical Significance.

For example, Santiago Park (Santa Ana's fourth park) was built in 1936 as a WPA project. Florence Yoch, daughter of Joseph Yoch of Santa Ana, designed the original layout for Santiago Park. She was a well-known Pasadena landscape architect, having designed movie sets for the 1930's *Gone With the Wind* and *Romeo and Juliet* as well as many estates in Carmel and Pasadena for Hollywood figures such as Jack Warner and David Selznik. The original design and hardscape of these early parks are worth preserving whenever possible.

Please add Access Management to Level of Service evaluations for Road Design and Modifications

Currently, the City is using Level of Service (LOS) to evaluate road modifications, but when used by itself, this parameter does not adequately cover safety, especially pedestrian safety. The inclusion of an Access Management evaluation considers pedestrian traffic as well as efficiency of flow and would bring Santa Ana in line with recommendations from the NTSB.

Please consider including recommendations and requirements of the Seismic Hazard Mapping Act of 1990 (Public Resources Code, Chapter 7.8, Section 2690-2699.6) and the Special Publication 117A into the Safety Element

Currently, the City of Santa Ana's approach to evaluating seismic safety for new developments is uneven, at best, even though much of Santa Ana is within a Seismic Hazard Liquefaction Zone. For some projects, seismic safety is addressed in the EIR, for others, it is not addressed until the permitting process. The Seismic Hazard Mapping Act (SHMA) does not require that the investigation occur during the CEQA process, but its guiding Special Publication (SP 117A) notes that:

> "Some of the potential mitigation measures described herein (e.g., strengthening of foundations) will have little or no adverse impact on the environment. However, other mitigation measures (e.g., draining of subsurface water, driving of piles, densification, extensive grading, or removal of liquefiable material) may have significant impacts. If the CEQA process is completed prior to the site-specific investigation, it may be desirable to discuss a broad range of potential mitigation measures (any that might be proposed as part of the project) and related impacts. If, however, part or all of the site-specific investigation is conducted prior to completion of the CEQA process, it may be possible to narrow the discussion of mitigation alternatives to only those that would provide reasonable protection of the public safety given site-specific conditions." (SP 117A, pg. 6)

Please consider including a Geology section in all CEQA studies for projects within the liquefaction zone. Saving the study for the permitting process keeps mitigation measures of significant impact out of public view. This goes against the City's guiding principle of transparency and may lead to significant impacts unaccounted for when weighing a project. For example, in a current project, no Geology section was included, however the Geological Report's recommendations for dealing with unstable topsoil was to remove 5 feet out and 5 feet down from the foundation and recompact the unstable fill (requiring the removal and recompacting of a calculated 33,476 cubic yards of soil – no small environmental impact).

The SHMA also requires that the certified geological study and its professional certified review (usually done by the City) be submitted to the appropriate state agency. This again creates a

reviewable public record and allows all the professional involved to own their professional recommendations.

We have good science and guidelines for minimizing seismic hazards, let's use and comply with all of them.

From:	Lisa Ganz
To:	Carvajal, Verny
Subject:	Public Comments: Santa Ana General Plan
Date:	Monday, March 16, 2020 12:45:36 PM

Please include the following comment/questions in the public record on the NOP for the Santa Ana General Plan Program.

Santa Ana is the most dense city in OC and the second dense in the state. Santa Ana City Planning documents consistently make the statement the "the city is nearly built out." SCAG reports that So Cal has the worst congestion in the country for the last 2 decades.

Adding more high density housing projects to the General Plan is just plain irresponsible. The NOP document seems to primarily focus on Land Use, while the "Shared Vision" Plan should instead focus on quality of life initiatives that will improve the city through 2045: More open/park space, less congestion, quality services. The 2014-21 Housing Element should absolutely be a part of this analysis and the Mandatory Topics should be looked at in its entirety, not piece-mealed. A THOROUGH EIR should be conducted - and not be determined on the "degree of specificity involved." The Main Place Mall Renovation is a perfect example of when things go wrong. That project should have had an updated EIR and should not have been approved based on a 20 year old EIR document.

I strongly oppose the plan to turn Grand and 17th into an Urban Neighborhood. This area is congested already. Keep the zoning and incentivize new retail. The 55/Dyer development will add more congestion to the already crowded 55 FWY.

Santa Ana needs a better vision for the city. Better streets/timed lights. More open space. Good retail that makes people want to visit. Reasonable housing in the right space - single family that fit the uniqueness of our historic neighborhoods.

Please consider this.

Thank you,
Lisa Ganz resident of Santa Ana

General Plan Update - EIR Scoping Meeting - March 5, 2020

golden city beyond
A SHARED VISION FOR SANTA ANA

First Name	Last Name	E-Mail Address	Street Address	Zip Code	Primary Telephone #	Neighborhood Association or Organization	Contact with Project Updates?
FRANK	LOPEZ					PARK SANTIAGO	
PETER	KATZ					MAR LES	
JOE	ANDRADE					Logan	
SAM	ROMERO					LOGAN	
GINELLE	HARDY					HENNINGER PARK	✓
DALE	HELVIG					PSNA	X
Irma	Sauregui					SSAMA/Wilshire Square	
Nylda	Anaya					Monte Carlo	
Patricia	Coleman					Park Santiago	✓
BRIAN	DIAZ					N/A	✓
Tay	Aston					Mayberry	—
Athena	Christy					Athletic Actions	
Soledad	Valentin					Park Santiago	✓
Diane	Fradkin					memorial pk	
Corey	Hayes						✓
CHAD	ORTLIEB					WINDSOR VILLAGE	
CHRIS	SCHMIDT						
TOM	MORRISSEY					PLURAL PARK	✓
JEFF	KATZ						✓
Glen	Kolany						
TRESA	OLIVERI						✓
Gaby	Hernandez						
Roy	Russell					Washington Square	
Barbara	Russell					Arbor Park	✓
Pedro	ARANDA						
Catalina	Lopez						
Maura	Lopez						
Obdulia	Flores						

General Plan Update - EIR Scoping Meeting - March 5, 2020

golden city beyond
A SHARED VISION FOR SANTA ANA

First Name	Last Name	E-Mail Address	Street Address	Zip Code	Primary Telephone #	Neighborhood Association or Organization	Contact with Project Updates?
ERIC	HIGUCHI					N/A	Yes
Cecilia	Iglesias						
STEVEN	OH					N/A	Yes
Franco	Ortega						
Drew	Emmel					N/A	YES
Thai	Phan					NA	Yes
Manny	Escamilla					Central/City	yes
Peter	Yam						
Cynthia	Guerrero						
ELENA	MOYA						
Albert	Castillo					N/A	Yes

COMMENT CARD
Santa Ana General Plan Update EIR
Public Scoping Meeting

March 5, 2020, 6:00 PM

+ green house gases

Please let us know your comments/concerns regarding the Santa Ana General Plan Update EIR (please print):

UN designation for the Medical Arts property is a very constricted parcel w/ the Western boundary being RR tracks.

Also, there is a proposal to do a grade separation for the RR crossing @ 17th & Lincoln — this will greatly restrict access from the Medical Arts property into 17th St.

The proposed UN designation will add way too much traffic, NOISE, Air Quality issues to an already very congested 17th St & Grand

You need to include a major park/openspace component for THIS UN designation

Last Summer we attended a Gen Plan Update mtg & took a survey for the Medical Arts property & the majority didn't want to see MORE High Density at this location — apparently it doesn't matter what the neighbors want because you show UN as the designation anyway. This will definitely impact the quality of the existing residents in a very negative way — Way too dense for an already dense area — there is not any additional infrastructure which exists today — Very unsustainable & irresponsible!

It's all about a BALANCE

Name: Diane Frankel

Address: 2402 N. Oakmont 92706

1) Please return this card to Verny Carvajal, Principal Planner for the City of Santa Ana, at the end of the Scoping Meeting, 2) Email your comments to newgeneralplan@santa-ana.org or 3) Mail this comment card by folding it in half, sealing with scotch tape, and adding a postal stamp.

* The concern is that our existing infrastructure (streets, sewer, water, storm drain) can't handle the proposed density in many of these areas - unless these projects are going to add New Roadways (+ water/sewer/ stormdrain) its NOT sustainable as it exists today

Circulation Plan - how do the classifications work & are they changed based on the new designations? Are there physical changes to the roads based on the new designations & if so are they prepared/constructed prior to any commencement of construction for the new designated areas?

Fold here

Thank you!

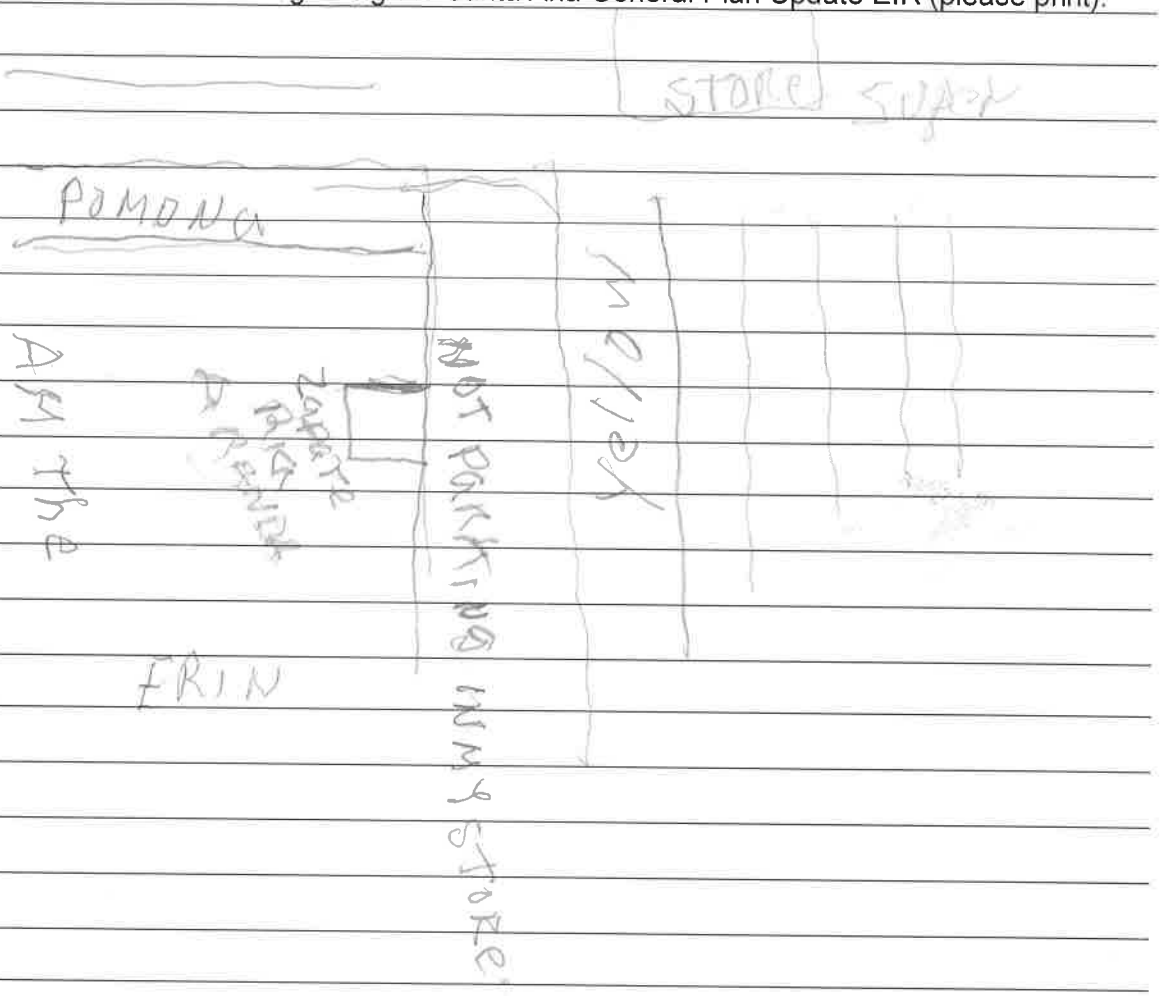
Place Stamp Here

City of Santa Ana Planning and Building Agency
Attn. Verny Carvajal, Principal Planner
PO Box 1988, M-20
Santa Ana, CA 92702

COMMENT CARD
Santa Ana General Plan Update EIR
Public Scoping Meeting

March 5, 2020, 6:00 PM

Please let us know your comments/concerns regarding the Santa Ana General Plan Update EIR (please print):



Name: Pedro ARANDA Zapateria ARANDA

Address: 1611 S MAIN ST Santa Ana Ca. 92707

My Phone 714 973 1537 - Cell 714 856 0004

1) Please return this card to Verny Carvajal, Principal Planner for the City of Santa Ana, at the end of the Scoping Meeting, 2) Email your comments to newgeneralplan@santa-ana.org or 3) Mail this comment card by folding it in half, sealing with scotch tape, and adding a postal stamp.

GRACIAS PORSU ATT.

COMMENT CARD
Santa Ana General Plan Update EIR
Public Scoping Meeting

March 5, 2020, 6:00 PM

Please let us know your comments/concerns regarding the Santa Ana General Plan Update EIR (please print):

Increasing housing by 59% should also entail on site parking for each unit and keeping in mind that multiple drivers will be living in these spaces due to actual cost of these units. The current (2.4?) ~~ratio~~ requirement is extremely insufficient and will have a negative effect on the use and safety of surrounding neighborhoods.

Environmentally - it is inherent in planning that open space is increased. Adding all these multi-unit residences without providing the additional and necessary, open space is a concrete jungle in the making.

Define terms - i.e. District Center
Low - Med - etc residential
? Environmental Justice

Name: Jay Aston
Address: 1605 N. Linwood Ave. 92701
taybird54@gmail.com

1) Please return this card to Verny Carvajal, Principal Planner for the City of Santa Ana, at the end of the Scoping Meeting, 2) Email your comments to newgeneralplan@santa-ana.org or 3) Mail this comment card by folding it in half, sealing with scotch tape, and adding a postal stamp.

TARJETA DE COMENTARIOS
Reunión Informativa para Santa Ana General Plan Update EIR

5 de marzo de 2020, 6:00 PM

Por favor háganos saber sus comentarios/inquietudes con respecto al Santa Ana General Plan Update EIR (favor de escriba en letra de molde):

Me gustaría que en la calle 1ª y Standard es en la esquina, un lugar de carros que ya no están trabajando los movieran para otro lugar adecuado para ellos o los dueños y que las calles principales estén siempre limpias.
Que los negocios limpien afuera que mantengan limpio.
Y que cuando hagan construcción de edificios que se enfoquen en las tuberías de agua luz y Gaz que todo sea nuevo.

Nombre: Soledad Valentín
Dirección: 1030 S Minnie Apt. 3 Santa Ana Ca, 92701

1) Por favor devuelva esta tarjeta a Verny Carvajal, Planificador Principal de la ciudad de Santa Ana, al final de la reunión informativa, 2) Envíe sus comentarios por correo electrónico a newgeneralplan@santa-ana.org o 3) Envíe esta tarjeta de comentario al doblar por la mitad, sellar con cinta adhesiva, y añadir con sello postal.

From:	Diane Fradkin
To:	Carvajal, Verny
Cc:	Ridge, Kristine; Thai, Minh
Subject:	Santa Ana General Plan Update - NOP mtg on March 5th
Date:	Friday, March 06, 2020 8:21:04 PM

Hi Verny:

Nice meeting you on Thursday evening as well as your EIR consultant Joanne.

I wanted to discuss the proposed use for the Grand and 17th Street area. When we attended the focus study last year (spring/summer 2019), there was a survey which was performed with real time results. The proposed use of Urban Neighborhood was met by the audience as too much for the area. The survey results were that the general public (neighbors of the area) at that meeting overwhelmingly rejected this use for the Grand and 17th Street location. Again, this survey had real time results.

I understand that you did other surveys and had an advisory committee, but given my recent experience of door knocking over the entire City of Santa Ana to gather signatures for the 2525 N. Main St. Referendum, the feedback from a majority of Santa Ana residents is that they DO NOT want more high density residential. They believe that the overcrowding will cause more stress to an already over stressed and older infrastructure of our City. **The message is that the residents of Santa Ana want "responsible development".**

The City Planning Department continues to want to increase density throughout our already dense City. The City is right in wanting to improve areas which need revitalization, but the focus needs to be more on businesses and jobs.....we are already overcrowded with density!

I would encourage you to provide several alternatives to study in the EIR for the Grand and 17th Street section.....there needs to be alternatives with more SFR and town homes and low rise garden style apartments with a well thought out park component including a dog park and appropriate retail and office. Another alternative could secure a Costco with gas sales for a portion of the property, office and appropriate residential.....again SFR, townhomes and low rise garden style multi-family along with a "Grand City" park component.

Because the Medical Arts property currently houses many medical offices, it would be best to include this use in your General Plan Update for the Grand & 17th section so that these medical services can stay at this location to service this portion of the City.

Another item to consider in the incorporation of the land use and design for the area is the proposed grade separation at 17th and Lincoln for the RR tracks. This will likely inhibit access along 17th Street focusing more access along Grand Ave. This needs to be incorporated in the EIR.

I provide these comments to hopefully make our City and its future a better place.

Respectfully Submitted,

Diane Fradkin
Park Santiago
714-914-8047

From:	John Fradkin
To:	New General Plan
Cc:	Thai, Minh; Ridge, Kristine; Diane Fradkin
Subject:	Comments on New General Plan
Date:	Friday, March 06, 2020 10:32:24 AM

I attended the Public Scoping Meeting last night and have these comments:

1. The City of Santa Ana is still placing too much emphasis on adding to the city's housing stock. The state of California needs more housing but perhaps Santa Ana does not. Our city is already almost completely built out and we are already one of the densest cities in the nation. If we continue to build high density housing we will decrease the quality of life for existing residents. Nice neighborhoods will become less nice as wealthier residents leave. Do we really want that ? This is the cornerstone underlying clash between the viewpoint of current residents and the City of Santa Ana Planning Department's view and vision for the future of Santa Ana. Current residents want more businesses, more local jobs, and more parks and open space. They don't want more housing and more people living in Santa Ana.

2. There is a huge seismic shift going on in the automotive industry and the majority of cars in the future are going to be powered by electricity. Electric vehicles do not produce greenhouse gasses. The EIR for the general plan, which is supposed to cover a 25 year period, should take this into account because so much of the past thinking has been aimed at reducing greenhouse gasses by building high density housing next to transportation nodes in order to reduce greenhouse gasses by getting people to use public transportation and reducing automotive trips. This Transit Oriented Development is perhaps an older way of thinking that is less relevant going forward in a world of electric vehicles that do not produce greenhouse gasses.

3. Definitions of relevant zoning terms like Urban Neighborhood and MR-15 need to be decided upon early in the process in order for comments and studies to be accurate and useful.

4. In the "Urban Neighborhood" mixed use zoned areas the mixed use should be done on a horizontal basis and not on a vertical basis. Vertical mixed use buildings, where you have commercial on the bottom and residential on the top, have proven to be relatively unsuccessful as they are both hard to finance and hard to find tenants for the commercial spaces. Large companies as a rule will not lease those spaces as they do not like residents living above their businesses for insurance reasons as there is too much potential liability. This limits potential tenants to mom and pop small businesses and my sources have told me that many newly constructed buildings of this type are having trouble.

Regards,

John Fradkin
Santa Ana resident
714-915-8047

From: Lisa Ganz
To: Carvajal, Verny
Subject: Santa Ana General Plan update
Date: Friday, March 06, 2020 3:32:31 PM

Good afternoon- I was unable to attend the meeting last night. I have visited the website but dont see the report on what the City in considering to update. Can you please send me the link?

Thank you.

Lisa

From:	jessie Lopez
To:	Carvajal, Verny
Subject:	General Plan Update
Date:	Friday, March 06, 2020 11:42:20 AM

Hello,

Will the City host another meeting so that residents who couldn't make the last one can also attend?

Thanks,
Jessie

Appendix A-b EJ Background Analysis

Appendices

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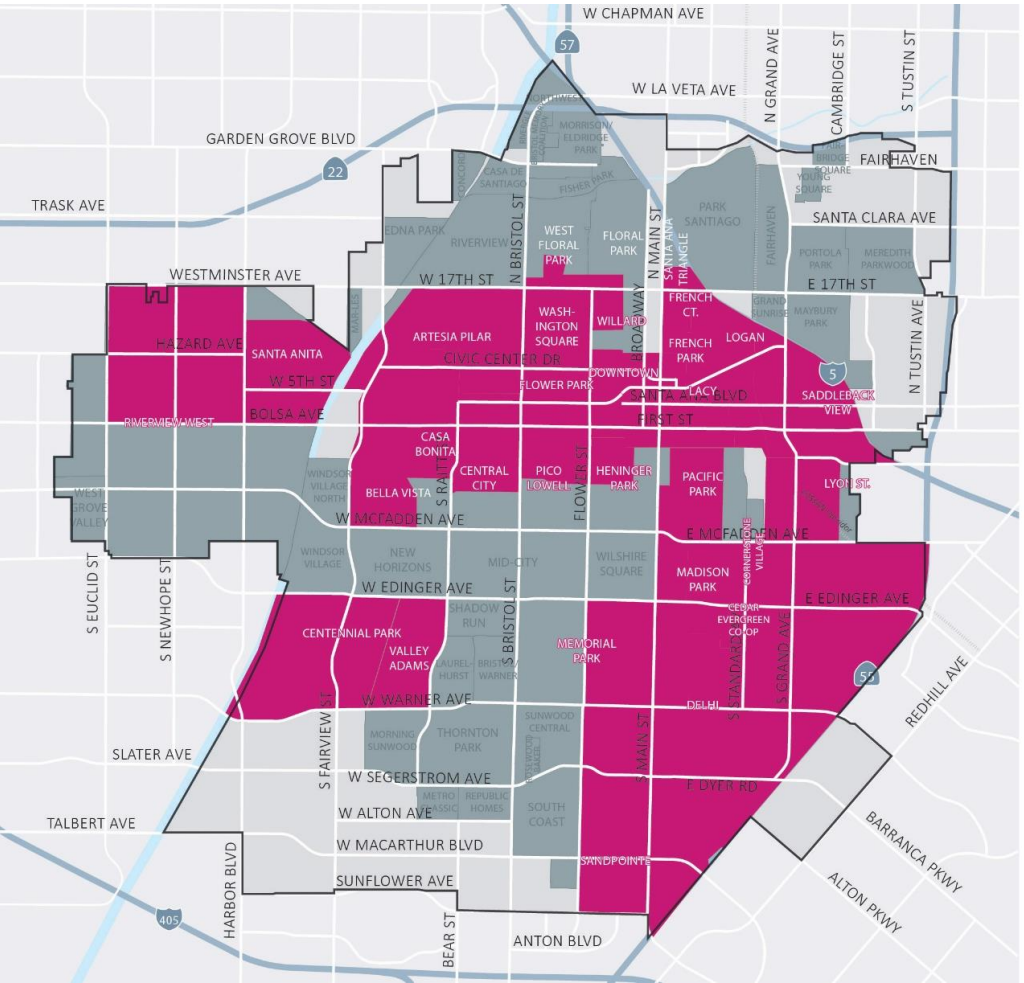
golden city beyond

A SHARED VISION FOR SANTA ANA

ENVIRONMENTAL JUSTICE BACKGROUND & ANALYSIS FOR THE GENERAL PLAN UPDATE

City of Santa Ana | Updated March 2021 (Initial Publication July 2020)



Prepared for:
City of Santa Ana

Prepared by:
PlaceWorks

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19	Pollution Burden Scores Mapping and Discussion
48	Population Characteristics Scores Mapping and Discussion
66	Compendium of Environmental Justice Goals, Policies, and Implementation Actions

SB 1000 Legal Background

Senate Bill 1000, the Planning for Healthy Communities Act, was signed into law in September 2016. SB 1000 mandates that, after January 1, 2018, cities and counties adopt an Environmental Justice element in their general plans or integrate environmental justice policies, objectives, and goals into other elements when two or more general plan elements are being updated. The new environmental justice goals, policies, and objectives must do the following:

- Reduce the unique or compounded health risks in disadvantaged communities by reducing pollution exposure and promoting public improvements, public services, community amenities, food access, safe and sanitary homes, and physical activity.
- Promote civil engagement in the public decision-making process.
- Prioritize improvements and programs that address the needs of disadvantaged communities.

SB 1000- Legal Background

SB 1000's definition of a disadvantaged community include areas that: 1) are disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation; and 2) have concentrations of people with low income, high unemployment, low levels of homeownership, high rent burden, sensitive populations, or low levels of educational attainment. Additionally, the term "community" can be defined or understood as various geographic places, ranging from a neighborhood to a small unincorporated area or to a small region.

"Disadvantaged communities" are defined as areas identified by the California Environmental Protection Agency pursuant to Section 39711 of the Health and Safety Code or low-income areas that are disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation.

Note: There are other provisions in State law and programs that reference the term "disadvantaged communities", such as GHG emissions cap-and-trade program (SB 535 and AB 1550) and the Integrated Regional Water Management fund. These laws and programs generally define "disadvantaged communities" as lower income, without consideration of other factors such as pollution exposure.

SB 1000- Legal Background

While the law does not define the phrase “disproportionately affected by environmental pollution,” there are some sources of relevant data that could be considered:

CalEnviroScreen – https://oehha.ca.gov/calenviroscreen

Public Health Alliance, Health Disadvantage Index – http://phasocal.org/ca-hdi/

UC Davis, Regional Opportunity Index – http://interact.regionalchange.ucdavis.edu/roi/

PolicyLink, National Equity Atlas – http://nationalequityatlas.org/

HUD, Opportunity Index – http://opportunity.census.gov/

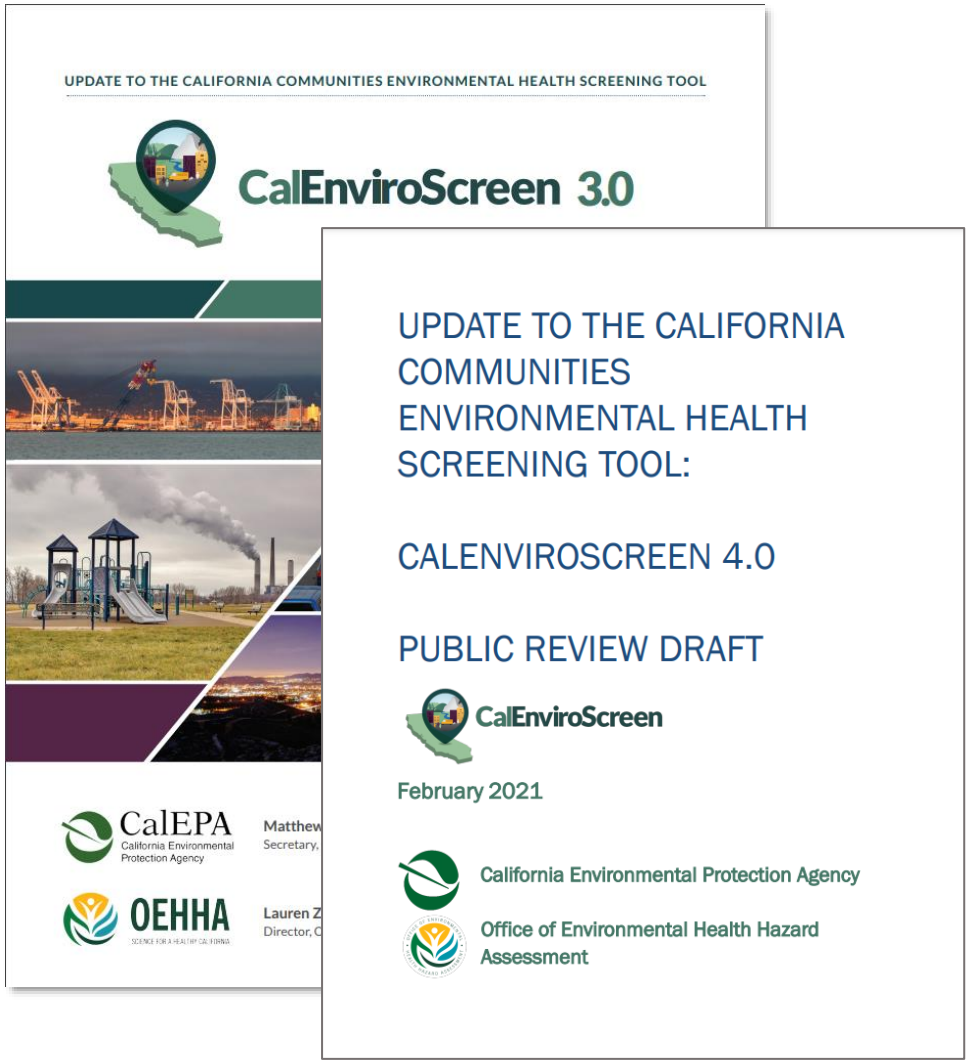
NHI, Environmental Justice Strategy – https://www.transportation.gov/policy/transportation-policy/environmental-justice-strategy

Environmental Justice Analysis For Santa Ana

Methodology

The California Communities Environmental Health Screening Tool, or CalEnviroScreen (CES), was developed by the Office of Environmental Health Hazards Assessment on behalf of CalEPA. CES is a method for identifying communities that are disproportionately burdened by pollution and/or have a disproportionately vulnerable population. In accordance with SB 1000, jurisdictions can use this tool to help identify areas within their communities where environmental justice concerns may arise. Goals, policies, and programs can then be developed to address concerns.

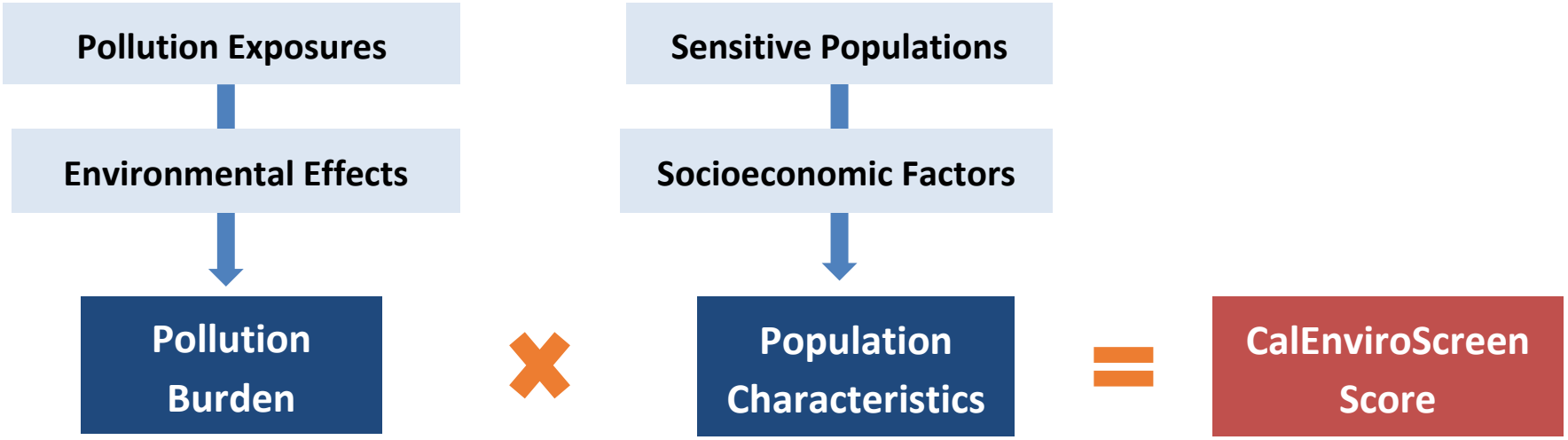
Note: CES v4.0 was released in draft form in February 2021 and is expected to be finalized in Summer 2021.



Environmental Justice Analysis For Santa Ana

Methodology

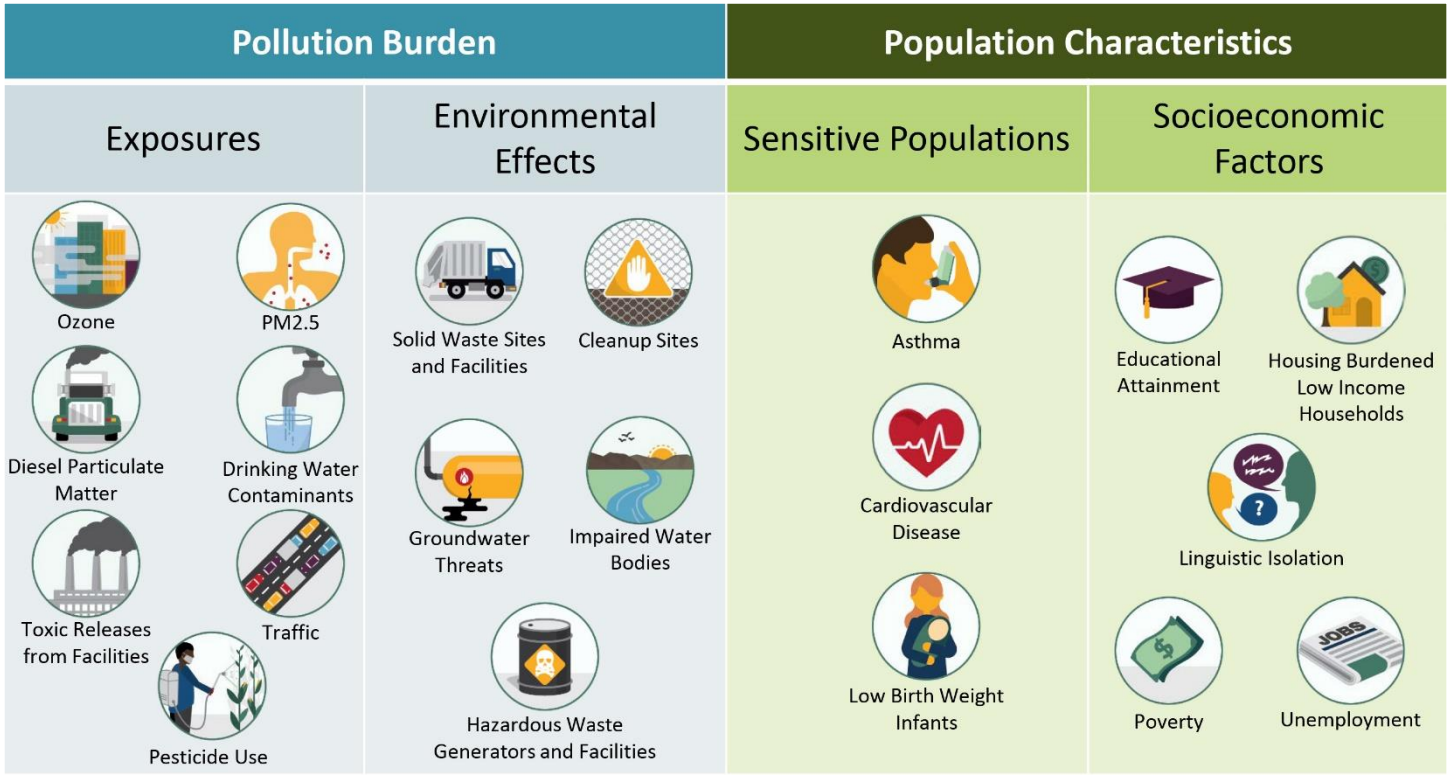
CalEnviroScreen scores are calculated from the scores for two groups of indicators: pollution burden and population characteristics. Pollution burden represents the potential exposures to pollutants and the adverse environmental conditions caused by pollution. Population characteristics represent biological traits, health status, or community characteristics that can result in increased vulnerability to pollution.



Environmental Justice Analysis For Santa Ana

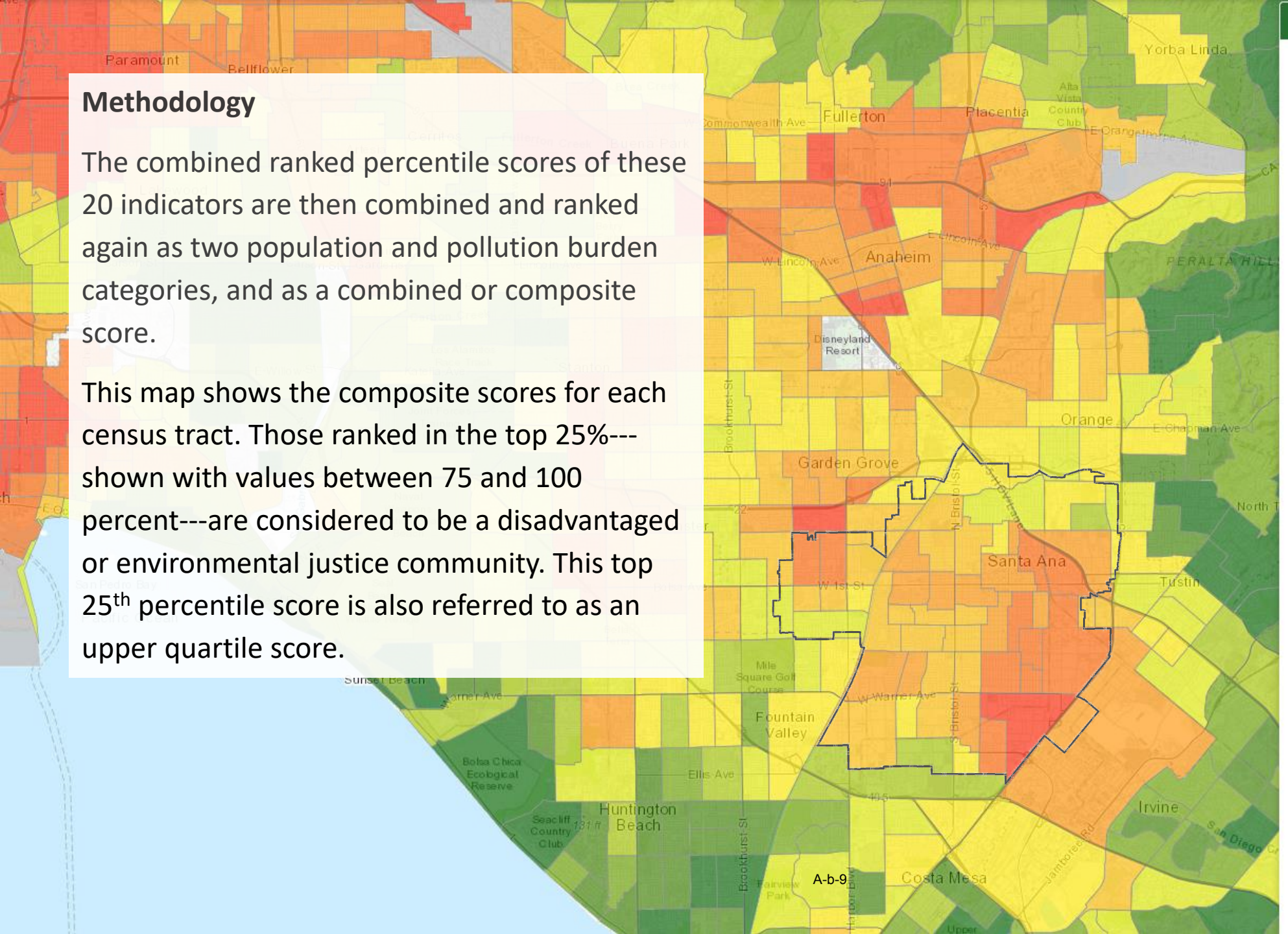
Methodology

The CES tool measures 21 different indicators related to people's exposure to pollution and quality of life. CES uses a census tract as a proxy for community. The results for each census tract are then measured against every other census tract in California. The outcome is a scale that sorts census tracts from the least impacted to the most impacted --- as a ranked percentile --- for each indicator.



Lead Risk

Children's Lead Risk from Housing was added in version 4.0 of CES 4.0.The data sources for the other 20 other indicators were also updated in version 4.0.



Methodology

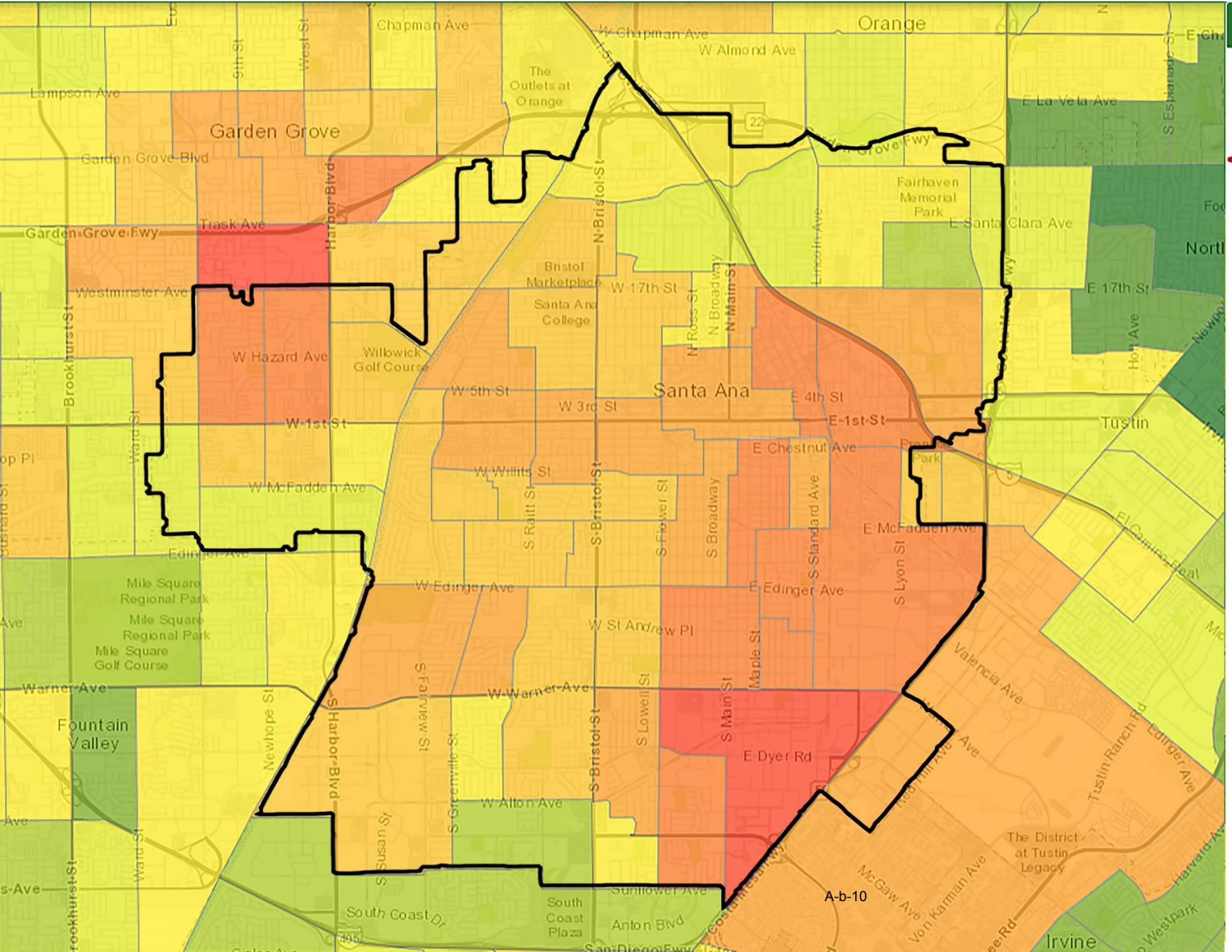
The combined ranked percentile scores of these 20 indicators are then combined and ranked again as two population and pollution burden categories, and as a combined or composite score.

This map shows the composite scores for each census tract. Those ranked in the top 25%---shown with values between 75 and 100 percent---are considered to be a disadvantaged or environmental justice community. This top 25th percentile score is also referred to as an upper quartile score.

Tracts ranked from 75% to 100% are a disadvantaged or EJ community

Combined scores compared to identify lowest to highest burden

Note: The City's approach is consistent with CalEPA methodology.



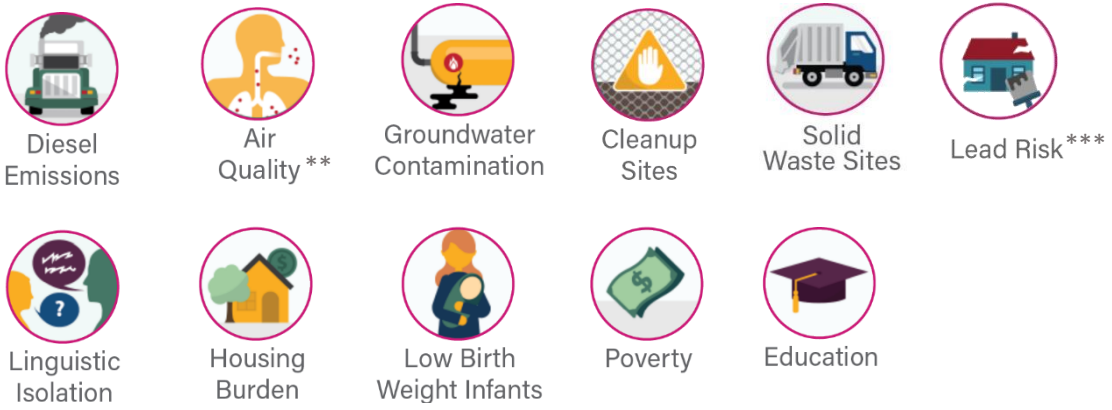
Tracts ranked from 75% to 100% are a disadvantaged or EJ community

Combined scores compared to identify lowest to highest burden

Note: The City’s approach is consistent with CalEPA methodology.

EJ Communities in the City of Santa Ana

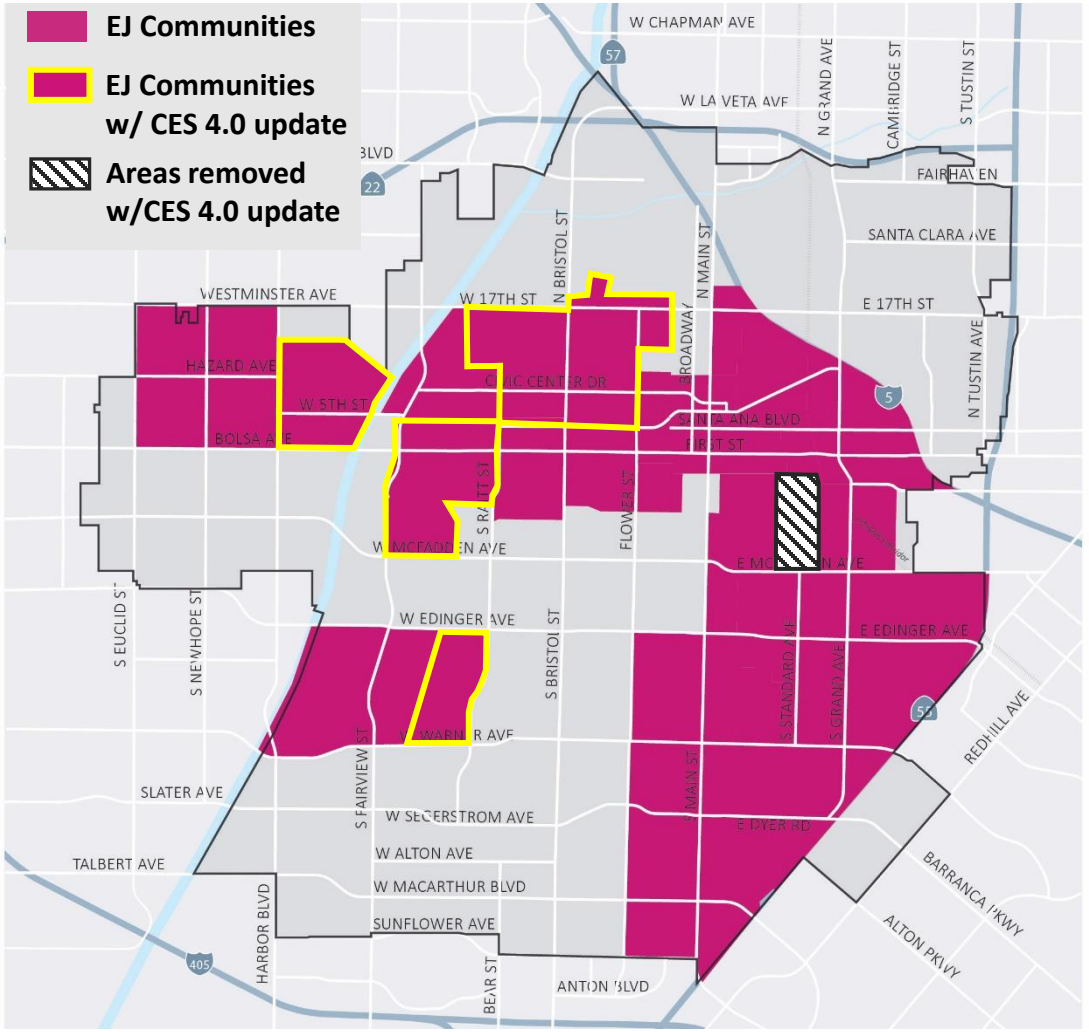
Based on a combination of CES scores and local issues raised in community outreach, the main priorities* are:



* The first row of issues is related to pollution burden, with the second row related to population characteristics. The issues are not otherwise listed in any specific order of severity or importance. All of the above issues have scores in the upper quartile (75-100%) for multiple census tracts. The majority of the above issues were also referenced by the community at meetings, workshops, and/or individual comments. For maps and additional discussion, see pages 18-59.

** The symbol shown for Air Quality is used by CES to represent fine particle pollution (PM2.5). On this page, the City also uses this symbol (as the simplest and clearest option) to communicate a trio of air quality/air pollution issues: Ozone, PM2.5, and Toxic Releases.

*** The indicator for Children's Lead Risk is based on the draft CES 4.0 methodology, released in February 2021.



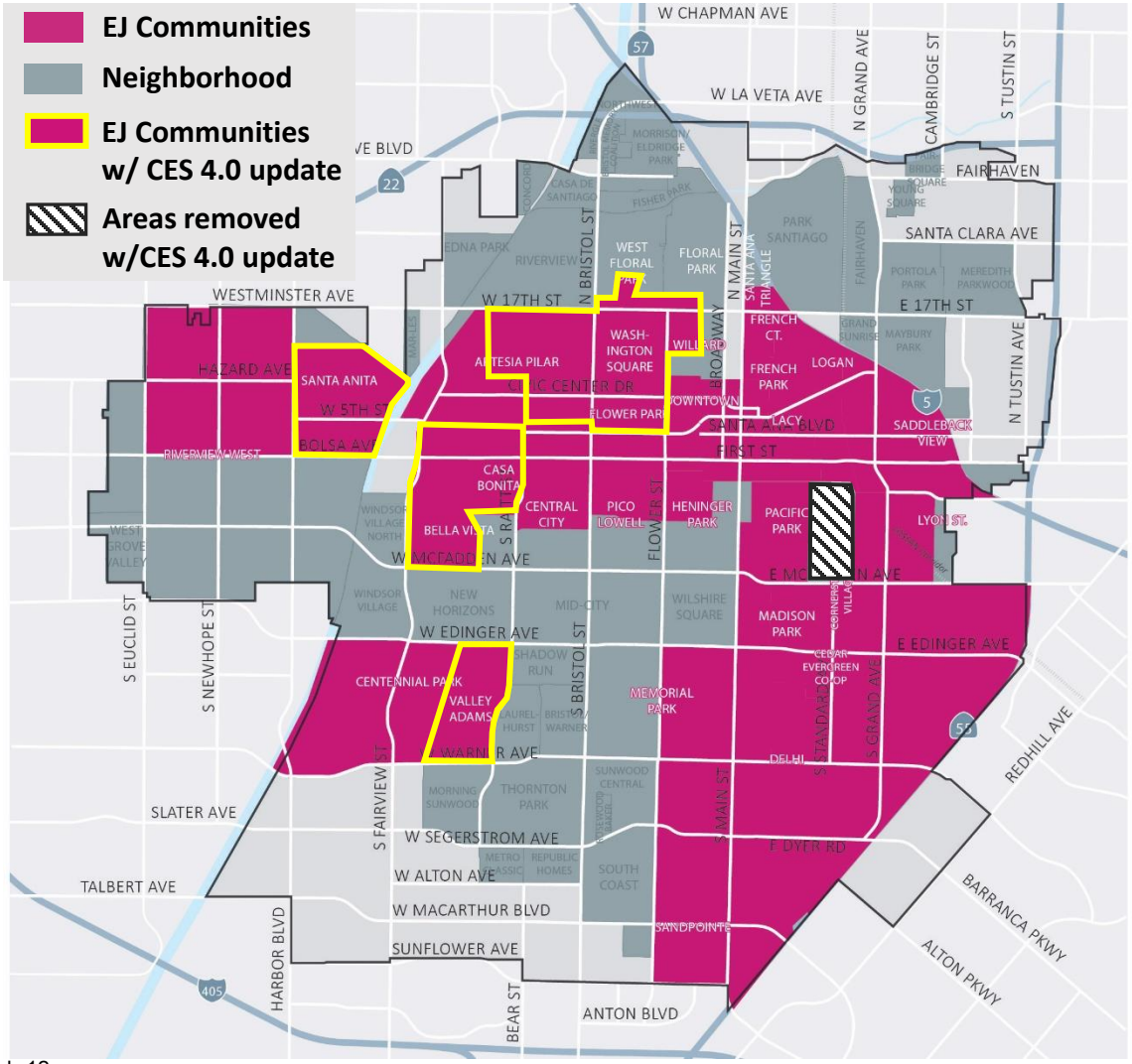
EJ Communities in the City of Santa Ana

This map shows how the 23 EJ census tracts overlap with the City's Neighborhood Map.

The following neighborhoods are partially or entirely within one of these 23 EJ areas:

Artesia Pilar ● Bella Vista* ● Casa Bonita* ● Cedar Evergreen ● Centennial ● Central City ● Cornerstone Village ● Delhi ● Downtown ● Floral Park* ● Flower Park ● French Court ● French Park ● Heninger Park ● Lacy ● Logan ● Lyon St ● Madison Park ● Memorial Park ● Pacific Park ● Pico Lowell ● Riverview West ● Sandpointe ● Santa Ana Triangle* ● Santa Anita* ● Valley Adams* ● Washington Square* ● West Floral Park* ● Willard

* Neighborhoods partially or entirely within environmental justice areas identified from draft CES 4.0



A-b-12

CalEnviroScreen Score Summary

The following tables provide a summary of CalEnviroScreen scores for each of the 23 EJ census tracts that fall in the upper quartile (75-100%). The tables provide the score for the combined pollution indicators, combined population indicators, and overall composite score. The tables also identify the pollution and population factors that contributed the most to the composite score.

CalEnviroScreen Score Summary

Census Tract	General Location	Neighborhoods	Low Income*	Percentile and Quartile Rank			Scores in the Upper Quartile	
				Composite Score	Pollution Score	Population Score	Pollution Factors	Population Factors
6059075002	Central	Downtown, French Park, Heninger Park, Lacy, Pacific Park, Willard	Yes	80	78	71	AQ | CS | HZ | SW	LB | ED | LI | POV
6059074901	Central	Flower Park, Heninger Park, Pico Lowell	Yes	77	54	84	AQ | CS	LB | ED | LI | POV
6059075201	Central	Artesia Pillar	Yes	77	80	65	AQ | CS | HZ | SW	LB | ED | POV
6059074801	Central	Artesia Pilar, Central City	Yes	79	77	70	AQ | CS | SW	ED
6059075202	Central	Artesia Pilar	Yes	80	80	71	AQ | L |	ED | LI | UE
6059075004	Central	French Court, Santa Ana Triangle	Yes	80	80	72	AQ | DPM | L | TD	ED | LI | POV | HB
6059074805	Central	Bella Vista	Yes	78	64	80	AQ	ED | LI | POV | HB
6059075100	Central	Flower Park, Washington Square, Willard, Floral Park, West Floral Park	Yes	77	76	69	AQ | L | CS	ED | LI | POV
6059074802	Central	Casa Bonita, Artesia Pilar	Yes	76	89	57	L | AQ | CS | HZ	ED | LI | POV

Ranking: Quartile 1 = Good | Quartile 2 = Moderate | Quartile 3 = Poor | Quartile 4 = Challenged

Variables in the CES model:

Pollution Exposure
AQ = Air Quality (reflects a combination of *Ozone*, *PM2.5*, and *Toxic Releases*)
DMP = Diesel Particulate Matter
TD = Traffic Density
L = Lead

Environmental Effects
CS = Toxic Cleanup Sites
GW: Groundwater Threats
HZ = Hazardous Waste
SW = Solid Waste Sites/Facilities

Sensitive Population
LB = Low Birth Weight

Socioeconomic Factors
LI = Linguistic Isolation
POV = Poverty
HB = Housing Burden
ED = Educational Attainment
UE = Unemployment

Source: OEHHA, CalEnviroScreen, version 3, 2016;
OEHHA, CalEnviroScreen, draft version 4, 2021 [symbolized]

*Low Income identified as AB 1550 Low-income Communities, https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/lowincomemapfull.htm

Indicators not ranked in upper quartile: drinking water contaminants; pesticide use; impaired water bodies; asthma; cardiovascular disease

CalEnviroScreen Score Summary

Census Tract	General Location	Neighborhoods	Low Income*	Percentile and Quartile Rank			Scores in the Upper Quartile	
				Composite Score	Pollution Score	Population Score	Pollution Factors	Population Factors
6059074403	East	Cornerstone Village, Lyon St	Yes	~~86~~ 80	~~95~~ 93	~~62~~ 58	AQ | ~~DPM~~ | TD | CS | ~~GW~~ | HZ | ~~SW~~	ED | LI | POV | HB
6059074406	East	Lyon St, Saddleback View	Yes	~~84~~ 92	~~90~~ 93	~~67~~ 79	AQ | DPM | TD | CS | ~~HZ~~ | SW | L	ED | LI | POV | HB | LB
6059074602	East	Madison Park, Pacific Park	Yes	83	80	75	AQ | CS | HZ | L	ED | LI | POV | HB
6059074502	East	Cedar Evergreen, Madison Park	Yes	~~82~~ 86	~~75~~ 90	~~77~~ 72	AQ | CS | GW | HZ | L	~~LB~~ | ED| LI | POV | HB
~~6059074501~~	~~East~~	~~Cornerstone Village, Pacific Park~~	~~Yes~~	~~77~~	~~79~~	~~66~~	~~AQ | DPM | CS | HZ~~	~~ED | LI | POV| HB~~
6059074405	East	French Court, French Park, Lacy, Logan, Pacific Park	Yes	89	~~91~~ 89	~~75~~ 78	AQ | DPM | TD | CS | ~~HZ~~ | SW | L	~~LB~~ | ED | LI | POV | HB

Ranking: Quartile 1 = Good | Quartile 2 = Moderate | Quartile 3 = Poor | Quartile 4 = Challenged

Variables in the CES model:

Pollution Exposure
AQ = Air Quality (reflects a combination of *Ozone, PM2.5*, and *Toxic Releases*)
DMP = Diesel Particulate Matter
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Source: OEHHA, CalEnviroScreen, version 3, 2016;
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*Low Income identified as AB 1550 Low-income Communities, https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/lowincomemapfull.htm

Indicators not ranked in upper quartile: drinking water contaminants; pesticide use; impaired water bodies; asthma; cardiovascular disease

CalEnviroScreen Score Summary

Census Tract	General Location	Neighborhoods	Low Income*	Percentile and Quartile Rank			Scores in the Upper Quartile	
				Composite Score	Pollution Score	Population Score	Pollution Factors	Population Factors
6059074003	Southeast	Delhi	No	~~91~~ 85	~~97~~ 98	~~67~~ 56	AQ | DPM | TD | CS | GW | HZ | ~~SW~~ | L	LB
6059074300	Southeast	Delhi, Madison Park	Yes	~~86~~ 91	~~87~~ 92	~~74~~ 78	AQ | CS | GW | HZ | L	LB | ED | ~~LI~~ | POV | HB
6059074200	Southeast	Delhi, Madison Park, Memorial Park	Yes	80	~~81~~ 79	~~69~~ 72	AQ | ~~CS~~ | GW | L	ED | POV | ~~HB~~
6059074004	South	Sandpointe	Yes	~~81~~ 77	~~86~~ 81	66	AQ | CS | ~~HZ~~ | GW	~~LB~~ LI
6059074108	Southwest	Centennial Park	Yes	80	75	73	AQ | CS | HZ	LB | ED | LI
6059074109	Southwest	Valley Adams	Yes	75	75	67	AQ | L	ED | LI | HB

Ranking: Quartile 1 = Good | Quartile 2 = Moderate | Quartile 3 = Poor | Quartile 4 = Challenged

Variables in the CES model:

Pollution Exposure
AQ = Air Quality (reflects a combination of *Ozone*, *PM2.5*, and *Toxic Releases*)
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Indicators not ranked in upper quartile: drinking water contaminants; pesticide use; impaired water bodies; asthma; cardiovascular disease

CalEnviroScreen Score Summary

Census Tract	General Location	Neighborhoods	Low Income*	Percentile and Quartile Rank			Scores in the Upper Quartile	
				Composite Score	Pollution Score	Population Score	Pollution Factors	Population Factors
6059089004	West	Riverview West	Yes	~~86~~ 82	76	~~84~~ 77	AQ | DPM | L	~~LB~~ | ED| LI | POV | HB
6059089001	West	Riverview West	Yes	~~83~~ 81	~~75~~ 72	79	AQ	ED | LI | POV | HB | UE
6059089105	West	Santa Anita	Yes	83	69	84	AQ | L | TD	ED | LI | POV | HB

Ranking: Quartile 1 = Good | Quartile 2 = Moderate | Quartile 3 = Poor | Quartile 4 = Challenged

Variables in the CES model:

Pollution Exposure
AQ = Air Quality (reflects a combination of *Ozone*, *PM2.5*, and *Toxic Releases*)
DMP = Diesel Particulate Matter
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L = Lead

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SW = Solid Waste Sites/Facilities

Sensitive Population
LB = Low Birth Weight

Socioeconomic Factors
LI = Linguistic Isolation
POV = Poverty
HB = Housing Burden
ED = Educational Attainment
UE = Unemployment

Source: OEHHA, CalEnviroScreen, version 3, 2016;
OEHHA, CalEnviroScreen, draft version 4, 2021 [symbolized]

*Low Income identified as AB 1550 Low-income Communities, https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/lowincomemapfull.htm

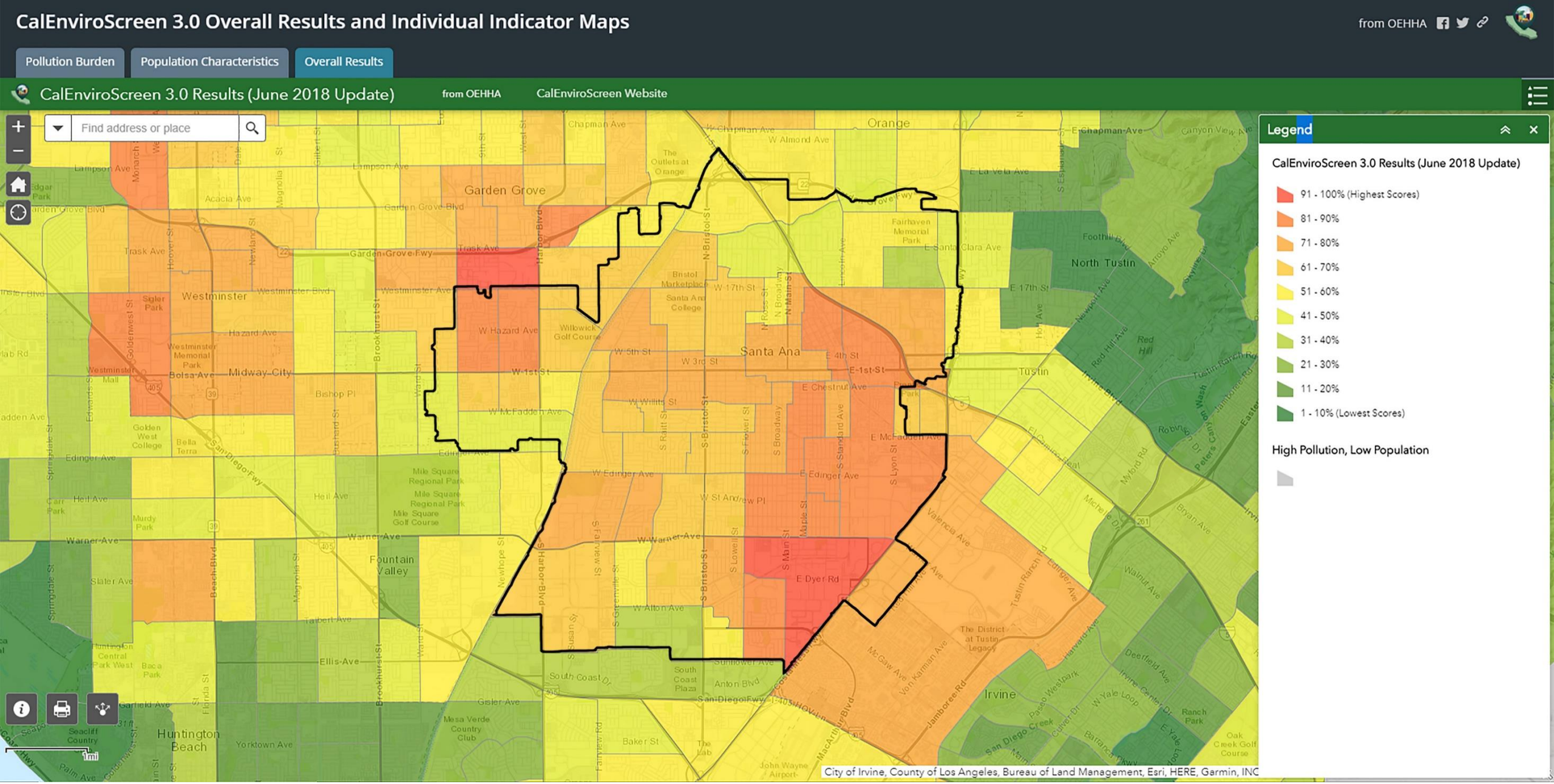
Indicators not ranked in upper quartile: drinking water contaminants; pesticide use; impaired water bodies; asthma; cardiovascular disease

CalEnviroScreen Mapping

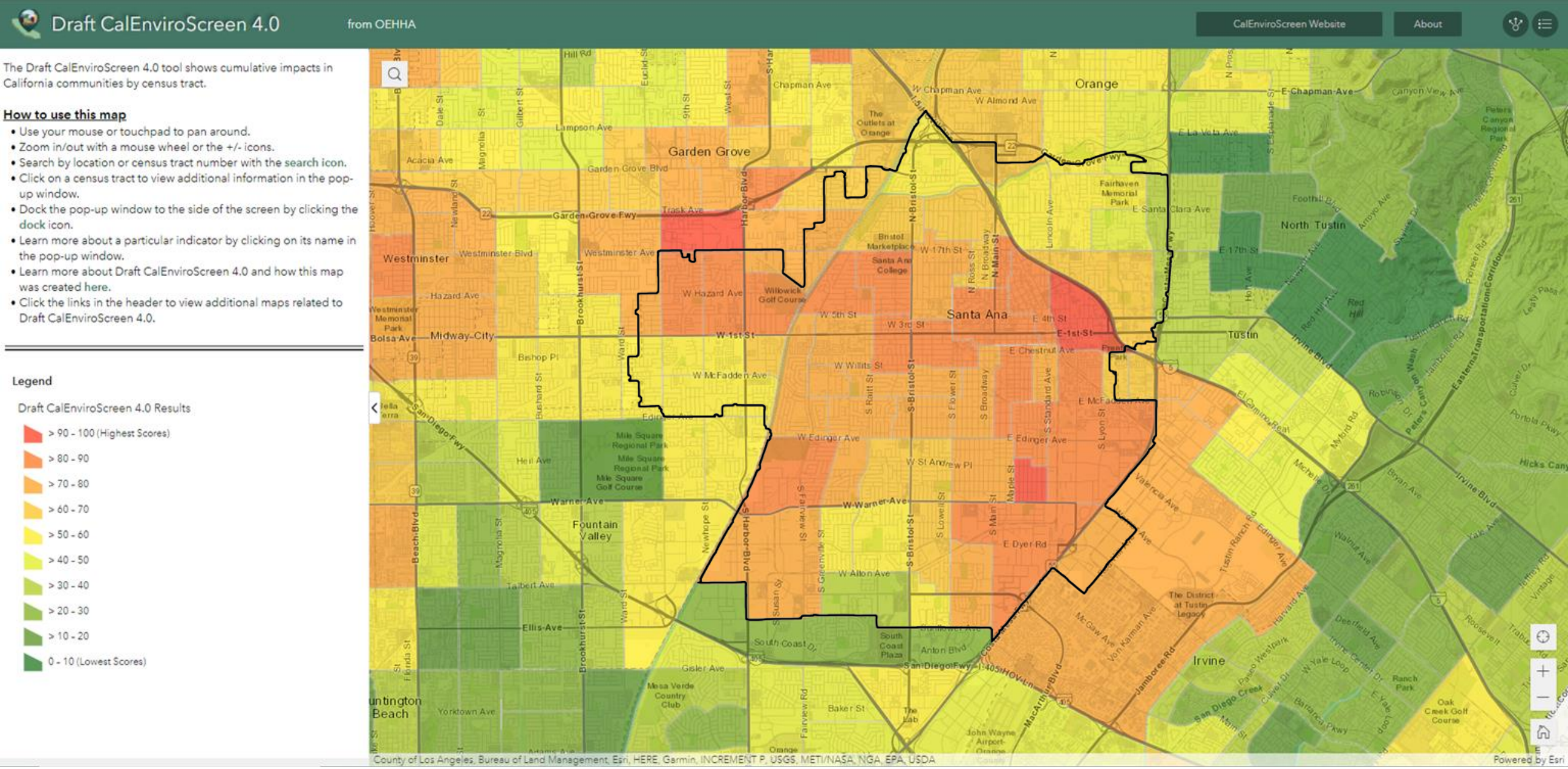
The following pages contain a snapshot of the maps from CalEnviroScreen Version 3.0 for census tracts in Santa Ana. Data from the recently released draft of Version 4.0 is shown as part of the composite map and a map of the newly added Lead Risk indicator. The maps show the overall composite results, the combined pollution burden score, the combined population characteristics score, and the scores for each individual indicator. Additional narrative follows each individual indicator map about the indicator and its significance for Santa Ana.

For more information on CalEnviroScreen and the combined or individual maps and indicators, visit:

www.oehha.ca.gov/calenviroscreen.



https://oehha.ca.gov/calenviroscreen/maps-data



https://oehha.ca.gov/calenviroscreen/maps-data

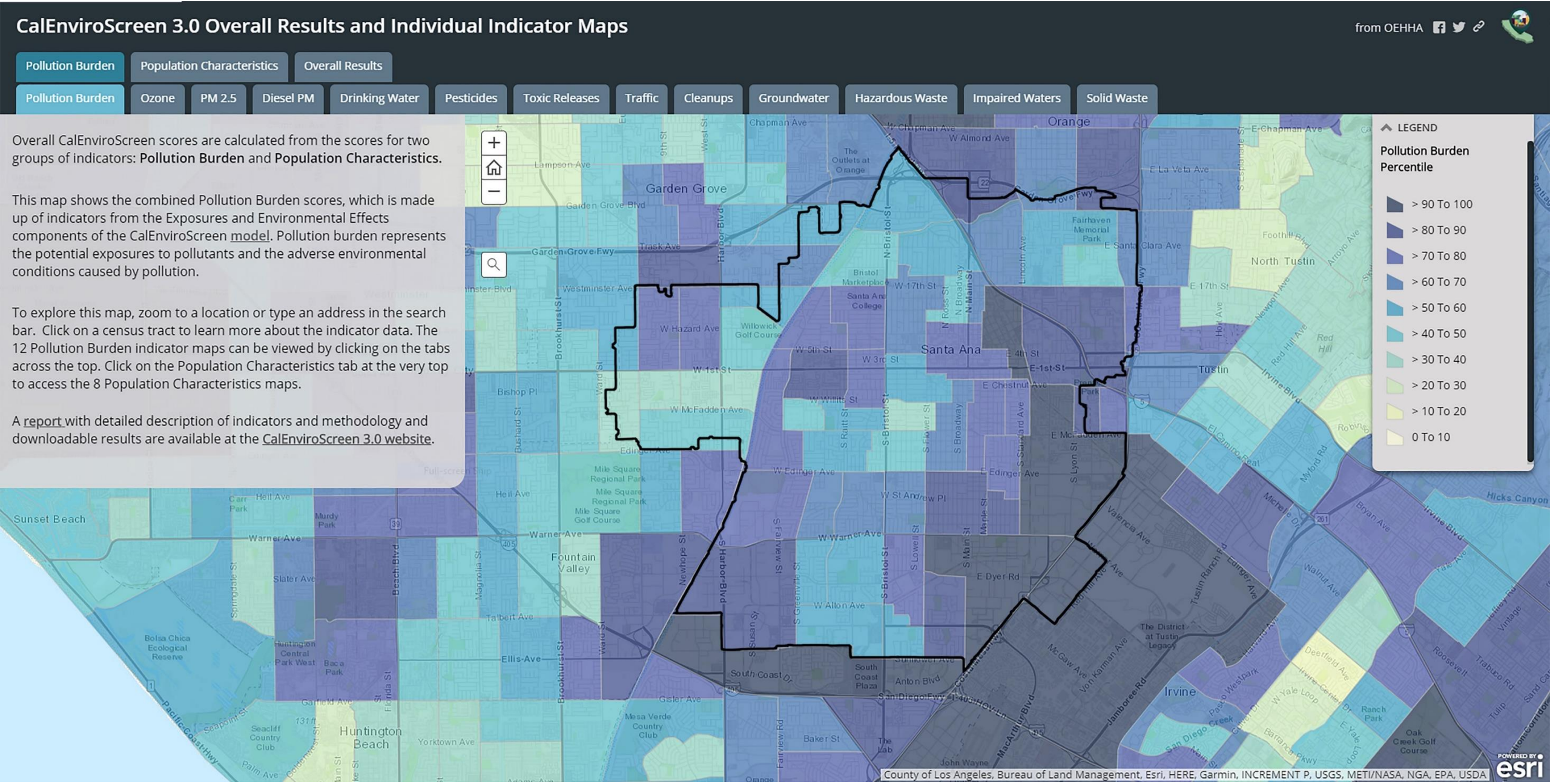
Pollution Burden

OEHHA identifies pollution burdens, evaluating pollution exposure in the air and water, primarily as the result of human activities. These characteristics are used to identify environmental justice communities because of the potential effects of pollution on vulnerable and sensitive populations. This section provides maps and summaries* of the following pollution indicators:

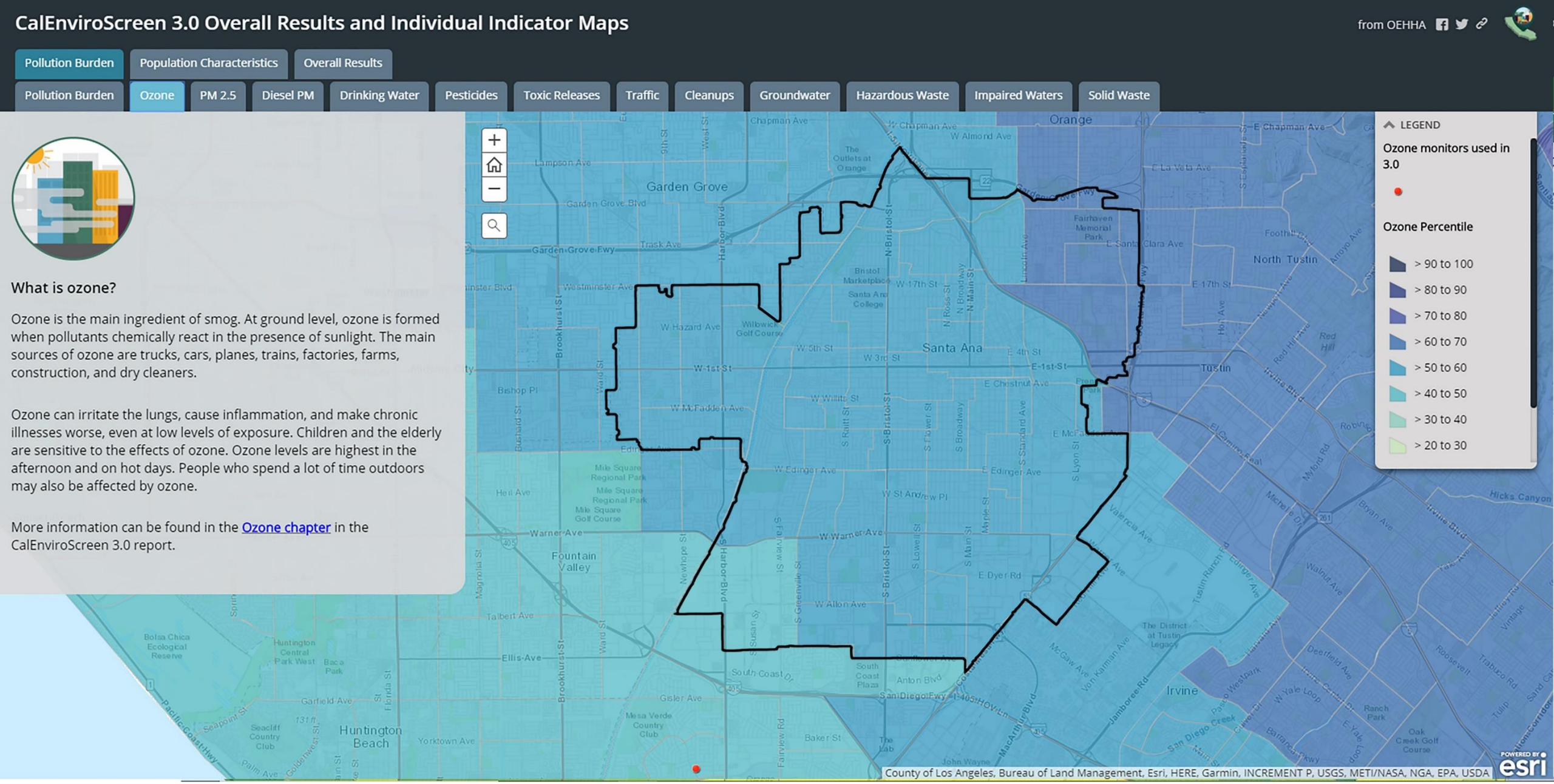
- Air Quality: Ozone
- Air Quality: PM2.5
- Diesel Particulate Matter
- Children's Lead Risk from Housing**
- Drinking Water Contaminants
- Pesticide Use
- Toxic Releases from Facilities
- Traffic Density
- Cleanup Sites
- Groundwater Threats
- Hazardous Waste Generators and Facilities
- Impaired Water Bodies
- Solid Waste Sites and Facilities

* The following maps and summaries are based off the CES 3.0 methodology, except for indicator for children's lead risk.

** Indicator Children's Lead Risk is based on the draft CES 4.0 methodology, released February 2021. See the following link for Proposed Changes in CalEnviroScreen Version 4.0: https://oehha.ca.gov/media/downloads/calenviroscreen/document/calenviroscreen40summaryofchangesd12021.pdf



https://oehha.ca.gov/calenviroscreen/maps-data



https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Pollution Indicators| Ozone

Ozone pollution causes numerous adverse health effects, including respiratory irritation and exacerbation of lung disease. The health impacts of ozone and other criteria air pollutants (particulate matter (PM), nitrogen dioxide, carbon monoxide, sulfur dioxide, and lead) have been considered in the development of health-based standards. Of the six criteria air pollutants, ozone and particle pollution pose the most widespread and significant health threats. The California Air Resources Board maintains a wide network of air monitoring stations that provides information that may be used to better understand exposures to ozone and other pollutants across the state.

The City of Santa Ana does not have a significant ozone issue in which census tracts rank within the upper quartile (>74%). Most census tracts have an ozone percentile score ranked in the mid-50th or low-60th percentiles.

CalEnviroScreen 3.0 Overall Results and Individual Indicator Maps

from OEHHA

Pollution Burden | Population Characteristics | Overall Results

Pollution Burden | Ozone | PM 2.5 | Diesel PM | Drinking Water | Pesticides | Toxic Releases | Traffic | Cleanups | Groundwater | Hazardous Waste | Impaired Waters | Solid Waste

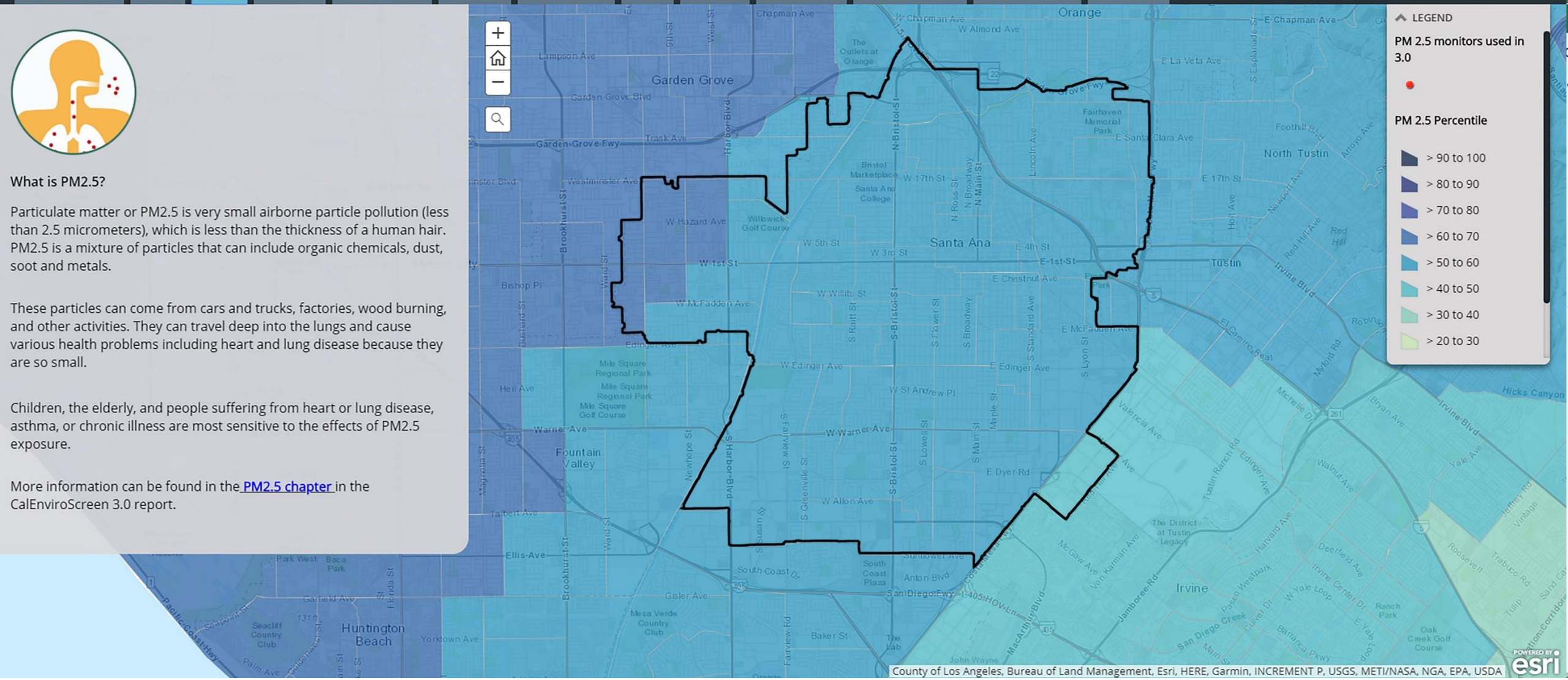
What is PM2.5?

Particulate matter or PM2.5 is very small airborne particle pollution (less than 2.5 micrometers), which is less than the thickness of a human hair. PM2.5 is a mixture of particles that can include organic chemicals, dust, soot and metals.

These particles can come from cars and trucks, factories, wood burning, and other activities. They can travel deep into the lungs and cause various health problems including heart and lung disease because they are so small.

Children, the elderly, and people suffering from heart or lung disease, asthma, or chronic illness are most sensitive to the effects of PM2.5 exposure.

More information can be found in the PM2.5 chapter in the CalEnviroScreen 3.0 report.



https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Pollution Indicators| PM2.5

Particulate matter pollution, and fine particle pollution in particular (Particulate Matter 2.5 or PM2.5), has been shown to cause numerous adverse health effects, including heart and lung disease. PM2.5 contributes to substantial mortality across California. The health impacts of PM2.5 and other criteria air pollutants (ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, and lead) have been considered in the development of health-based standards. Of the six criteria air pollutants, particle pollution and ozone pose the most widespread and significant health threats. The California Air Resources Board maintains a wide network of air monitoring stations that provides information that may be used to better understand exposures to PM2.5 and other pollutants across the state.

The City of Santa Ana does not have a significant PM2.5 issue in which census tracts rank within the upper quartile (>74%). Most census tracts have a PM2.5 percentile score ranked in the 50th and 60th percentiles.

Note: The symbol for PM2.5 is also used on page 11 (as the simplest and clearest option) to communicate a trio of air quality/air pollution issues: Ozone, PM2.5, and Toxic Releases.

CalEnviroScreen 3.0 Overall Results and Individual Indicator Maps

from OEHHA

Pollution Burden | Population Characteristics | Overall Results

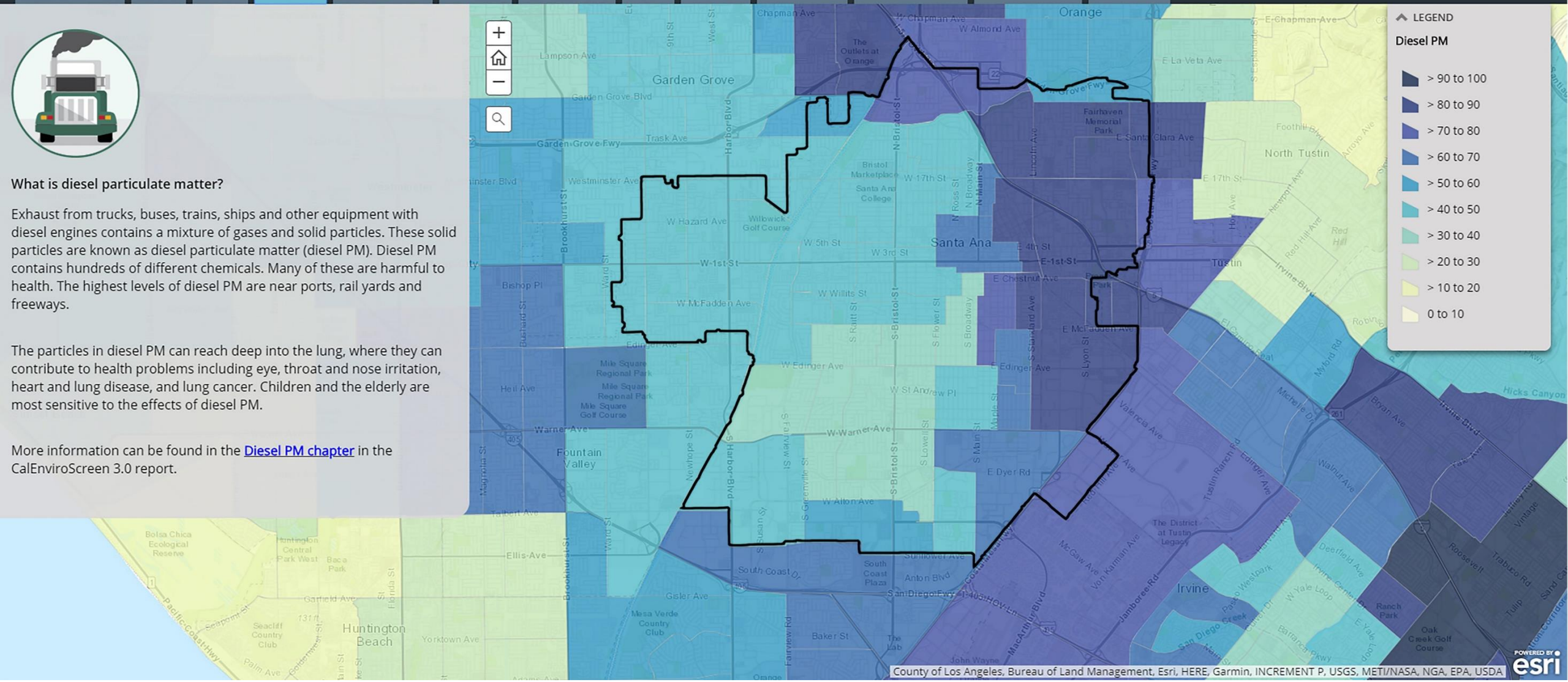
Pollution Burden | Ozone | PM 2.5 | Diesel PM | Drinking Water | Pesticides | Toxic Releases | Traffic | Cleanups | Groundwater | Hazardous Waste | Impaired Waters | Solid Waste

What is diesel particulate matter?

Exhaust from trucks, buses, trains, ships and other equipment with diesel engines contains a mixture of gases and solid particles. These solid particles are known as diesel particulate matter (diesel PM). Diesel PM contains hundreds of different chemicals. Many of these are harmful to health. The highest levels of diesel PM are near ports, rail yards and freeways.

The particles in diesel PM can reach deep into the lung, where they can contribute to health problems including eye, throat and nose irritation, heart and lung disease, and lung cancer. Children and the elderly are most sensitive to the effects of diesel PM.

More information can be found in the Diesel PM chapter in the CalEnviroScreen 3.0 report.



https://oehha.ca.gov/calenviroscreen/maps-data

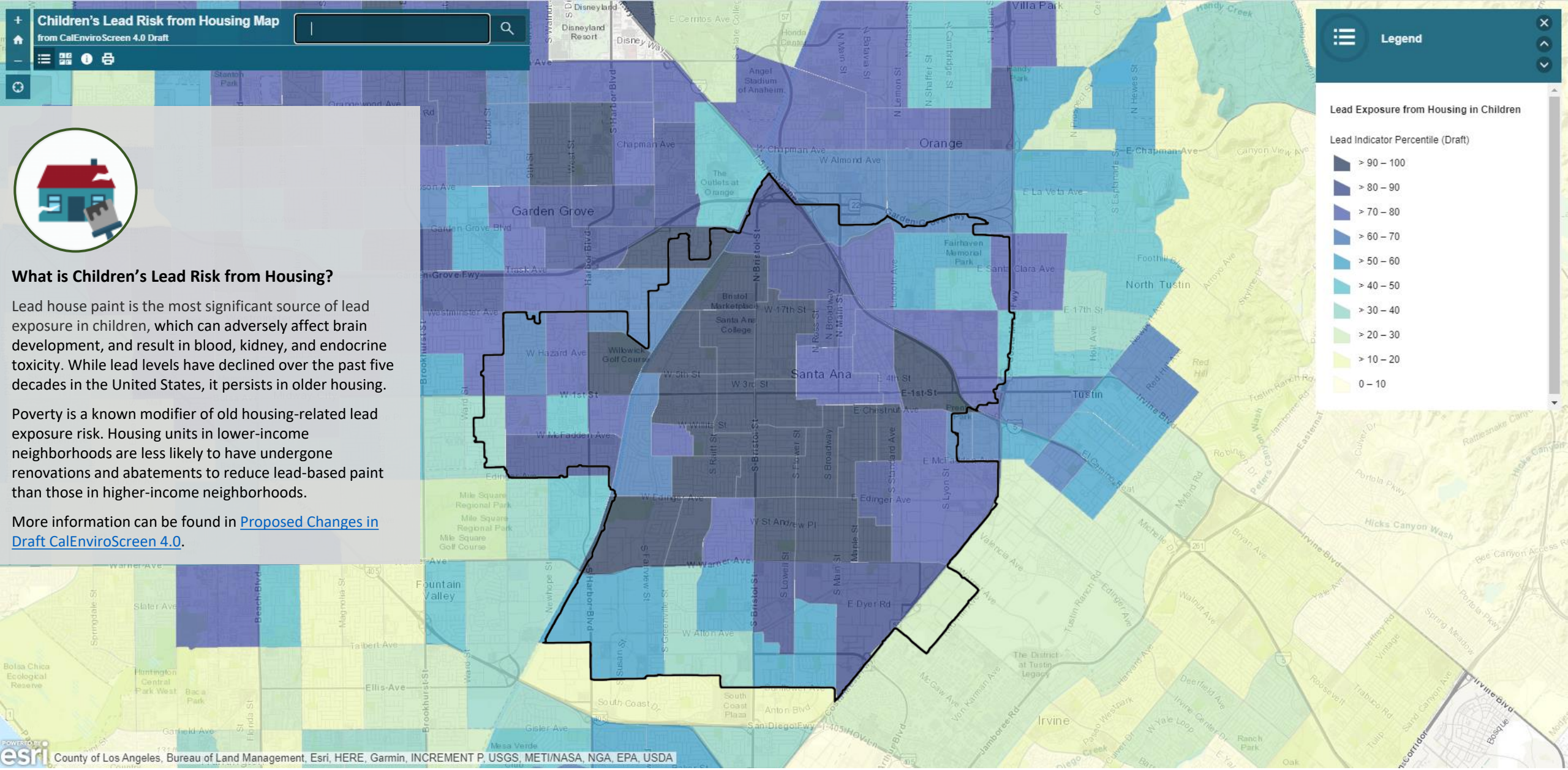
Analysis of Pollution Indicators| Lead Risk

Lead is a toxic heavy metal that occurs naturally in the environment. However, the highest levels of lead present in the environment are a result of human activities. Historically, lead has been used in house paint, plumbing, and as a gasoline additive. While lead levels have declined over the past five decades in the United States, it persists in older housing.

Poverty is a known modifier of old housing-related lead exposure risk. It is also reasonable to assume that housing units in lower-income neighborhoods are less likely to have undergone renovations and abatements to reduce lead-based paint than those in higher-income neighborhoods. Children are most sensitive to the effects of lead exposure, which can adversely affect brain development, and result in blood, kidney, and endocrine toxicity.

The proposed indicator of children's lead risk from housing was calculated using the percentage of households within a census tract with a likelihood of lead-based paint (LBP) hazards due to housing age, combined with the percentage of low-income households with children.

The City of Santa Ana has significant lead risk in central areas of the city, with most census tracts ranked in the upper 90th and 80th percentiles. Census tracts in the west, southwest, southeast, and east also fall within the upper quartile (>74%).



What is Children's Lead Risk from Housing?

Lead house paint is the most significant source of lead exposure in children, which can adversely affect brain development, and result in blood, kidney, and endocrine toxicity. While lead levels have declined over the past five decades in the United States, it persists in older housing.

Poverty is a known modifier of old housing-related lead exposure risk. Housing units in lower-income neighborhoods are less likely to have undergone renovations and abatements to reduce lead-based paint than those in higher-income neighborhoods.

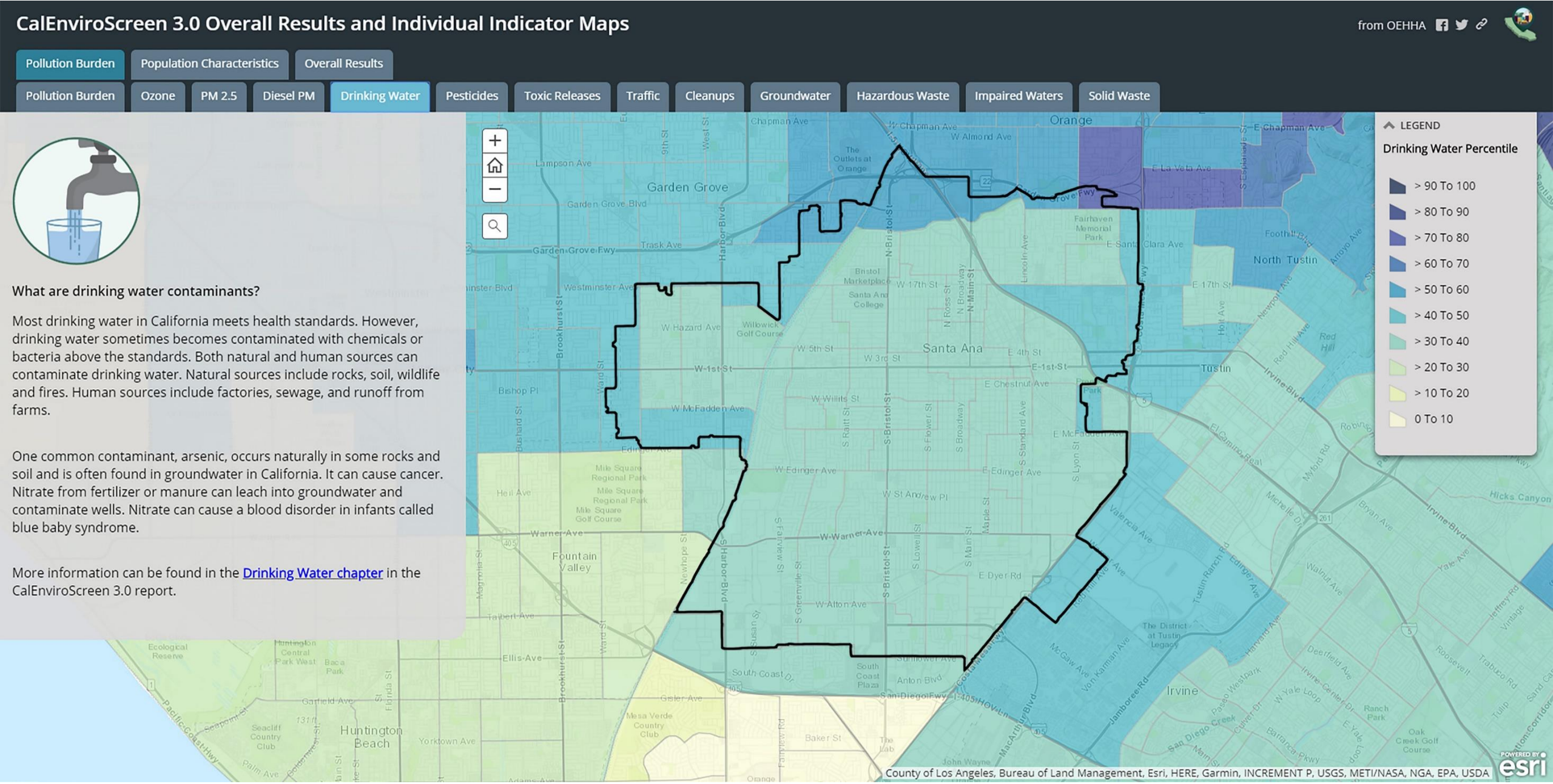
More information can be found in [Proposed Changes in Draft CalEnviroScreen 4.0].

https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Pollution Indicators| Diesel PM

Diesel particulate matter (PM) is the particle phase of diesel exhaust emitted from diesel engines such as trucks, buses, cars, trains, and heavy-duty equipment. Diesel PM is concentrated near ports, rail yards and freeways. Exposure to diesel PM has been shown to have numerous adverse health effects including irritation to the eyes, throat and nose, cardiovascular and pulmonary disease, and lung cancer. People that live or work near heavily traveled roadways, ports, railyards, bus yards, or trucking distribution centers may experience a high level of exposure. Children and those with existing respiratory disease, particularly asthma, appear to be especially susceptible to the harmful effects of exposure to airborne PM from diesel exhaust.

In Santa Ana, the census tracts with the highest levels of diesel PM are in the east, adjacent to freeways. The following neighborhoods (that are also EJ communities), have a percentile score for diesel PM above 80%: Cornerstone Village, French Court, French Park, Lacy, Logan, Lyon St., Pacific Park, and Saddleback View. These neighborhoods are located near or adjacent to Interstate 5 and/or State Route 55, thereby exposing residents to the higher levels of diesel PM that elsewhere in the city. The following neighborhoods are not EJ communities, but also exhibit a percentile score above 80% for diesel PM (Park Santiago, Fairhaven, Young Square, Portola Park, and Meredith Parkwood), due to their proximity to State Route 22 and Interstate 5.



https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Pollution Indicators| Drinking Water Contaminates

California water systems have a high rate of compliance with drinking water standards. In 2014, systems serving only about 2.9 percent of the state's population were in violation of one or more drinking water standards (SWRCB, 2016). The drinking water contaminant index used in CalEnviroScreen 3.0 is not a measure of compliance with these standards. The drinking water contaminant index is a combination of contaminant data that takes into account the relative concentrations of different contaminants and whether multiple contaminants are present. The indicator does not indicate whether water is safe to drink.

The City of Santa Ana does not have a significant contaminated drinking water issue in which census tracts rank within the upper quartile (>74%). Most census tracts have a drinking water contamination percentile ranked in the 30th and 40th percentiles.

CalEnviroScreen 3.0 Overall Results and Individual Indicator Maps

from OEHHA

Pollution Burden | Population Characteristics | Overall Results

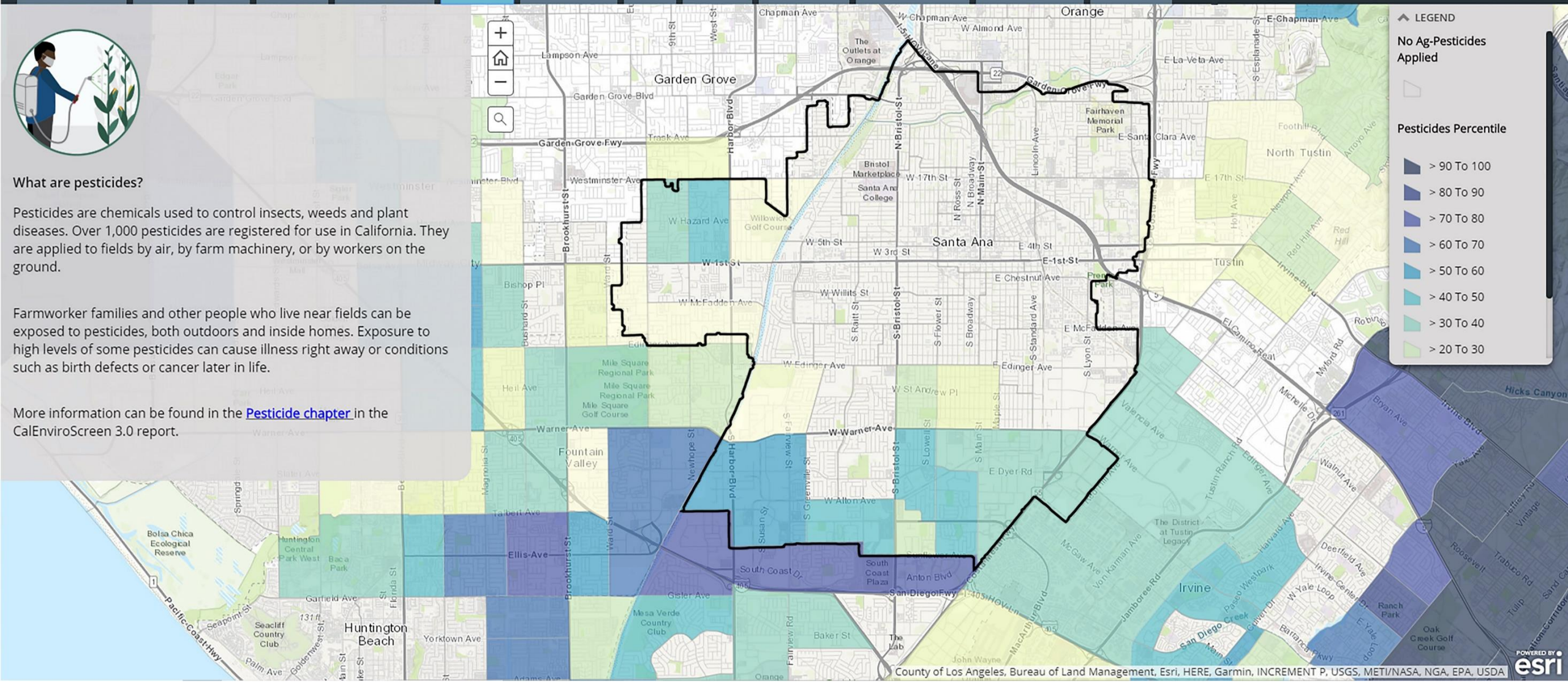
Pollution Burden | Ozone | PM 2.5 | Diesel PM | Drinking Water | Pesticides | Toxic Releases | Traffic | Cleanups | Groundwater | Hazardous Waste | Impaired Waters | Solid Waste

What are pesticides?

Pesticides are chemicals used to control insects, weeds and plant diseases. Over 1,000 pesticides are registered for use in California. They are applied to fields by air, by farm machinery, or by workers on the ground.

Farmworker families and other people who live near fields can be exposed to pesticides, both outdoors and inside homes. Exposure to high levels of some pesticides can cause illness right away or conditions such as birth defects or cancer later in life.

More information can be found in the Pesticide chapter in the CalEnviroScreen 3.0 report.

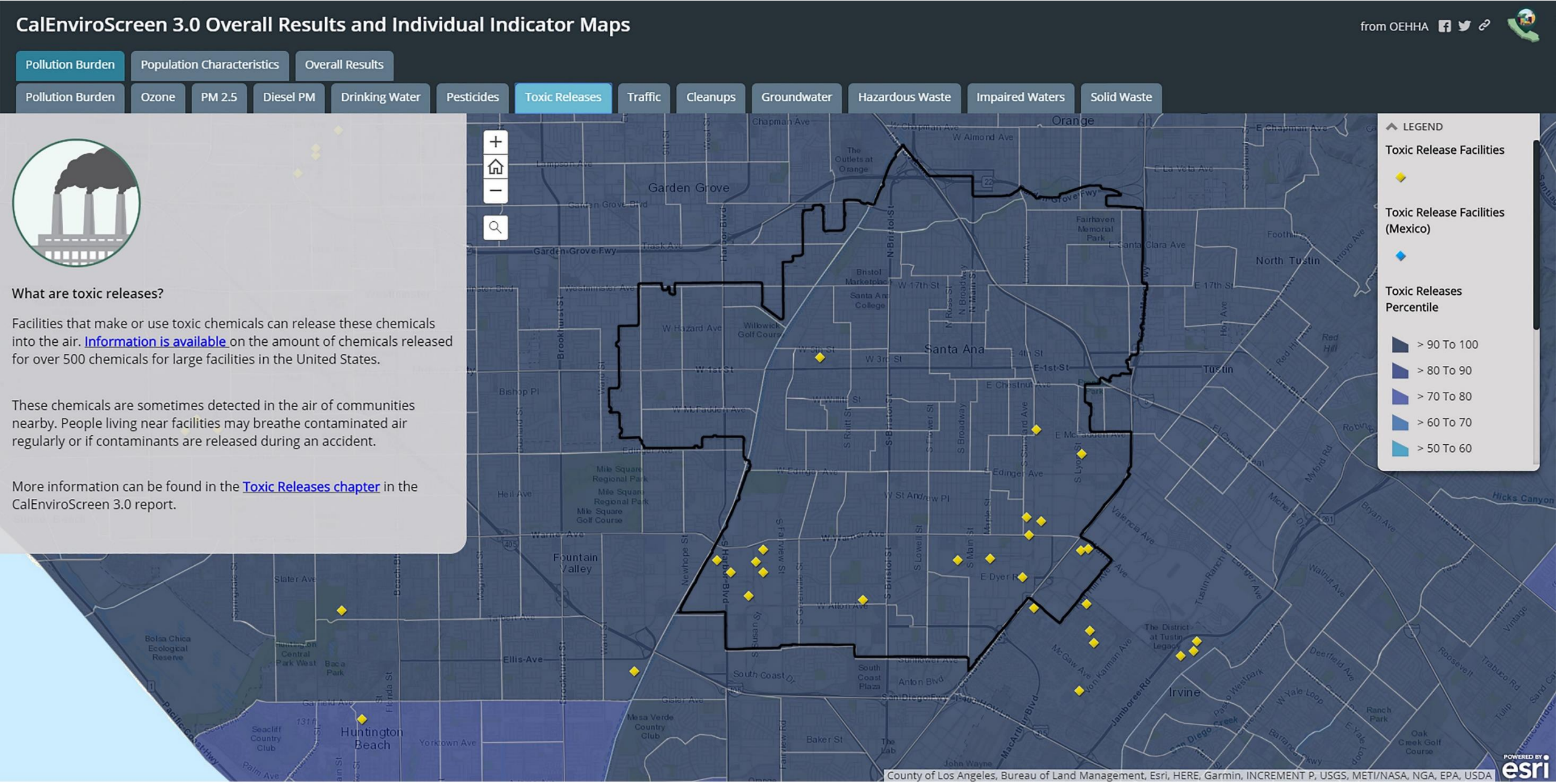


https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Pollution Indicators| Pesticides

Communities near agricultural fields, primarily farm worker communities, may be at risk for exposure to pesticides. Drift or volatilization of pesticides from agricultural fields can be a significant source of pesticide exposure. Complete statewide data on human exposures to pesticides do not exist. The most robust pesticide information available statewide are data maintained by the California Department of Pesticide Regulation showing where and when pesticides are used across the state. Pesticide use, especially use of volatile chemicals that can easily become airborne, can serve as an indicator of potential exposure. Similarly, unintended environmental damage from the use of pesticides may increase in areas with greater use.

The City of Santa Ana does not have a significant pesticide issue in which census tracts rank within the upper quartile (>74%). EJ Census tracts that have a pesticide percentile ranked in the 30th and 40th percentile.



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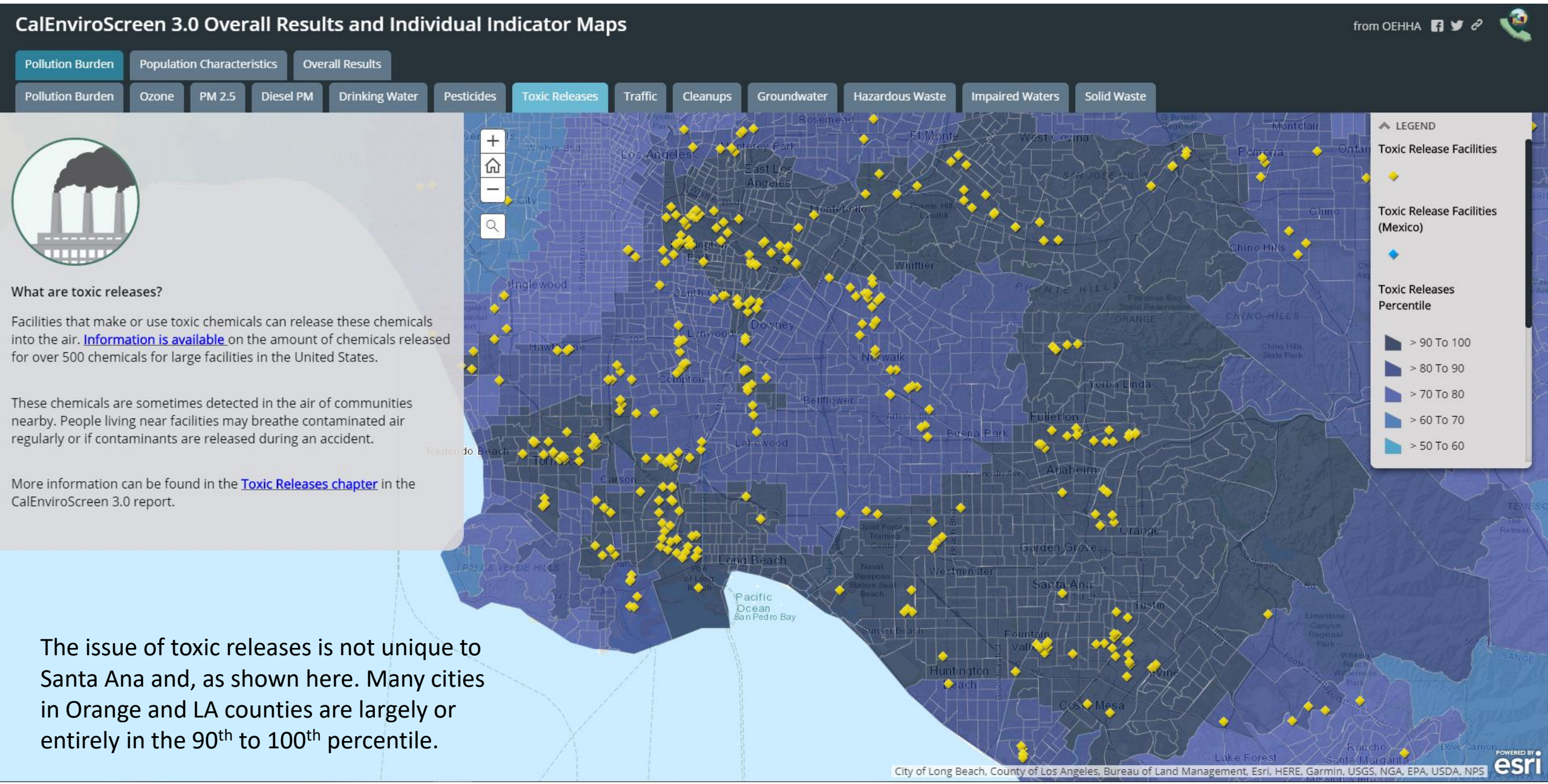


The issue of toxic releases is not unique to Santa Ana and, as shown here. Many cities in Orange and LA counties are largely or entirely in the 90th to 100th percentile.

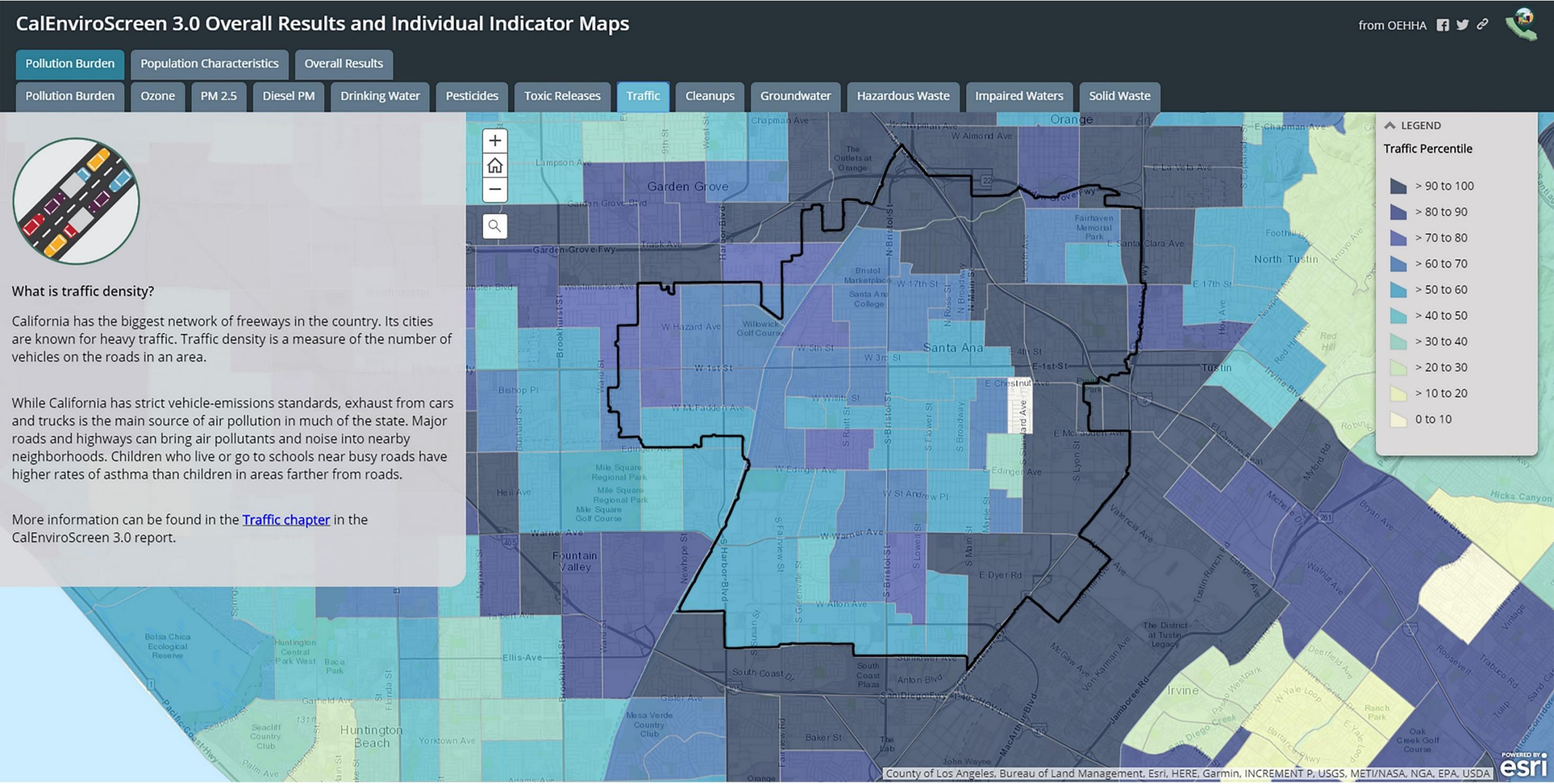
https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Pollution Indicators| Toxic Releases

Toxic releases have been detected in the air from communities nearby facilities that make or use toxic chemicals. People living near facilities may breathe contaminated air regularly and suffer from poor air quality if contaminants are released during an accident. People of color and low-income residents are more likely to live in areas with higher toxic chemical releases and as a result are at greater risk for health-related issues. The U.S. Environmental Protection Agency maintains a toxic substance inventory of on-site releases to air, water, and land and underground injection of any classified chemical, as well as quantities transferred off-site.

Data shows that most of Orange County is negatively impacted by a high concentration of toxic releases, with a percentile ranking of 80-100% compared to other census tracts in the state. The entire city of Santa Ana ranks in the 90th to 100th percentile in terms of toxic releases, similar to many cities in LA and Orange counties.

Zoning regulations are established to help reduce exposure to air pollution to sensitive land uses, such as schools, housing, and medical facilities. New or relocated industrial uses near schools should be built further than 500 feet, as cited in the 2017 California Air Resources Board Land Use Handbook. In Santa Ana, heavy industrial areas are also usually surrounded by general industrial or light industrial or separated by freeways or flood waterways. However, there are heavy industrial areas located less than 500 feet from Century High School and from a single-family neighborhood in the Lacy neighborhood.

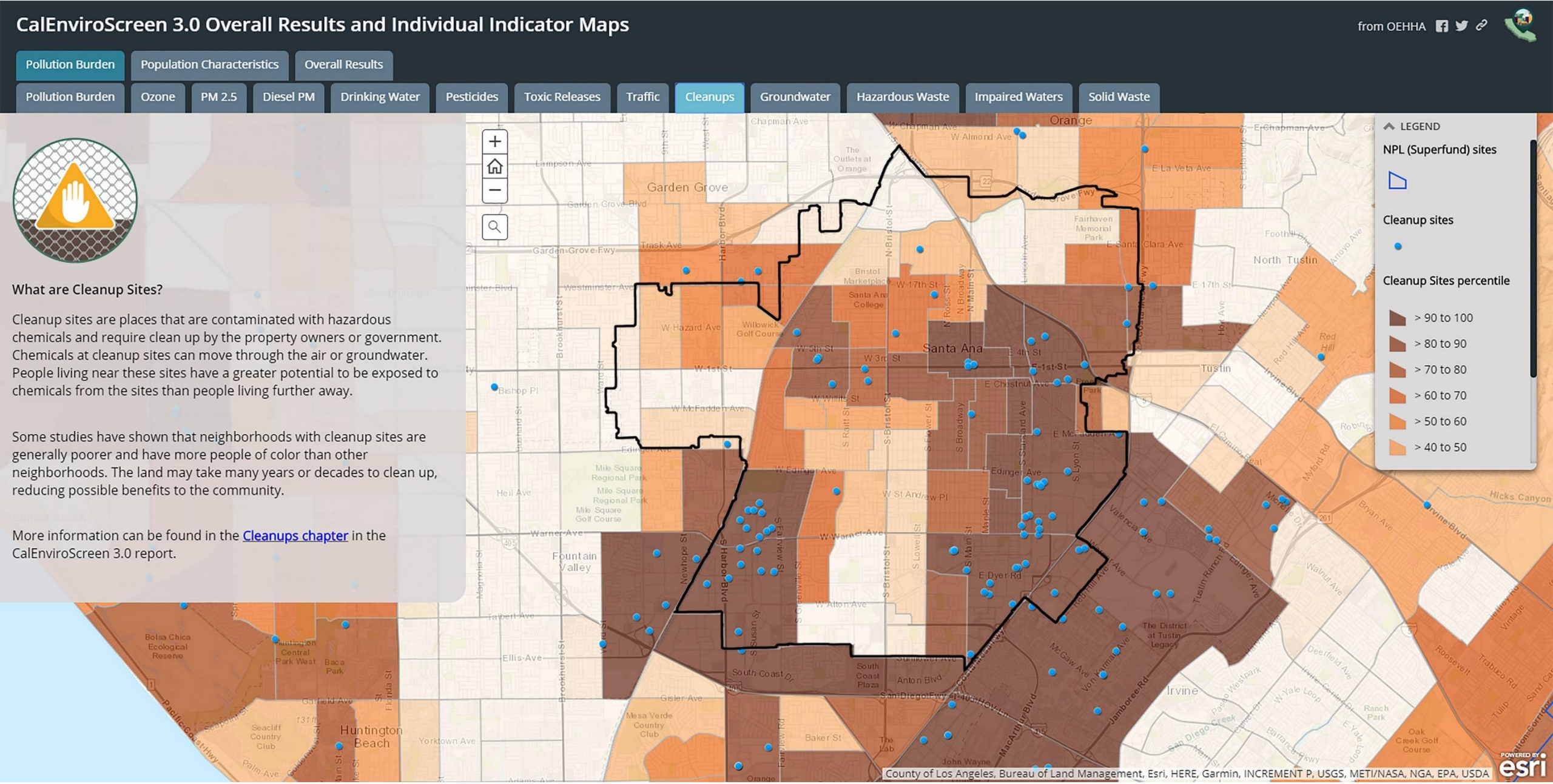


https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Pollution Indicators| Traffic Density

Traffic density is a measure of the number of vehicles on the roads in an area. The indicator uses information on the amount of traffic on major roads as well as some local roads and the length of the roads in or near each census tract. Traffic density is calculated by dividing the traffic volumes by the total road length for the annual year. While California has strict vehicle-emissions standards, exhaust from cars and trucks is the main source of air pollution in much of the state. Non-whites, Latinos, low income people, and people who speak a language other than English often live in or near areas with high traffic volumes.

Traffic density in concentrated in the east and southeast areas of the city and in EJ communities including neighborhoods Delhi, Cornerstone Village, French Court, French Park, Lacy, Logan, Lyon St, Pacific Park, and Saddleback View. These areas are near Interstate 5 and State Route 55, and also near major corridors with high truck traffic such as Warner Ave, Grand Ave, Main St, and Edinger Ave. Major roads and highways can bring air pollutants and noise into nearby neighborhoods. Exhaust fumes contain toxic chemicals that can damage DNA, cause cancer, make breathing difficult, and cause low weight and premature births. Children who live or go to schools near busy roads have higher rates of asthma and other lung diseases than children in areas farther from roads.

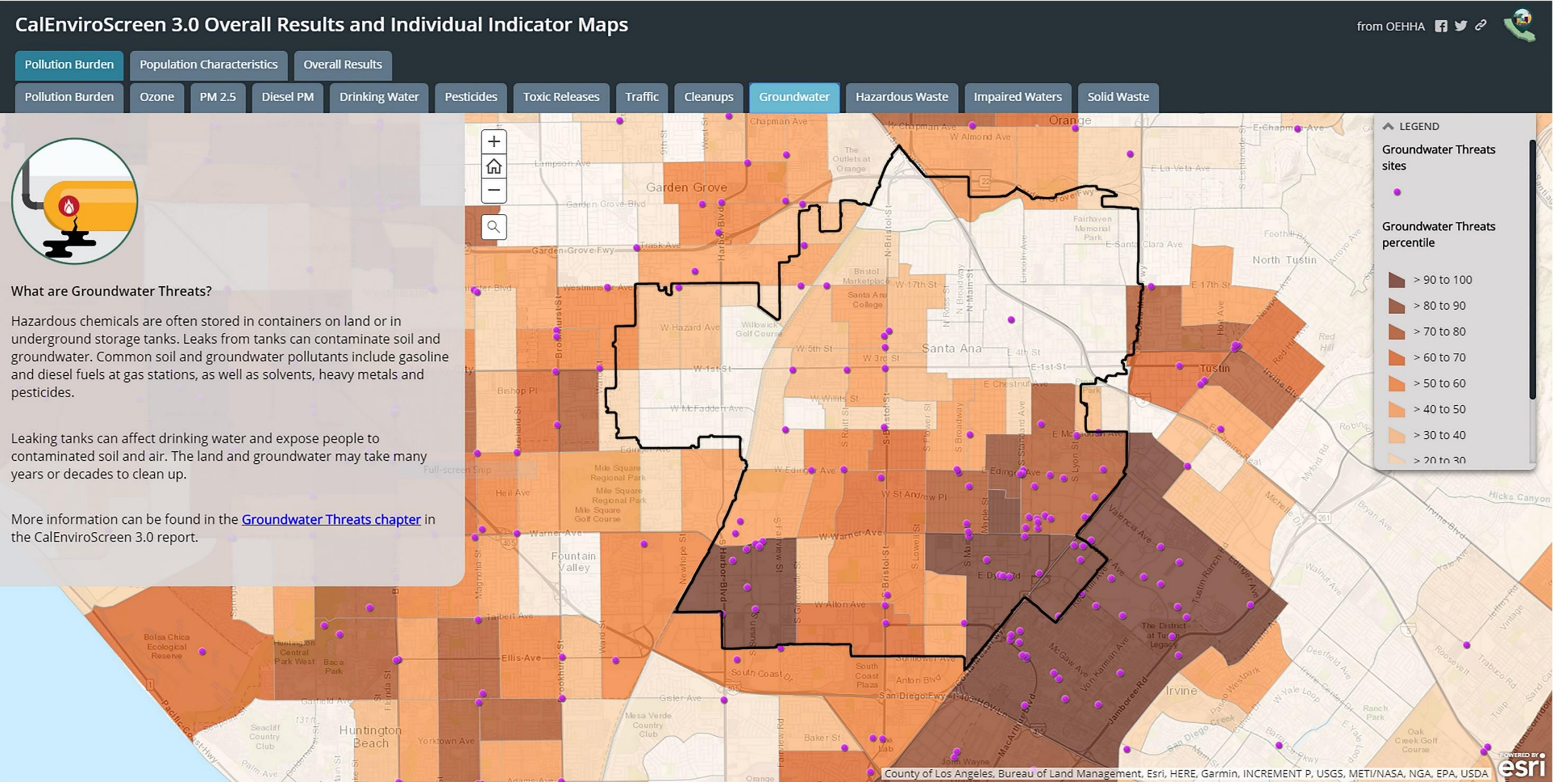


https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Pollution Indicators| Toxic Clean Up Sites

Cleanup sites are places that are contaminated with harmful chemicals. The Department of Toxic Substances Control tracks cleanups of contaminated sites in California. The indicator combines the sites in or near each census tract to account for the type of site it is and how close it is to where people may live. Chemicals in the buildings, soil or water at cleanup sites can move into nearby communities through the air or by movement of water. Scientists have found toxic metals in house dust and pesticides in the blood of people who live near contaminated sites.

Studies have shown that neighborhoods with cleanup sites are generally low-income and of color. All environmental justice communities in Santa Ana are impacted by toxic clean-up sites. Most clean-up sites are located within environmental justice communities, with a majority located in the south and east areas of the city. People living near these sites are more likely to be exposed to chemicals from the sites. It generally takes many years for a site to be certified as clean, and cleanup work is often delayed due to cost, litigation, concerns about liability or detection of previously unrecognized contaminants.



https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Pollution Indicators| Groundwater Threats

Groundwater threats may occur when leaks from containers and tanks that contain hazardous chemicals contaminate the soil and pollute groundwater. Common pollutants of soil and groundwater include gasoline and diesel fuel from gas stations, as well as solvents, heavy metals and pesticides. The State Water Resources Control Board maintains a database of places where groundwater may be threatened by certain sources of pollution. This indicator is calculated by considering the number of groundwater cleanup sites, the weight of each site, and the distance to the census tract.

Groundwater threats in Santa Ana are significant in the east and south east areas, which include the neighborhoods of Delhi, Cedar Evergreen, Cornerstone Village, Lyon St, Madison Park, and Memorial Park. These areas are located near or within light and heavy industrial uses.

CalEnviroScreen 3.0 Overall Results and Individual Indicator Maps

from OEHHA

Pollution Burden | Population Characteristics | Overall Results

Pollution Burden | Ozone | PM 2.5 | Diesel PM | Drinking Water | Pesticides | Toxic Releases | Traffic | Cleanups | Groundwater | Hazardous Waste | Impaired Waters | Solid Waste

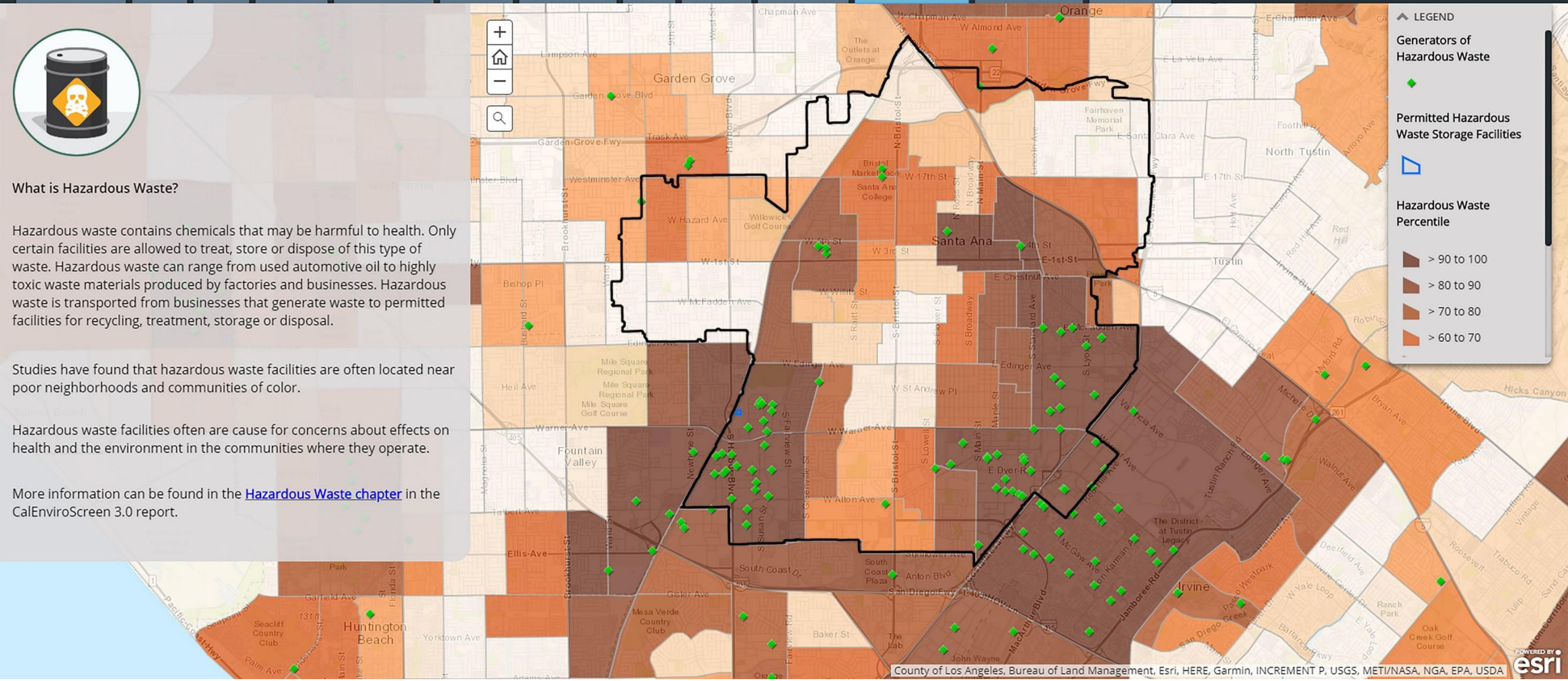
What is Hazardous Waste?

Hazardous waste contains chemicals that may be harmful to health. Only certain facilities are allowed to treat, store or dispose of this type of waste. Hazardous waste can range from used automotive oil to highly toxic waste materials produced by factories and businesses. Hazardous waste is transported from businesses that generate waste to permitted facilities for recycling, treatment, storage or disposal.

Studies have found that hazardous waste facilities are often located near poor neighborhoods and communities of color.

Hazardous waste facilities often are cause for concerns about effects on health and the environment in the communities where they operate.

More information can be found in the Hazardous Waste chapter in the CalEnviroScreen 3.0 report.

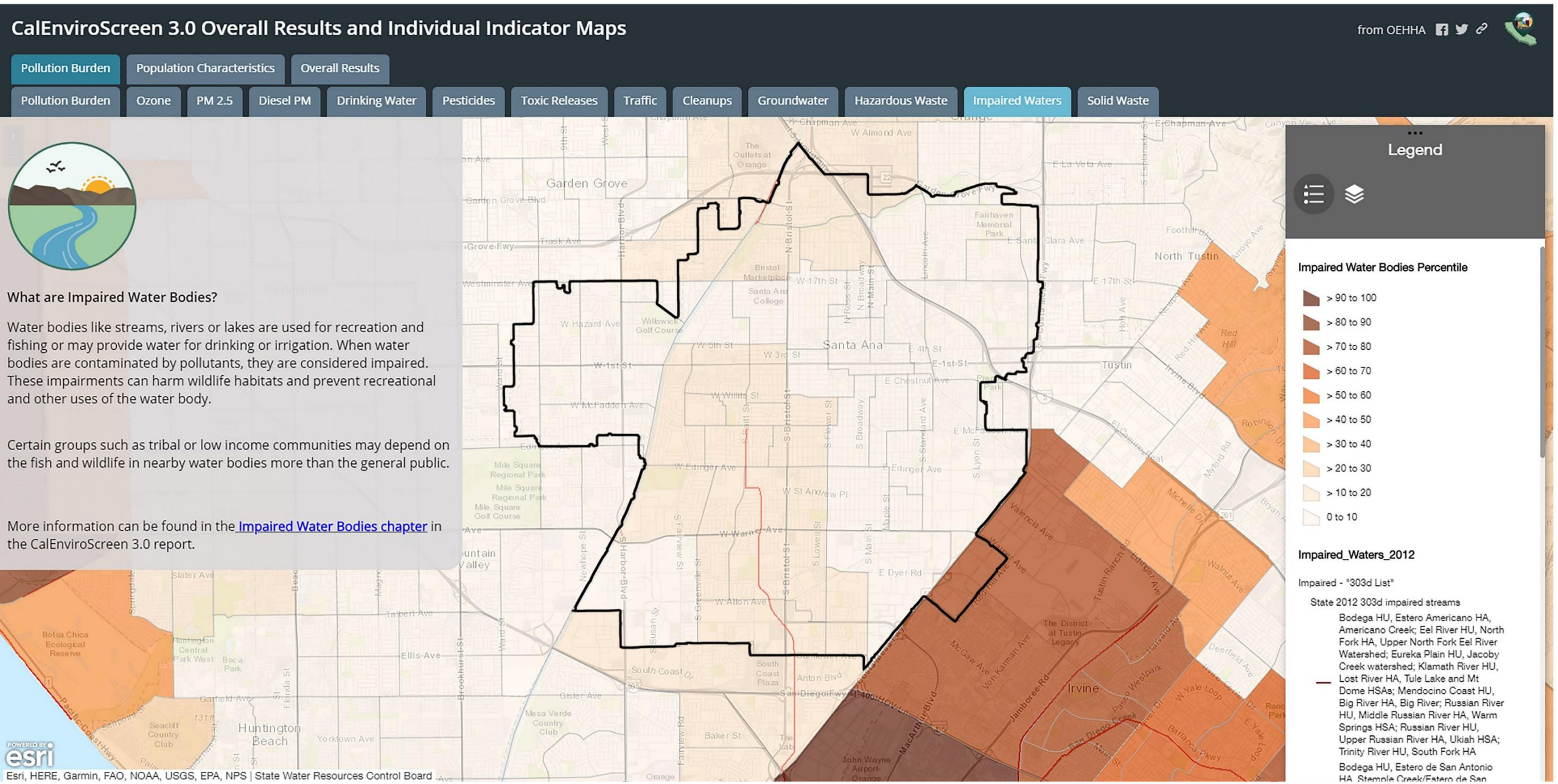


https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Pollution Indicators| Hazardous Waste

Hazardous waste is transported from businesses that generate waste to permitted facilities for recycling, treatment, storage or disposal. Contamination of air, water and soil near waste generators and facilities can harm the environment as well as people. The Department of Toxic Substances Control maintains information on where hazardous waste is generated and the facilities that handle it. This indicator is calculated by considering the number of permitted treatment, storage and disposal facilities or generators of hazardous waste, the weight of each generator or site, and the distance to the census tract.

Studies have found that hazardous waste facilities are often located near low-income neighborhoods and communities of color. Hazardous waste is significant in nearly all environmental justice communities in Santa Ana. Hazardous waste includes a range of different types of waste, such as automotive oil as well as highly toxic waste materials produced by factories and businesses.



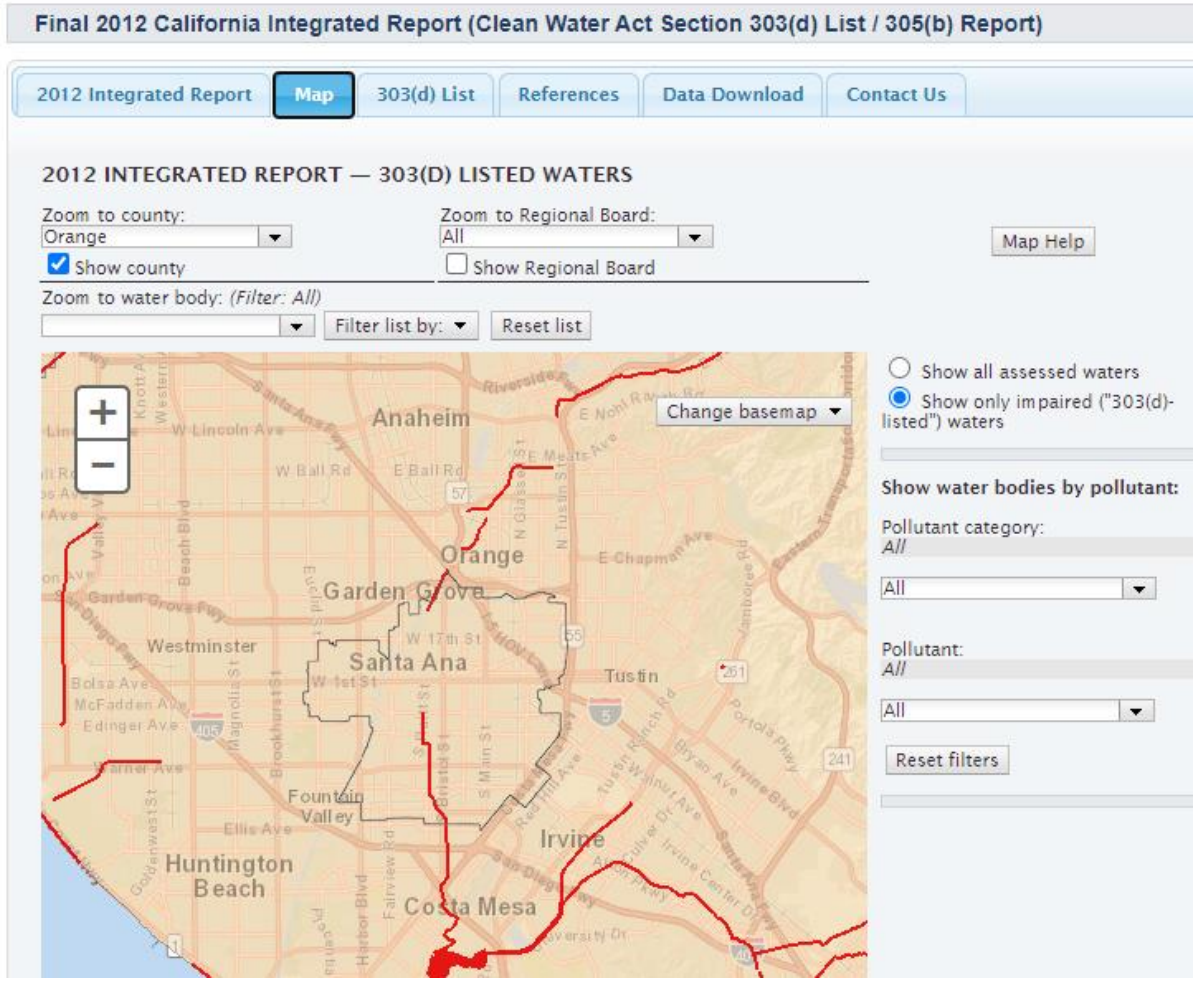
https://oehha.ca.gov/calenviroscreen/maps-data

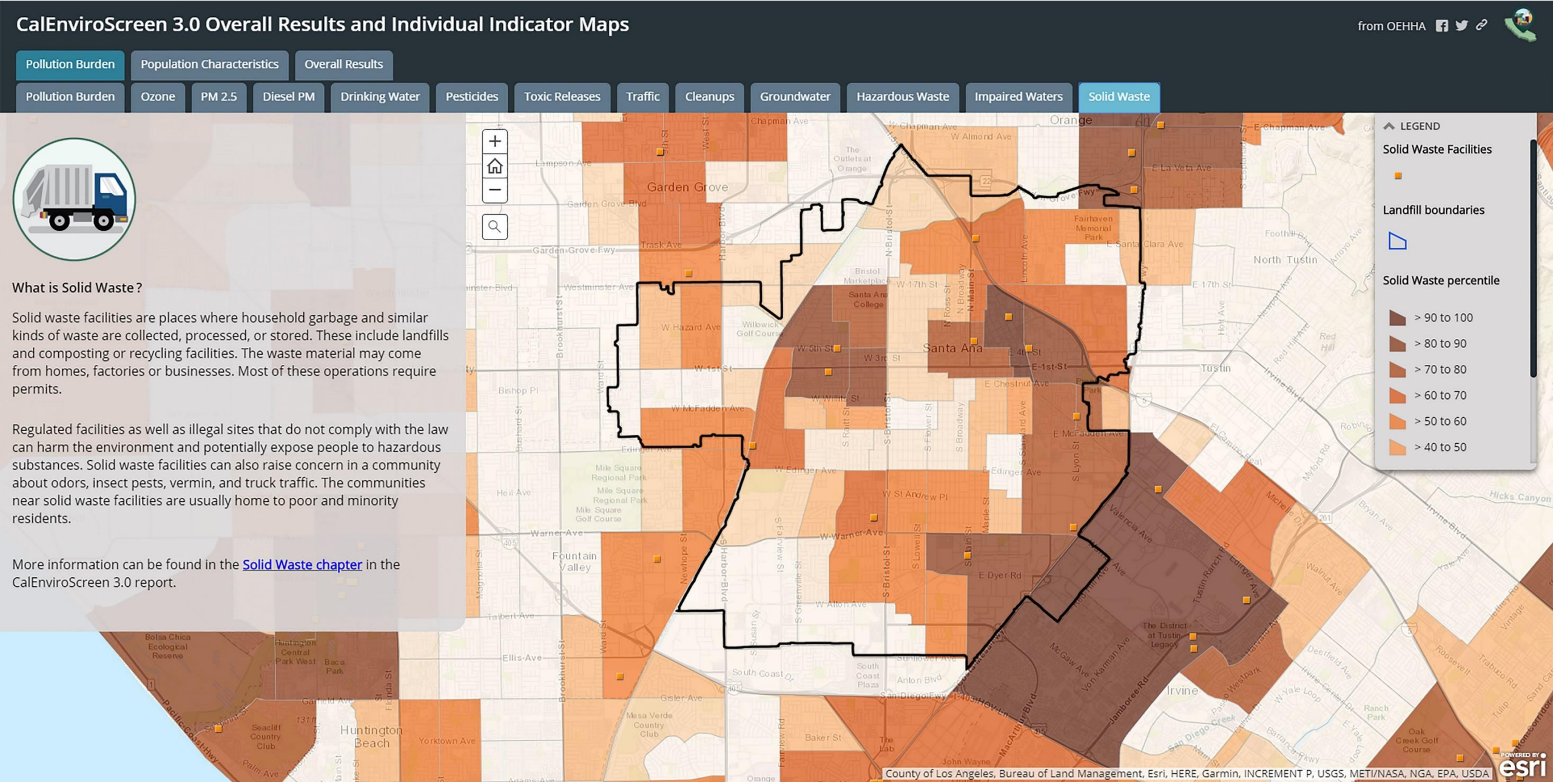
Analysis of Pollution Indicators| Impaired Waters

Contamination of California streams, rivers, and lakes by pollutants can compromise the use of the water body for drinking, swimming, fishing, aquatic life protection, and other beneficial uses. When this occurs, such bodies are considered “impaired.”

According to CA Integrated Water Report of 2012, in Santa Ana, there are two impaired water bodies contaminated with bacteria (with affected area in parentheses): Santa Ana River Reach 2 (20 square miles) and Santa Ana Delhi Channel (6.8 square miles).

However, the City of Santa Ana does not have a significant impaired waters issue in which census tracts rank within the upper quartile (>74%). Census tracts that have an impaired waters percentile did not ranked higher than in the 15th percentile.





https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Pollution Indicators| Solid Waste Facilities

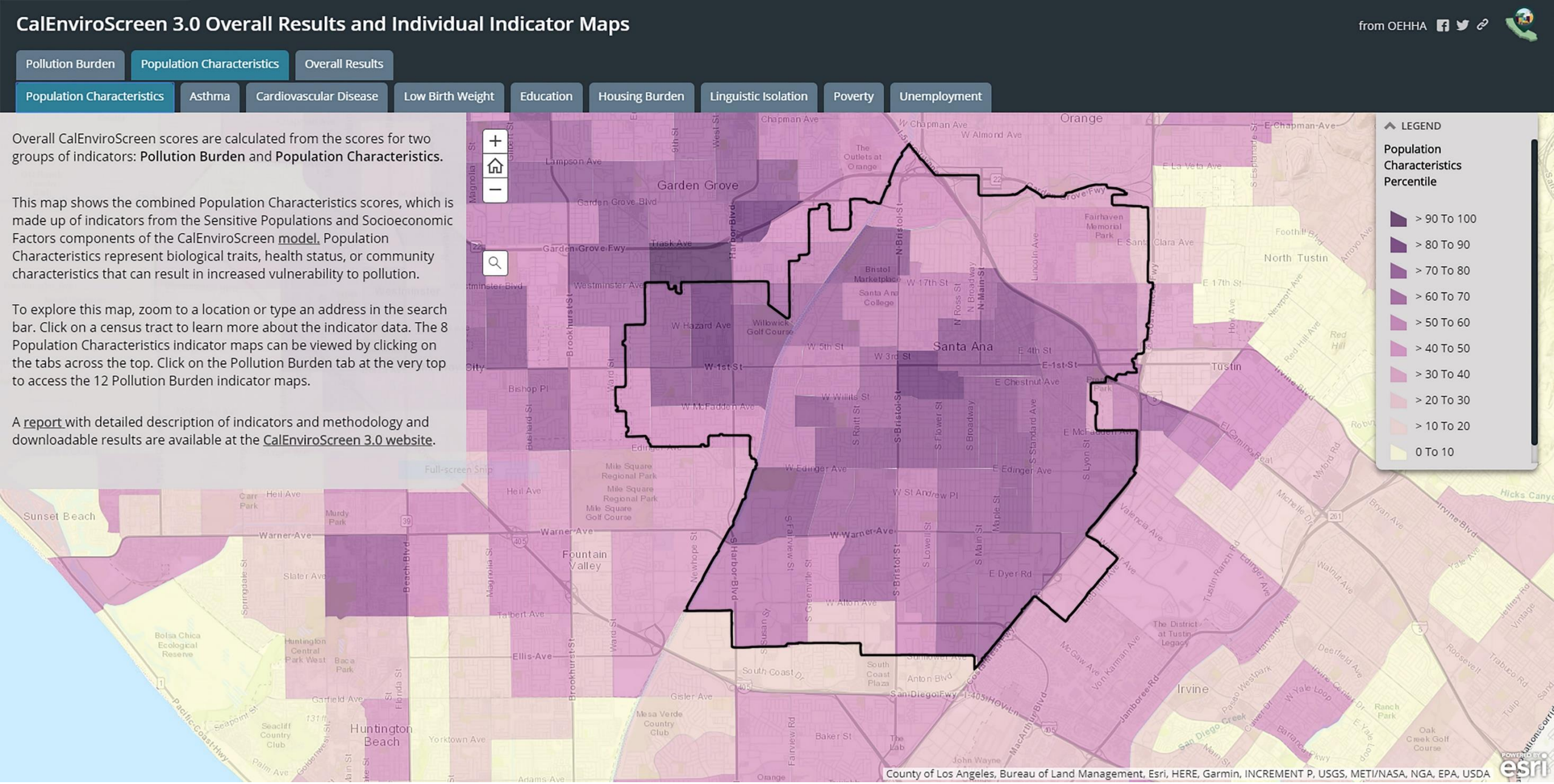
Solid waste facilities are places where household garbage and other types of waste from industry or commercial sources are collected, processed, or stored. Facilities or sites include landfills, transfer stations, and composting facilities. The communities near solid waste facilities are usually home to poor and minority residents. CalRecycle maintains information on solid waste facilities across the state. This indicator is calculated by considering the number of solid waste facilities including illegal sites, the weight of each, and the distance to the census tract.

Solid waste facilities are significant in nearly all environmental justice communities in Santa Ana. Regulated facilities as well as illegal sites that do not follow the law can harm the environment and expose people to hazardous chemicals. Solid waste facilities can release toxic gases into the air, even after they are closed. Chemicals in waste can leach into the soil around the facility. These chemicals may eventually pose a health risk to people nearby. Composting, recycling and waste treatment facilities may produce odors, attract pests, and increase local truck traffic.

Population Characteristics

OEHHA identifies population characteristics, such as health conditions, community characteristics, and socioeconomic conditions. These characteristics are used to identify environmental justice communities because they can increase communities' vulnerability to environmental pollution. This section provides maps and summaries of the following population characteristics:

- Asthma
- Cardiovascular Disease
- Low Birth Weight
- Education
- Housing Burden
- Linguistic Isolation
- Poverty
- Unemployment



https://oehha.ca.gov/calenviroscreen/maps-data

CalEnviroScreen 3.0 Overall Results and Individual Indicator Maps

from OEHHA

Pollution Burden | Population Characteristics | Overall Results

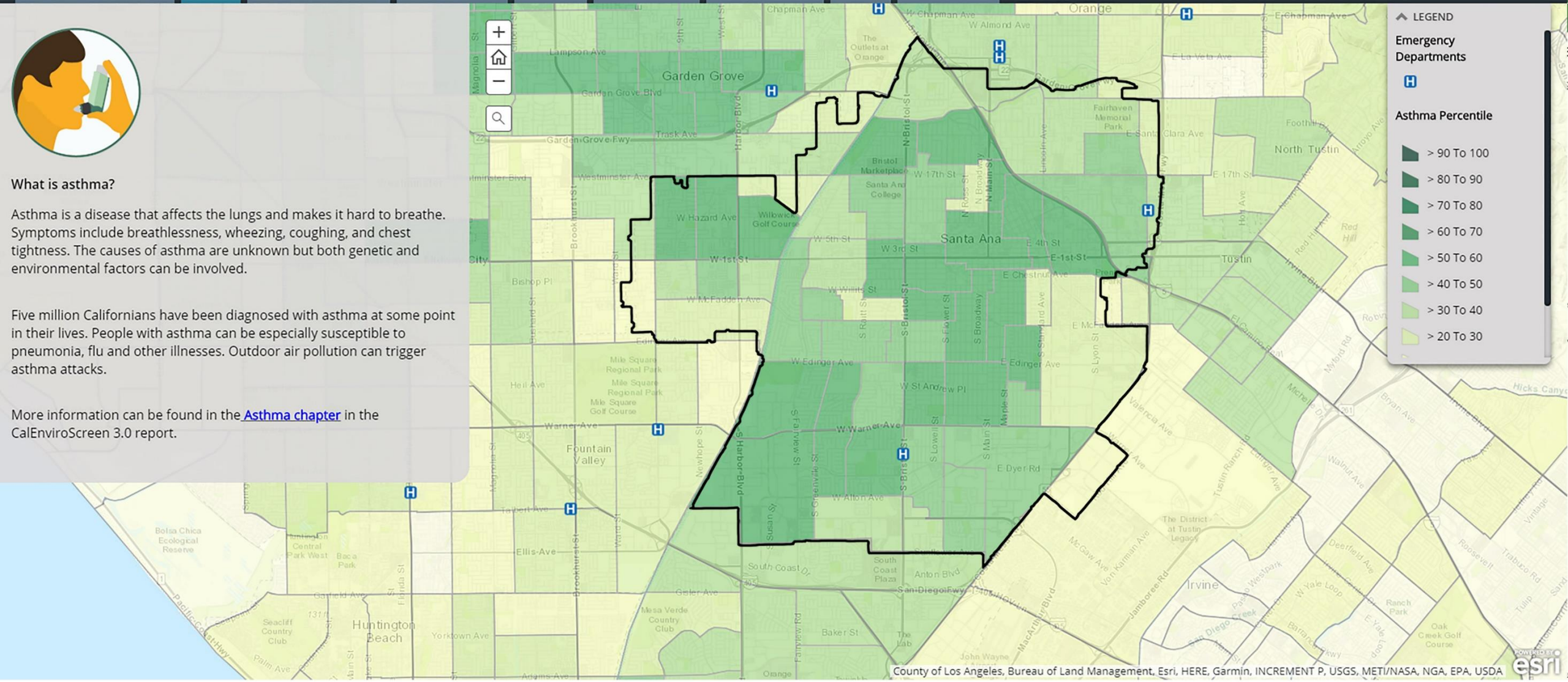
Population Characteristics | Asthma | Cardiovascular Disease | Low Birth Weight | Education | Housing Burden | Linguistic Isolation | Poverty | Unemployment

What is asthma?

Asthma is a disease that affects the lungs and makes it hard to breathe. Symptoms include breathlessness, wheezing, coughing, and chest tightness. The causes of asthma are unknown but both genetic and environmental factors can be involved.

Five million Californians have been diagnosed with asthma at some point in their lives. People with asthma can be especially susceptible to pneumonia, flu and other illnesses. Outdoor air pollution can trigger asthma attacks.

More information can be found in the Asthma chapter in the CalEnviroScreen 3.0 report.

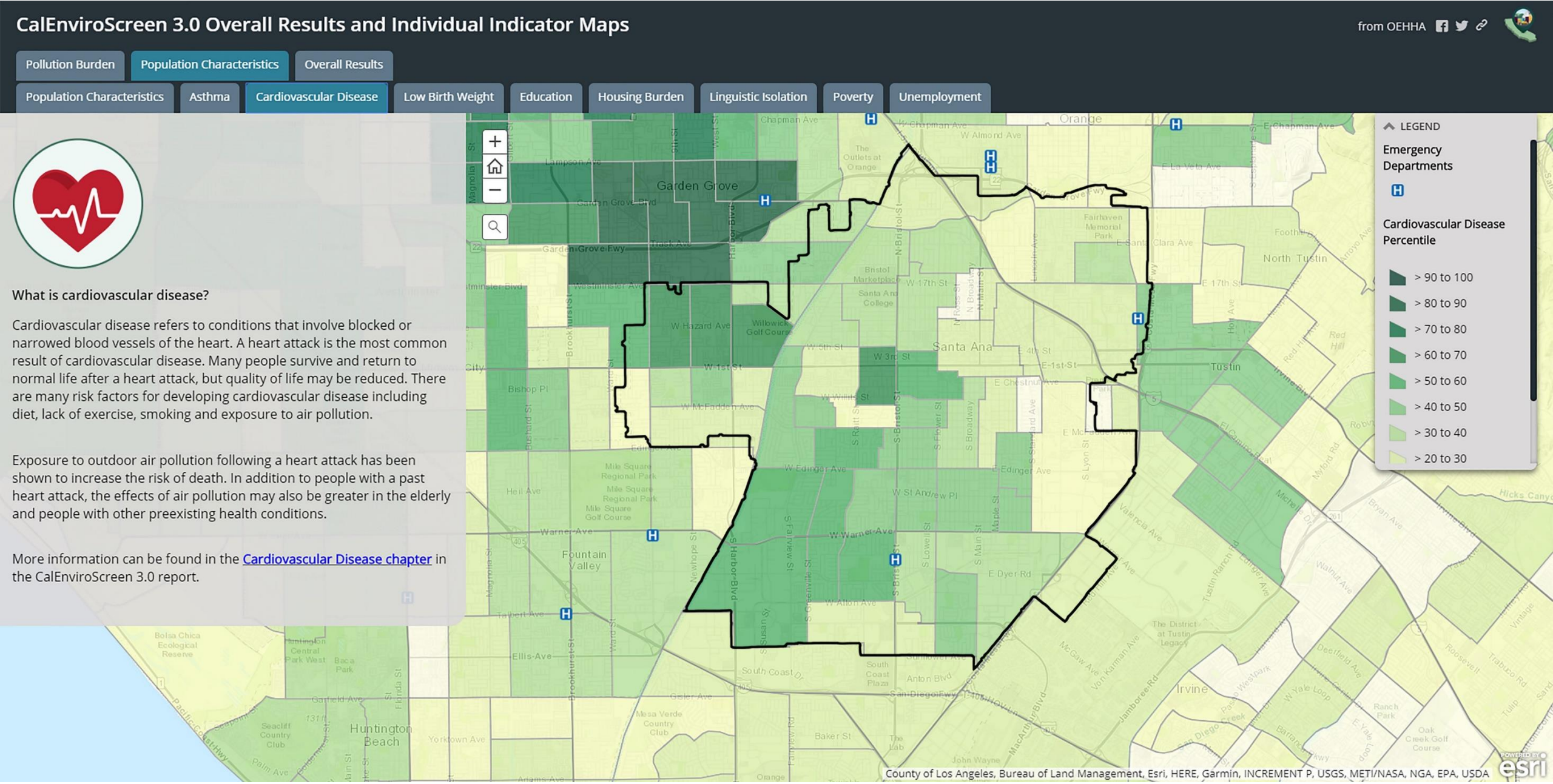


https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Population Indicators| Asthma

Asthma is a chronic lung disease characterized by episodic breathlessness, wheezing, coughing, and chest tightness. While the causes of asthma are poorly understood, it is well established that exposure to traffic and outdoor air pollutants, including particulate matter, ozone, and diesel exhaust, can trigger asthma attacks. Nearly three million Californians currently have asthma and about five million have had it at some point in their lives. Children, the elderly and low-income Californians suffer disproportionately from asthma (California Health Interview Survey, 2009). Although well-controlled asthma can be managed as a chronic disease, asthma can be a life-threatening condition, and emergency department visits for asthma are a very serious outcome, both for patients and for the medical system.

The City of Santa Ana does not have a significant asthma issue in which census tracts rank within the upper quartile (>74%). Most census tracts have an asthma percentile ranked in the 40th and 50th percentiles.

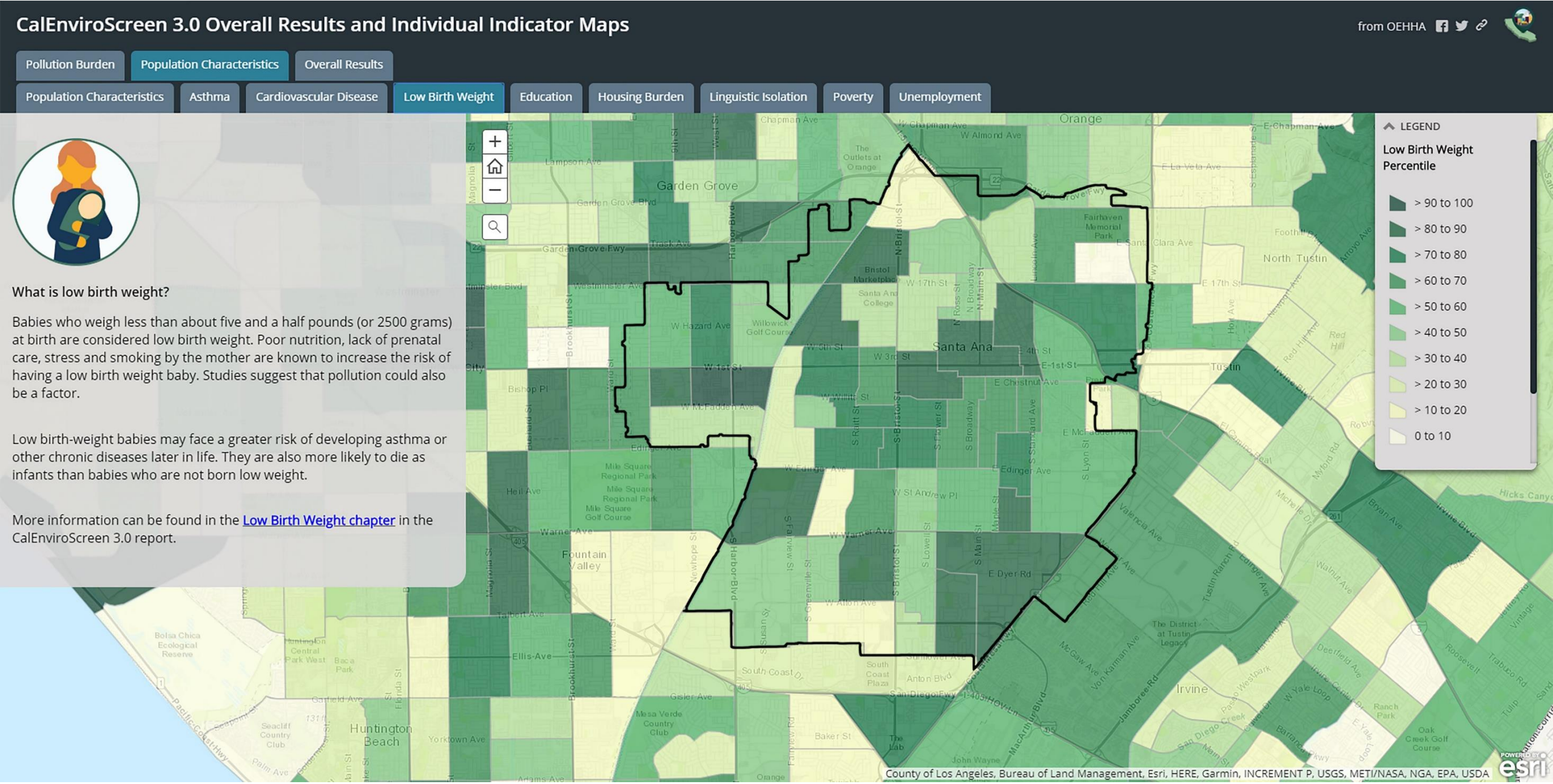


https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Population Indicators| Cardiovascular Disease

Cardiovascular disease (CVD) refers to conditions that involve blocked or narrowed blood vessels that can lead to a heart attack or other heart problems. CVD is the leading cause of death both in California and the United States. There are many risk factors for developing CVD including diet, lack of exercise, smoking, and air pollution. Short term exposure to air pollution, and specifically particulate matter, has been shown to increase the risk of cardiovascular mortality shortly following a heart attack. There is also growing evidence that long term exposure to air pollution may result in premature death for people that have had a heart attack. In addition to people with a previous AMI (area median income), the effects of pollution on cardiovascular disease may be more pronounced in the elderly and people with other preexisting health conditions.

The City of Santa Ana does not have a significant cardiovascular disease issue in which census tracts rank within the upper quartile (>74%). Census tracts have a cardiovascular disease percentile ranked as low as the 5th percentile to the low 60th percentile.

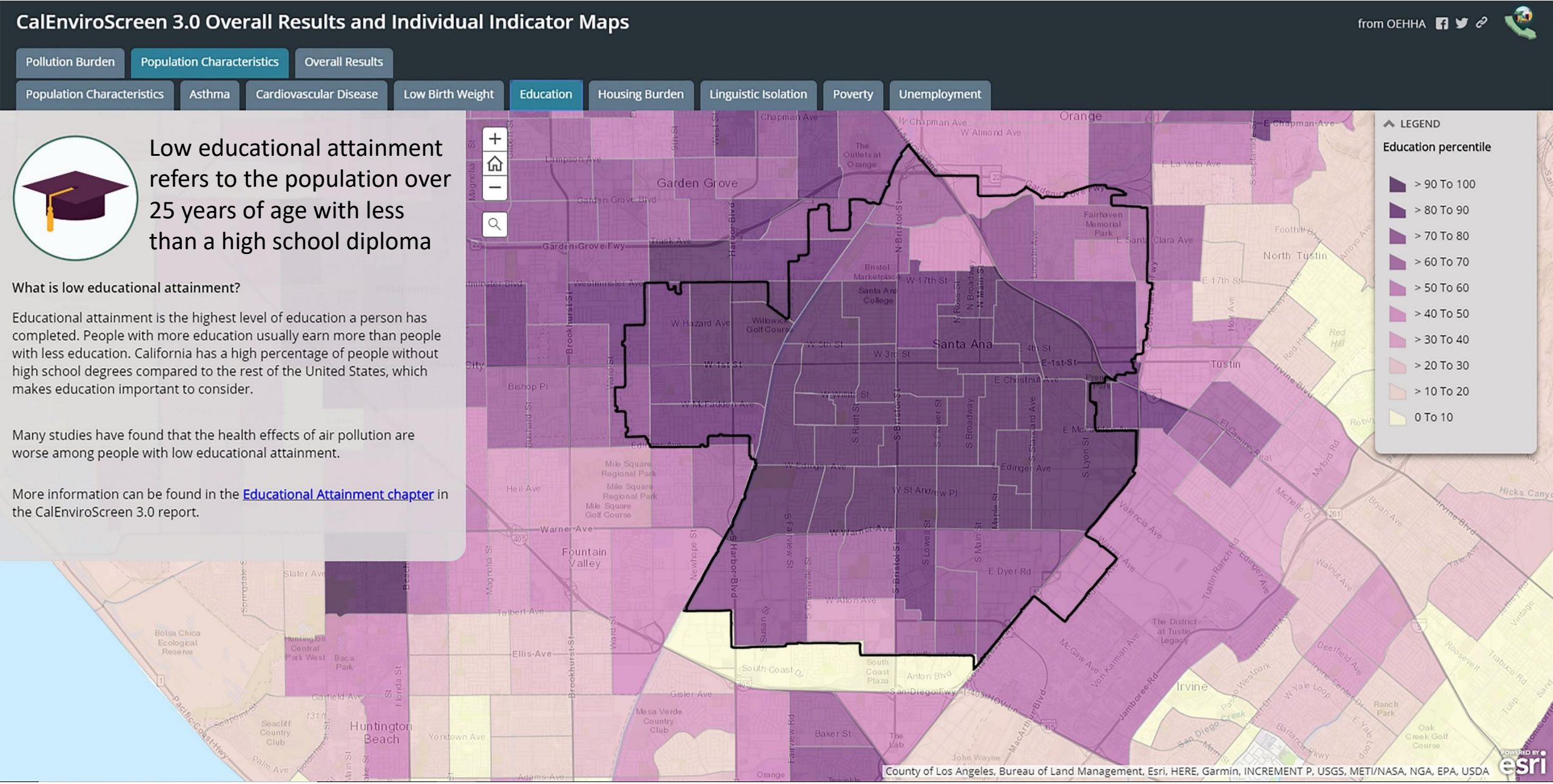


https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Population Indicators| Low Birth Weight

Babies who weigh less than about five and a half pounds (2500 grams) at birth are considered low birth weight. Many factors, including poor nutrition, lack of prenatal care, stress and smoking by the mother, can increase the risk of having a low birth-weight baby. The California Department of Public Health collects information on where low birth weight infants are born in California. The indicator is the percentage of low weight births, averaged over a seven-year period (2006-2012).

Low birth weight is significant in nearly all environmental justice communities in Santa Ana. The culmination of pollution exposure, poverty, and other socioeconomic factors may increase the chance of low birth rate. Low birth weight babies may develop asthma or other chronic diseases later in life, and they are more likely to die as infants than babies who weigh more.



https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Population Indicators| Education

Educational attainment is the highest level of education a person has completed. The U.S. Census Bureau's American Community Survey maintains information on the rates of educational attainment by determining the percent of the population over age 25 with less than a high school education. People with more education usually earn more than people with less education and are more likely to live a healthier and longer life.

In Santa Ana, nearly all environmental justice communities have lower levels of educational attainment. The map shows the percentage of the population with less than a high school education. In Santa Ana, a majority of census tracts are in the 80th percentiles (80th to 89th percentile, indicated by the second darkest shade of purple). This means that the majority of Santa Ana has a larger percent of people over 25 years of age with less than a high school diploma compared to 80 to 89 percent of all census tracts in California.

Educational attainment is an important independent predictor of health. Studies have found that communities of more educated people are less polluted. Adults with less education have more pollution-related health problems. The ways in which lower educational attainment can decrease health status are not completely understood, but may include economic hardship, stress, fewer occupational opportunities, lack of social support, and reduced access to health-protective resources such as medical care, prevention and wellness initiatives, and nutritious food.

CalEnviroScreen 3.0 Overall Results and Individual Indicator Maps

from OEHHA

Pollution Burden | Population Characteristics | Overall Results

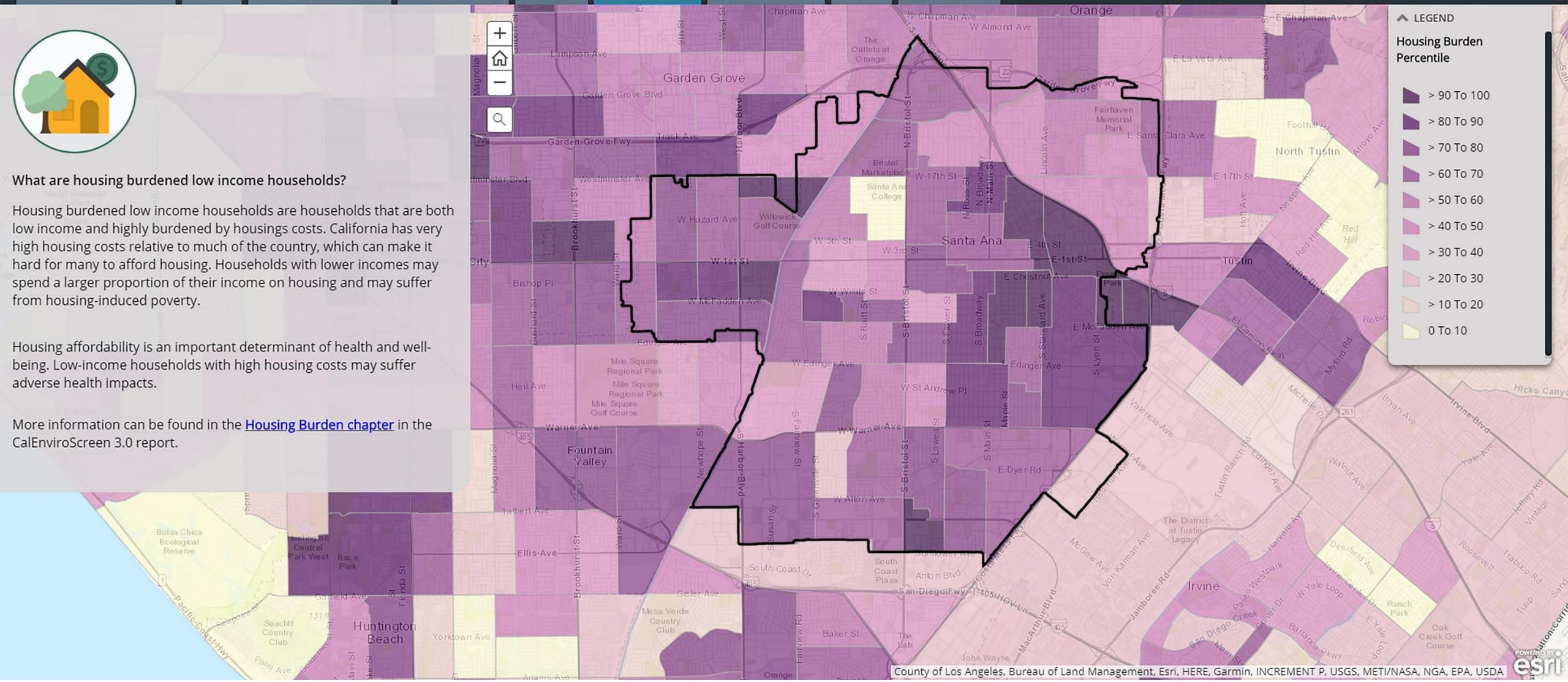
Population Characteristics | Asthma | Cardiovascular Disease | Low Birth Weight | Education | Housing Burden | Linguistic Isolation | Poverty | Unemployment

What are housing burdened low income households?

Housing burdened low income households are households that are both low income and highly burdened by housings costs. California has very high housing costs relative to much of the country, which can make it hard for many to afford housing. Households with lower incomes may spend a larger proportion of their income on housing and may suffer from housing-induced poverty.

Housing affordability is an important determinant of health and well-being. Low-income households with high housing costs may suffer adverse health impacts.

More information can be found in the Housing Burden chapter in the CalEnviroScreen 3.0 report.

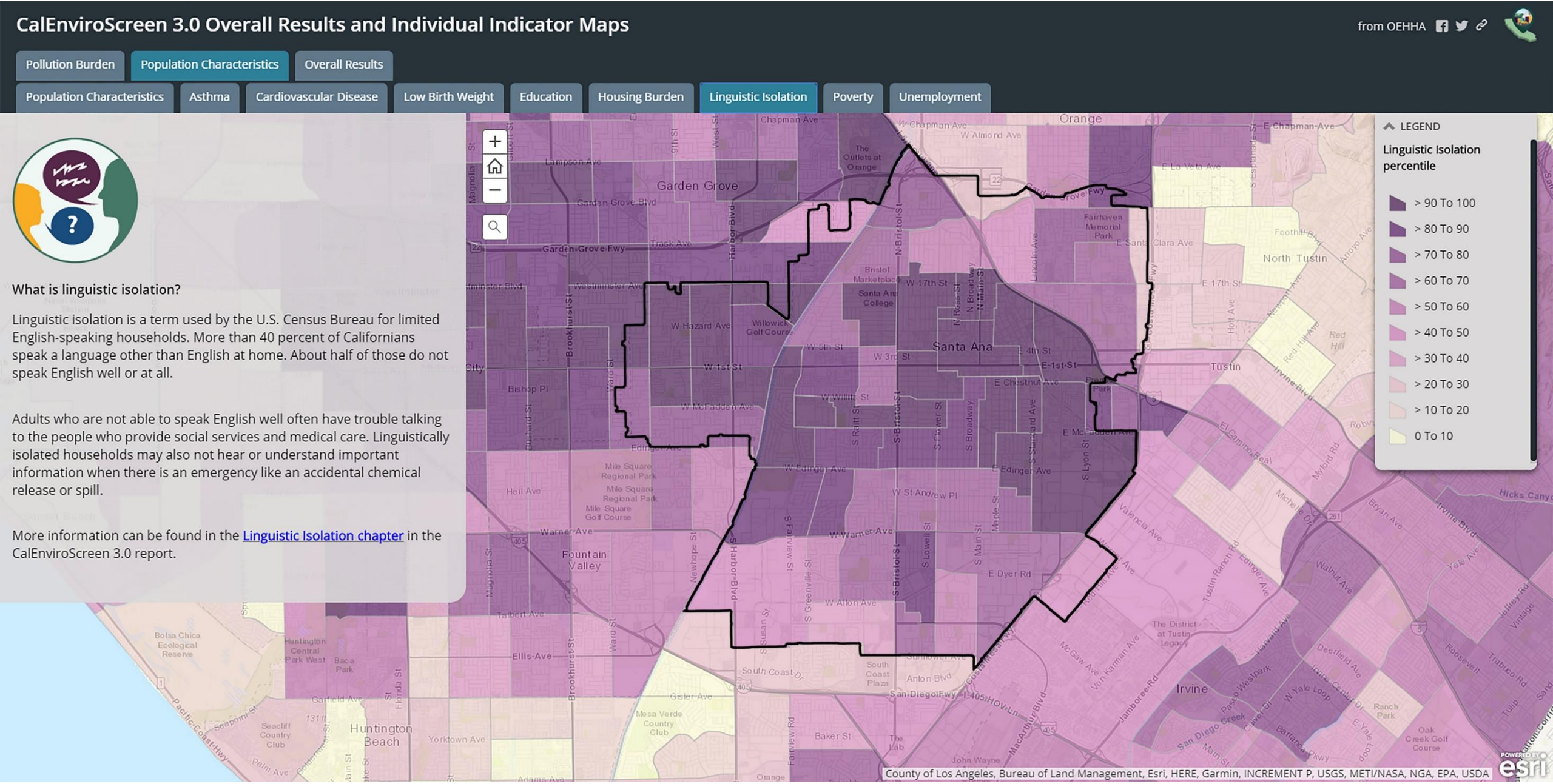


https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Population Indicators| Housing Burden

Housing burdened low income households are households that are both low income and highly burdened by housings costs. Data from the Housing and Urban Development Comprehensive Housing Affordability Strategy is used for the indicator to determine the percent of households in a census tract that are both low income (making less than 80% of their county's median family income) and severely burdened by housing costs (paying greater than 50% of their income for housing costs). Households with lower incomes may spend a larger proportion of their income on housing and may suffer from housing-induced poverty.

Housing burden is significant for areas east and southwest, including the neighborhoods of Delhi, Cornerstone Village, French Court, French Park, Lacy, Logan, Lyon St, Madison Park, Memorial Park, Pacific Park and Saddleback View. Housing affordability is an important determinant of health and well-being.

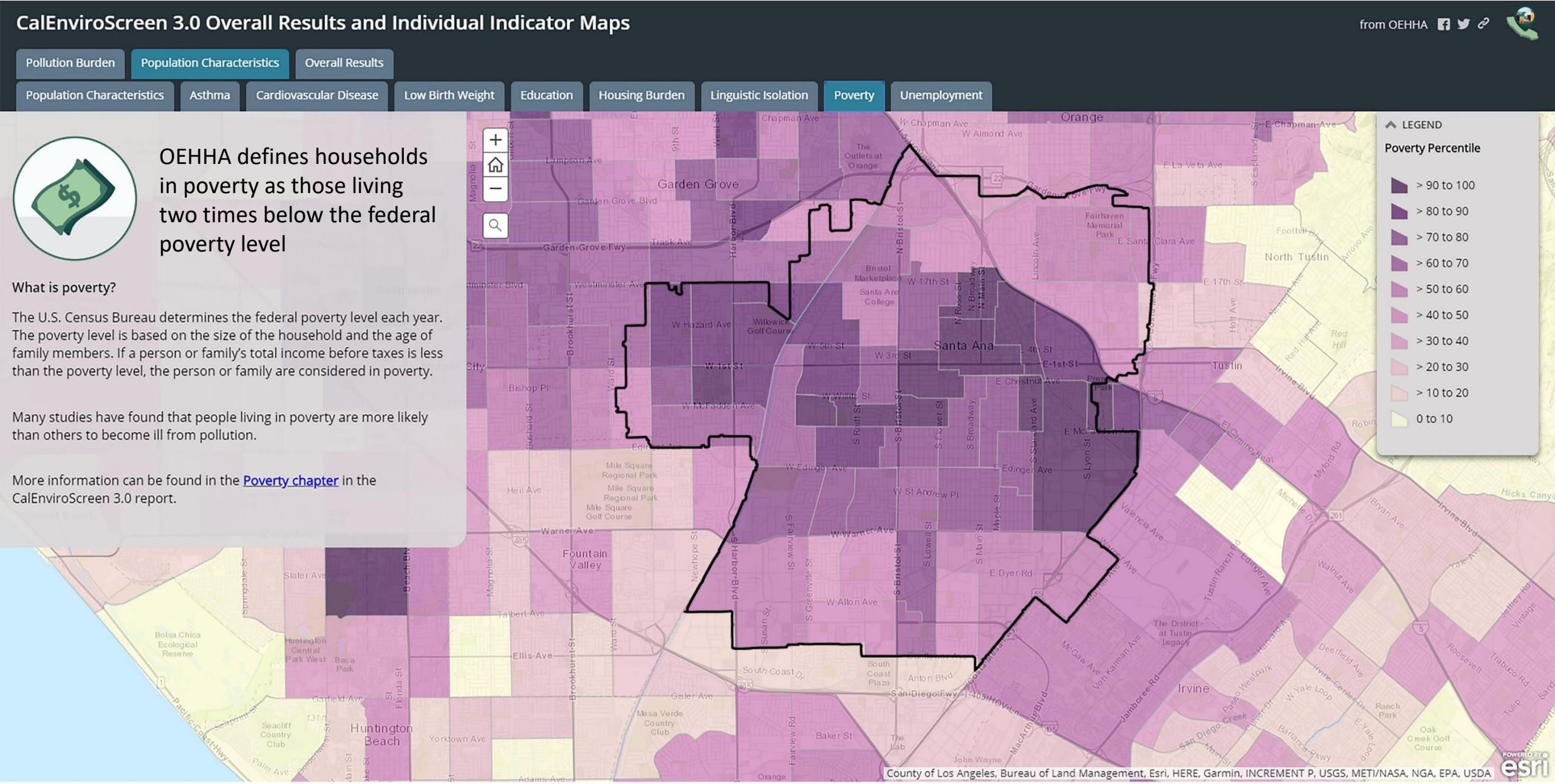


https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Population Indicators| Linguistic Isolation

Linguistic isolation is a term used by the U.S. Census Bureau for limited English-speaking households. The U.S. Census Bureau's American Community Survey maintains information on the rate of linguistic isolation. The indicator is the percent of limited speaking households, which are households where no one over age 14 speaks English well.

Linguistic isolation is significant in nearly all environmental justice communities in Santa Ana. Adults who are not able to speak English well often have trouble talking to the people who provide social services and medical care. As a result, they might not get the health care and information they need. Linguistically isolated households may not hear or understand important information when there is an emergency like an accidental chemical release or spill.



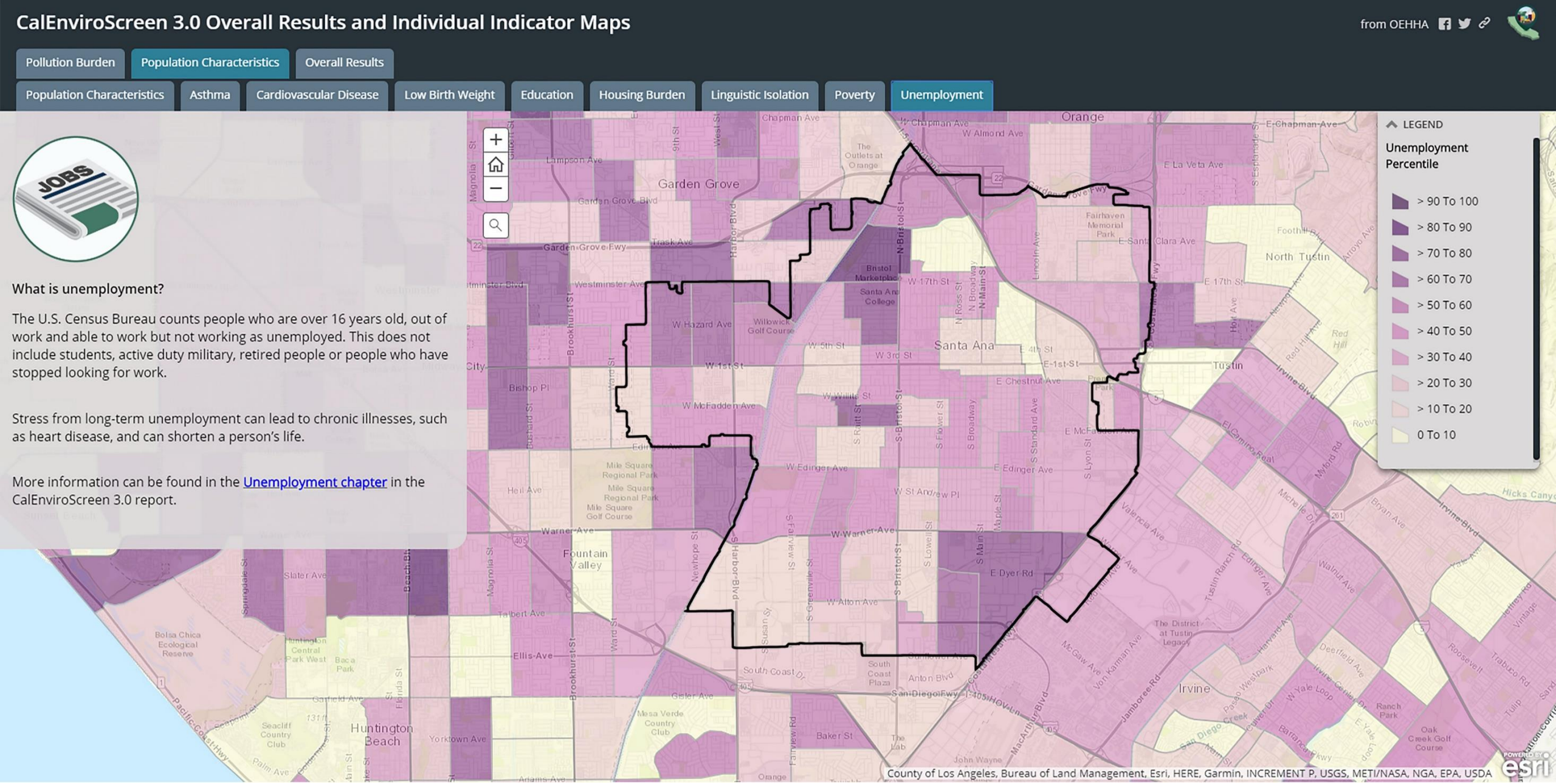
https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Population Indicators| Poverty

The U.S. Census Bureau determines the Federal Poverty Level each year. The poverty level is based on the size of the household and the ages of family members. If a person or family's total income before taxes is less than the poverty level, the person or family are considered in poverty. Because the cost of living in California is higher than the national average, OEHHA uses twice the federal poverty level as a threshold.

The data used in CES 3.0 reflects data from the years 2011-2015, at which point the poverty rate was 20.4 percent for Orange County. According to the Public Policy Institute of California estimates for 2016-2018, the poverty rate was 19.7 percent in Orange County, with a poverty threshold of roughly $36,800 for a family of four that rents in Santa Ana.

Poverty is an issue for nearly all environmental justice communities in Santa Ana. Low-income communities are more likely to be exposed to pollution and to suffer from health effects as a result of that exposure. Income can affect health when people cannot afford healthy living and working conditions, nutritious food and necessary medical care.



https://oehha.ca.gov/calenviroscreen/maps-data

Analysis of Population Indicators| Unemployment

Because low socioeconomic status often goes hand-in-hand with high unemployment, the rate of unemployment is a factor commonly used in describing disadvantaged communities. On an individual level, unemployment is a source of stress, which is implicated in poor health reported by residents of such communities. Lack of employment and resulting low income often oblige people to live in neighborhoods with higher levels of pollution and environmental degradation.

The City of Santa Ana does not have a significant unemployment issue in which census tracts rank within the upper quartile (>74%). EJ census tracts have an unemployment percentile ranked as low as the 5th percentile to the low 70th percentiles.

Compendium of Environmental Justice Goals, Policies, and Implementation Actions

Consistent with our General Plan Shared Vision and Core Values, the potential changes will emphasize policies and actions to:

- Reduce the unique or compounded health risks in disadvantaged communities by reducing pollution exposure and promoting public improvements, public services, community amenities, food access, safe and sanitary homes, and physical activity
- Promote civil engagement in the public decision-making process
- Prioritize improvements and programs that address the needs of disadvantaged communities

Based on the above, the following pages list relevant policies and implementation actions from the City's Draft Policy Framework in six categories:

- Reducing exposure to pollution
- Improving public facilities
- Promoting healthy food
- Creating safe and sanitary housing
- Increasing physical activity
- Enhancing civil engagement

Reducing exposure to pollution

Develop strategies and support regulations that will help reduce exposure to air pollution and hazardous materials.

A clear view of the mountains over Santa Ana
Photo courtesy of Lisandro Orozco

Reducing Exposure to Pollution

CONSERVATION ELEMENT (CN)

POLICIES

Policy CN-1.2 Climate Action Plan. Consistency with emission reduction goals highlighted in the Climate Action Plan shall be considered in all major decisions on land use and investments in public infrastructure.

Policy CN-1.5 Sensitive Receptor Decisions. Consider potential impacts of stationary and non-stationary emission sources on existing and proposed sensitive uses and opportunities to minimize health and safety risks. Develop and adopt new regulations on the siting of facilities that might significantly increase pollution near sensitive receptors within environmental justice area boundaries.

Policy CN-1.8 Promote Alternative Transportation. Promote use of alternate modes of transportation in the City of Santa Ana, including pedestrian, bicycling, public transportation, car sharing programs, and emerging technologies.

Policy CN-1.9 Public Investment Alternative Transportation Infrastructure. Continue to invest in infrastructure projects that support public transportation and alternate modes of transportation in the City of Santa Ana, including pedestrian, bicycling, public transportation, car sharing programs, and emerging technologies.

Policy CN-1.15 Community Emissions Reduction. Collaborate with the South Coast Air Quality Management District and local stakeholders in advance of designation as a priority community for air monitoring and reduction, and implement measures and strategies identified in other air monitoring and emissions reduction plans that are applicable to and feasible for Santa Ana.

Policy CN-1.16 Indirect source rules. Support the development of regional legislation such as the drayage truck rule, advanced clean truck route, and heavy-duty low N0x rule by the South Coast Air Quality Management District.

Reducing Exposure to Pollution

CONSERVATION ELEMENT (CN)

IMPLEMENTATION ACTIONS

1.1 Air quality planning. Review existing and monitor the development of new air monitoring and emissions reduction plans prepared by the South Coast Air Quality Management District. Gather and evaluate measures and strategies in such plans for their applicability to and feasibility for Santa Ana

1.2 Community identification. Coordinate with the South Coast Air Quality Management District and local stakeholders to purse a priority community designation for eligible environmental justice areas of the city, with focus on areas with unique needs and pollution burden such as the Delhi Neighborhood area. If such designation is not awarded, seek grant funds for activities such as local air quality monitoring.

1.4 Health Risk Criteria. Establish criteria for requiring Health Risk Assessment for existing and new industries including the type of business, thresholds, and scope of assessment. Review existing and establish new regulation to reduce and avoid increased pollution near sensitive receptors within environmental justice area boundaries.

1.5 Agency Permits. Monitor South Coast Air Quality Management District permitting and inspection process and the Orange County Health Care Agency to identify businesses in Santa Ana with potential hazardous materials or by-products, with a special focus on environmental justice communities. Serve as a liaison for residents to identify potential emission violations. Share information and data with the community on the City's environmental quality web page.

1.6 Emissions monitoring. Coordinate with the South Coast Air Quality Management District to monitor existing air measurements and recommend new air measurements and locations.

1.7 Truck idling. Evaluate strategies to reduce truck idling found or reported in areas with sensitive receptors, with a priority placed on environmental justice areas.

Reducing Exposure to Pollution

CONSERVATION ELEMENT (CN)

IMPLEMENTATION ACTIONS (continued)

1.8 Improve older trucks. Promote the City's Vehicle Replacement Plan and explore the replacement of older trucks through City participation in regional incentive programs and education of Santa Ana private fleet owners of program opportunities.

1.9 Indirect source rules. Support the development of indirect source rules, drayage truck rules, advanced clean truck routes, and heavy-duty low NOx rules by the South Coast Air Quality Management District.

1.10 Interagency team. Establish an Environmental Quality interagency team to evaluate, monitor, and make recommendations to address air quality and environmental hazard issues, with special focus on environment justice areas. Publish results and information on the City's website through a dedicated Santa Ana Environmental Quality web page.

1.11 Public education. Augment existing programs to improve public awareness of State, regional and local agencies and resources to assist with air quality and other environmental quality concerns.

1.12 Data Collection for Emissions Plans. Coordinate with the South Coast Air Quality Management District to explore ways to initiate data collection efforts for a community emissions reduction and/or community air monitoring plan, including the identification of information needed (new or updated), potential data sources and needed resources, and strategies to engage residents and collect information.

1.16 City budget. Evaluate the City's Budget and Financial Policies to include direction for prioritizing public services and improvements within environmental justice area boundaries. Augment budget meeting presentations to include a section dedicated to the status of actions and improvements to address the needs of residents within environmental justice area boundaries.

Reducing Exposure to Pollution

OPEN SPACE ELEMENT (OS)

POLICIES

Policy OS-2.3 Hazardous Materials. Reduce or eliminate, as feasible, the use of pesticides and herbicides that negatively impact human health at park facilities and publicly accessible open spaces.

Reducing Exposure to Pollution

SAFETY ELEMENT (S)

POLICIES

Policy S-2.1 Regional Collaboration. Consult and collaborate with federal, state, and regional agencies to identify and regulate the disposal and storage of hazardous materials, prevent the illegal transportation and disposal of hazardous waste, and facilitate the cleanup of contaminated sites.

Policy S-2.2 Hazardous Waste Generators. Collaborate with appropriate agencies to identify and inventory all users and handlers of hazardous materials to proactively mitigate potential impacts.

Policy S-2.3 Transportation and Storage. Coordinate with the County of Orange, the California Department of Transportation, and other relevant parties to enforce state and local laws regulating the storage and transport of hazardous materials within the City of Santa Ana, and limit truck routes through the City to arterials streets away from natural habitats and sensitive land uses.

Policy S-2.4 Planning and Remediation. Determine the presence of hazardous materials and/or waste contamination prior to approval of new uses and require that appropriate measures be taken to protect the health and safety of site users and the community.

Policy S-2.5 Education and Best Practices. Promote public awareness of best practices for and participation in household hazardous waste management and disposal.

Policy S-2.6 Existing Sensitive Uses. Partner and collaborate with property owners, businesses, and community groups to develop strategies to protect and minimize risks from existing hazardous material sites to existing nearby sensitive uses, with priority given to discontinuing such uses within environmental justice area boundaries.

Reducing Exposure to Pollution

SAFETY ELEMENT (S)

IMPLEMENTATION ACTIONS

2.4 Lead contamination. Work with local and regional partners, such as Orange County Environmental Justice, Orange County Health Care Agency and University of California at Irvine Public Health, to understand the prevalence, sources, and implications of lead contamination across Santa Ana's soil. Collaborate with environmental justice stakeholders in proposing solutions to remove hazardous lead-contaminated soils in the city and with benchmarks to measure and track effectiveness of proposed programs.

2.5 Business education. Collaborate with state and county agencies and trade organizations to educate and inform industrial business owners on permit regulations required for safe facility operations and on best practices.

Improving Public Facilities

MOBILITY ELEMENT (M)

POLICIES

Policy M-1.7 Proactive Mitigation. Proactively mitigate potential air quality, noise, congestion, safety, and other impacts from the transportation network on residents and business.

Policy M-4.9 Air Pollution Mitigation. Consider land use, building, site planning, and technology solutions to mitigate exposure to transportation-related air pollution.

Policy M-5.6 Clean Fuels and Vehicles. Encourage the use of alternative fuel vehicles and mobility technologies through the installation of supporting infrastructure.

IMPLEMENTATION ACTIONS

5.8 Air quality improvements. Participate in inter-jurisdictional efforts to promote improvements in air quality and to meet state and federal mandates through advanced technology and TDM programs.

Reducing Exposure to Pollution

LAND USE ELEMENT (LU)

POLICIES

Policy LU-3.8 Sensitive Receptors. Avoid the development of sensitive receptors in close proximity to land uses that pose a hazard to human health and safety due to the quantity, concentration, or physical or chemical characteristics of the hazardous materials that they utilize or the hazardous waste that they generate or emit.

Policy LU-3.9 Noxious, hazardous, dangerous, and polluting uses. Improve the health of residents, students, and workers by limiting the operation of noxious, hazardous, dangerous, and polluting uses that are in close proximity to sensitive receptors, with priority given to discontinuing such uses within environmental justice area boundaries.

Policy LU-3.11 Air Pollution Buffers. Promote landscaping and other buffers to separate existing sensitive uses from rail lines, heavy industrial facilities, and other emissions sources. As feasible, apply more substantial buffers within environmental justice area boundaries.

Policy LU-3.12 Indoor Air Quality. Require new sensitive land uses proposed in areas with high levels of localized air pollution to achieve good indoor air quality through landscaping, ventilation systems, or other measures.

Reducing Exposure to Pollution

LAND USE ELEMENT (LU)

IMPLEMENTATION ACTIONS

3.2 Design guidelines and standards. Update the zoning code's development and operational standards for industrial zones to address incompatibility with adjacent uses, including minimum distance requirements to buffer heavy industrial uses from sensitive receptors. Conduct a study to evaluate and establish appropriate minimum distances and landscape buffers between polluting industrial uses from sensitive receptors such as residences, schools, day care, and public facilities.

3.3 Healthy Lifestyles. Collaborate with residents and industry stakeholders to create a program to incentivize and amortize the removal of existing heavy industrial uses adjacent to sensitive uses.

3.4 Funding for air filtration. Seek funding from South Coast Air Quality Management District and other regional sources for the installation of high efficiency air filtration systems in buildings, homes, and schools located in areas with high levels of localized air pollution, especially for those within environmental justice area boundaries.,

3.5 Business Incentive. Explore economic development incentives and grant funding to encourage existing or draw new business investments in the industrial zones to incorporate more environmentally sustainable practices.

3.6 Lead paint abatement. Coordinate with County of Orange Health Care Agency and community organizations to strengthen local programs to eliminate lead-based paint hazards, with priority given to residential buildings within environmental justice area boundaries.

3.16 Health in Corridors. Require a Health Risk Assessment to identify best practices to minimize air quality and noise impacts when considering new residential uses within 500 feet of a freeway.

3.17 Training for safe practice. Pursue the EPA Renovate Right Program to train local residential contractors for certification as lead renovators to promote safe work practices and prevent lead contamination.

Reducing Exposure to Pollution

LAND USE ELEMENT (LU)

IMPLEMENTATION ACTIONS (continued)

3.18 Renovations and lead prevention. Evaluate the feasibility of requiring contractor training and/or certification for safe work practices to conduct residential renovations for pre-1978 structures that may contain existing lead paint.

3.21 Prevention education. Collaborate with local organizations such as Orange County Health Care Agency and State Environmental Protection Agency and identify funds to create a Santa Ana Prevent Lead Poisoning Education Program, with special focus on disadvantaged communities and pre-1978 housing stock.

3.22 Public health outcomes. Support the Orange County Health Care Agency in their role in investigating public complaints regarding lead hazards, through enforcement of local housing standards to assure healthy outcomes.

3.23 Agency permits. Work with South Coast Air Quality Management District and Orange County Health Care Agency to evaluate existing special permit process and criteria for approval, and identify potential policy changes to minimize issuance of special permits with potential health impacts.

3.24 Public health. Partner with Orange County Health Care Agency and community serving organizations to evaluate best practices and benefits of preparing a Public Health Plan to address environmental hazards in Santa Ana, with special focus in environmental justice communities. Conduct public meetings to gather information and present preliminary findings.

Reducing Exposure to Pollution

LAND USE ELEMENT (LU)

IMPLEMENTATION ACTIONS (continued)

3.26 Health conditions. Work with Orange County Health Care Agency and local stakeholders including Orange County Environmental Justice and UC Irvine Public Health to identify baseline conditions for lead contamination in Santa Ana, monitor indicators of lead contamination, and measure positive outcomes.

3.27 Groundwater practice. Coordinate with the State Department of Toxic Substances Control (DTSC) to monitor the Santa Ana Southeast Groundwater Clean Up Project and identify measurable progress to remediate groundwater contamination. Share information with the community on the City's Environmental Quality web page.

Reducing Exposure to Pollution

ECONOMIC PROSPERITY ELEMENT (EP)

POLICIES

Policy EP-1.9 Avoid Conflict of Uses. Avoid potential land use conflicts by prohibiting the location of sensitive receptors and noxious land uses in close proximity.

Policy EP-3.3 Mitigate Impacts. Promote the development of sustainable and equitable new land use plans that proactively mitigates negative impacts on existing residents and businesses.

IMPLEMENTATION ACTIONS

3.5 Green business incentives. Continue to promote and market the Recycling Market Development Zone. Develop an incentive program to encourage nonpolluting industry and clean green technology companies that reduce environmental impacts and the carbon footprint to locate to the city. Encourage existing businesses to invest in technology and best practice to transition to sustainable business practices.

Improving public facilities

Increase access to community health facilities, parks, community centers, and other public services and facilities, particularly in underserved areas.

Improving Public Facilities

COMMUNITY ELEMENT (CM)

POLICIES

Policy CM-1.1 Access to Programs. Provide and maintain access to recreational and cultural programs within walking distance of residential areas. Prioritize the improvement of access for residents living within environmental justice area boundaries that are underserved or suffer from a lack of access.

Policy CM-1.3 Equitable Programs. Encourage cultural programs and activities of local interest that are inclusive and affordable to all.

Policy CM-1.4 Shared Use. Expand community activities and programs at City facilities and throughout the community through shared use or cooperative agreements.

Policy CM-1.5 Equitable Recreational Spaces. Promote the development and use of municipal buildings, indoor facilities, sports fields, and outdoor spaces for recreation that serve residents throughout the City, with priority given to areas that are underserved and/or within environmental justice area boundaries.

POLICY CM-3.5 Community Spaces. Encourage positive community interactions and neighborhood pride to create secure communities and promote safe public spaces.

Improving Public Facilities

COMMUNITY ELEMENT (CM)

POLICIES (continued)

Policy CM-2.1 Supporting Organizations. Collaborate with both private and public organizations that support early childhood education programs to optimize and expand service capacity.

Policy CM-2.2 Educational Facilities Capacity. Partner with local school districts, non-profit organizations, and other educational providers regarding land use and policy changes to ensure available educational facilities.

Policy CM-2.6 Educational Funding. Enhance educational opportunities in the community by expanding and maintaining access to libraries, learning centers, and technology through innovative funding sources.

Policy CM-3.1 Supporting Health Services. Collaborate with and provide support to organizations engaged in improving public health and wellness, expanding access to affordable quality health care, and providing medical services for all segments of the community. Encourage greater emphasis on expanding or improving health services to underserved areas and populations.

Improving Public Facilities

COMMUNITY ELEMENT (CM)

IMPLEMENTATION ACTIONS

1.5 Alternative facilities. For areas that are underserved by parks and recreation facilities and that are within environmental justice area boundaries, prepare an inventory of facilities that are viable alternatives to public parks and municipal facilities for recreational, cultural, and health and wellness programs, including but not limited to school facilities, facilities of faith-based and civic organizations, and privately owned recreation and entertainment facilities. Identify, inventory, and rank other resources for potential park system acquisition, expansion to existing parks, and/or parks development opportunity within the community.

1.6 Program accessibility. To ensure residents of environmental justice area boundaries have access to recreational, cultural, and health and wellness programs, establish accessibility corridors that provide attractive, comfortable, and safe pedestrian and bike access to public recreational facilities in the Parks Master Plan (an implementation action of the Open Space Element). Identify public realm improvements needed to create these accessibility corridors. Prioritize investments for accessibility corridors in the city's capital investment program; include investments for accessibility corridors when investments are made in new parks and recreation facilities within environmental justice area boundaries.

2.1 Facilities to support lifelong learning. For areas within environmental justice area boundaries, conduct, maintain, and publicize an inventory of public, nongovernmental, and private facilities that can be used by organizations to support early childhood education, after school activities, libraries and learning centers, and other meetings and educational opportunities.

2.2 Public realm. Identify areas in need of a public realm plan to provide attractive, comfortable and safe walking corridors.

Improving Public Facilities

COMMUNITY ELEMENT (CM)

IMPLEMENTATION ACTIONS (continued)

3.1 Community health care facilities. Evaluate options to support existing and potential community health care facilities in environmental justice focus areas through a variety of mechanisms such as reduced permit fees, reduced impact fees, and tax incentives.

3.2 Pedestrian access to health facilities. Ensure that new or redeveloped health care facilities include a pedestrian friendly site amenities. In areas where mobile clinics are stationed, ensure the location is safe and accessible for pedestrians, cyclist, and transit-users.

Improving Public Facilities

MOBILITY ELEMENT (M)

POLICIES

Policy M-1.2 Balanced Multimodal Network. Provide a balanced and equitable multimodal circulation network that reflects current and changing needs.

Improving Public Facilities

PUBLIC SERVICES ELEMENT (PS)

POLICIES

Policy PS-1.2 Equitable Distribution. Ensure public services and facilities reflect changing population needs and are equitably distributed and accessible, with priority assigned to improving areas that are underserved and/or within environmental justice area boundaries.

Policy PS-1.8 Access for All. Improve connectivity and ADA special needs accessibility at all public facilities.

Policy PS-1.11 Safety. Remove actual and perceived safety concerns that create barriers to physical activity by requiring adequate lighting, street visibility, and areas of clear connectivity, especially for new projects or improvements within environmental justice area boundaries..

IMPLEMENTATION ACTIONS

1.4 Fiscal priority for public improvements. Identify City fiscal and operational procedures and potential thresholds involved in the prioritization of general funds for public programming, service, or infrastructure improvements for residents living within environmental justice area boundaries.

Improving Public Facilities

OPEN SPACE ELEMENT (OS)

POLICIES

Policy OS-1.1 Park Master Plan. Create and maintain a Santa Ana parks master plan that incorporates data on need, demographics, and health outcomes.

Policy OS-1.2 Parks and Recreation Network. Support a comprehensive and integrated network of parks, open space, and recreational facilities that maintains and provides a variety of active and passive recreational opportunities and meets the needs of all Santa Ana residents, regardless of age, ability, or income.

Policy OS-1.10 Shared Use. Collaborate with school districts, faith-based communities, and community serving organizations to expand shared use facilities through cooperative agreements, as well as pursuing multiple use strategies of publicly owned land.

Policy OS-1.12 Neighborhood Needs. Consider unique neighborhood needs in the development of open spaces and programs.

Policy OS-1.13 Indoor Recreation. Encourage new development to provide indoor recreation space when located in areas with high levels of localized air pollution or if site is adjacent to freeways or heavy industrial uses.

Policy OS-2.6 Facility Maintenance. Ensure all park facilities and open spaces are well maintained.

IMPLEMENTATION ACTIONS

1.2 Indoor recreation. Explore best practices and options to incentivize or require the provision of indoor open space, particularly in environmental justice areas that experience high levels of exposure to air pollution.

Improving Public Facilities

LAND USE ELEMENT (LU)

POLICIES

Policy LU-4.9 Recreational Amenities. Encourage public and commercial recreational facilities in areas that are park and open space deficient.

Promoting healthy food

Improve the health and wellness of all residents through policies, regulations, and programs that foster healthier food options.

Promoting Healthy Food

COMMUNITY ELEMENT (CM)

POLICIES

Policy CM-3.6 Healthy Options. Promote access to affordable, fresh, and healthy food options citywide through efforts such as community gardens, culinary classes, and neighborhood farmers markets.

IMPLEMENTATION ACTIONS

3.6 Fresh and healthy foods. Pursue programs, incentives, and/or grants to encourage small grocery or convenience stores to sell fresh foods in the city, especially those within environmental justice area boundaries. Examples include grants or loans to purchase updated equipment, publicity, or directories of healthy food outlets, or connecting stores to wholesale sources of healthy, local, or organic food

Promoting Healthy Food

OPEN SPACE ELEMENT (OS)

POLICIES

Policy OS-2.5 Urban Agriculture. Expand urban agriculture opportunities in private development and public spaces, including home gardens, community gardens, and urban farms.

Creating safe and sanitary housing

Add to existing efforts to reduce health hazards associated with construction materials, building standards, and deferred maintenance.

Creating Safe and Sanitary Housing

COMMUNITY ELEMENT (CM)

POLICIES

Policy CM-3.2 Healthy Neighborhoods. Continue to support the creation of healthy neighborhoods by addressing public safety, mitigating incompatible uses, and maintaining building code standards.

IMPLEMENTATION ACTIONS

1.7 Rental property outreach. Augment Proactive Rental Enforcement Team and Residential Response Team programs with additional outreach geared toward absentee owners of rental properties. Create and periodically distribute outreach materials in order to educate absentee owners about legal obligations to maintain and upkeep rental properties. Distribute information to tenants about their rights and protection, so they are not penalized for reporting or living in a dwelling unit that does not meet health and safety standards. Translate outreach efforts into Spanish, Vietnamese, or other appropriate language. Prioritize such outreach for properties within environmental justice area boundaries.

1.8 Neighborhood rehabilitation. Continue to seek state and federal funding for neighborhood rehabilitation projects and collaborate with community-based organizations to identify housing issues and improvements, especially for housing within environmental justice area boundaries.

Creating Safe and Sanitary Housing

LAND USE ELEMENT (LU)

POLICIES

Policy LU-3.2 Empower Community. Facilitate community engagement and dialogue in policy decisions and outcomes affecting land use and development, with supplemental opportunities for proposed planning activities within environmental justice area boundaries.

Policy LU-4.6 Healthy Living Conditions. Support diverse and innovative housing types that improve living conditions and promote a healthy environment.

IMPLEMENTATION

3.20 Safe housing. Require all residential rehabilitation projects that use local, or HUD federal funds to comply with the Lead Safe Housing Rule, to remove lead paint hazards, depending on the nature of work and the dollar amount of federal investment in the property.

3.28 Tenant Protections. Provide information to residential tenants regarding Landlord Tenant Laws in the State, such as AB 1481, that provide protections against evictions for those who seek action to improve substandard housing and hazardous conditions.

3.29 Development site history. Update the City's Development Review application process to require developers to provide information regarding the prior use of the site and history of hazardous materials on the property, in order to identify potential for site contamination from hazardous materials or soil lead contamination to be remediated.

Creating Safe and Sanitary Housing

PUBLIC SERVICES ELEMENT (LU)

POLICIES

Policy PS-1.9 Supportive Housing. Collaborate with community stakeholders to identify and encourage the development of suitable sites for housing with support services.

Increasing physical activity

Establish new opportunities for outdoor and indoor recreation as part of a comprehensive and integrated network of spaces and facilities, with a focus on underserved areas.

Increasing Physical Activity

COMMUNITY ELEMENT (CM)

POLICIES

Policy CM-1.11 Program Incentives. Incentivize use of privately owned property to promote recreation, health, wellness, and art and culture programs.

Policy CM-3.3 Healthy Residential Programs. Invest in programs and public improvements that educate residents about opportunities to increase their physical activity and improve their health.

Policy CM-3.7 Active Lifestyles. Support programs that create safe routes to schools and other destinations to promote walking, biking and active lifestyles.

Policy CM-3.8 Underutilized Spaces. Promote access to affordable, fresh, and healthy food. Repurpose underutilized spaces and City-owned vacant land as a strategy to improve community health and increase the number and accessibility of opportunities for health and recreation activities. Prioritize the redevelopment of such sites within environmental justice area boundaries that are also underserved by parks and recreation opportunities.

Policy CM-3.9 Prevention. Coordinate with the County Health Care Agency to promote healthier communities through education, prevention, and intervention programs, and other activities that address the root causes of health disparities and inequities in Santa Ana.

Increasing Physical Activity

COMMUNITY ELEMENT (CM)

IMPLEMENTATION ACTIONS

1.3 Collaboration. Develop intentional, strategic partnerships with public, private, and nonprofit entities to improve health outcomes by leveraging capacity, resources, and programs around mutually beneficial initiatives that promote health, equity, and sustainability in neighborhoods within environmental justice area boundaries. Develop a comprehensive partnership policy providing guidelines that can be used throughout the City organization.

1.4 Community coordination on underutilized spaces. Coordinate with community residents, property owners, and other stakeholders to identify vacant and potentially underutilized properties and strategize how such properties could be repurposed into public parks or commercial recreation facilities.

3.4 Prevention activities. Coordinate with the County Health Care Agency to identify the root causes of health disparities and inequities in Santa Ana, with additional detail for residents living within environmental justice area boundaries. Identify potential programmatic changes and resources to better address the root causes.

Increasing Physical Activity

OPEN SPACE ELEMENT (OS)

POLICIES

Policy OS-1.2 Parks and Recreation Network. Support a comprehensive and integrated network of parks, open space, and recreational facilities that maintains and provides a variety of active and passive recreational opportunities that meets the needs of all Santa Ana residents, regardless of age, ability, or income.

Policy OS-1.3 Park Standard. Achieve a minimum citywide park ratio of two acres per 1,000 residents. For new residential development in Focus Areas, prioritize the creation and dedication of new public parkland over the collection of impact fees.

Policy OS-1.4 Park Connectivity. Establish and enhance options for residents to access existing and new park facilities through safe walking, bicycling, and transit routes.

Policy OS-1.7 Community Building. Ensure that park facilities and programs reflect the priorities of residents in the surrounding neighborhoods, with attention to place-making elements that foster social interaction and community pride such as art, landscape, monuments, murals, play equipment, seating, and community centers.

Policy OS-1.12 Neighborhood Needs. Consider unique neighborhood needs in the development of open spaces and programs.

Policy OS-1.13 Indoor Recreation. Encourage new development to provide indoor recreation space when located in areas with high levels of localized air pollution or if site is adjacent to freeways or heavy industrial uses.

Policy OS-3.1 Recreational Corridors. Establish and maintain an integrated recreational and multi-modal commuter corridor network linking open spaces, housing, community services, and employment centers.

Increasing Physical Activity

OPEN SPACE ELEMENT (OS)

POLICIES (continued)

Policy OS-3.2 Linking Development. Promote alternative modes of transportation and active lifestyles through pedestrian and bicycle linkages to new and existing development, greenway corridors, and open spaces.

Policy OS-3.3 Publicly Owned Land. Maintain and explore options for publicly owned land for the creation of open space pathways and corridors.

IMPLEMENTATION

1.15 Public parkland requirements for larger residential projects. Amend the Residential Development Fee in the Municipal Code (Chapter 35, Article IV) to reflect requirements for Larger Residential Projects (100+ units, residential only or mixed-use) to facilitate the creation two acres of new public parkland within a 10-minute walking radius of the new residential project. Establish provisions that allow the Larger Residential Projects to reduce all onsite private and common open space requirements by 50 percent if new public parkland is provided within a 10 minute walking radius and by 80 percent if the new public parkland is immediately adjacent to or on the residential project property. Work with property owners and new development projects within the Focus Areas to identify options (e.g., 100 percent reduction of onsite private and public open space requirements) that would incentivize the creation of public park areas that are more than the minimum and/or if a location can expand park access for an adjoining underserved neighborhood and/or environmental justice area. Establish incentives for coordination between two or more residential projects (of any size) to create larger and/or more centralized public park space.

Increasing Physical Activity

LAND USE ELEMENT (LU)

POLICIES

Policy LU-1.1 Compatible Uses. Foster compatibility between land uses to enhance livability and promote healthy lifestyles.

Policy LU-1.3 Equitable Distribution of Open Space. Promote the creation of new open space and community serving amenities in park deficient areas, with priority given to those that are also within environmental justice area boundaries.

Policy LU-1.7 Active Transportation Infrastructure. Invest in active transportation connectivity between activity centers and residential neighborhoods to encourage healthy lifestyles.

Policy LU-2.3 Supportive Spaces. Provide a diversity of land uses that support residents, visitors, and businesses, such as open space, areas for community gatherings, and outdoor entertainment venues.

Policy LU-2.9 Open Space Needs. Establish and maintain public open space and recreation requirements for new residential and nonresidential uses to provide sufficient open space and recreational opportunities for Santa Ana Residents and visitors.

IMPLEMENTATION ACTIONS

2.10 Open space requirements. Evaluate public open space and park requirements in the Zoning Code for residential and nonresidential uses. Consider requirements and/or incentives to aggregate public open space areas required by two or more uses to form larger and more usable areas and facilities.

Increasing Physical Activity

URBAN DESIGN ELEMENT (UD)

POLICIES

Policy UD-1.6 Active Transportation Infrastructure. Support the creation of citywide public street and site amenities that accommodate and promote an active transportation-friendly environment.

Policy UD-3.2 Activate Paths. Strengthen and activate the design of paths and adjacent development through enhanced and cohesive streetscapes, architectural themes, and landscaping.

Policy UD-3.3 Foster Community Building. Promote a safe environment that facilitates social interaction and improves active transportation along corridors.

Policy UD-3.6 Linear Park System. Support open space improvements along roadways and non-vehicular paths, such as bike or multi-use trails, to connect linear greenways leading to a network of parks and activity areas throughout the city.

Enhancing civil engagement

Increase the amount and quality of community engagement throughout the planning, development, and operation of our communities and City.

Enhancing Civil Engagement

COMMUNITY ELEMENT (CM)

POLICIES

Policy CM-1.2 Community Input. Engage residents and community facility users to provide input for facility improvements and programming.

Policy CM-2.1 Supporting Organizations. Collaborate with both private and public organizations that support early childhood education programs to optimize and expand service capacity.

Policy CM-2.2 Educational Facilities Capacity. Partner with local school districts, non-profit organizations, and other educational providers regarding land use and policy changes to ensure available educational facilities.

Policy CM-2.4 Parent Participation. Support education, recreation programs, and after school activities that involve parent participation to increase high school graduation and college attendance rates.

Enhancing Civic Engagement

COMMUNITY ELEMENT (CM)

IMPLEMENTATION ACTIONS

1.1 Engage EJ communities on recreation and cultural programs. Incorporate community stakeholders from environmental justice communities into existing and/or new ad hoc committees to guide the identification of recreational and cultural programming needs and desires.

1.2 Community conversation. Plan for and conduct a community survey every three years related to community health, air quality concerns, parks, and community service needs, with focused outreach to environmental justice priority areas.

1.3 Collaboration. Develop intentional, strategic partnerships with public, private, and nonprofit entities to improve health outcomes by leveraging capacity, resources, and programs around mutually beneficial initiatives that promote health, equity, and sustainability in neighborhoods within environmental justice area boundaries. Develop a comprehensive partnership policy providing guidelines that can be used throughout the City organization.

1.4 Community coordination on underutilized spaces. Coordinate with community residents, property owners, and other stakeholders to identify vacant and potentially underutilized properties and strategize how such properties could be repurposed into public parks or commercial recreation facilities.

3.3 Health Metrics. Engage with Orange County Health Care Agency and other stakeholders to monitor key health indicators to measure success and outcome of General Plan policies and implementation plan, including reduction in incidence in asthma.

3.5 Environmental Education. Encourage all education institutions in Santa Ana to include curriculum regarding environmental justice and local efforts to promote clean business operations, environmental quality, and the health in our community.

Enhancing Civic Engagement

COMMUNITY ELEMENT (CM)

IMPLEMENTATION ACTIONS (continued)

3.7 Public health and wellness collaboration summit. Collaborate with health care providers, health and wellness advocates, and other public health stakeholders to identify ways to improve the provision of and access to health and wellness services throughout the city. Include a discussion on areas within environmental justice area boundaries underserved by affordable health and wellness services.

Enhancing Civil Engagement

ECONOMIC PROSPERITY ELEMENT (EP)

POLICIES

Policy EP-2.4 Community-led Economic Development. Support community-based economic development initiatives, such as buy-local campaign, marketing strategies, and worker cooperatives.

Enhancing Civil Engagement

PUBLIC SERVICES ELEMENT (PS)

POLICIES

Policy PS-1.5 Community Benefit. Collaborate with community stakeholders to expand recreational, educational, and cultural opportunities; promote active lifestyles; and maximize community benefit.

Enhancing Public Engagement

CONSERVATION ELEMENT (CN)

POLICIES

POLICY CN-1.3 Education. Promote efforts to educate businesses and the general public about air quality standards, reducing the urban heat island effect, health effects from poor air quality and extreme heat, and best practices they can make to improve air quality and reduce greenhouse gas emissions.

IMPLEMENTATION ACTIONS

1.3 Proactive engagement. Collaborate with the South Coast Air Quality Management District and local stakeholders in environmental justice areas experiencing local air pollutions issues to outline objectives and strategies for monitoring air pollution in advance of the establishment of a community emissions reduction and/or air monitoring plan.

1.13 Community survey on healthy lifestyles. Plan for and conduct a Community Survey of residents related to community health, air quality, parks, and community services; with focused outreach for Environment Justices concerns and priority areas (tie into other City efforts like Strategic Plan, Park and Recreation Planning, Community Benefits, etc.).

1.14 Expanded interactions. Identify opportunities to expand regular attendance of City staff and decision-makers at meetings for neighborhoods within environmental justice area boundaries, so that residents and businesses can more easily communicate their unique issues and needs. Include a translator(s) at these meetings so that all residents can engage.

1.15 Expanded representation. Expand representation of residents from neighborhoods within environmental justice area boundaries by extending residents from such areas to become board, commission, and task force members as openings occur.

Enhancing Civic Engagement

OPEN SPACE ELEMENT (OS)

POLICIES

Policy OS-2.2 Neighborhood Engagement. Encourage residents, neighborhood groups, businesses, schools, organizations, and public agencies to partner in the creation and maintenance of safe and well maintained publicly-owned park and recreation facilities.

IMPLEMENTATION ACTIONS

2.4 Public notification. Prior to treating areas in the city with pesticides or herbicides, inform the public through signage posted in impacted areas, direct mailers, and announcements on the City website, cable channels, publications, and the City's social media platforms.

Enhancing Civil Engagement

LAND USE ELEMENT (LU)

POLICIES

Policy LU-3.2 Empower Community. Facilitate community engagement and dialogue in policy decisions and outcomes affecting land use and development, with supplemental opportunities for proposed planning activities within environmental justice area boundaries.

Policy LU-4.8 Community Partnerships. Collaborate with property owners, community organizations, and other local stakeholders to identify opportunities for additional open space and community services, such as community gardens and gathering places. Collaborate with property owners, community organizations, and other local stakeholders to identify opportunities for additional open space and community services, such as community gardens and gathering places.

IMPLEMENTATION ACTIONS

3.14 Sunshine Ordinance. Update City Sunshine Ordinance incorporating best practices for outreach in Environmental Justice areas in Santa Ana.

3.15 Communication tools. Explore tools for communication with residents and sensitive receptors when new industrial uses are proposed in their areas.

3.19 Promote health. Partner with local organizations (e.g., OC Health Care Agency, Latino Health Access, Santa Ana Unified School District, and the Coalition of Community Health Centers) to increase blood lead testing, outreach, education, and referral services through a 'promotora' or community peer outreach model that addresses the root causes of elevated blood lead levels impacting Santa Ana residents, with special focus in environmental justice communities and for children living in pre-1978 housing.

Enhancing Civil Engagement

LAND USE ELEMENT (LU)

IMPLEMENTATION ACTIONS (continued)

3.25 Engage EJ communities. Work with community serving organizations, neighborhood leaders, and residents to form an Ad Hoc Committee to develop ongoing EJ Community Engagement programs, including multilingual communication protocols.

ENVIRONMENTAL JUSTICE
IN THE SANTA ANA GENERAL PLAN

The latest documents on environmental justice in Santa Ana will be made available on the City's website.

www.santa-ana.org/general-plan/environmental-justice

For more information on CalEnviroScreen, visit:
www.oehha.ca.gov/calenviroscreen

Appendix B-a Proposed General Plan Update Policies

Appendices

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Draft Policy Framework and Implementation

Santa Ana General Plan

~~November 9, 2020~~ REV July 13, 2021

The following represents the draft goals and policies, as revised compared to the version submitted to the Planning Commission for the public hearing held on November 9, 2020, including the additional clarifications. Prefixes have been added to each goal and policies to communicate the corresponding element. No changes are being proposed to the Housing Element, which is adopted under a separate process regulated by State housing law.

CM = Community Element

M = Mobility Element

EP = Economic Prosperity Element

PS = Public Services Element

CN = Conservation Element

OS = Open Space Element

N = Noise Element

S = Safety Element

LU = Land Use Element

HP = Historic Preservation Element

UD = Urban Design Element

The purpose of this document is to provide a compendium of goals, policies, and implementation actions from the Draft General Plan, including a record of tracked changes to the goals and policies since the release of the Draft EIR and tracked changes to the implementation actions since the November draft. Accordingly, some graphic content is excluded --- the symbolized association of each policy with the City's Core Value and association of policies and implementation actions with environmental justice.

GOAL CM-1: RECREATION AND CULTURE

Provide opportunities for public and private recreation and cultural programs that meet the needs of Santa Ana's diverse population.

POLICY CM-1.1 ACCESS TO PROGRAMS*

Provide and maintain access to recreational and cultural programs ~~within walking distance of~~ to serve residential areas. Prioritize the ~~improvement~~provision of ~~access~~programs for residents living within park deficient or environmental justice ~~area boundaries that are underserved or suffer from a lack of access~~areas.

POLICY CM-1.2 COMMUNITY INPUT*

Engage residents and community facility users to provide input for facility improvements and programming.

POLICY CM-1.3 EQUITABLE PROGRAMS*

Encourage recreational and cultural programs and activities of local interest that are inclusive and affordable to all.

POLICY CM-1.4 SHARED USE*

Expand community activities and programs ~~at City facilities and throughout the community~~provided through shared use or cooperative agreements at City facilities or partner sites.

POLICY CM-1.5 EQUITABLE RECREATIONAL SPACES*

Promote the development and use of municipal buildings, indoor facilities, sports fields, and outdoor spaces for recreation that serve residents throughout the City, with priority given to areas that are underserved and/or within environmental justice area boundaries.

POLICY CM-1.6 RECREATION ON PRIVATE PROPERTY

Promote the development and use of privately-owned recreation and entertainment facilities that ~~are affordable and~~help meet the needs of Santa Ana residents.

POLICY CM-1.7 CONNECTIONS TO FACILITIES

Support efforts to connect residents and visitors to local and regional cultural, educational, and natural environments.

POLICY CM-1.8 DEVELOPER INVOLVEMENT

Promote developer participation in the provision of community facilities to meet the recreational needs of residents.

POLICY CM-1.9 ART AND CULTURAL PROGRAMMING

Promote art and cultural programs of local interest to provide educational and cultural awareness opportunities.

POLICY CM-1.10 COMMUNITY ATTRACTIONS

Incorporate placemaking elements and technology into existing and new parks and facilities to encourage use of public spaces, access to educational resources, and community led activities.

POLICY CM-1.11 PROGRAM INCENTIVES*

Incentivize use of privately owned property to promote recreation, health, wellness, and art and culture programs.

GOAL CM-2: EDUCATION

Provide exceptional, accessible, and diverse educational programs and facilities to meet community needs.

POLICY CM-2.1 SUPPORTING ORGANIZATIONS*

Collaborate with both private and public organizations that support early childhood education programs to optimize and expand service capacity.

POLICY CM-2.2 EDUCATIONAL FACILITIES CAPACITY*

Partner with local school districts, non-profit organizations, and other educational providers regarding land use and policy changes to ensure available educational facilities.

POLICY CM-2.3 PARTNERSHIPS WITH SCHOOLS

Strengthen partnerships with local schools to promote safe, supportive, and effective learning environments that foster school and community pride.

POLICY CM-2.4 PARENT PARTICIPATION*

Support education, recreation programs, and after school activities that involve parent participation to increase high school graduation and college attendance rates.

POLICY CM-2.5 TRAINING OPPORTUNITIES

Promote and partner with local businesses, schools, and non-profits offering education, job training, internship, and apprenticeship opportunities for Santa Ana youth and residents.

POLICY CM-2.6 EDUCATIONAL FUNDING

Enhance educational opportunities in the community by expanding and maintaining access to libraries, learning centers, and technology through innovative funding sources.

POLICY CM-2.7 LIFELONG LEARNING

Encourage lifelong learning beyond the traditional classroom environment by promoting lectures, learning circles, self-directed discussion groups, learning and skill-building activities, and other educational opportunities at local libraries, historical societies, cultural centers, recreation and community centers, and public spaces.

GOAL CM-3: ACTIVE LIVING AND WELL-BEING

Promote the health and wellness of all Santa Ana residents.

POLICY CM-3.1 SUPPORTING HEALTH SERVICES*

Collaborate with and provide support to organizations engaged in improving public health and wellness, expanding access to affordable quality health care, and providing medical services for all segments of the community. Encourage greater emphasis on expanding or improving health services to underserved areas and populations.

POLICY CM-3.2 HEALTHY NEIGHBORHOODS*

Continue to support the creation of healthy neighborhoods by addressing public safety, ~~mitigating~~land use conflicts, hazardous soil contamination, incompatible uses, and maintaining building code standards.

POLICY CM-3.3 HEALTHY RESIDENTIAL PROGRAMS*
Invest in programs and public improvements that educate residents about opportunities to increase their physical activity and improve their health.

POLICY CM-3.4 SAFE MOBILITY
Promote the overall safety of multi-modal streets by developing local and regional programs that educate and inform motorists of non-motorized roadway users.

POLICY CM-3.5 COMMUNITY SPACES*
Encourage positive community interactions and neighborhood pride to create secure communities and promote safe public spaces.

POLICY CM-3.6 HEALTHY OPTIONS*
Promote access to affordable, fresh, and healthy food options citywide through efforts such as community gardens, culinary classes, and neighborhood farmers markets.

POLICY CM-3.7 ACTIVE LIFESTYLES*
Support programs that ~~create safe routes to schools and other destinations to promote~~promote sports, fitness, walking, biking and active lifestyles.

POLICY CM-3.8 UNDERUTILIZED SPACES*
~~Promote access to affordable, fresh, and healthy food~~ Repurpose underutilized spaces and City-owned vacant land as a strategy to improve community health and increase the number and accessibility of opportunities for health and recreation activities. Prioritize the redevelopment of such sites within environmental justice area boundaries ~~that are also~~and other areas underserved by parks and recreation opportunities.

POLICY CM-3.9 PREVENTION*
Coordinate with the County Health Care Agency to promote healthier communities through education, prevention, and intervention programs, and other activities that address the root causes of health disparities and inequities in Santa Ana.

POLICY CM-3.10 PUBLIC HEALTH
Explore the feasibility of establishing a City Public Health Department with a focus on enhancing local health care access and delivery of health services in the City.

TABLE CM-2. COMMUNITY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
Goal CM-1: Provide opportunities for public and private recreation and cultural programs that meet the needs of Santa Ana's diverse population.		
1.1*	**Engage EJ communities on recreation and cultural programs.** Incorporate community stakeholders from environmental justice communities into existing and/or new ad hoc committees to guide the identification of recreational and cultural programing needs and desires.	PBA ~~2021~~ 2022

TABLE CM-2. COMMUNITY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
1.2*	**Community conversation.** Plan for and conduct a community survey every three years related to community health, air quality concerns, parks, and community service needs, with focused outreach to environmental justice priority areas.	CMO ~~2022~~ 2023
1.3*	**Collaboration.** Develop intentional, strategic partnerships with public, private, and nonprofit entities to improve health outcomes by leveraging capacity, resources, and programs around mutually beneficial initiatives that promote health, equity, and sustainability in neighborhoods within environmental justice area boundaries. Develop a comprehensive partnership policy providing guidelines that can be used throughout the City organization.	PBA/PRCSA ~~2021~~ 2022
1.4*	**Community coordination on underutilized spaces.** Coordinate with community residents, property owners, and other stakeholders to identify vacant and potentially underutilized properties and strategize how such properties could be repurposed into public parks or commercial recreation facilities.	PBA/PRCSA 2022 & ongoing
1.5*	**Alternative facilities.** ~~For areas that are underserved by parks~~In park deficient and ~~recreation facilities and that are within~~ environmental justice ~~area boundaries, prepare an inventory of~~areas, identify facilities that are viable alternatives to public parks and municipal facilities for recreational, cultural, and health and wellness programs, including but not limited to school facilities, facilities of faith-based and civic organizations, and privately owned recreation and entertainment facilities. Identify, inventory, and rank other resources for potential park system acquisition, expansion to existing parks, and/or parks development opportunity within the community.	PRCSA 2022
1.6*	**Program accessibility.** To ensure residents of environmental justice area boundaries have access to recreational, cultural, and health and wellness programs, establish accessibility corridors that provide attractive, comfortable, and safe pedestrian and bike access to public recreational facilities in the Parks Master Plan (an implementation action of the Open Space Element). Identify public realm improvements needed to create these accessibility corridors. Prioritize investments for accessibility corridors in the city's capital investment program; include investments for accessibility corridors when investments are made in new parks and recreation facilities within environmental justice area boundaries.	PRCSA/PWA 2022
1.7*	**Rental property outreach.** Augment the Proactive Rental Enforcement Team and Residential Response Team with additional outreach geared toward absentee owners of rental properties. Create and periodically distribute outreach materials in order to educate absentee owners about legal obligations to maintain and upkeep rental properties. Distribute information to tenants about their rights and protection, so they are not penalized for reporting or living in a dwelling unit that does not meet health and safety standards. Translate outreach efforts into Spanish, Vietnamese, and other appropriate languages. Prioritize such outreach for properties within environmental justice area boundaries.	PBA 2022
1.8*	**Neighborhood rehabilitation.** Continue to seek state and federal funding for neighborhood rehabilitation projects and collaborate with community-based organizations to identify housing issues and improvements needed, especially for housing within environmental justice area boundaries.	CDA Ongoing
GOAL CM-2: Provide exceptional, accessible, and diverse educational programs and facilities to meet community needs.		
2.1*	**Facilities to support lifelong learning.** For areas within park deficient and environmental justice areas ~~boundaries~~, conduct, maintain, and publicize an inventory of public, nongovernmental, and private facilities that can be used by organizations to support early childhood education, after school activities, libraries and learning centers, and other meetings and educational opportunities.	CMO 2024
2.2*	**Public realm.** Identify areas in need of a public realm plan to provide attractive, comfortable, and safe walking corridors to promote accessibility to community programs or activity centers, in conjunction with the City's Active Transportation Plan.	PWA/PBA Ongoing
GOAL CM-3: Promote the health and wellness of all Santa Ana residents.		

TABLE CM-2. COMMUNITY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
3.1*	**Community health care facilities.** Evaluate options to support existing and potential community health care facilities in environmental justice focus areas through a variety of mechanisms such as reduced permit fees, reduced impact fees, and tax incentives.	PBA/CMO 2023
3.2*	**Pedestrian access to health facilities.** Ensure that new or redeveloped health care facilities include pedestrian-friendly site amenities. In areas where mobile clinics are stationed, ensure the location is safe and accessible for pedestrians, cyclists, and transit users.	PBA Ongoing
3.3*	**Health metrics.** Engage with the Orange County Health Care Agency and other stakeholders to monitor key health indicators to measure the success of the outcome of General Plan policies and the implementation plan, including reduction in incidence in asthma~~.~~ and low birth weight of infants.	PBA/CMO ~~2021~~2022
3.4*	**Prevention activities.** Coordinate with the County Health Care Agency to identify the root causes of health disparities and inequities in Santa Ana, with additional detail for residents living within environmental justice area boundaries. Identify potential programmatic changes and resources to better address the root causes.	PBA/CMO 2022
3.5*	**Environmental education.** Encourage all education institutions in Santa Ana to include curriculum regarding environmental justice and local efforts to promote clean business operations, environmental quality, and the health in our community.	PBA/CMO ~~2021~~2022
3.6*	**Fresh and healthy foods.** Pursue programs, incentives, and/or grants to encourage urban agriculture and small grocery or convenience stores to sell fresh foods in the city, especially those within environmental justice area boundaries. Examples include grants or loans to purchase updated equipment, publicity, or directories of healthy food outlets, or connecting stores to wholesale sources of healthy, local, or organic food.	CDA 2022
3.7*	**Public health and wellness collaboration summit.** Collaborate with health care providers, health and wellness advocates, and other public health stakeholders to identify ways to improve the provision of and access to health and wellness services throughout the city. Include a discussion on areas within environmental justice area boundaries and other areas underserved by ~~affordable~~parks, programs and services that support health and wellness ~~services~~.	PRCSA 2022 & ongoing
3.8*	**Environmental soil screening measures.** Collaborate with Orange County Health Care Agency, and local stakeholders such as Orange County Environmental Justice and UC Irvine Public Health, in efforts to adjust the County and State policies for health and environmental screening levels to promote healthy outcomes related to lead contamination as recommended by health experts.	PBA 2022

Notes:
CDA - Community Development Agency
CMO - City Manager's Office
HR - Human Resources Department
PBA - Planning and Building Agency
PWA - Public Works Agency
PRCSA - Parks, Recreation and Community Services Agency
PD - Police Department
–* associated with environmental justice policies

GOAL M-1: COMPREHENSIVE CIRCULATION

A comprehensive and multimodal circulation system that facilitates the safe and efficient movement of people, enhances commerce, and promotes a sustainable community.

POLICY M-1.1 SAFETY

Achieve zero fatalities from traffic collisions through education, enforcement, and infrastructure design.

POLICY M-1.2 BALANCED MULTIMODAL NETWORK

Provide a balanced and equitable multimodal circulation network that reflects current and changing needs.

POLICY M-1.3 TRAFFIC MANAGEMENT SYSTEMS

Utilize technology to efficiently move people and vehicles and manage motor vehicle speeds.

POLICY M-1.4 MOTOR VEHICLE LEVEL OF SERVICE

Maintain at least a vehicle level of service "D" for intersections of arterial streets, except in areas planned for high intensity development or traffic safety projects.

POLICY M-1.5 MULTIMODAL LEVEL OF SERVICE

Ensure that new development and City projects maintain or improve the current level of service for all modes of transportation.

POLICY M-1.6 COMPLETE STREETS

Transform travelways to accommodate all users through street design and amenities, such as sidewalks, trees, landscaping, street furniture, and bus shelters.

POLICY M-1.7 PROACTIVE MITIGATION

Proactively mitigate potential air quality, noise, congestion, safety, and other impacts from the transportation network on residents and business.

POLICY M-1.8 ENVIRONMENTAL SUSTAINABILITY

Consider air and water quality, noise reduction, neighborhood character, and street-level aesthetics when making improvements to travelways.

POLICY M-1.9 REGIONAL CONSISTENCY

Ensure the street network is consistent with standards set in the OCTA Master Plan of Arterial Highways and the Congestion Management Program.

POLICY M-1.10 INTERGOVERNMENTAL COORDINATION

Collaborate with federal, state, SCAG, OCTA, rail authorities, and other agencies to fund and improve the regional transportation system.

POLICY M-1.11 EMERGING SERVICES

Promote the development of innovative and safe travel and delivery services through partnerships with business and industry leaders.

GOAL M-2: REGIONAL MOBILITY

An integrated system of travelways that connects the City to the region, employment centers, and key destinations, making Santa Ana the leader in regional transportation.

POLICY M-2.1 INTERSTATE FREEWAYS
Support Caltrans and OCTA efforts to modernize and improve freeways by improving safety, capacity, convenience of access, and operational efficiencies, while addressing impacts to neighborhoods.

POLICY M-2.2 TRANSIT SERVICES
Work with regional and local entities to provide residents, workers and visitors with safe, affordable, accessible, convenient, and attractive transit services.

POLICY M-2.3 REGIONAL TRANSPORTATION CENTER
Continue to promote and develop the Santa Ana Regional Transportation Center (SARTC) as a major transportation hub linking Amtrak, Metrolink, the OC Streetcar, other regional systems, and first and last mile connections.

POLICY M-2.4 COMMUTER RAIL
Support the expansion of commuter rail services and Santa Ana's role as a destination along the Los Angeles–San Diego–San Luis Obispo (LOSSAN) rail corridor.

POLICY M-2.5 OC STREETCAR
Support development and expansion of the OC Streetcar project, connecting neighborhoods, employment centers, and Downtown Santa Ana to activity centers in Orange County.

POLICY M-2.6 HIGH FREQUENCY TRANSIT CORRIDORS
Work with OCTA to support the improvement of transit opportunity corridors to facilitate high frequency transit (e.g., bus rapid transit and other modes) along designated corridors in Santa Ana.

POLICY M-2.7 REGIONAL MOBILITY ACCESS
Enhance access to regional transit, including first and last mile connections, to encourage the use of public transit.

POLICY M-2.8 GRADE SEPARATIONS
Encourage the installation and improvement of grade separations at rail crossings that minimize impacts to adjacent properties and nonmotorized users.

POLICY M-2.9 GOODS MOVEMENT
Maintain a network of truck routes limited to arterial streets to allow for goods movement and protect residential neighborhoods from adverse impacts.

GOAL M-3: ACTIVE TRANSPORTATION

A safe, balanced, and integrated network of travelways for nonmotorized modes of transportation that connects people to activity centers, inspiring healthy and active lifestyles.

POLICY M-3.1 NONMOTORIZED TRAVELWAY NETWORK

Expand and maintain a citywide network of nonmotorized travelways within both the public and private realms that create linkages between neighborhoods, recreational amenities, schools, employment centers, neighborhood serving commercial, and activity centers.

POLICY M-3.2 NONMOTORIZED TRAVELWAY AMENITIES

Enhance nonmotorized travelways with amenities such as landscaping, shade trees, lighting, benches, crosswalks, rest stops, bicycle parking, and support facilities that promote a pleasant and safe experience.

POLICY M-3.3 SAFE ROUTES TO SCHOOLS AND PARKS*

Lead the development and implementation of safe routes to schools and parks by partnering with the school districts, residents, property owners, and community stakeholders.

POLICY M-3.4 REGIONAL COORDINATION

Coordinate development of the City's active transportation and transit network with adjacent jurisdictions, OCTA, and other appropriate agencies.

POLICY M-3.5 EDUCATION AND ENCOURAGEMENT

Encourage active transportation choices through education, special events, and programs.

POLICY M-3.6 TRANSIT CONNECTIVITY

Enhance first and last mile connectivity to transit facilities through safe, accessible, and convenient linkages.

POLICY M-3.7 COMPLETE STREETS DESIGN

Enhance streets to facilitate safe walking, bicycling, and other nonmotorized forms of transportation through community participatory design.

POLICY M-3.8 SANTA ANA RIVER AND GOLDEN LOOP

Proactively pursue the improvement and restoration of the Santa Ana River natural habitat and the completion of the Golden Loop to serve as a multi-use recreational amenity.

POLICY M-3.9 NEIGHBORHOOD TRAFFIC

Develop innovative strategies to calm neighborhood traffic, increase safety, and eliminate collisions, while also maintaining access for emergency response.

GOAL M-4: TRANSPORTATION, LAND USE, AND DESIGN

Coordinated transportation planning efforts with land use and design strategies that encourage sustainable development and achieve broader community goals.

POLICY M-4.1 INTENSE DEVELOPMENT AREAS

Program multimodal transportation and public realm improvements that support new development in areas along transit corridors and areas planned for high intensity development.

POLICY M-4.2 PROJECT REVIEW

Encourage active transportation, transit use, and connectivity through physical improvements and public realm amenities identified during the City's Development Review process.

POLICY M-4.3 TRANSPORTATION MANAGEMENT

Coordinate with OCTA, employers, and developers to utilize TDM (transportation demand management) strategies and education to reduce vehicle trips and parking demands.

POLICY M-4.4 FAIR SHARE IMPACTS

Ensure that all development projects pay their fair share of the system improvements necessary to accommodate the transportation needs of their projects.

POLICY M-4.5 LAND USE DEVELOPMENT DESIGN

Ensure that building placement and design features create a desirable and active streetscape.

POLICY M-4.6 ROADWAY CAPACITY ALTERNATIVES

Promote reductions in automobile trips and vehicle miles traveled by encouraging transit use and nonmotorized transportation as alternatives to augmenting roadway capacity.

POLICY M-4.7 PARKING

Explore and implement a flexible menu of parking options and other strategies to efficiently coordinate the response to parking demands.

POLICY M-4.8 NOISE MITIGATION

Encourage physical and operational improvements to reduce noise levels around major roads, freeways, and rail corridors, in particular around sensitive land uses.

POLICY M-4.9 AIR POLLUTION MITIGATION*

Consider land use, building, site planning, and technology solutions to mitigate exposure to transportation related air pollution.

GOAL M-5: SUSTAINABLE TRANSPORTATION DESIGN

A transportation system that is attractive, safe, state-of-the-art, and supports community, environmental, and conservation goals.

POLICY M-5.1 ENHANCED STREET DESIGN

Improve the beauty, character, and function of travelways with amenities such as landscaped parkways and medians, bike lanes, public art, and other amenities.

POLICY M-5.2 RAIL CORRIDORS

Coordinate with rail service providers to improve and maintain the aesthetics of rail corridors, reduce noise levels, and mitigate traffic conflicts and other environmental hazards.

POLICY M-5.3 TRAVEL VIEWS

Promote the undergrounding of utilities and the reduction of visual clutter along travelways.

POLICY M-5.4 GREEN STREETS

Leverage opportunities along streets and public rights-of- way to improve water quality through use of landscaping, permeable pavement, and other best management practices.

POLICY M-5.5 STREET DESIGN

Design and retrofit streets based on their combined land use context and road function to achieve safety objectives.

POLICY M-5.6 CLEAN FUELS AND VEHICLES

Encourage the use of alternative fuel vehicles and mobility technologies through the installation of supporting infrastructure.

POLICY M-5.7 INFRASTRUCTURE CONDITION*

Enhance travelway safety by maintaining streets, alleys, bridges, sidewalks, lighting, and other transportation infrastructure in excellent condition.

POLICY M-5.8 TRAFFIC SAFETY

Prioritize the safety of all travelway users when designing transportation improvement and rehabilitation projects.

TABLE M-4. MOBILITY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
GOAL M-1: Comprehensive Circulation A comprehensive circulation system that facilitates the safe and efficient movement of people, enhances commerce, and promotes a sustainable community.		
1.1	**Cross-agency collaboration.** Coordinate with external agencies to address the impacts of new regional transportation projects on the local network and accommodate complete street practices.	PWA Ongoing
1.2	**MPAH.** Coordinate with external agencies to ensure the OCTA Master Plan of Arterial Highways accommodates current and future demand for all users.	PWA

TABLE M-4. MOBILITY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
		~~2019~~2021-2035
1.3	**Complete streets design.** Update the City's standard plans to include complete streets design strategies.	PWA 2025
1.4	**Reduce collisions.** Minimize parking from arterial streets to reduce vehicular, bicycle, and pedestrian conflicts.	PWA Ongoing
1.5	**Capital Improvement Program.** Prepare the annual Capital Improvement Program that corresponds with the City's general plan goals and implementation actions.	PWA Annually
1.6	**Asset Management database.** Explore the benefits of an asset management database to coordinate ongoing maintenance of streets, parkway and the public realm.	PWA Ongoing~~2022~~
1.7	**Transportation network safety.** Continue ITS to provide enhanced safety and efficiency features on the transportation network, including traffic signal synchronization.	PWA Ongoing
1.8	**Impact fees.** Secure development impact fees and dedications for project-related transportation improvements during City review and approval processes.	PWA ~~2013~~2021-2035
GOAL M-2: Regional Mobility **Integrated system of travelways that connects the City to the region, employment centers, and key destinations, making Santa Ana the leader in regional transportation.**		
2.1	**Cross-agency planning.** Work with OCTA and regional transportation agencies on the Long-Range Transportation Plan and to expand bus and rail transit services, particularly transit priority corridors.	PWA/PBA - Ongoing
2.2	**Cross-agency coordination.** Coordinate with OCTA and transportation agencies to identify a funding, operation, and maintenance plan for the OC Streetcar.	PWA Ongoing
2.3	**Bus turnouts.** Construct bus turnouts on arterial streets according to OCTA design standards.	PWA Ongoing
2.4	**Freeway improvement projects.** Participate in Caltrans Advisory Working Groups freeway improvement projects to evaluate benefits and impacts to the Santa Ana local streets.	PWA Ongoing
2.5	**Grade separation.** Pursue implementation of grade separation between rail crossings and roadways at Santa Ana Boulevard, Seventeenth Street, and Grand Avenue.	PWA ~~2020~~2021-2035
2.6	**Regional transit planning.** Develop the Santa Ana Regional Transportation Center (SARTC) Master Plan.	PWA/PBA/CDA ~~2019~~2021-2035
2.7	**Wayfinding program.** Refine the City's wayfinding signage program to direct travelers to activity centers, Downtown, and Civic Center.	PWA ~~2020~~2021-2025
GOAL M-3: Active Transportation **A safe, balanced, and integrated network of travelways for nonmotorized modes of transportation that connects people to activity centers, inspiring healthy and active lifestyles.**		

TABLE M-4. MOBILITY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
3.1	**Active transportation planning.** Develop and pursue implementation of a comprehensive active transportation plan.	PWA ~~2020~~2021-2035
3.2	**Circulation connectivity.** Close the Golden Loop network between Memory Lane and Santiago Creek and between Santiago Park and Lincoln Avenue/Santiago Street.	PWA/PRCSA Ongoing
3.3	**Pedestrian accessibility.** Implement the City ADA Transition Plan to cost-effectively enhance pedestrian accessibility, with guidance from the Sidewalk Connectivity Plan.	PWA Ongoing
3.4	**Pedestrian opportunity zones.** Prepare public realm plans in pedestrian opportunity zones.	PWA/PBA ~~2019~~2021-35
3.5*	**Safe routes to ~~school.~~schools and parks.** Develop and pursue implementation of a Safe Routes to School Plan~~.~~ and a Safe Routes to Parks Plan.	PWA/PRCSA Ongoing~~2022~~
3.6	**Drinking water access.** Create a network of public water fountains / bottle fill stations that promote the City's award-winning water, conservation, and substitution of bottled water for affordable public drinking water.	PWA 2022-2025
GOAL M-4: Transportation, Land Use, and Design Coordinated transportation planning efforts with land use and design strategies that encourage sustainable development and achieve broader community goals.		
4.1	**Municipal Code update.** Amend the code to require parking studies to evaluate requests for parking reductions in all development projects.	PBA ~~2020~~2022
4.2	**Downtown transportation planning.** Prepare comprehensive Downtown transportation and parking management plan that involves Downtown stakeholders and addresses downtown activity, economic growth, and operational improvements.	PWA/PBA/CDA ~~2023~~2025
4.3	**Downtown transportation improvements.** Study the Downtown parking structure facilities, involving Downtown stakeholders, to identify potential operational improvements and monitor the program.	CDA/PWA ~~2023~~2025
4.4	**Residential parking.** Continue the Residential Permit Parking Program.	PWA Ongoing
4.5*	**Citywide Design Guidelines update.** Update the Citywide Design Guidelines to strengthen pedestrian and cyclist linkages to development centers and residential neighborhoods and coordinate on-site landscape with public realm landscaping.	PBA/PWA 2023
4.6	**Safe travelways.** Provide City interagency review of physical improvements and related design standards within travelways and the public realm.	PWA Ongoing
4.7	**Bike parking and amenities.** Update the City bike parking ordinance to require new major development to provide long-term bike locker parking and amenities, and incentives for inclusion in existing development.	PBA 2023
4.8	**Ensure safety.** Utilize the City's project review processes to identify and maintain landscaped setbacks along public rights-of-way.	PWA Ongoing

TABLE M-4. MOBILITY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
4.9	**Trip reduction.** Continue to evaluate alternative trip reduction program best practices for City employees, and implement a program that is cost-effective.	HR Ongoing
4.10	**Vehicle miles traveled.** Maintain vehicle miles traveled (VMT) guidelines in compliance with SB 743.	PWA/PBA Ongoing
4.11	**Cross-agency coordination.** Maintain ongoing coordination of land use and transportation impacts through joint powers authority agreements with adjacent jurisdictions.	PWA ~~2019-~~ ~~2035~~Ongoing
4.12	**School partnerships.** Pursue partnerships with local school districts to improve coordination of review process for new and rehabilitated school facility improvements, to promote safe and well-designed student pick-up/drop-off.	PWA/PD Ongoing
GOAL M-5: Sustainable Transportation **A transportation system that is attractive, safe, state-of-the-art, and supports community, environmental, and conservation goals.**		
5.1	**Safe travelways.** Continue design practices that facilitate the safe use of the travelways.	PWA Ongoing
5.2	**Street designs.** Participate in state and regional transportation agency forums to affect policies for universal street design standards to ensure standards are user friendly, cost-effective, and sustainable.	PWA Ongoing
5.3	**Street improvements.** Incorporate low impact development (LID) strategies to infiltrate, treat, or harvest urban stormwater runoff in street improvement projects.	PWA Ongoing
5.4	**Municipal/development code update.** Update the City's design standards and municipal codes regarding landscaping and amenities in the public realm and street parkways, to promote aesthetically pleasing and sustainable corridors.	PWA ~~2020~~2025
5.5	**Tree preservation.** Re-evaluate the City's street tree maintenance and preservation programs to ensure fiscal sustainability and aesthetically pleasing trees over the long term.	PWA ~~2019~~2021-2040
5.6	**Traffic calming.** Develop or update neighborhood traffic management plans to facilitate traffic calming measures appropriate and reasonable for the area.	PWA Ongoing
5.7	**Parking management strategies.** Evaluate parking management strategies, such as parking assessment districts, to facilitate parking in areas programmed for future development.	CDA ~~2021~~2022
5.8*	**Air quality improvements.** Participate in inter-jurisdictional efforts to promote improvements in air quality and to meet state and federal mandates through advanced technology and TDM programs.	PBA/PWA ~~2020~~2021-2035
5.9	**Rail service.** Coordinate with rail and transit service providers to address aesthetics, ongoing maintenance, safety, and noise concerns along rail corridors.	PWA Ongoing
5.10	**Street medians.** Complete construction of medians on major arterial streets.	PWA 2030

TABLE M-4. MOBILITY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
5.11	**Underground utilities program.** Continue to implement the program to underground utilities on arterial streets.	PWA 2030
5.12	**Transportation network.** Provide upkeep of the City's transportation network based upon an established maintenance schedule.	PWA Ongoing

Notes:
CDA - Community Development Agency CMO - City Manager's Office HR - Human Resources Department
PBA - Planning and Building Agency PWA - Public Works Agency PRCSA - Parks, Recreation and Community Services Agency
PD - Police Department * associated with environmental justice policies

GOAL EP-1: JOB CREATION AND RETENTION

Foster a dynamic local economy that provides and createsemployment opportunities for all residents in the City.

POLICY EP-1.1 PROTECT INDUSTRIAL

Protect industrial uses that provide quality job opportunities including middle-income jobs; provide for secondary employment and supporting uses; and maintain areas where smaller emerging industrial uses can locate in a multi-tenant setting.

POLICY EP-1.2 ATTRACT BUSINESS

Strengthen and expand citywide business attraction efforts in order to achieve the City's full employment potential.

POLICY EP-1.3 LIVING-WAGE EMPLOYMENT

Promote new and retention of existing job-producing businesses that provide living-wage employment opportunities.

POLICY EP-1.4 JOB SKILLS

Pursue available financial and tax incentives to improve residents' employment skills and workforce preparation.

POLICY EP-1.5 ACCESS THROUGH EDUCATION

Support education and employment training on a citywide basis to improve access to higher-wage and emerging occupations.

POLICY EP-1.6 COMPREHENSIVE APPROACH

Collaborate with chambers of commerce, educational institutions, and other partners to prepare residents to seek and thrive in current and emerging employment environments.

POLICY EP-1.7 TARGETED RESOURCES

Target business attraction and retention resources to firms with high positive net revenue implications for local government, particularly those engaged in business-to- business taxable sales transactions.

POLICY EP-1.8 GROWING TAX BASE

Collaborate with the City chambers of commerce to promote fiscal stability and growth of sales tax and employment generating businesses in the City.

POLICY EP-1.9*

AVOID CONFLICT OF USES

Avoid potential land use conflicts by prohibiting the location of sensitive receptors and noxious land uses in close proximity.

POLICY EP-1.10 CREATIVE CLASS

Target the attraction of arts and culture related industries to create jobs, attract investments, and stimulate the local economy through tourism.

GOAL EP-2: DIVERSE ECONOMIC BASE

Maintain and enhance the diversity and regional significance of the City's economic base.

POLICY EP-2.1 HIGH-GROWTH BUSINESSES

Promote economic development opportunities in high- growth business clusters that match the changing skillset of the City's resident population.

POLICY EP-2.2 DELIBERATE INVESTMENT

Pursue business attraction and retention prospects in sectors which broaden and strengthen the local economy.

POLICY EP-2.3 COMPLEMENTARY BUSINESSES

Encourage the development of mutually beneficial and complementary business clusters within the community.

POLICY EP-2.4 COMMUNITY-LED ECONOMIC DEVELOPMENT

Support community-based economic development initiatives, such as buy-local campaign, marketing strategies, and worker cooperatives.

POLICY EP-2.5 SUFFICIENT INDUSTRIAL LAND

Ensure sufficient availability of industrial zoned properties and businesses that provide employment opportunities for the City's resident population.

POLICY EP-2.6 SMALL BUSINESS ASSISTANCE

Support and encourage small business development, incubators, and microenterprises through start-up assistance and identification of fiscal resources for entrepreneurship.

POLICY EP-2.7 INFRASTRUCTURE AS AN AMENITY

Provide state-of-the-art infrastructure systems with sufficient capacity to attract emerging businesses, encourage efficient public service delivery, and foster a sustainable community.

POLICY EP-2.8 EMERGING BUSINESSES

Pursue and grow emerging business and industry that further fiscal and environmental sustainability of the community.

POLICY EP-2.9 ENERGY CONSERVATION

Collaborate with utility providers and regional partners to encourage business and industry to improve performance in energy efficiency, water conservation, and waste reduction.

POLICY EP-2.10 GREEN BUSINESS

Support the growth of a diverse green business sector that facilitates and promotes environmental sustainability and creates a competitive advantage for business attraction activities.

POLICY EP-2.11 GOODS PRODUCING SECTOR

Support economic development initiatives and land use strategies that preserve and foster an environment that allows the goods producing sector to thrive.

POLICY EP-2.12 RESILIENCY
Collaborate with governmental agencies and businesses to develop, maintain, and deploy physical and financial strategies that enable businesses of all sizes and their employees to withstand and recover from the acute impacts of flooding, extreme weather events, and public health epidemics or pandemics.

GOAL EP-3: BUSINESS FRIENDLY ENVIRONMENT

Promote a business friendly environment where businesses thrive and build on Santa Ana's strengths and opportunities.

POLICY EP-3.1 LEVERAGE HISTORIC AND CULTURAL ASSETS
Market the City's historic and cultural assets to increase the attraction of businesses and their employees to Santa Ana's places and destinations.

POLICY EP-3.2 CITY BRANDING
Promote Santa Ana as a "Smart City" and regional leader in sustainability, equity, innovation, place making, collaboration, and community pride in products Made in Santa Ana.

POLICY EP-3.3 MITIGATE IMPACTS*
Promote the development of sustainable and equitable new land use plans that proactively ~~mitigates~~reduces negative impacts on existing residents and businesses.

POLICY EP-3.4 COMPLETE COMMUNITIES
Encourage the development of "complete communities" that provide a range of housing, services, amenities, and transportation options to support the retention and attraction of a skilled workforce and employment base.

POLICY EP-3.5 SIMPLIFY THE PROCESS
Provide a streamlined development process and assist businesses with permit processing.

POLICY EP-3.6 RESPONSIVE TO TRENDS
Maintain flexible and up-to-date land use regulations that are responsive to changing business trends, best practices, technological advancements, and community needs.

POLICY EP-3.7 FACILITATING INVESTMENT
Promote a solution-based customer focus in order to facilitate additional development and investment in the community.

POLICY EP-3.8 COMPREHENSIVE ANALYSIS OF LAND USE
Pursue a balance of fiscal and qualitative community benefits when making land use decisions.

POLICY EP-3.9 CIVIC CULTURE AND COMMUNITY SERVICE
Facilitate a business culture that encourages community service and wellness programs for residents and employees.

POLICY EP-3.10 RETHINKING STRIP-COMMERCIAL
Promote the creation of distinctive neighborhood serving districts through the renovation or redevelopment of existing strip-commercial development.

POLICY EP-3.11 IMPROVE IMAGE
Create vibrant public spaces through arts and culture projects that enhance urban quality of life, expand the tax base, and improve regional and community image.

GOAL EP-4: ECONOMIC DEVELOPMENT STRATEGIES

Promote strategies that create an economic development mindset integrated throughout City Hall.

POLICY EP-4.1 ECONOMIC DEVELOPMENT RESPONSIBILITY
Promote a spirit in which economic development is the responsibility of each elected official, appointed official, and City employee through ongoing quality customer service.

POLICY EP-4.2 ECONOMIC DEVELOPMENT TRAINING
As financial resources are available, invest in economic development training for staff, elected and appointed officials, and key community stakeholders.

POLICY EP-4.3 BUSINESS VISITATION
Encourage frequent dialogue between City representatives and owners and managers of businesses operating in Santa Ana.

POLICY EP-4.4 ECONOMIC DEVELOPMENT STRATEGY
Adopt and regularly update a comprehensive economic development strategic plan, either as a stand-alone plan or as part of the City's Strategic Plan.

POLICY EP-4.5 ECONOMIC DEVELOPMENT PARTNERS
Collaborate effectively with regional economic development partners to achieve specific measurable goals for Santa Ana.

POLICY EP-4.6 PUBLIC-PRIVATE PARTNERSHIPS
Prioritize municipal initiatives and investments in areas in which private sector businesses and property owners are voluntarily providing private funding through special financing districts (such as assessment districts and business improvement districts).

TABLE EP-2. ECONOMIC PROSPERITY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
GOAL EP-1: Job Creation and Retention Foster a dynamic local economy that provides and creates employment opportunities for all residents in the City.		
1.1	**Economic Development Strategic Plan.** Pursue funding and update the City's Economic Development Strategic Plan every three years to report on economic trends, describe targeted industry clusters, identify economic issues, inform infrastructure and land use priorities, develop strategies for addressing near- to mid-term economic issues, and identify new initiatives in the private sector, within the context of long-term goals.	CDA ~~2022~~2023
1.2	**Fiscal impacts of land use changes.** Document the potential economic and fiscal impacts associated with significant land use plan amendments involving land use or intensity revisions.	CDA 2021

TABLE EP-2. ECONOMIC PROSPERITY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
1.3	**Economic indicators.** Explore the use of key economic indicators to identify the need for new strategies and establish priorities for public investment. This data will be used in the development of the City's Economic Development Strategy Plan and also updated bi-annually on the City's economic development website.	CDA 2022
1.4	**Integrity of industrial areas.** Review the permitted uses in industrial zones and consider removing uses that do not need to be in an industrial zone; identify areas where new warehousing development would not be consistent with the desire to maintain manufacturing and other industrial uses that have higher employment per acre than warehousing.	CDA Ongoing
1.5	**Broker outreach.** Conduct outreach meetings with commercial and industrial real estate brokers to discuss the types of businesses considering a Santa Ana business location; identify challenges that discourage business from locating in the city; implement a plan to address such challenges.	CDA 2021
1.6	**Business development targets.** Prepare and regularly update a business development target list that identifies the types of businesses that are most likely to be interested in a Santa Ana business location, the types of businesses most likely to employ city residents, types of businesses that broaden the local economy, and the types of businesses expected to generate higher net revenues for the City or to create shared revenue opportunities; target the City's business attraction efforts on these types of businesses.	CDA Ongoing
1.7	**Living wage jobs.** Prepare and regularly update a living wage calculation for Santa Ana; prepare and regularly update a list of the types of businesses in which the average wage is above a living wage for Santa Ana; incorporate this information into the City's business incentives program.	CDA 2022
1.8	**Workforce development for City residents.** Provide an informational program—including an annual public workshop, information on the City's website, and printed collateral—to inform the public about available training, education, and assistance for employment skills and workforce preparation; partner with Santa Ana Unified School District, the chambers of commerce, and community organizations to make this information widely available throughout the community.	CDA 2022 & annually
1.9	**Retail attraction.** Conduct an annual retail market demand analysis to identify types of stores for which the city leaks retail spending; focus market efforts on these types of business; incorporate a focus on these types of businesses into the City's business assistance and business incentive programs.	CDA 2022
1.10	**Creative class.** Develop and implement programs to celebrate arts and culture and to promote the works of local artists; develop marketing collateral for artists and creative industries businesses.	CDA Ongoing
1.11	**Employ local initiative.** Continue to support local initiatives like worker cooperatives and develop a package of business incentives like reduced business license fees to encourage Santa Ana businesses to hire local residents.	CDA 2021
1.12	**Tourism action.** Assist in the planning and strategic use of public-private partnerships to develop new permanent facilities and attractions through the implementation of a tourism marketing district.	CDA 2021
1.13	**Promote development opportunities.** Maintain updated inventory of citywide vacant properties. Continue to promote these opportunities and incentives like the City's Opportunity Zone to the broker and development community to develop into commercial and residential projects beneficial to the sales and property tax base of the City.	CDA Ongoing
1.14	**Foster Development through Financing Assistance.** Utilize economic financing tools such as enhanced infrastructure financing districts, community revitalization investment authorities, and the Statewide Community Infrastructure Program to finance economic development and infrastructure projects that provide community-wide benefits.	CDA ~~2021~~2023
GOAL EP-2: Diverse Economic Base **Maintain and enhance the diversity and regional significance of the city's economic base.**		

TABLE EP-2. ECONOMIC PROSPERITY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
2.1	**Business attraction.** Participate in state and national economic development organizations. Attend trade shows and market Santa Ana to high-growth business clusters for Orange County, consistent with the Economic Development Strategic Plan.	CDA Ongoing
2.2	**Business incubator.** Explore the feasibility of establishing a business incubator/business accelerator in Santa Ana.	CDA 2022
2.3	**Green business recruitment.** Conduct a study to identify the types of green businesses best suited to a Santa Ana business location; market the city to these types of businesses.	CDA 2022
2.4	**Communication Technology.** Partner with public and private enterprises to facilitate communication technology, such as fiber optics, to address current and future technology needs relative to available resources and ensure that the city maintains a competitive business environment.	PWA Ongoing
2.5	**Wireless Telecommunication.** Update the local Wireless Telecommunication Design Guidelines to incorporate best industry practices, consistency with federal requirements, and community considerations.	PWA 2021
GOAL EP-3: Business Friendly Environment Promote a business friendly environment where businesses thrive and build on Santa Ana's strengths and opportunities.		
3.1	**Historic and cultural resources.** Conduct an outreach program with commercial and industrial brokers focused on the City's historical and cultural assets and how these assets can be beneficial to businesses and their employees; develop marketing collateral focused on the City's historical and cultural assets.	CDA 2021
3.2	**Economic development ombudsman.** Pursue funding and establish an ombudsman position in the Economic Development Division to assist new businesses in navigating the building and permitting processes.	CDA 2022
3.3	**Business outreach and retention.** Continue to support existing business attraction and retention programs. Maintain partnerships with the Santa Ana Chamber of Commerce and other nonprofit organizations. Continue to reach out to national retailers and employers.	CDA Ongoing
3.4	**Business relocation assistance.** Continue to promote and market the Recycling Market Development Zone. Develop a program to assist businesses that want to relocate from functionally obsolete strip commercial locations to new distinctive neighborhood commercial districts.	CDA Ongoing
3.5*	**Green business incentives.** Continue to promote and market the Recycling Market Development Zone. Develop an incentive program to encourage nonpolluting industry and clean green technology companies that reduce environmental impacts and the carbon footprint to locate to the city. Encourage existing businesses to invest in technology and best practice to transition to sustainable business practices.	CDA Ongoing
3.6	**Customer service survey.** Develop and maintain a customer service survey to evaluate and identify opportunities to improve permit and licensing procedures. Train appropriate business counter staff on enhanced customer service methods for the public.	CDA/PBA ~~2021~~2022
3.7	**Software upgrade.** Upgrade permit processing software to streamline review, allow the submission of electronic applications, reduce costs, and monitor processing time.	PBA 2022
3.8	**Promote gathering spaces.** Develop the role of the Arts and Culture Division of the Community Development Agency to coordinate various arts, culture, and historical programs that promote creative gathering spaces and experiences in Santa Ana.	CDA/PBA On-going

TABLE EP-2. ECONOMIC PROSPERITY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
3.9	**Marketing strategy.** Pursue funding and develop and maintain a branding and marketing strategy and materials to promote Santa Ana and maximize the effectiveness of the City's communication materials, website, and urban placemaking elements.	CDA 2023
3.10	**Business license.** Consider reduction of business tax assessment to support small businesses in the city and coordinate voter approval as needed.	CDA/Finance Ongoing
GOAL EP-4: Economic Development Strategies Promote strategies that create an economic development mindset integrated throughout City Hall.		
4.1	**Economic development training.** Each year, provide budget funds for at least one staff member and one elected or appointed official to attend an economic development training program through the California Association for Local Economic Development or a similar program.	CDA Ongoing
4.2	**Business outreach.** Conduct a monthly business breakfast workshop with a different sector of the local economy or a different geographic area each month in order for elected officials and senior staff to keep businesses apprised of what Santa Ana is doing for economic development and to hear directly from local businesses about the advantages and challenges of operating a business in the city.	CDA Ongoing

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GOAL PS-1: PUBLIC FACILITIES

Provide quality and efficient facilities that are adequately funded, accessible, safe, and strategically located.

POLICY PS-1.1 MAINTENANCE AND DESIGN

Provide and maintain public facilities that reinforce community identity through high quality design.

POLICY PS-1.2 EQUITABLE DISTRIBUTION*

Ensure public services and facilities reflect changing population needs and are equitably distributed and accessible, with priority assigned to improving areas that are underserved and/or within environmental justice area boundaries.

POLICY PS-1.3 CULTURAL AND COMMUNITY CENTERS

Support the expansion, creation, and continued operation of cultural and community institutions and organizations that serve Santa Ana residents.

POLICY PS-1.4 CIVIC CENTER ENHANCEMENTS

Explore opportunities to activate the Civic Center by incorporating social, cultural, entertainment venue programming, and improving infrastructure and connectivity to Downtown and surrounding neighborhoods.

POLICY PS-1.5 COMMUNITY BENEFIT*

Collaborate with community stakeholders to expand recreational, educational, cultural opportunities, promote active lifestyles, and maximize community benefit.

POLICY PS-1.6 FACILITY LOCATIONS

Support land use decisions related to community facilities that preserve quality of life for the City's residents and surrounding community.

POLICY PS-1.7 SUSTAINABLE AND RESILIENT PRACTICES

Require the development or rehabilitation of any public facility or capital improvement to incorporate site design and building practices that promote sustainability, energy efficiency, and resiliency.

POLICY PS-1.8 ACCESS FOR ALL*

Improve Connectivity and ADA accessibility at all public facilities.

POLICY PS-1.9 SUPPORTIVE HOUSING*

Collaborate with community stakeholders to identify and encourage the development of suitable sites for housing with support services.

POLICY PS-1.10 FAIR SHARE

Require that new development pays its fair share of providing improvements to existing or creation of new public facilities and their associated costs and services.

POLICY PS-1.11 SAFETY*

Remove actual and perceived safety concerns that create barriers to physical activity by requiring adequate lighting, street visibility, and areas of clear connectivity, especially for new projects or improvements within environmental justice area boundaries.

GOAL PS-2: PUBLIC SAFETY

Preserve a safe and secure environment for all people and property.

POLICY PS-2.1 PUBLIC SAFETY AGENCIES

Collaborate with the Police Department and the Fire Authority to promote greater public safety through ~~environmental design~~implementing Crime Prevention through Environmental Design (CPTED) principles for all development projects.

POLICY PS-2.2 CODE COMPLIANCE

Require all development to comply with the provisions of the most recently adopted fire and building codes and maintain an ongoing fire inspection program to reduce fire hazards.

POLICY PS-2.3 CRIME PREVENTION

Coordinate, partner, and build relationships with community members and stakeholders to develop and implement crime prevention strategies through restorative practices that focus on rehabilitation, community service, and public safety.

POLICY PS-2.4 COMMUNITY PARTNERSHIPS

Provide alternative methods to improve police services that support community partnerships, build public trust, and proactively address public safety issues.

POLICY PS-2.5 SAFETY PROGRAMS

Promote early childhood education and prevention programs that improve public safety and maintain ongoing community education opportunities.

POLICY PS-2.6 SCHOOL SAFETY

Collaborate with local schools to establish and implement comprehensive and coordinated services that enhance the security and safety of students, educators, and administrators on and off campus.

POLICY PS-2.7 STAFFING LEVELS

Maintain staffing levels for sworn peace officers, fire fighters, emergency medical responders, code enforcement, and civilian support staff to provide quality services and maintain an optimal response time citywide.

POLICY PS-2.8 EFFICIENCY STANDARDS

Ensure that equipment, facilities, technology, and training for emergency responders are updated and maintained to meet modern standards of safety, dependability, and efficiency.

POLICY PS-2.9 QUALITY EMPLOYEES

Enhance public safety efforts by actively seeking a diverse and talented pool of public safety candidates who possess the values and skills consistent with those of the community.

POLICY PS-2.10 EMERGENCY MANAGEMENT PLANS

Maintain, update, and adopt an Emergency Operations Plan and Hazard Mitigation Plan to prepare for and respond to natural or human generated hazards.

POLICY PS-2.11 RESILIENT FACILITIES AND INFRASTRUCTURE

Coordinate with utilities and public agencies to develop, maintain, relocate, and/or upgrade critical local and regional public facilities and infrastructure systems to ensure their resiliency during times of extreme weather or natural disasters.

POLICY PS-2.12 AUTOMATIC MUTUAL AID
Participate in agreements for automatic and mutual aid with other local, state, federal, and nongovernmental emergency service providers to improve protection services and emergency response throughout the region.

POLICY PS-2.13 EXTREME HEAT
Maintain an adequate amount and distribution of cooling centers throughout the City, with consideration given to areas with concentrations of those most vulnerable to the dangers of extreme heat.

POLICY PS-2.14 VULNERABLE POPULATIONS
Coordinate with and encourage the use of community- based networks to aid vulnerable populations in preparing for emergencies and provide assistance with evacuation and recovery.

POLICY PS-2.15 RECOVERY
Coordinate with the County and other local agencies to reestablish and expedite services to assist affected residents and businesses in the short- and long-term recovery from emergencies and natural disasters.

GOAL PS-3: UTILITY INFRASTRUCTURE
Supply, maintain, and expand City services and infrastructure improvements through innovative funding options and sustainable practices.

POLICY PS-3.1 SERVICE PARTNERSHIPS
Partner with service providers to ensure access to a wide range of state-of-the-art telecommunication systems and services for households, businesses, institutions, public spaces, and public agencies.

POLICY PS-3.2 WASTEWATER SERVICE
Provide and maintain wastewater collection facilities which adequately serve existing land uses and future development projects while maximizing cost efficiency.

POLICY PS-3.3 WASTEWATER TECHNOLOGY
Explore new technologies that treat and process wastewater that reduce overall capacity needs of centralized wastewater systems.

POLICY PS-3.4 DRAINAGE FACILITIES
Expand and maintain storm drain facilities to accommodate the needs of existing and planned development.

POLICY PS-3.5 GREEN INFRASTRUCTURE
Incorporate sustainable design and Low Impact Development (LID) techniques for storm water facilities and new development to achieve multiple benefits, including enhancing preserving and creating open space and habitat, reducing flooding, and improving runoff water quality.

POLICY PS-3.6 WATER SERVICE
Provide water quality and service that meets or exceeds State and Federal drinking water standards.

POLICY PS-3.7 EMERGENCY CONNECTIONS
Maintain emergency connections with local and regional water suppliers in the event of delivery disruption.

POLICY PS-3.8 CONSERVATION STRATEGIES
Promote cost effective conservation strategies and programs that increase water use efficiency.

POLICY PS-3.9 HOUSEHOLD RECYCLING

Expand household recycling services and educational awareness programs.

POLICY PS-3.10 DEVELOPMENT PROJECTS

Encourage new development and reuse projects to incorporate recycling and organics collection activities aligned with state waste reduction goals.

POLICY PS-3.11 WASTE COLLECTION

Support infill development projects that provide adequate and creative solutions for waste and recycling collection activities.

POLICY PS-3.12 SEWER AND WATER

Maintain and upgrade sewer and water infrastructure through impact fees from new development and exploring other funding sources.

TABLE PS-2. PUBLIC SERVICES ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
GOAL PS-1: Public Facilities **Provide quality and efficient facilities that are adequately funded, accessible, safe, and strategically located.**		
1.1	**Equity audit.** Conduct an audit of the equitability of where and how public facilities and services are provided throughout the city; develop and implement an action plan to improve the equitability of the provision of public facilities and services based on the findings of the audit.	PRSCA/PWA 2023
1.2	**Accessibility audit.** Alone or in conjunction with the equity audit, conduct an audit of accessibility at City-owned public facilities in accordance with the Americans with Disabilities Act (ADA); development and implement an action plan to remedy ADA accessibility shortcomings.	PWA 2024
1.3	**Development impact fees.** Conduct a review of the City's development impact fees to determine if changes in the amount of fees are warranted to adequately offset additional strain on existing infrastructure systems.	PWA 2022
1.4*	**Fiscal priority for public improvements.** Identify City fiscal and operational procedures and potential thresholds involved in the prioritization of general funds for public programming, service, or infrastructure improvements for residents living within environmental justice area boundaries.	CMO 2021 & annually
1.5	**Public-private partnerships.** Explore methods to upgrade public facilities and services through public-private partnerships.	PRCSA 2022
1.6	**Capital Improvement Program.** Conduct annual review and update of the Capital Improvement Program to ensure adequate and timely provision of public facility and municipal utility provisions.	PWA Ongoing
1.7	**Infrastructure master plans.** Perform periodic (approximately every 10 years) water/sewer resource studies and master plans to identify deficiencies and deferred maintenance for the city's infrastructure systems, including cost estimates; develop nexus calculations to determine new development's fair share cost to upgrade infrastructure systems.	PWA Ongoing
1.8	**Secondary use of City-owned infrastructure.** Identify City water facilities that can accommodate recreation and/or public art amenities.	PWA 2023
1.9	**Alternative energy for water resources.** Identify projects from the completed Alternative Energy Feasibility Study for water resources, to be included in the Capital Improvement Plan.	PWA 2022

TABLE PS-2. PUBLIC SERVICES ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
GOAL PS-2: Public Safety **Preserve a safe and secure environment for all people and property.**		
2.1	**Approach to police service.** Collaborate with community partners to formulate a comprehensive service approach for police services composed of public education, outreach, technology, and partnerships with the public.	PD 2022
2.2	**Crime prevention.** Coordinate with law enforcement and community-based organizations to identify public and private funding for crime and violence prevention programs, with a focus on trauma-informed prevention, intervention programs for youth, and restorative justice.	PD Ongoing
2.3	**Law enforcement training.** Create a plan for diversifying law enforcement funding from budget surpluses or existing police budgets for training on cultural competency, interactions with people with special needs or mental health issues, and de-escalation tactics.	PD 2024
2.4	**Emergency police responses.** Consider a call for service policy analysis to identify ways to reduce response times to emergency calls.	PD 2024
2.5	**Crime data.** Explore options for making crime data publicly available through the City's website.	PD 2022
2.6	**Safety survey.** Complete a community satisfaction survey to determine community sentiment related to police actions to target gang and violent crime.	PD 2022
2.7	**Reintegration program.** Investigate the feasibility of establishing programs for formerly incarcerated residents of the community to help them become involved in the community in a healthy and productive way.	PD 2022~~2021~~
2.8	**Student success.** Invest in public safety by working with Santa Ana Unified School District to provide alternative programs to detention and expulsion and re-entry programs.	CMO/PD 2022
2.9	**Comprehensive Safe Schools Plan.** Coordinate with local school districts on an ongoing basis to assist in the review and update of a Comprehensive Safe School Plan for each school in Santa Ana.	PWA 2030
2.10	**Community policing.** Consider the creation of a youth mentorship pathways program to further community-based police programming and enhance transparency and community engagement.	PD 2022
2.11	**Sanctuary City**. Evaluate the Sanctuary City Ordinance periodically to ensure that city law enforcement protects undocumented persons from deportation, harassment, or harm.	CMO Annually
2.12	**Health needs assessment.** In partnership with community organizations, explore conducting a health needs assessment for undocumented residents and provide recommendations to support their health and well-being.	PBA/CMO 2023
2.13	**Emergency service grant funding.** Pursue grant funding on an ongoing basis to increase police and fire staffing levels, improve police and fire facilities and equipment, and improve community safety services and programs.	PD/OCFA Ongoing
2.14	**Emergency service impact fee.** Consider conducting a development impact fee feasibility study and nexus report to assess the potential for establishing development impact fees for police and fire services.	PD/OCFA 2022~~2021~~

TABLE PS-2. PUBLIC SERVICES ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
2.15	**Community partners.** Partner with community organizations to establish and administer police programs that support community partnerships, build public trust, and proactively address public safety issues.	PD Ongoing
2.16	**Urban vehicle study.** Work with emergency responders to ensure that vehicles can efficiently navigate an increasingly urban environment with narrower lanes and tighter turn radii. Evaluate all new development projects to ensure emergency vehicle accessibility.	PD/OCFA Ongoing
GOAL PS-3: Utility Infrastructure Supply, maintain, and expand City services and infrastructure improvements through innovative funding options and sustainable practices.		
3.1	**Stormwater management.** Require all new development and significant redevelopment projects within the city to incorporate best management practices for stormwater capture and treatment per municipal NPDES (National Pollutant Discharge Elimination System) permit requirements.	PWA Ongoing
3.2	**Urban runoff mitigation.** Require new development and substantial remodels to prepare and submit an urban runoff mitigation plan to the City's Engineering Division.	PWA Ongoing
3.3	**Telecommunication.** Establish requirements for the installation of state-of-the-art internal telecommunications technologies in new development projects.	PBA 2024
3.4	**Telecommunication master plan.** Adopt a fiber optic telecommunications master plan that considers residential and nonresidential users.	PWA 2021
3.5	**Utility improvements.** Prepare a study to inform determining the fair share costs of necessary water, sewer, and storm drain improvements for projects in land use focus areas.	PWA 2021 & ongoing
3.6	**Wastewater treatment.** Continue to collaborate with regional partners to capture, treat, and recycle wastewater.	PWA Ongoing
3.7	**Water quality.** Continue participation in international taste competitions to foster awareness of high-quality public water and community pride.	PWA Annually
3.8	**Water quality report.** Continue to publish the annual water quality report on the City's website and advertise it to the community.	PWA Ongoing
3.9	**Emergency water.** Coordinate with neighboring water utilities to continue multiple emergency interconnection practices and maintain mutual aid program participation.	PWA Ongoing
3.10	**Water-efficient programs.** Continue to collaborate with regional water agencies to promote and provide resources and rebates for the installation of water-efficient fixtures and landscapes.	PWA Ongoing
3.11	**Service rates.** Continue to perform periodic (approximately every five years) cost of service studies and recommend prudent affordable water and sewer rates.	PWA Ongoing
3.12	**Infrastructure funding.** Continue to pursue grant funding and low-cost loans for improving and upgrading the water and sewer systems.	PWA Ongoing

TABLE PS-2. PUBLIC SERVICES ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
3.13	**Administrative streamlining.** Research best practices for streamlining administrative processes and providing services online. Survey city customers to identify optimal service models.	PBA ~~2021~~2022
3.14	**Technology upgrades.** Prepare a schedule of technology upgrades and necessary resources to expand online services that maximize economies of scale and inter-department solutions. Upgrades should include both physical and process improvements, such as establishing electronic plan checking, the digitization of City records and the citywide records management process, and online appointment scheduling system.	PBA/Finance 2022
3.15	**Agenda management.** Consider enhancements to the agenda management system to ensure public meetings run smoothly, increase internal efficiency, document decisions proficiently, and maintain public transparency.	CMO 2022

Notes:
CDA - Community Development Agency CMO - City Manager's Office HR - Human Resources Department
PBA - Planning and Building Agency PWA - Public Works Agency PRCSA - Parks, Recreation and Community Services Agency
PD - Police Department * associated with environmental justice policies

GOAL CN-1: AIR QUALITY AND CLIMATE

Protect air resources, improve regional and local air quality, and minimize the impacts of climate change.

POLICY CN-1.1 REGIONAL PLANNING EFFORTS

Coordinate air quality planning efforts with local and regional agencies to meet State and Federal ambient air quality standards in order to protect all residents from the health effects of air pollution.

POLICY CN-1.2 CLIMATE ACTION PLAN*

Consistency with emission reduction goals highlighted in the Climate Action Plan shall be considered in all major decisions on land use and investments in public infrastructure.

POLICY CN-1.3 EDUCATION*

Promote efforts to educate businesses and the general public about air quality standards, reducing the urban heat island effect, health effects from poor air quality and extreme heat, and best practices they can make to improve air quality and reduce greenhouse gas emissions.

POLICY CN-1.4 DEVELOPMENT STANDARDS

Support new development that meets or exceeds standards for energy-efficient building design and site planning.

POLICY CN-1.5 SENSITIVE RECEPTOR DECISIONS*

Consider potential impacts of stationary and non-stationary emission sources on existing and proposed sensitive uses and opportunities to minimize health and safety risks. Develop and adopt new regulations on the siting of facilities that might significantly increase pollution near sensitive receptors within environmental justice area boundaries.

POLICY CN-1.6 NEW AND INFILL RESIDENTIAL DEVELOPMENT

Promote development that is mixed-use, pedestrian- friendly, transit oriented, and clustered around activity centers.

POLICY CN-1.7 HOUSING AND EMPLOYMENT OPPORTUNITIES

Improve the City's jobs/housing balance ratio by supporting development that provides housing and employment opportunities to enable people to live and work in Santa Ana.

POLICY CN-1.8* PROMOTE ALTERNATIVE TRANSPORTATION

Promote use of alternate modes of transportation in the City of Santa Ana, including pedestrian, bicycling, public transportation, car sharing programs and emerging technologies.

POLICY CN-1.9* PUBLIC INVESTMENT ALTERNATIVE TRANSPORTATION INFRASTRUCTURE

Continue to invest in infrastructure projects that support public transportation and alternate modes of transportation in the City of Santa Ana, including pedestrian, bicycling, public transportation, car sharing programs, and emerging technologies.

POLICY CN-1.10 TRANSPORTATION MANAGEMENT

Continue to support and invest in improvements to the City's Transportation Management System, including projects or programs that improve traffic flow and reduce traffic congestion.

POLICY CN-1.11 PUBLIC INVESTMENT IN LOW- OR ZERO EMISSION VEHICLES

Continue to invest in low-emission or zero-emission vehicles to replace the City's gasoline powered vehicle fleet and to transition to available clean fuel sources such as bio-diesel for trucks and heavy equipment.

POLICY CN-1.12 SUSTAINABLE INFRASTRUCTURE
Encourage the use of low or zero emission vehicles, bicycles, non-motorized vehicles, and car-sharing programs by supporting new and existing development that includes sustainable infrastructure and strategies such as vehicle charging stations, drop-off areas for ride-sharing services, secure bicycle parking, and transportation demand management programs.

POLICY CN-1.13 CITY CONTRACT PRACTICES
Support businesses and contractors that use reduced- emissions equipment for city construction projects and contracts for services, as well as businesses that practice sustainable operations.

POLICY CN-1.14 TRANSPORTATION DEMAND MANAGEMENT
Require and incentivize projects to incorporate Transportation Demand Management (TDM) techniques.

POLICY CN-1.15 COMMUNITY EMISSIONS REDUCTION*
Collaborate with the South Coast Air Quality Management District and local stakeholders in advance of designation as a priority community for air monitoring and reduction, and implement measures and strategies identified in other air monitoring and emissions reduction plans that are applicable to and feasible for Santa Ana.

POLICY CN-1.16 INDIRECT SOURCE RULES*
Support the development of regional legislation such as the drayage truck rule, advanced clean truck route, and heavy-duty low N0x rule by the South Coast Air Quality Management District.

POLICY CN-1.17 INDOOR RECREATION
Encourage new development to provide indoor recreation space when located in areas with high levels of localized air pollution or if site is adjacent to freeways or heavy industrial uses.

POLICY CN-1.18 PUBLIC INVESTMENT IN PARKS
Coordinate with park renovation and new development to address air quality and climate impacts by reducing the heat island affect by providing green infrastructure and shade, and reducing air pollution by providing vegetation that removes pollutants and air particles.

GOAL CN-2: NATURAL RESOURCES
Preserve and enhance Santa Ana's natural and environmental resources while maintaining a balance between recreation, habitat restoration,and scenic resources.

POLICY CN-2.1 NATIVE WILDLIFE HABITAT PROTECTION
Protect and enhance natural vegetation in parks and open spaces for wildlife habitat, erosion control, and to serve as noise and scenic buffers.

POLICY CN-2.2 BIODIVERSITY PRESERVATION
Collaborate with State and County agencies to promote biodiversity and protect sensitive biological resources.

POLICY CN-2.3 RESOURCE MANAGEMENT
Efficiently manage soil and mineral resource operations to eliminate significant nuisances, hazards, or adverse environmental effects on neighboring land uses.

POLICY CN-2.4 SCENIC ~~LINKAGES~~PRESERVATION

Ensure that development, open space and travelways surrounding key destinations, historic sites, recreational areas, and open space ~~preserve~~protects visual corridors, community aesthetics, and ~~create~~ scenic ~~linkages~~preservation.

GOAL CN-3: ENERGY RESOURCES

Reduce consumption of and reliance on non-renewable energy, and support the development and use of renewable energy sources.

POLICY CN-3.1 INTERAGENCY COORDINATION

Consult with regional agencies and utility companies to pursue energy efficiency goals and expand renewable energy strategies.

POLICY CN-3.2 EDUCATION PROGRAMS

Support education programs to provide information on energy conservation and alternatives to non-renewable energy sources.

POLICY CN-3.3 DEVELOPMENT PATTERNS

Promote energy efficient-development patterns by clustering mixed use developments and compatible uses adjacent to public transportation.

POLICY CN-3.4 SITE DESIGN

Encourage site planning and subdivision design that incorporates the use of renewable energy systems.

POLICY CN-3.5 LANDSCAPING*

~~Encourage~~Promote and encourage the planting of native and diverse tree species to improve air quality, reduce heat island effect, reduce energy consumption, and contribute to carbon mitigation with special focus in environmental justice areas.

POLICY CN-3.6 LIFE CYCLE COSTS

Encourage construction and building development practices that use renewable resources and life cycle costing in construction and operating decisions.

POLICY CN-3.7 ENERGY CONSERVATION DESIGN AND CONSTRUCTION

Incorporate energy conservation features in the design of new construction and rehabilitation projects.

POLICY CN-3.8 ENERGY-EFFICIENT PUBLIC FACILITIES

Promote and encourage efficient use of energy and the conservation of available resources in the design, construction, maintenance, and operation of public facilities, infrastructure, and equipment.

POLICY CN-3.9 ENERGY GENERATION IN PUBLIC FACILITIES

Encourage and support the generation, transmission, use, and storage of locally-distributed renewable energy in order to promote energy independence, efficiency, and sustainability.

POLICY CN-3.10 ENERGY CONSERVATION IN PUBLIC PROJECTS

Work with businesses and contractors that use energy-~~-~~efficient practices in the provision of services and equipment for city construction projects.

POLICY CN-3.11 ENERGY-EFFICIENT TRANSPORTATION INFRASTRUCTURE

Continue to support public and private infrastructure for public transportation such as bus routes, rail lines, and the OC Streetcar.

GOAL CN-4: WATER RESOURCES

Conserve and replenish existing and future water resources.

POLICY CN-4.1 WATER USE

Encourage and educate residents, business owners, and operators of public facilities to use water wisely and efficiently.

POLICY CN-4.2 LANDSCAPING

Encourage public and private property owners to plant native or drought-tolerant vegetation.

POLICY CN-4.3 RECYCLED WATER SYSTEMS

Continue to coordinate with the Orange County Water District, Orange County Sanitation District, and developers for opportunities to expand use of reclaimed water systems.

POLICY CN-4.4 IRRIGATION SYSTEMS

Promote irrigation and rainwater capture systems that conserve water to support a sustainable community.

POLICY CN-4.5 WATER SUPPLY

Continue to collaborate with Orange County Water District and Metropolitan Water District to ensure reliable, adequate, and high quality sources of water supply at a reasonable cost.

POLICY CN-4.6 WATER QUALITY

Work with public and private property owners to reduce storm water runoff and to protect the water quality percolating into the aquifer and into any established waterway.

TABLE CN-3. CONSERVATION ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
GOAL CN-1: Air Quality and Climate Protect air resources, improve regional and local air quality, and minimize the impacts of climate change.		
1.1*	**Air quality planning.** Review existing and monitor the development of new air monitoring and emissions reduction plans prepared by the South Coast Air Quality Management District. Gather and evaluate measures and strategies in such plans for their applicability to and feasibility for Santa Ana.	PBA ~~2021~~ 2022 & annually
1.2*	**Community identification.** Coordinate with the South Coast Air Quality Management District and local stakeholders to pursue a priority community designation for eligible environmental justice areas of the city, with focus on areas with unique needs and highest pollution burden ~~such~~as identified in the ~~Delhi Neighborhood area~~CalEnviroScreen tool. If such designation is not awarded, seek grant funds for activities such as local air quality monitoring.	PBA 2022~~2021~~
1.3*	**Proactive engagement.** Collaborate with the South Coast Air Quality Management District and local stakeholders in environmental justice areas experiencing local air pollutions issues to outline objectives and strategies for monitoring air pollution in advance of the establishment of a community emissions reduction and/or air monitoring plan.	PBA ~~2021~~2022

TABLE CN-3. CONSERVATION ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
1.4*	**Health risk criteria.** Establish criteria for requiring health risk assessments for existing and new industries, including the type of business, thresholds, and scope of assessment. Review existing and establish new regulation to reduce and avoid increased pollution near sensitive receptors within environmental justice area boundaries.	PBA 2022
1.5*	**Agency permits.** Monitor the South Coast Air Quality Management District permitting and inspection process and the Orange County Health Care Agency to identify businesses in Santa Ana with potential hazardous materials or by-products, with a special focus on environmental justice communities. Serve as a liaison for residents to identify potential emission violations. Share information and data with the community on the City's Environmental Quality web page.	PBA ~~2021~~2022
1.6*	**Emissions monitoring.** Coordinate with the South Coast Air Quality Management District to monitor existing air measurements and recommend new air measurements and locations.	PBA 2022
1.7*	**Truck idling.** Evaluate strategies to reduce truck idling found or reported in areas with sensitive receptors, with a priority placed on environmental justice areas.	PBA/PD 2023
1.8*	**Improve older trucks.** Promote the City's Vehicle Replacement Plan and explore the replacement of older trucks through City participation in regional incentive programs and education of Santa Ana private fleet owners of program opportunities.	PWA 2022
1.9*	**Indirect source rules.** Support the development of indirect source rules, drayage truck rules, advanced clean truck routes, and heavy-duty low NOx rules by the South Coast Air Quality Management District.	CMO Ongoing
1.10*	**Interagency team.** Establish an environmental quality interagency team to evaluate, monitor, and make recommendations to address air quality and environmental hazard issues, with a special focus on environmental justice areas. Publish results and information on the City's website through a dedicated Santa Ana Environmental Quality web page.	PBA ~~2021~~2022
1.11*	**Public education.** Augment existing outreach programs to improve public awareness of State, regional~~,~~ and local agencies' roles and resources to ~~assist with~~identify, monitor, and address air quality and other environmental ~~quality concerns~~hazards in the community.	PBA/PWA Ongoing
1.12*	**Data collection for emissions plans.** Coordinate with the South Coast Air Quality Management District to explore ways to initiate data collection efforts for a community emissions reduction and/or community air monitoring plan, including the identification of information needed (new or updated), potential data sources and needed resources, and strategies to engage residents and collect information.	PBA ~~2021~~2022
1.13*	**Community survey on healthy lifestyles.** Plan for and conduct a community survey of residents related to community health, air quality, parks, and community services; with focused outreach for environment justice concerns and priority areas (tie into other City efforts like Strategic Plan, park and recreation planning, community benefits, etc.).	CMO 2022
1.14*	**Expanded interactions.** Identify opportunities to expand regular attendance of City staff and decision-makers at meetings for neighborhoods within environmental justice area boundaries, so that residents and businesses can more easily communicate their unique issues and needs. Include a translator(s) at these meetings so that all residents can engage.	PBA/CMO Ongoing
1.15*	**Expanded representation.** Expand representation of residents from neighborhoods within environmental justice area boundaries by extending residents from such areas to become board, commission, and task force members as openings occur.	PBA/CMO Ongoing
1.16*	**City budget.** Evaluate the City's budget and financial policies to include direction for prioritizing public services and improvements within environmental justice area boundaries. Augment budget meeting presentations to include a	CMO Annually

TABLE CN-3. CONSERVATION ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
	section dedicated to the status of actions and improvements to address the needs of residents within environmental justice area boundaries.	
1.17	**Transportation Demand Management.** Collaborate with the South Coast Air Quality Management District, Orange County Transportation Authority, and other transportation planning agencies to develop a transportation demand management program for small businesses and new multifamily housing in the city to educate and incentivize employees and residents to consider transit, carpool, and active transportation travel choices.	PBA/PWA 2023
1.18	**Support transit.** Support local and regional land use and transportation plans that increase mass transit usage and reduce vehicle trips.	PWA Ongoing
1.19	**Climate Action Plan.** Review and update the City's Climate Action Plan.	PWA 2025
GOAL CN-2: Natural Resources Preserve and enhance Santa Ana's natural and environmental resources while maintaining a balance between recreation, habitat restoration, and scenic resources.		
2.1	**Native planting.** Evaluate opportunities in parks, open spaces, scenic linkages, and greenway corridors to restore native vegetation and establish, where appropriate, native plantings that require limited water and fertilizer. Restoration and establishment of native planting should not limit pedestrian and recreation access.	PRCSA/ PWA 2021 & ongoing
2.2	**Santiago Creek.** Continue working with regional agencies, including the Orange County Flood Control District, to identify opportunities to enhance the natural qualities of Santiago Creek to protect habitat and reintroduce native plants and animals.	PRSCA 2022 & ongoing
2.3	**Channel improvement plans.** Partner with the County of Orange to explore best practices in greenbelt and channel improvement plans for the Santa Ana River and Santiago Creek to preserve natural vegetation.	PRSCA/PWA 2022
2.4	**Preservation of natural and historic resources.** Identify and evaluate potential incentives in the municipal code to encourage protection and enhancement of natural and historic resources.	PBA 2022
2.5	**Programming.** Incorporate the city's natural resources into City plans and recreational programming to facilitate and encourage healthy, safe recreational activities.	PRCSA 2021 & ongoing
GOAL CN-3: Energy Resources Reduce consumption of and reliance on nonrenewable energy, and support the development and use of renewable energy sources.		
3.1	**CALGreen voluntary measures.** Evaluate the feasibility of adopting CALGreen building code nonresidential voluntary measures as mandatory measures by the City.	PBA 2022
3.2	**LEED/ENVISION certification.** Evaluate the feasibility of requiring all major renovations and new construction of City-owned facilities over 5,000 square feet to earn a LEED New Construction Silver Certification or greater. Evaluate feasibility of requiring all existing City-owned facilities larger than 25,000 square feet to obtain the LEED Buildings: Operations & Maintenance Certification. Evaluate the feasibility of requiring all major renovations and new construction of City-owned infrastructure facilities to earn ENVISION Bronze Certification. Consider providing incentives and recognition for new commercial, multifamily projects, and neighborhoods to obtain LEED certification. Incentives may include expedited permitting, rebates on or reduced building permit fees, and density bonuses.	PBA 2022

TABLE CN-3. CONSERVATION ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
3.3	**Green design guidelines.** Update Citywide Design Guidelines to incorporate energy conservation principles, including passive heating and cooling, siting, shading, and material choices. Provide examples of site plans that illustrate energy conservation principles.	PBA 2022
3.4	**Retrofitting existing buildings.** Support and encourage retrofitting existing buildings to achieve energy optimization. Partner with Southern California Edison and other stakeholders to provide incentives, rebates, and expedited permitting for energy retrofit projects and to make residents, property owners, and businesses aware of such programs.	PBA/PWA Ongoing
3.5	**Funding energy projects.** Partner with local businesses, community organizations, and advocacy groups to seek creative financing sources for renewable energy retrofit and new development projects, including subsidized or other low-interest loans, on-bill repayment, and the option to pay for system installation through long-term assessments on individual property tax bills. For affordable housing projects involving City funds, require and incentivize affordable housing developers to meet energy-efficiency goals.	PBA/CDA 2023
3.6	**Funding mechanism clearinghouse.** Establish and maintain a clearinghouse of information on available funding alternatives for renewable energy projects, rates of return, and other information to support developers and community members interested in pursuing renewable energy projects.	PWA/CDA 2022
3.7	**Public awareness.** Create educational programs to sustain public awareness of the importance of resource conservation (e.g., energy, water, and open space), the continued existence of long-term resource demand challenges, and specific conservation tactics that are recommended.	PWA Ongoing
3.8	**Clean electricity.** Coordinate with Southern California Edison to expand the availability of clean/renewable energy services throughout the city, and to explore alternative energy technologies.	PWA 2023
3.9	**Local solar photovoltaics (PV).** Continue to pursue partnerships with government entities and private companies to establish a range of incentive programs to retrofit existing buildings with photovoltaic panels. Incentives could include reduced fees, expedited permit processing, tax incentives, and reduced energy bills. Provide educational resources to residents, property owners, and businesses regarding PV panels and available incentive programs.	PBA 2023
3.10	**Electricity storage.** Consider partnering with local Southern California Edison and local community organizations to pursue opportunities for electricity storage at the building scale, separate from the utility-scale storage operated by Southern California Edison. As battery technologies improve, promote the use of distributed electricity storage at commercial and residential buildings.	CMO 2022
3.11	**Natural carbon sequestration.** Reduce the amount of carbon dioxide that would otherwise be released into the atmosphere through the continued maintenance and expansion of the city's urban forest and development of other green infrastructure. Explore options to include green infrastructure requirements in new public realm plans.	PWA Ongoing
GOAL CN-4: Water Resources **Conserve and replenish existing and future water resources.**		
4.1	**Water education.** Provide educational outreach materials for residents and businesses on proper water use and other water conservation practices.	PWA Ongoing
4.2	**Water smart landscapes.** Promote awareness of the City Landscape and Parkway Improvement Guidelines to require public projects and new private development to incorporate drought-tolerant landscaping. Continue to encourage drought-tolerant retrofits through the Turf Removal Rebate Program and educate property owners about incentives available through the SoCal Water$mart program to public and private property owners for planting native or drought-tolerant vegetation.	PWA/PBA ~~2021~~2022

TABLE CN-3. CONSERVATION ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
4.3	**Green stormwater management.** Identify opportunities for the installation of stormwater best management practices in the public rights-of-way, parking lots, parks, or public buildings, for inclusion into the Capital Improvement Program.	PWA Ongoing
4.4	**Water recycling.** Pursue funding to implement the first phase of the City of Santa Ana Recycled Water Master Plan, with an emphasis on local water recycling programs and cooperation with regional water recycling efforts.	PWA 2023

Notes:
CDA - Community Development Agency
CMO - City Manager's Office
HR - Human Resources Department
PBA - Planning and Building Agency
PWA - Public Works Agency
PRCSA - Parks, Recreation and Community Services Agency
PD- Police Department
* associated with environmental justice policies

GOAL OS-1: PARKS, OPEN SPACE, AND RECREATION

Provide ~~a safe,~~an integrated system of accessible~~, sustainable~~ parks, recreation facilities, trails, and ~~diverse park and facility system with recreational opportunities accessible~~open space to ~~all residents~~serve the City of Santa Ana.

POLICY OS-1.1 PARK MASTER PLAN*

Create and ~~maintain~~regularly update a ~~Santa Ana~~citywide parks master plan ~~that incorporates data on need, demographics,~~to provide guidance for the acquisition, development, maintenance and ~~health outcomes.~~programing of parks, recreation facilities, trails and open space to meet community needs.

POLICY OS-1.2 PARKS AND RECREATION ~~NETWORK~~SYSTEM*

Support a comprehensive and integrated network of parks, ~~open space, and recreational~~recreation facilities, trails and open space that ~~maintains and provides~~provide a variety of active and passive recreational opportunities ~~that meets the needs of all Santa Ana residents, regardless of age, ability, or income~~.

POLICY OS-1.3 PARK STANDARD*

~~Achieve~~Establish and maintain public open space and recreation requirements for new residential and nonresidential development to provide sufficient opportunities for Santa Ana residents and visitors. Strive to attain a minimum ~~citywide park ratio~~ of two acres of park land per 1,000 residents in the City. ~~For new residential development in Focus Areas, prioritize the creation and dedication of new public parkland over the collection of impact fees.~~ [See POLICY OS-1.9]

~~POLICY OS-1.4 PARK CONNECTIVITY~~

~~Establish and enhance options for residents to access existing and new park facilities through safe walking, bicycling, and transit routes.~~

POLICY OS-1.4 PARK DISTRIBUTION*

Ensure the City residents have access to public or private parks, recreation facilities, or trails within a 10-minute walking and biking distance of home. Prioritize park provision, programs, and partnerships in park deficient and environmental justice areas.

[POLICY OS-1.5 moved to POLICY OS-1.9]

POLICY OS-1.5 PARK AND OPEN SPACE TYPES

Provide a mix of community, neighborhood, and special-use parks, along with greenway corridors, natural areas, and landscape areas, to meet community needs for greenspace, recreation space, social space, and trail connectivity.

~~POLICY OS-1.6 SUSTAINABLE LANDSCAPE~~

~~Promote citywide use of drought tolerant landscape and development practices for wise water use and energy consumption.~~

POLICY OS-1.6 PARK ACCESS AND CONNECTIVITY

Create a Safe Routes to Parks program that establishes and enhances access to existing and new parks and recreation facilities through safe walking, bicycling, and transit routes.

[POLICY OS-1.7 moved to POLICY OS-2.12]

POLICY OS-1.7 TRAIL CONNECTIVITY*

Collaborate with other City agencies, partners, and regional entities to provide, and connect regional and

local trails, travelways, and access corridors to support recreation, active transportation, and park and program access. Consider greenways along the OC Streetcar route, flood control channels, and other underutilized sites.

[POLICY OS-1.8 moved to POLICY OS-1.10]

POLICY OS-1.8 LAND ACQUISITION AND EQUITABLE DISTRIBUTION*
Explore options for the acquisition of available lands for parks, open space, greenways and trail corridors, with priority given to sites that are within park deficient or environmental justice areas.

POLICY OS-1.~~5~~9 NEW DEVELOPMENT ~~AMENITIES~~*
Ensure all new development ~~provides open space and~~ effectively integrates parks, open space, and pedestrian and multi-modal travelways to promote a quality living environment. For new ~~residential~~ development ~~in Focus Areas~~within park deficient and environmental justice areas, prioritize the creation and dedication of new public parkland over the collection of impact fees.

POLICY OS-1.~~8~~10 CREATIVE SOLUTIONS FOR DEFICIENCIES
Develop creative and flexible solutions to ~~create infill parks~~ provide greenspace and recreation activities in neighborhoods where traditional ~~pocket, neighborhood, and community~~ parks are not feasible. Encourage public, private, and commercial recreational facilities in areas that are park deficient.

POLICY OS-1.~~9~~11 FUNDING SOURCES
Explore and pursue all available funding, including nontraditional funding sources, for ~~the~~park acquisition ~~of parkland, the~~, facility development ~~of park facilities~~, programming, and maintenance of existing and new parks~~, including nontraditional funding sources.~~. Set aside park funding to have monies on hand to acquire and develop parkland when opportunities arise and to leverage grant options.

POLICY OS-1.~~10~~12 SHARED USE*
Collaborate with school districts, faith-based communities, and community serving organizations to expand shared use facilities through cooperative agreements~~, as well as pursuing multiple use strategies of publicly owned land~~ to maximize recreation options.

POLICY OS-1.13 WATER FEATURES
Maintain, protect, and program the City's lakes, river and creek to support recreation, resource and water quality protection, and community aesthetics.

[POLICY OS-1.11 moved to POLICY OS-2.14]
[POLICY OS-1.12 moved to POLICY OS-2.13]
[POLICY OS-1.13 moved to POLICY OS-2.7]

~~**GOAL OS-2: PUBLIC HEALTH AND SAFETY**~~
~~Provide a system of parks, open spaces, and community centers thatare well-maintained, safe, and healthy environments for all users.~~

GOAL OS-2: HEALTHY, SAFE AND INCLUSIVE OPPORTUNITIES
Provide welcoming, inclusive, safe, and healthy parks, recreation facilities, and activities to serve Santa Ana residents regardless of age, ability, or income.

[POLICY OS-2.1 moved to POLICY OS-2.9]

POLICY OS-2.1 RECREATION VARIETY
Provide a variety of recreation facilities and activities to meet the diverse needs of the community. Consider needs for indoor and outdoor recreation opportunities, as well as traditional and trending activities.

~~POLICY OS-2.2 NEIGHBORHOOD ENGAGEMENT~~
~~Encourage residents, neighborhood groups, businesses, schools, organizations, and public agencies to partner in the creation and maintenance of safe and well maintained publicly-owned park and recreation facilities.~~

POLICY OS-2.2 HEALTHY PARKS AND PUBLIC SPACES
Invest in and activate parks, recreation facilities and greenspace to support active lifestyles, mental health, youth development, lifelong learning and environmental health benefits that support individual and community wellbeing.

[POLICY OS-2.3 moved to POLICY OS-2.8]

POLICY OS-2.3 ACTIVE LIFESTYLES
Invest in parks, trails and programs that support sports, fitness, active transportation, and active lifestyles.

[POLICY OS-2.4 moved to POLICY OS-3.7]

POLICY OS-2.~~5~~ 4 URBAN AGRICULTURE AND HEALTHY FOODS*
Expand urban agriculture opportunities in private development and public spaces, including home gardens, community gardens, and urban farms. Support healthy food choices through amenities and programs.

POLICY OS-2.5 AIR QUALITY AND HEAT
Coordinate park renovation and development to address air quality and climate impacts by reducing heat island effect by providing green infrastructure and shade, and reducing air pollution by providing vegetation that removes pollutants and air particles.

[POLICY OS-2.6 moved to POLICY OS-3.1]

POLICY OS-2.6 CONNECTIONS TO NATURE
Design and develop parks, greenspace, and trail corridors to support community respite, wellness, and the mental health benefits found in connections to nature.

POLICY OS-~~1.13~~2.7 HEALTHY INDOOR ~~RECREATION~~OPTIONS*
Encourage or incentivize new commercial and residential development to provide private indoor recreation space when located in areas with high levels of localized air pollution or if site is adjacent to freeways or heavy industrial uses.

POLICY OS-2.~~3~~ 8 HAZARDOUS MATERIALS*
Reduce or eliminate, ~~as~~where feasible, the use of pesticides and herbicides that negatively impact human health at park facilities and publicly accessible open spaces.

POLICY OS-2.~~1~~9 SAFETY THROUGH DESIGN
Create a safe environment through implementation of Crime Prevention through Environmental Design (CPTED) ~~environmental design~~ principles in public spaces.

POLICY OS-2.10 SAFE USE

Ensure the safety of park visitors and usability of facilities through facility upkeep, landscaping maintenance, surveillance, recreation and social service programs, and partnerships with public and private entities that address public safety and related issues in parks.

POLICY OS-2.11 COMMUNITY INVOLVEMENT AND VOLUNTEERISM*

Encourage residents, stakeholders, neighborhood groups, businesses, schools, social organizations, and public agencies to volunteer and partner in the development, maintenance, and activation of publicly-owned parks and recreation facilities.

POLICY OS-~~1.7~~2.12 ~~COMMUNITY BUILDING~~PARK AND FACILITY CHARACTER*

Ensure that parks and recreation facilities ~~and programs reflect the priorities of residents in the surrounding neighborhoods, with attention to~~ incorporate place~~-~~making elements that foster social ~~interaction~~ connections and community pride such as art, ~~landscape~~landscaping, ~~monuments,~~ murals, ~~play equipment, seating, and community centers.~~and amenities and facilities that reflect site character and local needs.

POLICY OS-~~1.12~~2.13 NEIGHBORHOOD NEEDS*

Consider unique neighborhood and demographic needs in the development of local parks, open spaces and programs. Balance these unique needs with efforts to ensure affordability and serve residents citywide.

POLICY OS-~~1.11~~2.14 ADA ACCESSIBILITY

Design new and renovate~~d~~ existing parks, recreation facilities, and trails to provide access to residents of ~~all physical abilities.~~varying abilities, including people with special needs.

POLICY OS-2.15 INCLUSIVE, AFFORDABLE RECREATION

Provide parks, recreation facilities and programs that reflect the different demographics of the Santa Ana community, including diverse races, ethnic groups, identities, family configurations, abilities, and incomes.

~~**GOAL OS-3: CORRIDORS AND PATHWAYS**~~

~~Preserve, expand, and create additional open space areas and linkages throughout the City to protect the natural and visual character of the community, and to connect to local and regional activity centers.~~

~~POLICY OS-3.1 RECREATIONAL CORRIDORS~~

~~Establish and maintain an integrated recreational and multi-modal commuter corridor network linking open spaces, housing, community services, and employment centers.~~

~~POLICY OS-3.2 LINKING DEVELOPMENT~~

~~Promote alternative modes of transportation and active lifestyles through pedestrian and bicycle linkages to new and existing development, greenway corridors, and open spaces.~~

~~POLICY OS-3.3 PUBLICLY OWNED LAND~~

~~Maintain and explore options for publicly owned land for the creation of open space pathways and corridors.~~
[See POLICY OS-1.8]

~~POLICY OS-3.4 GREENWAY CORRIDORS~~

~~Coordinate with government and private sector to explore opportunities to incorporate pedestrian, multi-modal, and landscape amenities along the OC Streetcar route, flood control channels, and other underutilized sites.~~ [See POLICY OS-1.7]

~~POLICY OS-3.5 VISUAL CORRIDORS~~
~~Protect visual corridors of and adjacent to public open spaces from intrusive and incompatible development.~~ [See URBAN DESIGN ELEMENT]

GOAL OS-3: PARK MAINTENANCE, STEWARDSHIP, AND SUSTAINABILITY

Maintain and manage parks, recreation facilities, trails and open space to sustain City assets and support safe use.

POLICY OS-3.1 PARK AND FACILITY MAINTENANCE*
Ensure all parks, recreation facilities and open spaces are well maintained.

POLICY OS-3.2 MAINTENANCE RESOURCES
Ensure that funding, staffing, and other resources are available to maintain existing parks and facilities, as well as new ones when added to the park and open space system.

POLICY OS-3.3 ASSET MANAGEMENT
Ensure that funding is earmarked for the repair, replacement, and renovation of old or worn amenities, facilities and landscaping in parks when needed or at the end or their lifecycles. This would include deferred maintenance and new capital projects.

POLICY OS-3.4 PROTECTION OF NATURAL, CULTURAL AND HISTORIC RESOURCES
Maintain, preserve, and interpret the City's natural resources, landmarks, urban tree canopy, and designated historical and cultural features.

POLICY OS-3.5 LANDSCAPING
Encourage the planting of native and diverse tree species in public and private spaces to reduce heat island effect, reduce energy consumption, and contribute to carbon mitigation.

POLICY OS-3.6 SUSTAINABLE PARKS AND FACILITIES
Integrate drought tolerant or native plantings, water-wise irrigation, design and maintenance efficiencies, and sustainable development practices to reduce water use and energy consumption.

POLICY OS-~~2.4~~3.7 URBAN FOREST
Maintain, preserve, and enhance the ~~city's~~City's urban forest as an environmental, economic, and aesthetic resource to improve residents' quality of life.

POLICY OS-~~3.6~~3.8 NATURALIZING THE SANTA ANA RIVER
Explore opportunities to reintroduce natural habitat along the Santa Ana River to provide natural habitat and educational and recreational opportunities.

TABLE OS-3. OPEN SPACE ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
Goal OS-1: Parks, Open Space, and Recreation **Provide ~~a safe,~~an integrated system of accessible~~, sustainable~~ parks, recreation facilities, trails, and ~~diverse park and facility system with recreational opportunities accessible~~open space to ~~all residents~~serve the City of Santa Ana.**		
1.1	**Park needs assessment and master plan.** Create, adopt, and implement a park needs assessment and master plan~~that achieves the goals and policies of the Open Space Element, including~~, defining park service areas according to best practices, establishing a service area for each park facility, creating a tool to evaluate needs and prioritize improvements by quadrant or appropriate geographic subarea, and maintaining a list of priorities for the expansion and improvement of open space and recreational facilities in each quadrant or geographic subarea~~. Implement robust efforts to obtain grant funding for parks and open space improvements.~~ to attain a park land standard of 2 acres per 1,000 residents.	PRCSA 2022
1.2*	~~**Indoor recreation.** Explore best practices and options.~~ **Interagency Forum.** Convene an interagency forum to ~~incentivize or require~~take a coordinated approach to evaluating the ~~provision of indoor open space, particularly~~feasibility for converting City-owned properties to parkland, with special focus in park deficient and environmental justice areas~~ that experience high levels of exposure to air pollution~~.	PRCSA ~~2023~~2022
~~1.3~~	~~**Universal access.** Explore options for the systematic completion of Americans with Disabilities Act (ADA) compliance upgrades for all City facilities.~~	~~PWA 2024~~
~~1.4~~	~~**Site inventory.** Identify potential sites in underserved areas, as defined in the parks need assessment, where land could be converted to a park, senior center, community center, or another recreational facility.~~	~~PRCSA 2022~~
1.~~5~~3	**Annual Open Space Summit.** Convene an annual forum to bring together City interagency staff, community leaders, and private enterprise to establish goals for park acquisition and review a status report of metrics associated with progress. ~~**Hours of operation.** Evaluate hours of operation for parks, community centers, and other facilities. Consider the option to extend hours of operation to meet community needs.~~	PRCSA ~~2021~~2022
1.~~6~~4	**No-net-loss of parkland.** Establish land use provisions in the Municipal Code that prevent a net loss of public parkland in the city. Require at least a 1:1 replacement if there is any loss of public parkland due to public or private development.	PRCSA 2022
1.~~7~~5	~~**Grant funding.** Continue robust efforts to obtain grant funding for parks and open space improvements.~~**Park Opportunity Fund.** Incorporate General Funds, cannabis revenues, and private donations into an established Park Opportunity Fund to leverage for matching grants and have monies available when opportunities arise for new park acquisition.	PRCSA 2021 & ongoing
1.~~8~~6	**Development fees.** ~~Consider updating~~ Evaluate the fees required by the City's ~~Acquisition and~~ Residential Development Fee Ordinance and adjust them to better reflect current costs and needs~~ by increasing the parkland dedication requirement, and require that fees collected in place of parkland dedication for specific development projects be utilized to acquire, expand, or improve facilities within the same quadrant or geographic subarea (as defined in the Parks Master Plan) as the project for which the fee was collected.~~. Update requirements regarding where fees are spent.	PRSCA 2022
~~1.9~~	~~**Program and facility fees.** Evaluate program and facility rental fees to ensure that programming is sustainable, and fees are equitable and appropriate.~~	~~PRCSA 2021 & ongoing~~
~~1.10~~	~~**Santa Ana River.** Update the Santa Ana River Vision Plan to expand opportunities to reintroduce natural elements, increase habitat, and provide more recreational opportunities.~~	~~PRCSA/PWA 2024~~

TABLE OS-3. OPEN SPACE ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
~~1.11~~	~~**Evaluate programming.** Evaluate recreational programming through participant service assessment and online public opinion surveys on a periodic basis to identify needed and desired programs.~~	~~PRCSA 2021 & annually~~
~~1.12~~	~~**New programming in underserved areas.** Partner with community organizations to offer new programs that are accessible to residents who live in areas underserved by open space and recreational facilities. Develop a comprehensive partnership policy providing guidelines that can be used throughout the City organization.~~	~~PRCSA 2022~~
~~1.13~~	~~**Community partnerships.** Continue building partnerships with community-based organizations that administer social services to the elderly, youth, and other special needs groups; permit such providers to use public park facilities to meet the recreational and educational needs of these groups.~~	~~PRCSA 2021 & ongoing~~
~~1.14~~	~~**Community input.** Identify and utilize multilingual and interactive community engagement tools, initiated through the Parks and Recreation Master Plan, for residents and facility users to provide ongoing input about open space needs, park design, facility improvements, and programing.~~	~~PRCSA 2022~~
1.~~15~~7*	**Public parkland requirements for larger residential projects.** ~~Amend~~Update the Residential Development Fee ~~in the Municipal Code (Chapter 35, Article IV) to reflect requirements~~Ordinance for Larger Residential Projects ~~(100+ units, residential only or mixed-use) to facilitate the creation two acres of new~~to require public parkland within a 10-minute walking ~~radius of the new residential project. Establish provisions that allow the Larger Residential Projects to reduce all onsite private and common open space requirements by 50 percent if new public parkland is provided within a 10-minute walking radius and by 80 percent if the new public parkland is immediately adjacent to or on the residential project property. Work with property owners and new development~~ distance of the new residential projects ~~within the Focus Areas to identify options (e.g., 100 percent~~. Consider allowing developers a reduction ~~of onsite private and public open space requirements) that would incentivize the creation of public~~ in on-site open space by giving credits for park ~~areas that are more than the minimum and/or if a location can expand~~ development or the provision of private park ~~access for an adjoining underserved neighborhood and/or~~ land. Incentivize the creation of public parks that exceed City requirements, especially within park deficient and environmental justice ~~area.~~ areas. Establish incentives for coordination between two or more residential projects (of any size) to create larger and/or more centralized public park space~~.~~, such as exploring housing density bonus options for the provision of open space as a public benefit and leverage Residential Development fee to partner with developers to create public open space.	PBA/PRCSA 2022
1.8	**Park Foundation.** Establish a 501(c)(3) Parks and Recreation Foundation to establish fundraising support for Santa Ana's park system. Identify communication protocols, roles and responsibilities, and bylaws.	PRCSA 2023 & Ongoing
1.9	**Right-of-way use.** Coordinate with public agencies, railroads, and utilities to determine the feasibility of acquiring the use of rights-of-way for restricted use by the public.	PRCSA/PWA Ongoing
1.~~16~~10*	**New parkland.** ~~**Incentives for more parkland and facilities.** Develop an incentives program that encourages private development and public agencies to provide public park and recreation facilities beyond the minimum requirements.~~Coordinate with property owners to explore options to provide public access and programming in park deficient areas, including options to acquire land through purchase, land dedication, easements, and land leases that would allow for permanent or temporary use of land for recreational opportunities.	PRCSA~~/PBA~~ 2022 & ongoing
1.11*	**Joint-use agreements.** Coordinate with public school districts, private schools, and other community organizations to provide community members with access to additional open space and recreational resources.	PRCSA 2022
1.12	**Santa Ana River.** Update the Santa Ana River Vision Plan to expand opportunities to reintroduce natural elements, increase habitat, and provide more recreational opportunities.	PRCSA/PWA 2024
1.13*	**New programming in underserved areas.** Partner with community organizations to offer new programs that are accessible to residents who live in areas underserved by open space and recreational facilities. Develop a comprehensive partnership policy providing guidelines that can be used throughout the City organization.	PRCSA 2022

TABLE OS-3. OPEN SPACE ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
1.14*	**Community partnerships.** Continue building partnerships with community-based organizations that administer social services to the elderly, youth, and other special needs groups; create use agreements for these providers to use public park facilities to meet the recreational and educational needs of these groups.	PRCSA 2021 & ongoing
1.15*	**Community input.** Identify and utilize multilingual and interactive community engagement tools, initiated through the Parks and Recreation Master Plan, for residents and facility users to provide ongoing input about open space needs, park design, facility improvements, and programming.	PRCSA 2022
GOAL OS-2: ~~Public Health~~Healthy, Safe and ~~Safety~~Inclusive Opportunities **Provide ~~a system of parks, open spaces, and community centers that are well maintained~~welcoming, inclusive ~~environments for all users.~~parks, recreation facilities, and programs to serve Santa Ana residents regardless of age, ability, or income.**		
2.1	**Public safety ~~through environmental design.~~audits.** Conduct public safety ~~through environmental design~~ audits ~~of~~to determine areas with the highest levels of crime; pursue funding to ~~construct~~create public safety ~~through environmental design improvements~~programs based on the recommendations from the audits. Avoid aspects of public safety ~~through environmental design~~ that privatize or segregate open space and recreation facilities.	PD/PBA/PRCSA 2023
~~2.2~~	~~**Park facility maintenance.** Identify deficiencies and deferred maintenance for the park facilities, including cost estimates; program facility improvements into the Capital Improvement Program.~~	~~PRCSA 2022~~
2.~~3~~2	**Enhanced safety.** ~~Through the parks needs assessment, identify areas where~~ **features.** Provide enhanced lighting, cameras, ~~increased patrolling,~~ or other security features that would enhance the safety or perceived safety of parks, trails, and other public spaces; seek grant funding to improve safety measures and program facility improvements into the Capital Improvement Program each year.	PRCSA 2022
2.3	**Park Patrol.** Provide continuous evaluation of existing security program and look at ways to enhance and strengthen; consider formation of neighborhood watch group, park host, or other similar program.	PRCSA 2022
2.4	**Public notification.** Prior to treating areas in the city with pesticides or herbicides, inform the public through signage posted in impacted areas, direct mailers, and announcements on the City website, cable channels, publications, and the City's social media platforms.	PRCSA/PWA 2022
2.5	**Healthy amenities.** As facilities are upgraded, include amenities that improve the health and wellness of residents, including hydration stations and shading devices.	PRCSA 2021 & ongoing
2.6*	**Healthy indoor options.** Explore options to incentivize or require the provision of indoor recreation space, particularly in environmental justice areas that experience high levels of exposure to air pollution.	PRCSA 2023
2.7	**Universal access.** Explore options for the systematic completion of Americans with Disabilities Act (ADA) compliance upgrades for all City facilities.	PWA 2024
2.~~6~~8	**Public input.** Establish a procedure to collect community input regarding park design and programming at the beginning of the planning process whenever a new facility is proposed or when redevelopment of an existing facility is under consideration.	PRCSA 2023
2.9	**Hours of operation.** Evaluate hours of operation for parks, community centers, and other facilities. Consider the option to extend hours of operation to meet community needs.	PRCSA 2021
2.10	**Evaluate programming.** Evaluate recreational programming through participant service assessment and online public opinion surveys on a periodic basis to identify needed and desired programs.	PRCSA 2021 & annually

TABLE OS-3. OPEN SPACE ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
2.11	**Program and facility fees.** Evaluate program and facility rental fees to ensure that programming is sustainable, and fees are equitable and appropriate.	PRCSA 2021 & ongoing
GOAL OS-3: ~~Corridors~~Park Maintenance, Stewardship and ~~Pathways~~Sustainability **~~Preserve, expand, and create additional open space areas and linkages throughout the city to protect the natural and visual character of the community, and to connect to local and regional activity centers.~~Maintain and manage parks, recreation facilities, trails and open space to sustain City assets and support safe use.**		
3.1	**Park and facility maintenance resources.** Evaluate and identify the funding, staffing and resources needed to provide quality preventative and routine maintenance for existing sites as well as planned parks and facilities. ~~**Joint use agreements.** Coordinate with public school districts, private schools, and other community organizations to provide community members with access to additional open space and recreational resources.~~	PRCSA 2022
3.2	**Deferred maintenance.** Assess the condition of parks and facilities, identifying deficiencies, repairs and replacements needed, including cost estimates. Include facility improvements in the Capital Improvement Program. ~~**Right-of-way use.** Coordinate with public agencies, railroads, and utilities to determine the feasibility of acquiring the use of rights-of-way for restricted use by the public.~~	~~PW~~ PRCSA 2022 & ongoing~~Ongoing~~
3.3	**Asset management.** Forecast and track facility lifecycle to plan for the ongoing needs for park and landscaping renovations and replacement. ~~**New parkland.** Coordinate with property owners to explore options to provide public access and programming on sites identified in the site inventory, including options to acquire land, land dedication through easements, and land leases that would allow for permanent or temporary use of land for recreational opportunities.~~	PRCSA 2022 & ongoing
3.4	**Green infrastructure.** Identify and apply funds to implement environmental design practices such as integrating and maintaining native plants, additional trees, bioswales, and other natural and green infrastructure into targeted sites to support sustainability, reduced water and maintenance costs, natural resource protection, environmental education/interpretation, and connections to nature.	PRCSA 2022 & ongoing
3.5	**Urban Forestry Plan.** Coordinate with other City agencies to develop, implement and maintain a citywide tree preservation ordinance and Urban Forestry Plan for parks and open space that provides air pollution mitigation, microclimate modification, noise reduction, and offers an area of recreation, rest, and education.	PRCSA 2022 & ongoing

Notes:
CDA - Community Development Agency
CMO - City Manager's Office
HR - Human Resources Department
PBA - Planning and Building Agency
PWA - Public Works Agency
PRCSA - Parks, Recreation and Community Services Agency
PD- Police Department
* associated with environmental justice policies

GOAL N-1: LAND USE COMPATIBILITY

Ensure that existing and future land uses are compatible with current and projected local and regional noise conditions.

POLICY N-1.1 NOISE STANDARDS

Utilize established Citywide Noise Standards and guidelines to inform land use decisions and guide noise management strategies.

POLICY N-1.2 SOUND DESIGN

Encourage functional and attractive designs to mitigate excessive noise levels.

POLICY N-1.3 REGIONAL NOISE IMPACTS

Collaborate with local and regional transit agencies and other jurisdictions to minimize regional traffic noise and other sources of noise in the City.

POLICY N-1.4 SENSITIVE USES

Protect noise sensitive land uses from excessive, unsafe, or otherwise disruptive noise levels.

GOAL N-2: NOISE GENERATORS

Reduce the impact of known sources of noise and vibration.

POLICY N-2.1 TRANSPORTATION RELATED NOISE

Reduce noise generated from traffic, railroads, transit, and airports to the extent feasible.

POLICY N-2.2 STATIONARY RELATED NOISE

Minimize noise impacts from commercial and industrial facilities adjacent to residential uses or zones where residential uses are permitted.

POLICY N-2.3 TEMPORARY AND/OR NUISANCE NOISE

Minimize the effects of intermittent, short-term, or other nuisance noise sources.

GOAL N-3: AIRPORT AND LAND USE ENVIRONS

Protect sensitive land uses from airport related noise impacts.

POLICY N-3.1 RESIDENTIAL DEVELOPMENT

Residential development within the John Wayne Airport (JWA) 65 dB(A) CNEL Noise Contour or greater is not supported.

POLICY N-3.2 FLIGHT PATHS

Advocate that future flight path selection be directed away from existing noise sensitive land uses.

POLICY N-3.3 RESIDENTIAL MITIGATION

Require all residential land uses in 60 dB(A) CNEL or 65 dB(A) CNEL Noise Contours to be sufficiently mitigated so as not to exceed an interior standard of 45 dB(A) CNEL.

TABLE N-3. NOISE ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
Goal N-1: Land Use Compatibility **Ensure that existing and future land uses are compatible with current and projected local and regional noise conditions.**		
1.1	**City equipment.** As feasible and practical, new equipment purchased by the City will meet noise performance standards consistent with the best available noise reduction technology.	PWA/Finance Ongoing
1.2	**OC Streetcar.** Monitor implementation of mitigation measures outlined in the Final Supplemental Environmental Impact Report for the OC Streetcar.	PWA Ongoing
1.3	**Noise evaluation.** Continue to evaluate the noise impacts of new projects during the development review process; consider requirements for noise analysis conducted by an acoustical specialist for projects involving land uses where operations are likely to impact adjacent noise-sensitive land uses.	PBA Ongoing
1.4	**Agency coordination.** Continue to coordinate with California Department of Transportation and OCTA to evaluate the need for sound barriers or other mitigation strategies along segments of the freeways and transit travel ways that impact existing noise-sensitive land uses.	PWA Ongoing
1.5	**Noise ordinance.** Update the City's noise ordinance to provide more detail about acceptable noise standards for land uses.	PBA/PD 2022
1.6	**Noise mitigation in impacted areas.** Evaluate options to expand noise mitigation in areas that are planned for growth but where ambient noise levels already exceed noise standards.	PBA ~~2021~~2022
1.7	**Disclosure statements.** As part of any approvals of noise-sensitive projects where reduction of exterior noise to the maximum levels specified in the City's General Plan or noise ordinance is not reasonably feasible, require the developer to issue disclosure statements—to be identified on all real estate transfers associated with the affected property—that identifies regular exposure to noise.	PBA ~~2021~~2022
1.8	**Site mobility.** Develop standards to ensure that on-site mobility does not generate excessive noise.	PBA ~~2021~~2022
1.9	**Adjacent jurisdictions.** Continue to monitor development projects in adjacent jurisdictions and comment on projects with the potential for noise impacts in Santa Ana.	PBA Ongoing
GOAL N-2: Noise Generators **Reduce the impact of known sources of noise and vibration.**		
2.1	**Alternative paving.** Evaluate the use of alternative paving materials that can reduce traffic noise, as feasible, depending on roadway conditions and cost-efficiency.	PWA 2024
2.2	**Freeways.** Continue cooperation with Caltrans in the planning of noise attenuation along freeways and assist with outreach efforts to notify residents of major projects that may impact noise levels and aesthetics.	PWA Ongoing
2.3	**Roadway designations.** Periodically review major roadways and designated truck routes to reduce truck traffic through residential neighborhoods and near schools.	PWA Ongoing
2.4	**Rail coordination.** Continue to work with rail owners and operators to manage existing quiet zones, monitor safety adjacent to railroad tracks, and consider feasible alternatives that reduce noise.	PWA Ongoing
2.5	**Site design and technology.** Require that the parking structures, terminals, and loading docks of noise-generating land uses be designed to minimize the potential noise impacts of vehicles on-site and on adjacent land uses. Encourage and/or require feasible technological options to reduce noise to acceptable levels.	PBA Ongoing

TABLE N-3. NOISE ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
2.6	**Mitigate existing impacts.** Identify existing business operations that produce exterior noise above the maximum levels specified in the City's General Plan or noise ordinance for adjacent land uses. Reach out to those businesses to provide educational resources about best practices for noise prevention and mitigation. Assist businesses to implement mitigation strategies through permit assistance, expedited permitting, ~~reduced fees,~~ and other incentives. If the noise impact cannot be mitigated, provide site selection assistance to help businesses relocate to other areas of the city.	PBA/CDA 2023
2.7	**Best practices.** Conduct a study of best practices for the prevention and mitigation of noise impacts on sensitive land uses caused by existing or new business operations.	PBA/PD 2023
2.8	**Nuisance noise.** Review all permit applications, including special use permits, for potential noise impacts. Utilize existing noise ordinances and antinuisance statutes to reduce the occurrence of nuisance noise violations.	PBA Ongoing
GOAL N-3: Airport and Land Use Environs Protect sensitive land uses from airport related noise impacts.		
3.1	**Aircraft altitude standards.** Continue working with the Federal Aviation Administration to determine appropriate altitude standards for aircraft flying over congested areas, taking into account public health and safety.	PBA Ongoing
3.2	**Helicopter noise.** Continue cooperation with the Fire Department and Metropolitan Water District to minimize noise conflicts associated with helicopter activity.	PBA Ongoing
3.3	**Local coordination.** Work with the Airport Land Use Commission to ensure that local noise concerns are proactively addressed.	PBA Ongoing

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GOAL S-1: FLOOD SAFETY

Protect life and minimize property damage, social andeconomic disruptions caused by flood and inundation hazards.

POLICY S-1.1 REGIONAL COLLABORATION

Continue to consult with agencies to maintain the most current flood hazard and floodplain information; use the information as a basis for project review and to guide development in accordance with regional, state, and federal standards.

POLICY S-1.2 CLIMATE CHANGE

Evaluate the need to expand the capacity of flood control facilities to minimize flood hazards to people, property, and the environment based on changing weather conditions associated with climate change.

POLICY S-1.3 STORM DRAIN INFRASTRUCTURE

Update the Drainage Master Plan to prioritize improvements to existing system deficiencies, and plan for infrastructure needs that support the General Plan land use vision.

POLICY S-1.4 CRITICAL INFRASTRUCTURE

Design, construct, and retrofit critical public facilities and utilities located in flood-prone areas to maintain their structural and operational integrity during floods.

POLICY S-1.5 FLOOD AWARENESS

Promote education of flooding hazards and bring awareness to resources and programs that assist property owners, residents, and businesses to protect their homes and property from flood damage.

POLICY S-1.6 ALTERNATIVE FLOOD CONTROL METHODS

Explore and encourage natural flood control infrastructure and techniques that create new open areas to capture storm water, recharge aquifers, prevent flooding, and that expand recreation opportunities.

POLICY S-1.7 SURFACE WATER INFILTRATION

Encourage site drainage features that reduce impermeable surface area, increase surface water infiltration, and minimize surface water runoff during storm events on private and public developments.

POLICY S-1.8 DEVELOPMENT IN FLOOD ZONE

Continue to implement federal, state, and regional requirements related to new construction in flood plain areas to ensure that future flood risks to life and property are minimized.

GOAL S-2: HAZARDOUS MATERIALS

Protect residents and environmental resources from contaminated hazardous material sites and minimize risks associated with theuse, production, storage, transport, and disposal of hazardousmaterials.

POLICY S-2.1 REGIONAL COLLABORATION*

Consult and collaborate with federal, state, and regional agencies to identify and regulate the disposal and storage of hazardous materials, prevent the illegal transportation and disposal of hazardous waste, ~~facilitate the cleanup of contaminated sites,~~ and facilitate the cleanup of contaminated sites.

POLICY S-2.2 HAZARDOUS WASTE GENERATORS*

Collaborate with appropriate agencies to identify and inventory all users and handlers of hazardous materials

to proactively mitigate potential impacts.

POLICY S-2.3 TRANSPORTATION AND STORAGE*

Coordinate with the County of Orange, the California Department of Transportation, and other relevant parties to enforce state and local laws regulating the storage and transport of hazardous materials within the City of Santa Ana, and limit truck routes through the City to arterials streets away from natural habitats and sensitive land uses.

POLICY S-2.4 PLANNING AND REMEDIATION*

Determine the presence of hazardous materials and/or waste contamination prior to approval of new uses and require that appropriate measures be taken to protect the health and safety of site users and the community.

POLICY S-2.5 EDUCATION AND BEST PRACTICES*

Promote public awareness of best practices for and participation in household hazardous waste management and disposal.

POLICY S-2.6 EXISTING SENSITIVE USES*

Partner and collaborate with property owners, businesses, and community groups to develop strategies to protect and minimize risks from existing hazardous material sites to existing nearby sensitive uses, with priority given to discontinuing such uses within environmental justice area boundaries.

GOAL S-3: GEOLOGIC AND SEISMIC HAZARDS

Provide a safe environment for all Santa Ana residents and workers while minimizing risk of injury, loss of life, property damage, and social and economic impacts caused by geologic and seismic hazards.

POLICY S-3.1 HAZARD IDENTIFICATION

Explore opportunities to identify and encourage the upgrade of structures and facilities that are at risk from seismic hazards.

POLICY S-3.2 SEISMIC AND GEOTECHNICAL STANDARDS

Ensure that all new development abides by the current city and state seismic and geotechnical requirements and that projects located in areas with potential for geologic or seismic hazards prepare a hazards study.

POLICY S-3.3 KEY PUBLIC FACILITIES AND SYSTEMS

Coordinate with relevant utility service providers to ensure that major utility systems remain resilient in the event of a major earthquake and are seismically upgraded.

POLICY S-3.4 MULTIAGENCY EDUCATION CAMPAIGN

Develop cooperative partnerships and strengthen communication among public agencies, residents, nonprofit organizations, and businesses to promote sharing of educational information regarding seismic and geologic hazards and safety.

GOAL S-4: AIRCRAFT HAZARDS

Protect the safety of the general public from aircraft hazards.

POLICY S-4.1 STRUCTURES ABOVE 200 FEET

For development projects that include structures higher than 200 feet above existing grade, the City shall

inform the Airport Land Use Commission (ALUC) and submit materials to the ALUC for review. Proposed projects that would exceed a height of 200 feet above existing grade shall be required to file Form 7460-1 with the Federal Aviation Administration.

POLICY S-4.2 FEDERAL AVIATION REGULATION PART 77

Do not approve buildings and structures that would penetrate Federal Aviation Regulation (FAR) Part 77 Imaginary Obstruction Surfaces unless found consistent by the Airport Land Use Commission (ALUC). Additionally, in accordance with FAR Part 77, required applicants proposing buildings or structures that penetrate the 100:1 Notification Surface to file a Form 7460-1 Notice of Proposed Construction or Alteration with FAA and provide a copy of the FAA determination to the City and the ALUC for Orange County.

POLICY S-4.3 LIGHT, GLARE, AND OTHER INTERFERENCE

Minimize hazards to aeronautical operations by ensuring land uses do not emit excessive glare, light, steam, smoke, dust, or electronic interference in compliance with FAA regulations and the John Wayne Airport Environs Land Use Plan.

POLICY S-4.4 HELIPORT/HELISTOP APPROVAL AND REQUIREMENTS

Any proposals for heliports/helipads within the City shall be submitted through the City to the Airport Land Use Commission~~ALUC~~ for a consistency determination. Approve the development of a heliport or helistop only if it complies with the Airport Environs Land Use Plan for heliports. Ensure that each applicant seeking a conditional use permit or similar approval for the construction or operation of a heliport or helistop complies fully with the state permit procedure provided by law and with all conditions of approval imposed or recommended by the FAA, by Orange County Airport Land Use Commission, and by Caltrans/Division of Aeronautics. This requirement shall be in addition to all other City development requirements.

POLICY S-4.5 REFERRAL TO ALUC

Prior to the amendment of the City's general plan or a specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the Airport Land Use Commission (ALUC), and pursuant to Public Utilities Code Section 21676, the City shall first refer the proposed action to the ALUC.

POLICY S-4.6 DEED DISCLOSURE NOTICE

Provide notice of airport in the vicinity where residential development is being proposed within the 60 dBA CNEL noise contours for the John Wayne Airport.

TABLE S-2. SAFETY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
Goal S-1: Flood Safety **Protect life and minimize property damage, social and economic disruptions caused by flood and inundation hazards.**		
1.1	**Agency coordination.** Communicate with FEMA annually regarding updates to Flood Insurance Rate Maps and Letter of Map Revisions.	PBA Annually
1.2	**Flood resistant buildings.** Require that new structures in or near a 100-year floodplain be sited and designed to be flood resistant and not inhibit flood flows. Retrofit existing critical facilities within the floodplain to maintain structural and operational integrity during a flood.	PBA Ongoing

TABLE S-2. SAFETY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
1.3	**Best Practices.** Periodically review county, state, and federal flood control best practices and incorporate appropriate standards into the Municipal Code.	PBA/PWA Ongoing
1.4	**StormReady Program.** Participate in the StormReady Program with the National Weather Service, including the monitoring of storm watches and warnings in real-time.	PD Ongoing
1.5	**Grants.** Work with the Orange County Flood Control District to apply for grants that provide funding for local drainage controls. FEMA's Hazard Mitigation Grant and Flood Mitigation Assistance Programs and Predisaster Mitigation Program, CalEPA, and the State Water Resources Control Board offer grants to municipalities throughout California.	PWA Ongoing
1.6	**On-site stormwater mitigation.** Require new development and significant redevelopment projects in the city to implement best management practices for on-site stormwater retention, where feasible, and other low-impact development stormwater infrastructure to reduce runoff and encourage groundwater recharge.	PWA Ongoing
1.7	**Storm Drains.** Continue to maintain and seek opportunities to upgrade the City's storm drain systems, where needed, with an emphasis on historical flooding areas. This includes regular maintenance and cleaning of storm drains and other flood control structures so that stormwater can be effectively conveyed, and upgrading the storm drain system where it is known to be undersized.	PWA Ongoing
1.8	**Hazard Mitigation Plan.** Prepare, maintain, and regularly update a local hazard mitigation plan.	PD 2021 & update 2 to 3 years~~Ongoing~~
1.9	**Emergency Operations Plan.** Maintain and regularly update an emergency operations plan.	PD Ongoing
1.10	**Climate resiliency.** Explore the development of a climate adaptation plan to respond to the most significant potential climate change risks and vulnerabilities identified in the vulnerability assessment and protect the natural and built environment, residents, visitors, economic base, and quality of life.	PBA/PWA 2022
1.11	**Public education.** Continue to disseminate information on flooding, flood control on private property, floodplains, and flood preparedness to the public through the City website, social media, and at City offices.	CMO/PD 2022
1.12	**Community Emergency Response Team (CERT).** Increase participation in CERT through program promotion and expanded course offerings. Consider partnering with school districts to offer CERT training to city high school students. Encourage CERT participation for City employees.	PD Ongoing
1.13	**Emergency preparedness.** Identify all essential and critical facilities (including but not limited to essential City offices and buildings, medical facilities, schools, child care centers, and nursing homes) in or within 200 feet of the 100-year flood zone, and evaluate disaster response and evacuation plans that address the actions that will be taken in the event of flooding.	PWA/PBA 2023
GOAL S-2: Hazardous Materials **Protect residents and environmental resources from contaminated hazardous material sites and minimize risks associated with the use, production, storage, transport, and disposal of hazardous materials.**		
2.1	**Facility location.** Identify options to prohibit new facilities involved in the production, use, storage, transport, or disposal of hazardous materials in quantities that would place them in the State's Toxic Release Inventory or Small Quantity Generator databases in the 100-year flood zone unless all standards of elevation, anchoring, and flood proofing have been implemented to the satisfaction of the City's Planning and Building Agency and the Orange County Fire Authority.	PBA/OCFD 2022

TABLE S-2. SAFETY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
2.2	**Sensitive use protection.** Consider legislation to prohibit new facilities involved in the production, use, storage, transport, or disposal of hazardous materials near existing land uses that may be adversely impacted by such activities. Prohibit new sensitive facilities near existing sites that use, store, or generate hazardous materials.	PBA 2022
2.3	**Waste drop-off facilities.** Continue to promote off-site hazardous materials and/or electronic waste drop-off.	PWA Ongoing
2.4*	**Lead contamination.** Work with local and regional partners, such as Orange County Environmental Justice, Orange County Health Care Agency and University of California at Irvine Public Health, to understand the prevalence, sources, and implications of lead contamination of soil across Santa Ana. Collaborate with environmental justice stakeholders in proposing solutions to remove hazardous lead-contaminated soils in the city and with benchmarks to measure and track effectiveness of proposed programs.	PBA/CDA ~~2021~~2022
2.5*	**Business education.** Collaborate with state and county agencies and trade organizations to educate and inform industrial business owners about permit regulations required for safe facility operations and about best practices.	PBA/CDA ~~2021~~2022
GOAL S-3: Geologic and Seismic Hazards **Provide a safe environment for all Santa Ana residents and workers while minimizing risk of injury, loss of life, property damage, and social and economic impacts caused by geologic and seismic hazards.**		
3.1	**Public utilities.** Coordinate with the California Public Utilities Commission and/or utilize the Capital Improvement Program. Explore options to strengthen, relocate, or take other appropriate measures to safeguard high-voltage lines; water, sewer, natural gas and petroleum pipelines; and trunk electrical and telephone conduits that extend through areas of high liquefaction potential, cross active faults, or traverse earth cracks or landslides.	PWA/PBA 2024
3.2	**Preparedness practice.** Participate in regional and local emergency exercises, such as the Great California ShakeOut, an annual statewide earthquake drill.	PD Ongoing
3.3	**Preparedness kits.** Enhance public awareness and preparedness by encouraging residents and businesses to store supplies for self-reliance following a disaster. Emergency preparedness kits should include, at a minimum, a three-day supply of drinking water and food for all members of the household or business, including pets. Partner with community organizations to seek funding / provide emergency kits for families who qualify for state or federal aid programs and for families whose children qualify for the free or reduced school lunch program.	PD Ongoing
3.4	**Education programs.** Offer educational programs for residents and businesses regarding preventative actions to take before, during, and after a seismic event, and involve the public in the awareness of City emergency response plans, resources, risk reduction, and mitigation measures.	PD Ongoing
3.5	**High-risk facilities.** Compile and maintain a list of facilities that, because of population demands (such as mobility issues at a nursing home), construction type, location relative to a fault, or other factors, may have a high risk and require special response during a geologic or seismic event.	PBA/OCFA 2025
3.6	**Earthquake Vulnerability Assessment.** Identify resources to conduct an inventory of private buildings that may be particularly vulnerable to earthquake damage, including pre 1940s structures and homes with cripple wall foundations.	PBA 2022
GOAL S-4: Aircraft Hazards **Protect the safety of the general public from aircraft hazards.**		
4.1	**Coordination.** Continue to collaborate internally and with adjacent jurisdictions, appropriate agencies, and the Orange County Airport Land Use Commission as needed on potential development applications and ongoing programs affecting land use and development, affordable housing, transportation, infrastructure, resource conservation, environmental quality, and John Wayne Airport operations and improvement plans.	PBA/PWA Ongoing

TABLE S-2. SAFETY ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
4.2	**Airport regulations and plans.** Continue to comply with Federal Aviation Regulations and adhere to the John Wayne Airport Land Use Compatibility Plan to ensure future development ensures the safety of airport operations and of those living, working, and going to school in Santa Ana.	PBA/PWA Ongoing
4.3	**Development code standards.** Maintain and update as necessary the development code to incorporate appropriate requirements and standards to ensure airport safety and compatibility.	PBA

Notes:
CDA - Community Development Agency CMO - City Manager's Office HR - Human Resources Department
PBA - Planning and Building Agency PWA - Public Works Agency PRCSA - Parks, Recreation and Community Services Agency
PD- Police Department * associated with environmental justice policies

GOAL LU-1: GROWING RESPONSIBLY

Provide a land use plan that improves quality of life and respectsour existing community.

POLICY LU-1.1 COMPATIBLE USES*

Foster compatibility between land uses to enhance livability and promote healthy lifestyles.

POLICY LU-1.2 HOMEOWNERSHIP OPPORTUNITIES

Support innovative development policies to expand homeownership opportunities at all income levels.

POLICY LU-1.3 EQUITABLE CREATION AND DISTRIBUTION OF OPEN SPACE*

Promote the creation of new open space and community serving amenities in park deficient areas that keeps pace with the increase in multi-unit housing development, with priority given to those that are also within environmental justice area boundaries.

POLICY LU-1.4 COUNTY SEAT

Support the location of new and enhanced regional, state, and federal governmental facilities in the Civic Center to reinforce Santa Ana as the County Seat.

POLICY LU-1.5 DIVERSE HOUSING TYPES

Incentivize quality infill residential development that provides a diversity of housing types and accommodates all income levels and age groups.

POLICY LU-1.6 TRANSIT ORIENTED DEVELOPMENT

Encourage residential mixed-use development, within the City's District Centers and Urban Neighborhoods, and adjacent to high quality transit.

POLICY LU-1.7 ACTIVE TRANSPORTATION INFRASTRUCTURE*

Invest in active transportation connectivity between activity centers and residential neighborhoods to encourage healthy lifestyles.

POLICY LU-1.8 DEVELOPMENT TRADEOFFS

Ensure that new development projects provide a net community benefit.

POLICY LU-1.9 PUBLIC FACILITIES AND INFRASTRUCTURE

Evaluate individual new development proposals to determine if the proposals are consistent with the General Plan, and to ensure that they do not compound existing public facility and service deficiencies.

POLICY LU-1.10 DOWNTOWN ORANGE COUNTY

Balance development within the downtown to continue to serve as a cultural and economic hub for existing and future residents.

GOAL LU-2: LAND USE NEEDS

Provide a balance of land uses that meet Santa Ana's diverse needs.

POLICY LU-2.1 EMPLOYMENT OPPORTUNITIES

Provide a broad spectrum of land uses and development that offer employment opportunities for current and future Santa Ana residents.

POLICY LU-2.2 CAPTURE LOCAL SPENDING
Encourage a range of commercial uses to capture a greater share of local spending, and offer a range of employment opportunities.

POLICY LU-2.3 SUPPORTIVE SPACES*
Provide a diversity of land uses that support residents, visitors, and businesses, such as open space, areas for community gatherings, and outdoor entertainment venues.

POLICY LU-2.4 COST AND BENEFIT OF DEVELOPMENT
Balance the benefits of development with its fiscal impacts on the City and on quality of life for the community.

POLICY LU-2.5 BENEFITS OF MIXED-USE
Encourage infill mixed-use development at all ranges of affordability to reduce vehicle miles traveled, improve jobs/housing balance, and promote social interaction.

POLICY LU-2.6 ENCOURAGE INVESTMENT
Promote rehabilitation of properties and encourage increased levels of capital investment to create a safe and attractive environment.

POLICY LU-2.7 BUSINESS INCUBATOR
Support land use decisions that encourage the creation, development, and retention of businesses in Santa Ana.

POLICY LU-2.8 CITY IMAGE
Encourage land uses, development projects, and public art installations that promote the City's image as a cultural and business friendly regional center.

POLICY LU-2.9 OPEN SPACE NEEDS*
Establish and maintain public open space and recreation requirements for new residential and nonresidential uses to provide sufficient open space and recreational opportunities for Santa Ana residents and visitors.

POLICY LU-2.10 SMART GROWTH
Focus high density residential in mixed-use villages, designated planning focus areas, Downtown Santa Ana, and along major travel corridors.

GOAL LU-3: COMPATIBILITY OF USES
Preserve and improve the character and integrity of existing neighborhoods and districts.

POLICY LU-3.1 COMMUNITY BENEFITS
Support new development which provides a net community benefit and contributes to neighborhood character and identity.

POLICY LU-3.2 EMPOWER COMMUNITY*
Facilitate community engagement and dialogue in policy decisions and outcomes affecting land use and development, with supplemental opportunities for proposed planning activities within environmental justice area boundaries.

POLICY LU-3.3 ENFORCEMENT OF STANDARDS
Maintain a robust and proactive code enforcement program that partners with community stakeholders and is responsive to community needs.

POLICY LU-3.4 COMPATIBLE DEVELOPMENT
Ensure that the scale and massing of new development is compatible and harmonious with the surrounding built environment.

POLICY LU-3.5 ADAPTIVE REUSE
Encourage the preservation and reuse of historical buildings and sites through flexible land use policies.

POLICY LU-3.6 FOCUSED DEVELOPMENT
Facilitate the transformation of the transit corridors through focusing medium and high density pedestrian-oriented mixed-use development at key intersections.

POLICY LU-3.7 ATTRACTIVE ENVIRONMENT
Promote a clean, safe, and creative environment for Santa Ana's residents, workers, and visitors.

POLICY LU-3.8 SENSITIVE RECEPTORS*
Avoid the development of industry and sensitive receptors in close proximity to ~~land uses~~each other that could pose a hazard to human health and safety, due to the quantity, concentration, or physical or chemical characteristics of the hazardous materials ~~that they utilize~~utilized, or the hazardous waste ~~that they~~an operation may generate or emit.

POLICY LU-3.9 NOXIOUS, HAZARDOUS, DANGEROUS, AND POLLUTING USES*
Improve the health of residents, students, and workers by limiting the impacts of construction activities and operation of noxious, hazardous, dangerous, and polluting uses that are in close proximity to sensitive receptors, with priority given to discontinuing such uses within environmental justice area boundaries.

POLICY LU-3.10 COMMUNITY ATTRACTIONS
Support the development of regional land uses that allow for entertainment, sports and unique venues that benefit the local community and attract a wide range of visitors.

POLICY LU-3.11 AIR POLLUTION BUFFERS*
Promote landscaping and other buffers to separate existing sensitive uses from rail lines, heavy industrial facilities, and other emissions sources. As feasible, apply more substantial buffers within environmental justice area boundaries.

POLICY LU-3.12 INDOOR AIR QUALITY*
Require new sensitive land uses proposed in areas with high levels of localized air pollution to achieve good indoor air quality through landscaping, ventilation systems, or other measures.

GOAL LU-4: COMPLETE COMMUNITIES
Support a sustainable Santa Ana through improvements to the built environment and a culture of collaboration.

POLICY LU-4.1 COMPLEMENTARY USES
Promote complete neighborhoods by encouraging a mix of complementary uses, community services, and people places within a walkable area.

POLICY LU-4.2 PUBLIC REALM
Maintain and improve the public realm through quality architecture, street trees, landscaping, and other pedestrian-friendly amenities.

POLICY LU-4.3 SUSTAINABLE LAND USE STRATEGIES*
Encourage land uses and strategies that reduce energy and water consumption, waste and noise generation, soil contamination, air quality impacts, and light pollution.

POLICY LU-4.4 NATURAL RESOURCE CAPTURE
Encourage the use of natural processes to capture rainwater runoff, sustainable electric power, and passive climate control.

POLICY LU-4.5 VMT REDUCTION
Concentrate development along high quality transit corridors to reduce vehicle miles traveled (VMT) and transportation related carbon emissions.

POLICY LU-4.6 HEALTHY LIVING CONDITIONS*
Support diverse and innovative housing types that improve living conditions and promote a healthy environment.

POLICY LU-4.7 DIVERSE COMMUNITIES
Promote mixed-income developments with mixed housing types to create inclusive communities and economically diverse neighborhoods.

POLICY LU-4.8 COMMUNITY PARTNERSHIPS*
Collaborate with property owners, community organizations, and other local stakeholders to identify opportunities for additional open space and community services, such as community gardens and gathering places.

POLICY LU-4.9 RECREATIONAL AMENITIES*
Encourage public, private and commercial recreational facilities in areas that are park and open space deficient.

POLICY LU-4.10 THRIVING DOWNTOWN
Encourage new development and enhancement of Downtown Santa Ana through creative, sustainable, and innovative design solutions.

TABLE LU-10. LAND USE ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
GOAL LU-1:Growing Responsibly Provide a land use plan that improves quality of life and respects our existing community.		

TABLE LU-10. LAND USE ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
1.1	**Development Code Update.** Prepare a comprehensive update to the zoning code to ensure that the City's zoning regulations align with the General Plan's goals and policies. Update the Metro East Mixed-Use Overlay District to remove the portion within the 17th Street and Grand Avenue Focus Area. Update the Midtown Specific Plan.	PBA ~~2021/~~2022
1.2	**Community benefits.** Develop a standard of review for evaluation of a new development project's net community benefit by identifying types of community benefits desired in neighborhoods through public outreach. Assess capital costs and ongoing operations and maintenance costs; conduct a financial feasibility analysis to determine the impacts of community benefits on the feasibility of desired types of development.	PBA/CDA 2022
1.3	**Retail business potential.** Conduct and annually update a retail market study for the city's District Centers and Urban Neighborhoods to identify types of businesses that can be supported; conduct outreach to local businesses to inform them of potential business opportunities in these areas.	CDA 2022
1.4	**Affordable infill housing.** Prepare an inventory of affordable housing opportunity sites of publicly held land as well as land owned by nonprofit organizations and churches.	CDA 2022
1.5	**Universal access.** Evaluate the feasibility of developing standards that require a percentage of units in new residential development projects to incorporate universal design principles.	PBA 2023
1.6	**ADUs.** Develop accessory dwelling unit standard plans to facilitate quality site and architectural design while reducing costs and expediting City review and approvals.	PBA ~~2021~~2022
1.7	**Civic Center.** Explore zoning options that could support residential, mixed-use, and additional facilities that could activate Santa Ana's Civic Center and complement zoning for Downtown.	CMO/PBA 2028
GOAL LU-2: Land Use Needs **Provide a balance of land uses that meet Santa Ana's diverse needs.**		
2.1	**Periodic evaluation.** Review and, if necessary, update the General Plan every five years to affirm its vision remains consistent with the community's values.	PBA 2025
2.2	**Annual review.** Prepare a general plan status report annually. Review the General Plan land use objectives and map to ensure they continue to support the community's long-term land use vision. Amend the text, goals, policies, and map as necessary to address new concerns, legislation, and changing conditions.	PBA ~~Apr 1, 2021~~Annually April 1st
2.3	**Projections.** Review and adjust population assumptions and forecasts annually in conjunction with the Department of Finance, SCAG, and the County of Orange/Center for Demographic Research to adequately plan for the growth of housing and jobs.	PBA ~~Jan~~ 2021 Ongoing
2.4	**School sites.** Coordinate with local school districts and community colleges serving Santa Ana residents on the need for new sites as well as plans for surplus property.	CMA/PBA Annually
2.5	**Developer outreach.** Conduct an annual workshop with residential, mixed-use, commercial, and industrial real estate developers to discuss developing projects in Santa Ana; identify challenges that	PBA/CDA 2022~~2021~~

TABLE LU-10. LAND USE ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
	discourage quality development in the city; identify cost implications that impact affordability; implement a plan to address such challenges.	
2.6	**Fee assessment.** Conduct a periodic review of developer fees and assessment districts to ensure fees are adequate to provide services and mitigate impacts of development, with consideration given to feasibility concerns of building new development.	PWA/PBA 2023
2.7	**Fiscal impact model.** Create a project-level fiscal impact model and incorporate requirements that new development be fiscally neutral or beneficial to the City into the development process.	PBA/CDA 2021
2.8	**City-owned land.** Coordinate future disposition of City-owned property and remnant parcels, consistent with the Surplus Land Act.	PWA/CDA Ongoing
2.9	**High-density housing**. Collaborate with Orange County jurisdictions to prepare and distribute public information to explain the need and value of high-density housing in Santa Ana, combat misinformation about high-density housing, and clarify where high-density housing is planned and where it is prohibited.	PBA 2021
2.10*	**Open space requirements.** Evaluate public open space and park requirements in the zoning code for residential and nonresidential uses. Consider requirements and/or incentives to aggregate public open space areas required by two or more uses to form larger and more usable areas and facilities.	PBA/PRCSA 2022
2.11	**Antidisplacement strategies.** Collaborate with community organizations and residents to identify, evaluate, and implement effective and appropriate antidisplacement strategies to address the unintended displacement of vulnerable tenants and property owners due to the introduction of new development.	PBA/CDA 2022
2.12	**Distinctive districts.** Develop and adopt a specific plan or corridor plan for each of the land use focus areas to establish regulations and design standards with consideration of the character, history and uniqueness of existing corridors and neighborhoods.	PBA/ CDA 2022
2.13	**Housing Trust Fund.** Coordinate and support applications by developers to the Orange County Housing Finance Trust for affordable housing rehabilitation projects in Santa Ana.	CDA Ongoing
2.14	**Local preference.** Require a first priority preference for Santa Ana residents and workers in tenant selection policies for affordable housing projects that receive financial assistance from the City or project that qualify for a density bonus	CDA Ongoing
GOAL LU-3: Compatibility of Uses **Preserve and improve the character and integrity of existing neighborhoods and districts.**		
3.1	**CEQA review.** Continue to evaluate land use compatibility through required environmental clearance of new development projects.	PBA Ongoing
3.2*	**Design guidelines and standards.** Update the zoning code's development and operational standards for industrial zones to address incompatibility with adjacent uses, including minimum distance requirements to buffer heavy industrial uses from sensitive receptors. Conduct a study to evaluate and establish appropriate minimum distances and landscape buffers between polluting industrial uses from sensitive receptors such as residences, schools, day care, and public facilities.	PBA ~~2021~~2022

TABLE LU-10. LAND USE ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
3.3*	**Healthy lifestyles.** Collaborate with residents and industry stakeholders to create a program to incentivize and amortize the removal of existing heavy industrial uses adjacent to sensitive uses.	PBA 2022
3.4*	**Funding for air filtration.** Seek funding from South Coast Air Quality Management District and other regional sources for the installation of high-efficiency air filtration systems in buildings, homes, and schools located in areas with high levels of localized air pollution, especially for those within environmental justice area boundaries.	PBA 2022
3.5*	**Business incentive.** Explore economic development incentives and grant funding to encourage existing or draw new business investments in the industrial zones to incorporate more environmentally sustainable practices.	CDA Ongoing
3.6*	**Lead paint abatement.** Coordinate with County of Orange Health Care Agency and community organizations to strengthen local programs and initiatives to eliminate lead-based paint hazards, with priority given to residential buildings within environmental justice area boundaries.	CDA 2021
3.7	**Building massing.** Update the Citywide Design Guidelines to incorporate best practices addressing transitions in building height and bulk for new development adjacent to lower density neighborhoods.	PBA ~~2021~~2022
3.8	**Signage.** Update the sign ordinance to incorporate measures that reduce visual clutter.	PBA 2022
3.9	**Parking.** Through City Interagency collaboration, develop parking management strategies to support the Land Use Plan and reduce dependency on single-passenger vehicles, considering the parking needs for existing development and future activity nodes, changes in automotive technologies and car usage trends, and options for City-operated facilities. Explore parking strategies through pilot projects.	PBA/ PWA ~~2021~~2022
3.10	**Code enforcement.** Continue aggressive code enforcement programs and activities to maintain community pride and promote reinvestment in Santa Ana neighborhoods.	PBA Ongoing
3.11	**Neighborhood aesthetics.** Partner with neighborhood associations to provide educational materials to residents regarding the front yard, parkway, landscape, and fence requirements.	PBA 2022
3.12	**Adaptive reuse.** Update the Adaptive Reuse Ordinance to clarify the areas of opportunity for conversion to new housing.	PBA ~~2021~~2022
3.13	**Growth in focus areas.** Develop incentives to promote development within identified focus areas.	PBA/CDA 2022
3.14*	**Sunshine ordinance.** Update City Sunshine Ordinance, incorporating best practices for outreach in environmental justice areas in Santa Ana.	CMO 2022
3.15*	**Communication tools.** Explore tools for communication with residents and sensitive receptors when new industrial uses are proposed in their areas.	PBA ~~2021~~2022
3.16*	**Health in corridors.** Require a Health Risk Assessment to identify best practices to minimize air quality and noise impacts when considering new residential uses within 500 feet of a freeway.	PBA Ongoing

TABLE LU-10. LAND USE ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
3.17*	**Training for safe practice.** Pursue the EPA Renovate Right Program to train local residential contractors for certification as lead renovators to promote safe work practices and prevent lead contamination.	PBA 2022
3.18*	**Renovations and lead prevention.** Evaluate the feasibility of requiring contractor training and/or certification for safe work practices to conduct residential renovations for pre-1978 structures that may contain existing lead paint.	PBA 2022
3.19*	**Promote health.** Partner with local organizations (e.g., OC Health Care Agency, Latino Health Access, Santa Ana Unified School District, and the Coalition of Community Health Centers) to increase blood lead testing, outreach, education, and referral services through a 'promotora' or community peer outreach model that addresses the root causes of elevated blood lead levels impacting Santa Ana residents, with special focus in environmental justice communities and for children living in pre-1978 housing.	PBA ~~2021~~2022
3.20*	**Safe housing.** Require all residential rehabilitation projects that use local, or HUD federal funds to comply with the Lead Safe Housing Rule, to remove lead paint hazards, depending on the nature of work and the dollar amount of federal investment in the property.	CDA Ongoing
3.21*	**Prevention education.** Collaborate with local organizations such as Orange County Health Care Agency and State Environmental Protection Agency and identify funds to create a Santa Ana Prevent Lead Poisoning Education Program, with special focus on disadvantaged communities and pre-1978 housing stock.	PBA ~~2021~~2022
3.22*	**Public health outcomes.** Support the Orange County Health Care Agency in their role in investigating public complaints regarding lead hazards, through enforcement of local housing standards to assure healthy outcomes.	PBA 2021 & ongoing
3.23*	**Agency permits**. Work with South Coast Air Quality Management District and Orange County Health Care Agency to evaluate existing special permit process and criteria for approval, and identify potential policy changes to minimize issuance of special permits with potential health impacts.	PBA 2022
3.24*	**Public health.** Partner with Orange County Health Care Agency and community serving organizations to evaluate best practices and benefits of preparing a Public Health Plan to address environmental hazards in Santa Ana, with special focus in environmental justice communities. Conduct public meetings to gather information and present preliminary findings.	PBA ~~2021~~2022
3.25*	**Engage EJ communities.** Work with community serving organizations, neighborhood leaders, and residents to form an Ad Hoc Committee to develop ongoing EJ Community Engagement programs, including multilingual communication protocols. Host biannual or quarterly Roundtable meetings with local stakeholders to guide and evaluate implementation of environmental justice policies.	PBA ~~2021~~2022
3.26*	**Health conditions.** Work with Orange County Health Care Agency and local stakeholders including Orange County Environmental Justice and UC Irvine Public Health to identify baseline conditions for lead contamination in Santa Ana, monitor indicators of lead contamination, and measure positive outcomes. Collaborate with these organizations to secure grant funds for soil testing and remediation for residential properties in proximity to sites identified with high soil lead levels, with a focus on Environmental Justice census tracts.	PBA ~~2021~~2022
3.27*	**Groundwater practice.** Coordinate with the State Department of Toxic Substances Control (DTSC) to monitor the Santa Ana Southeast Groundwater Clean Up Project and identify measurable progress to	PBA ~~2021~~ 2022 & annually

TABLE LU-10. LAND USE ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
	remediate groundwater contamination. Share information with the community on the City's Environmental Quality web page.	
3.28*	**Tenant protections.** Provide information to residential tenants regarding Landlord Tenant Laws in the State, such as AB 1481, that provide protections against evictions for those who seek action to improve substandard housing and hazardous conditions.	PBA ~~2021~~ 2022 & annually
3.29*	**Development site history.** Update the City's Development Review application process to require developers to provide information regarding prior use of the site and history of hazardous materials on the property, to identify potential for site contamination from hazardous materials or soil lead contamination to be remediated.	PBA ~~2021~~2022
GOAL LU-4: Complete Communities **Support a sustainable Santa Ana through improvements to the built environment and a culture of collaboration.**		
4.1	**Complete communities.** Create an inventory of neighborhoods that are underserved by essential retail stores and services, identify sites that could accommodate the development and operation of essential retail stores and services, and market these sites to brokers and developers.	PBA 2023
4.2	**Housing opportunity.** ~~Review~~Monitor the effectiveness of the Housing Opportunity Ordinance and provide options for City Council consideration on the requirements, including but not limited to requiring new affordable housing units on site and a mix of housing types at various price points.	CDA 2022
4.3	**Public improvements in activity nodes and focus areas.** Create a public realm plan for each activity node and focus area to establish a unified vision for long-term improvements to streets, sidewalks, plazas, other public spaces, and placemaking elements. Identify public improvement priorities and pilot projects for each focus area. Program priority improvements and pilot projects into the City's Capital Improvement Program.	PBA/ PWA 2022
4.4	**Public/private open space.** Develop and adopt standards that require the provision and maintenance of publicly accessible usable open space within new multifamily, commercial, office, government, and mixed-use development projects. Ensure long-term fiscal sustainability of publicly accessible open space.	PBA/ PWA/PRCSA 2022
4.5	**Open space acquisition funds.** Partner with community organizations to identify opportunities for and pursue grants to fund the acquisition of additional open space and community space in underserved areas, as identified in the parks needs assessment / parks master plan.	PRSCA 2023
4.6*	**Fireworks and environmental pollution.** Study the data available to understand to health effects and environmental exposure, including air quality and noise impacts, from airborne sources such as fireworks shows and displays, with special focus on environmental justice areas.	PBA/CMO/PD 2023
4.7*	**Construction improvements.** Identify best practices and communication tools to monitor mitigation measures and oversight of private and public construction improvements to protect the health and safety of health of the community, with focus on environmental justice areas.	PWA/PBA Ongoing
4.8	**Mixed Use Lifestyles.** Explore establishing thresholds in the Zoning Code to identify minimum percentage of commercial uses to be included in mixed-use land use designations, as supported by economic and fiscal studies. PBA 2022	PBA 2022

TABLE LU-10. LAND USE ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame

Notes:
CDA - Community Development Agency CMO - City Manager's Office HR - Human Resources Department
PBA - Planning and Building Agency PWA - Public Works Agency PRCSA - Parks, Recreation and Community Services Agency
PD - Police Department * associated with environmental justice policies

GOAL HP-1: HISTORIC AREAS AND RESOURCES

Preserve and enhance Santa Ana's historic areas and resources to maintain a unique sense of place.

POLICY HP-1.1 ARCHITECTURAL AND DESIGN STANDARDS

Preserve unique neighborhoods and structures in Santa Ana through implementation of the Citywide Design Guidelines and historic preservation best practices.

POLICY HP-1.2 FEDERAL STANDARDS FOR REHABILITATION

Ensure rehabilitation of historic buildings comply with the Secretary of Interior's Standards for the Treatment of Historic Properties and that new construction in historic districts is compatible with context.

POLICY HP-1.3 HISTORIC DISTRICTS AND DESIGN STANDARDS

Explore opportunities to preserve neighborhoods with largely intact historic buildings and character through the creation of historic districts, identification of historically sensitive areas, or neighborhood context sensitive design standards.

POLICY HP-1.4 PROTECTING RESOURCES

Support land use plans and development proposals that actively protect historic and cultural resources. Preserve tribal, archeological, and paleontological resources for their cultural importance to communities as well as their research and educational potential.

POLICY HP-1.5 STRUCTURE AND SYSTEMS MAINTENANCE

Encourage maintenance, care, and systems upgrades of historic resources to avoid the need for major rehabilitation, prevent loss of historic resources, and remediate health concerns such as lead based paint and mold.

POLICY HP-1.6 LEAD BY EXAMPLE

Ensure that all City-owned historic resources and cultural facilities reflect exceptional architecture and historically appropriate features to celebrate Santa Ana as a world- class city.

POLICY HP-1.7 PRESERVING HUMAN ELEMENT

Encourage participation in oral history programs to capture Santa Ana's historic and cultural narrative.

POLICY HP-1.8 REUSE OF HISTORIC BUILDINGS

Support flexible land use standards to facilitate the adaptive reuse of historic buildings with a variety of economically viable uses, while minimizing impacts to the historic value and character of sites and structures.

POLICY HP-1.9 HISTORIC DOWNTOWN

Strengthen the image and identity of Downtown through unifying design and architectural themes that are compatible with existing historic fabric.

GOAL HP-2: CULTURAL AND HISTORIC RESOURCES

Promote the City's cultural and historic resources to advance Santa Ana's role in Southern California history.

POLICY HP-2.1 RESOURCE STEWARDSHIP

Expand community outreach to educate property owners and businesses regarding responsibilities and stewardship requirements of the City's historic resources.

POLICY HP-2.2 EDUCATIONAL AWARENESS
Provide educational opportunities to foster community awareness and pride in Santa Ana's history.

POLICY HP-2.3 COMMEMORATING HISTORY
Support efforts to identify and commemorate historic structures and sites, and historically sensitive areas in Santa Ana through murals, plaques, and educational exhibits.

POLICY HP-2.4 LOCAL AND REGIONAL PARTNERSHIPS
Strengthen relationships and programs with local and regional institutions and organizations to promote the appreciation, maintenance, rehabilitation, and preservation of Santa Ana's historic and cultural resources.

POLICY HP-2.5 ECONOMIC DEVELOPMENT TOOL
Promote economic development through heritage education and the promotion of tourism.

POLICY HP-2.6 CENTER CORE
Promote Santa Ana's identity as the cultural and historic downtown of Orange County.

GOAL HP-3: HISTORIC PRESERVATION
Develop, implement, and maintain a nationally recognized historic preservation program.

POLICY HP-3.1
HISTORIC RESOURCE SURVEY
Maintain a comprehensive program to inventory and preserve historic and cultural resources, including heritage landscape and trees.

POLICY HP-3.2
INCENTIVIZE PRESERVATION
Support incentive programs that promote restoration, rehabilitation, salvage, and adaptive reuse of historic buildings.

POLICY HP-3.3
ACCESSIBLE PRESERVATION PROGRAM
Explore strategies to promote a historic preservation program that is robust, equitable, and accessible.

POLICY HP-3.4
PRESERVATION PROGRAM CERTIFICATION
Maintain Santa Ana's status as a Certified Local Government (CLG) to further the City's historic resource program and pursue all available funding for preservation.

POLICY HP-3.5
LOCAL PRESERVATION GROUPS
Collaborate with the Santa Ana Historical Preservation Society, community groups, and individuals to promote public awareness and educational opportunities that highlight historic preservation.

POLICY HP-3.6

STAFF DEVELOPMENT

Collaborate with local and regional historic preservation groups to maintain a training program that promotes best practices in preservation techniques.

TABLE HP-2. HISTORIC PRESERVATION ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
Goal HP-1: Historic Areas and Resources **Preserve and enhance Santa Ana's historic areas and resources to maintain a unique sense of place.**		
1.1	**Development standards update.** Amend Specific Development No. 19 and Specific Development No. 40 zoning districts to streamline development processes, incorporate best practices, and make documents user friendly.	PBA ~~2023~~2025
1.2	**Historic designation.** Develop a process to identify and designate a neighborhood as a Historic District.	PBA ~~2022~~2023
1.3	**Mills Act.** Restructure historic designation and Mills Act application and administration processes to reflect industry standards and prioritize resources at risk of being lost.	PBA 2022
1.4	**Design Guidelines update.** Comprehensively update Citywide Design Guidelines to reflect current best practices for sections related to Historic Structures and Downtown Santa Ana.	PBA ~~2021~~2024
1.5	**Historic design standards.** Update historic design standards for preserving historic setting and context, incorporating best practices related to landscape design, front yard fences, and other property features.	PBA ~~2023~~2024
1.6	**Historic resources survey.** Survey all City-owned historic resources to identify condition, maintenance and repair needs, and sources of funding for upgrades.	PRCSA/PWA 2022
1.7	**Oral history**. Seek funding to reinstate local oral history program to capture Santa Ana's historic and cultural narrative.	PRCSA Ongoing
1.8	**Signage improvement.** Seek funding and create incentives program for Downtown Santa Ana façade and signage improvement program.	CDA 2023
1.9	**Adaptive reuse.** Update the Adaptive Reuse Ordinance to provide more flexibility and options for the reuse of historic buildings citywide.	PBA ~~2023~~2025
1.10	**Public realm improvements.** Establish public realm plans for all historic districts, including landscaping, street, sidewalk, lighting, curb cut standards, and pedestrian amenities.	PWA 2026
1.11	**Municipal code update.** Update Chapter 30 of the municipal code (Places of Historical and Architectural Significance) for consistency with national historic standards and industry best practices, including such topics as demolition of historic resources and building signage.	PBA ~~2023~~2024

TABLE HP-2. HISTORIC PRESERVATION ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
1.12	**Tree preservation.** Establish a citywide tree preservation ordinance and program to protect unique natural resources and trees with great cultural capital.	PWA/PBA ~~2021~~2023
GOAL HP-2: Cultural and Historic Resources Promote the City's cultural and historic resources to advance Santa Ana's role in Southern California history.		
2.1	**Educational resources.** Hold bi-annual educational/resource workshops for owners and tenants of historic resources and buildings to ensure responsible stewardship.	PBA ~~2023~~2026
2.2	**Public awareness.** Promote awareness of the city's historic resources and their importance in the development of Orange County.	PBA Ongoing
2.3	**Wayfinding.** Create an interactive, multimedia wayfinding program to highlight historic structures, sites, and events throughout the city.	PBA/PWA ~~2023~~2028
2.4	**City branding.** Include historic resources and cultural imagery in future City branding and marketing campaigns.	CMO 2025
2.5	**Public art catalog.** Create a citywide catalog of public art, including murals, sculptures, and utility box art for use in promoting awareness of Santa Ana's rich historic and cultural resources.	CDA 2021 & Ongoing
2.6	**Active participation**. Participate in and support efforts of existing civic and preservation organizations and business groups to promote the appreciation, maintenance, and preservation of historic and cultural resources.	CDA Ongoing
GOAL HP-3: Historic Preservation Develop, implement, and maintain a nationally recognized historic preservation program.		
3.1	**Educational opportunities**. Dedicate resources for staff and policy makers to participate in historic preservation educational and professional development opportunities.	PBA Ongoing
3.2	**Historic properties**. Update and expand citywide Historic Properties Survey Program to identify potential historic resources for placement on local Register and those that are at risk of losing their historic value, with the first phase to include resource evaluation of the Focus Areas.	PBA ~~2024~~2022 and Ongoing
3.3	**Historical places**. Proactively nominate all properties that potentially qualify for placement on the Santa Ana Register of Historical Places.	PBA 2024
3.4	**Community engagement**. Prepare a community engagement plan that targets communities with historic resources that have low participation rates in historic preservation programs.	PBA ~~2022~~2023
3.5	**Media communication**. Enhance and maintain a web-based tool to promote Santa Ana's local historic resources and provide incentives to encourage historic preservation.	PBA ~~2022~~2023

TABLE HP-2. HISTORIC PRESERVATION ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
3.6	**Historic Resources Commission.** Establish minimum qualifications for participation on the Historic Resources Commission.	PBA ~~2022~~2023
3.7	**Maintain certification**. Maintain Certified Local Government status under the National Parks Service historic preservation program through training and submittal of annual report.	PBA Ongoing
3.8*	**Equitable access.** Establish a fee reduction or waiver program for low-income applicants to ensure equitable access and participation in the Mills Act Program.	PBA 2023
3.9	**Historic building rehabilitation**. Maintain and enhance a low-interest loan program for the rehabilitation of historic buildings.	~~TBD~~CDA 2022
3.10	**Public awareness**. Participate in and support efforts of preservation organizations and business groups to promote public awareness and educational opportunities that highlight historic preservation.	PBA Ongoing

Notes:
CDA - Community Development Agency
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* associated with environmental justice policies

GOAL UD-1: PHYSICAL CHARACTER

Improve the physical character and livability of the City to promote a sense of place, positive community image, and quality environment.

POLICY UD-1.1 DESIGN QUALITY

Ensure all developments feature high quality design, materials, finishes, and construction.

POLICY UD-1.2 PUBLIC ART

Require public art as part of major developments and the public realm improvements.

POLICY UD-1.3 DELINEATION OF PUBLIC SPACES

Encourage site design that clearly defines public spaces through building placement and orientation.

POLICY UD-1.4 SAFETY THROUGH DESIGN

Incorporate public safety design features into private and public developments to prevent loitering, vandalism, and other undesirable activities.

POLICY UD-1.5 ATTRACTIVE PUBLIC SPACES

Encourage community interaction through the development and enhancement of plazas, open space, people places, and pedestrian connections with the public realm.

POLICY UD-1.6 ACTIVE TRANSPORTATION INFRASTRUCTURE*

Support the creation of citywide public street and site amenities that accommodate and promote an active transportation-friendly environment.

POLICY 1.7 VISUAL CLUTTER

Promote the beautification and accessibility of the public realm through the undergrounding of utility lines and aboveground equipment.

GOAL UD-2: SUSTAINABLE ENVIRONMENT

Improve the built environment through sustainable development that is proportional and aesthetically related to its setting.

POLICY UD-2.1 ENHANCED PUBLIC REALM EXPERIENCE

Encourage development to enhance the existing environment through the use of creative architectural design and sustainable streetscape treatments that are consistent on each corridor.

POLICY UD-2.2 COMPATIBILITY AND USE WITH SETTING

Employ buffers and other urban design strategies to encourage the compatibility of new development with the scale, bulk, and pattern of existing development.

POLICY UD-2.3 NEW LIFE FOR OLD BUILDINGS

Encourage the preservation and reuse of historic and architecturally significant structures to maintain urban fabric and reduce overall energy consumption associated with new construction.

POLICY UD-2.4 INTENTIONAL DESIGN

Encourage design and architecture on private and public property that accentuate focal points, activity nodes, and historic areas.

POLICY UD-2.5 RELATION TO SURROUNDINGS
Ensure new development exhibits a functional, comfortable scale in relation to its neighborhood.

POLICY UD-2.6 PRESERVE NEIGHBORHOOD CHARACTER
Preserve the character and uniqueness of existing districts and neighborhoods.

POLICY UD-2.7 BUILDING AND STRENGTHENING IDENTITY
Collaborate with community stakeholders to strengthen and foster development of community and neighborhood identity and district character through complementary architecture, unique streetscapes, and programming.

POLICY UD-2.8 INNOVATIVE DEVELOPMENT STRATEGIES
Explore development and subdivision options that promote new opportunities for sustainable, livable, and affordable development.

POLICY UD-2.9 VISUAL AESTHETIC OF BUILT ENVIRONMENT
Ensure that on and off-premise signs and communication equipment are situated to minimize detrimental impacts to the aesthetic quality, character, and image of the surrounding area.

POLICY UD-2.10 GREENING THE BUILT ENVIRONMENT
Promote planting of shade trees and require, where feasible, preservation and site design that uses appropriate tree species to shade parking lots, streets, and other facilities with the goal of reducing the heat island effect.

POLICY UD-2.11 SUSTAINABLE PRACTICES
Encourage sustainable development through ~~–~~the~~–~~ use of drought tolerant landscaping, permeable hardscape surfaces, and energy efficient building design and construction.

GOAL UD-3: ATTRACTIVE TRAVELWAYS
Create and maintain safe and attractive travelways through coordinated streetscape design.

POLICY UD-3.1 LANDSCAPED TRAVELWAYS
Promote visually appealing and sustainable landscaping along freeway corridors, roadway medians, and parkways.

POLICY UD-3.2 ACTIVATE PATHS*
Strengthen and activate the design of paths and adjacent development through enhanced and cohesive streetscapes, architectural themes, and landscaping.

POLICY UD-3.3 FOSTER COMMUNITY BUILDING*
Promote a safe environment that facilitates social interaction and improves active transportation along corridors.

POLICY UD-3.4 IMPROVEMENTS TO STREETSCAPE
Promote streetscape improvement plans that are responsive to community needs, the nature of adjacent uses, path characteristics, street classification, pedestrian scale, and view corridors.

POLICY UD-3.5 ACTIVITY NODE LINKAGES

Promote streetscape designs that link major destination points, landmarks, and local activity nodes.

POLICY UD-3.6 LINEAR PARK SYSTEM*

Support open space improvements along roadways and non-vehicular paths, such as bike or multi-use trails, to ~~connect~~create linear ~~greenways leading~~open space that connect to a network of parks and activity areas throughout the city.

POLICY UD-3.7 NATURAL RECREATIONAL AMENITIES

Enhance natural and recreational features of Santiago Creek and the Santa Ana River corridors and provide linkages throughout the community.

POLICY UD-3.8 PLEASANT TRAVEL EXPERIENCE

Maximize the use of street trees and parkway landscaping to create a pleasant travel experience and positive City image.

POLICY UD-3.9 SCENIC VIEWS

Preserve and enhance scenic views along corridors and other travelways.

POLICY UD-3.10 COORDINATED STREET IMPROVEMENT PLANS

Coordinate citywide landscape medians and street trees with land use plans and development projects.

POLICY UD-3.11 URBAN FOREST

Create a diverse urban forest with a variety of sustainable trees in medians, parkways, public open space, and private development.

GOAL UD-4: NODES AND PEOPLE PLACES

Create nodes and urban hubs throughout the City to foster community, education, arts and culture, business activities, entertainment, and establish Santa Ana as a vibrant center.

POLICY UD-4.1 INTENTIONAL DEVELOPMENT

Support development growth in nodes consistent with the City's vision as the dynamic urban center of Orange County.

POLICY UD-4.2 IMAGE MAKING THROUGH ARCHITECTURE

Promote development within nodes to reflect the significance of the area and cultivate a positive image of Santa Ana through high quality architecture.

POLICY UD-4.3 ACTIVATE OPEN SPACE

Ensure architectural and landscape design activates open space, as a means to promote community interaction and enhance the aesthetic quality of development.

POLICY UD-4.4 VIBRANT STREET LIFE

Encourage development within nodes that promote pedestrian activities, enhanced amenities, and engaging designs that allow for discovery, excitement, and social interaction.

POLICY UD-4.5 OPEN SPACE AT NODES

Promote creative, multi-purpose public space within nodes, major development projects, and people places.

POLICY UD-4.6 COMMUNITY LED INSTALLATIONS

Provide for opportunities to incorporate distinctive, innovative and community informed public art in plazas and open spaces, to promote pedestrian activity.

GOAL UD-5: FOCUS INTERSECTIONS

Create focal points at major intersections to enhance community identity and open space.

POLICY UD-5.1 BUILDING PRESENCE AT INTERSECTIONS

Create a strong presence at focus intersections by locating intense building mass and open space areas along the street that include high quality design and materials.

POLICY UD-5.2 LINKAGES BETWEEN PUBLIC ART

Promote public art in conveniently accessible and prominent places to physically and visually link development with streetscape and paths.

POLICY UD-5.3 ACTIVATING INTERSECTIONS

Encourage projects at focal intersections that incorporate vertical design features or mixed-use development as a means to provide visual presence and encourage pedestrian activity in these areas.

POLICY UD-5.4 INTERSECTIONS FOR ALL TRAVEL MODES

Strengthen active transportation connections and amenities at focal intersections to promote a pleasant and safe experience for non-motorized forms of travel.

POLICY UD-5.5 COORDINATED FEATURES

Ensure projects within focus intersections incorporate consistent architectural designs, enhanced landscaping, and coordinated signage.

GOAL UD-6: LANDMARKS

Create new and protect existing City landmarks and memorableplaces that convey positive images.

POLICY UD-6.1 DESIGN WITH LANDMARKS

Strengthen the design of development to frame and enhance landmarks, natural features, and view corridors.

POLICY UD-6.2 APPROPRIATE DESIGN NEAR LANDMARKS

Ensure development near existing landmarks is supportive and respectful of architecture, site, and other design features of the landmark.

POLICY UD-6.3 CREATE NEW LANDMARKS

Encourage new development that will lead to the creation of new landmarks in the City and bolster community pride.

POLICY UD-6.4 DECORATIVE FEATURES

Promote coordinated landscaping and decorative features in projects near landmarks that appropriately enhance the vicinity and do not create visual clutter.

GOAL UD-7: GATEWAYS

Create and strengthen gateways into the City that promote a sense of arrival.

POLICY UD-7.1 FIRST IMPRESSION
Strengthen the architectural design of developments near gateways to communicate a sense of arrival and inspire positive images of the City.

POLICY UD-7.2 STREETSCAPE IMPROVEMENTS
Enhance Santa Ana's gateways to include unique and distinctive streetscape improvements.

POLICY UD-7.3 IMPROVED FREEWAY INTERFACE DESIGN
Collaborate with Caltrans and adjacent jurisdictions to enhance freeway interchanges that create a sense of place and arrival.

POLICY UD-7.4 MONUMENTS AT GATEWAYS
Promote imaginative and distinctive features, such as entry monuments, public art, decorative landscape, directional signs, landscape statements, and architectural elements that project a positive image and community character at City gateways.

POLICY UD-7.5 TRANSIT CORRIDOR BEAUTIFICATION
Improve transit and rail corridors and interfaces to create a welcoming experience for all travelers.

POLICY UD-7.6 NEIGHBORHOOD SIGNAGE SYSTEM
Encourage the creation of a citywide signage system that identifies and promotes a sense of place for the city's various neighborhoods.

TABLE UD-2. URBAN DESIGN ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
Goal UD-1: Physical Character Improve the physical character and livability of the City to promote a sense of place, positive community image, and quality environment.		
1.1	**Public art program.** Collaborate with the Arts Director and Commission to develop a citywide public art program. Pursue public art grant-funding opportunities. Evaluate the feasibility of revising the development standard to require public art as part of new development projects and/or imposing a public art impact fee on new development projects.	PBA/CDA 2022
1.2	**Design guidelines.** Update or develop design guidelines that direct architectural design, building siting and orientation, neighborhood identity including monumentation, wayfinding, placemaking elements, and other public realm features for transit-oriented and higher intensity areas.	PBA ~~2021~~2022
1.3	**Signage**. Update the zoning code sign regulations to incorporate best practices to establish a cohesive identity and visually appealing integrated development or district.	PBA ~~2021~~2023
1.4	**Public Safety Through Environmental Design**. Educate City staff on "public safety through environmental design" principles by sponsoring participation in workshops. Update existing design guidelines and require any new design guidelines to include public safety through environmental design best practices. Avoid aspects of public safety through environmental design that privatize or segregate open space areas, recreation facilities, and neighborhoods.	PBA/PD Ongoing

TABLE UD-2. URBAN DESIGN ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
1.5	**Property upgrades**. Develop an incentive program to encourage residents and property owners to maintain and upgrade front yards and buildings.	PBA 2023
1.6	**Funding for placemaking**. Evaluate best practices and standards for public-private partnerships to fund placemaking elements on public property.	PBA 2023
GOAL UD-2: Sustainable Environment Improve the built environment through sustainable development that is proportional and aesthetically related to its setting.		
2.1	**Emerging technology**. Consider updating the zoning code to require mixed-use and multifamily residential projects to incorporate on-site lanes/spaces for transportation network companies (TNC) and other emerging technologies. As parking demand begins to outstrip parking supply in established business districts, conduct curbside management studies to identify pick-up and drop-off areas for TNC services to maintain the character of historic and established districts; reduce parking demand; limit vehicle idling, searching, and circling; and encourage pedestrian activity.	PBA/PWA ~~2021~~2022
2.2	**Creative expression**. Amend the zoning code to update the front yard fence requirements to address innovative designs and neighborhood characteristics.	PBA ~~2021~~2022
2.3	**Billboards**. Amend the zoning code to update the Billboard Ordinance to reflect current advertising practices and capitalize on the freeways that run through the city.	PBA ~~2021~~2022
2.4	**LEED Projects.** Evaluate program or policy options to promote energy efficient development practice such as fee waivers or expedited processing of projects that are certified LEED Gold or Platinum.	PBA 2022
GOAL UD-3: Attractive Travelways Create and maintain safe and attractive travelways through coordinated streetscape design.		
3.1	**Corridors**. Update the zoning code to require new development projects or major renovations along arterial roadways to meet the City's landscape standards and to reflect of the identity and values of the adjacent neighborhoods.	PBA 2022
3.2	**Multimodal transit facility design**. Develop a unique public realm plan for the land use focus areas and transit facilities to guide the design of landscape, hardscape, and amenities to promote walkability and linkages to all modes of transportation, consistent with the City's Active Transportation Plan.	PBA/PWA ~~2021~~2022
3.3	**Bicycle parking**. Update design guidelines for safe and secure bicycle parking, and promote bicycle access for special events. Explore options to update the zoning code to require secure bicycle parking for any new development project that also has a parking requirement.	PBA/CDA 2022
3.4	**Cross-access**. Amend the zoning code to require reciprocal access on commercial development projects adjacent to other commercially zoned developments.	PBA 2022
3.5	**Public realm impact fees**. Create and implement public realm improvement impact fees to fund development and construction of public realm plan improvements.	PWA/PBA ~~2021~~2022
3.6	**Linear parks and trails**. Within the parks master plan, ~~consider incorporating linear parks and~~ address needs for off-street~~ adjacent paths and~~ trails~~ as part of park inventory. Establish a plan for~~, including new linkages and linear park improvements, ~~including~~such as lighting, security features, signage, and enhanced landscaping.	PRCSA 2022

TABLE UD-2. URBAN DESIGN ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
3.7	Streetscape Improvements. Collaborate with community organizations to conduct a citywide windshield study to identify arterial streets or corridors in most need of comprehensive streetscape improvements. Identify funding or resources to complete Public Realm Plans for these corridors to enhance the pedestrian experience, amenities, safety, sense of place and aesthetics.	PBA/PWA 2022
3.8	Maintenance District. Evaluate and consider a program that requires developers/owners to pay into a maintenance district that absorbs the costs for maintaining public realm improvements.	PBA/PWA 2023
GOAL UD-4: Nodes and People Places Create nodes and urban hubs throughout the City to foster community, education, arts and culture, business activities, entertainment, and establish Santa Ana as a vibrant center.		
4.1	Museum District. Continue to enhance and develop policies and design standards for the Museum District to encourage private and public improvements that promote the arts, education, culture, and activity centers.	PBA/CDA 2022
4.2	Channels. Explore opportunities to reestablish waterways for recreational and educational purposes.	PWA/PRCSA 2025
4.3	Allowable uses. Expand the types of outdoor uses in public spaces to allow for additional social activities and community-focused entertainment.	PBA 2024
4.4	Community advertising. Explore options to incorporate digital signage or advertisements that promote community activities on small-scale structures such as bus shelters or trash receptacles.	PBA/PWA/CDA 2022
4.5	Emerging technologies. Collaborate with wireless and technology companies to create wireless charging areas in public spaces. Evaluate the feasibility of installing solar-powered charging stations. Evaluate the feasibility of providing free public WiFi in select park areas and public plazas. In the parks master plan include consideration for adapting public spaces to respond to changes in the way residents live and interact with their environment as a result of emerging technologies.	PRCSA/PWA 2024
GOAL UD-5: Focus Intersections Create focal points at major intersections to enhance community identity and open space.		
5.1	Landscaping at focus intersections. Develop landscape design standards for developments adjacent to or at focus intersections.	PBA 2023
5.2	Public art at focus intersections. Explore a collaborative program with schools, nonprofit organizations, and local artists to create and maintain public art in public spaces.	CDA 2023
5.3	Placemaking elements at focus intersections. Coordinate street signage and branding at focus intersections, consistent with public realm plans and district identity.	PWA/PBA 2024
GOAL UD-6: Landmarks Create new and protect existing City landmarks and memorable places that convey positive images.		
6.1	Landmarks. Establish and implement a Landmark program that identifies, maintains, and promotes city landmarks and memorable places.	PBA/CDA 2024
6.2	Natural landmarks. Update the Santa Ana River Vision Plan to develop the Santa Ana River and Santiago Creek as natural landmarks within the city.	~~PRCA~~PRCSA 2024

TABLE UD-2. URBAN DESIGN ELEMENT IMPLEMENTATION

Ref #	Implementation Action	Agency / Time Frame
GOAL UD-7: Gateways **Create and strengthen gateways into the City that promote a sense of arrival.**		
7.1	**Enhanced gateways**. Pursue funding to develop and maintain a signage, lighting, and landscape program at gateways leading into the city.	PBA/PWA 2023
7.2	**Gateway impact fee**. Consider amending the zoning code to require projects within proximity of a defined city gateway to incorporate gateway design features. If the development project is unable to integrate such features on-site, an in-lieu fee may be paid into a gateway fund.	PBA/PWA ~~2021~~2022

Notes:
CDA - Community Development Agency
CMO - City Manager's Office
HR - Human Resources Department
PBA - Planning and Building Agency
PWA - Public Works Agency
PRCSA - Parks, Recreation and Community Services Agency
PD - Police Department
*associated with environmental justice policies

Appendix B-b Santa Ana Buildout Methodology

Appendices

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Santa Ana General Plan Buildout Methodology

September 2020

Purpose, Design, and Limitations

The following summarizes the methodology and factors used to calculate existing and buildout conditions for purposes of the General Plan and its analysis through an environmental impact report. All figures are estimates generated using the best available data for analysis at a citywide level, with additional detail provided by specific planning/focus areas and traffic analysis zones.

Whenever possible, the figures generated were derived from authoritative data sources, such as the U.S. Census or California Department of Finance. Such sources are subject to their own error rates and may summarize data at different geographic levels or in different categories. When more precise data was not available, figures generated for existing and projected figures were compared to aggregated or citywide totals from authoritative sources, understanding that such comparisons are primarily for the purpose of determining order-of-magnitude accuracy.

It is important to note that the buildout figures represent an informed but estimated projection of a future condition. The actual construction of development will likely vary by parcel and planning area in terms of location and mix of uses. The analysis in the General Plan Environmental Impact Report provides a programmatic assessment of potential impacts, enabling tiering for future projects that are consistent with the assumptions on some CEQA topics (other project-level impacts will still need to be evaluated through the appropriate environmental clearance under CEQA).

Existing Conditions

Housing Units and Building Square Footage

Existing conditions figures (see Table 1) reflects the built environment as of January 2020, using parcel data from the City of Santa Ana Planning Information Network, augmented by projects listed as already under construction in the City's January 2020 monthly development project report (see Table 5).

Households and Population

The number of households was generated by multiplying the total number of housing units by the occupancy rate as reported by the California Department of Finance for 2019 (see source notes in Table 4). Population was generated by multiplying the total number of households by persons per household rates, varying for single family and multi-family units, as reported in the 2018 American Community Survey 1-year estimates (see Table 4).

Students

The number of K-12 and college students currently attending schools in Santa Ana was obtained from the California Department of Education and Rancho Santiago Community College District, respectively (see Table 5).

Employment

The number of jobs (employment) in Santa Ana was generated by dividing building square footage (by land use) by employment generation factors (see Table 3). The building use and square footage data was obtained from the City of Santa Ana Planning Information Network, augmented by projects listed as already under construction in the City's January 2020 monthly development project report. The employment generation factors were derived by first dividing the building square footage by factors provided by the City and sourced to the Santa Ana OCP 2002/2006 Interagency Team. The results were compared to total employment figures reported citywide and by industry sector (with rough equivalents identified for each land use category), by the U.S. Census Bureau for 2017. The employment generation factors were adjusted as necessary to bring calculated figures for existing employment generally in line with figures reported by the U.S. Census in 2017.

Employed Persons

The number of employed persons is calculated exclusively as an input into the Orange County Traffic Analysis Model (OCTAM) to conduct the traffic analysis of the General Plan as part of the environmental impact report. The total estimated number of employed residents varies between different U.S. Census datasets. The Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics (LEHD) reports data based on W-2 and W-4 forms related to wages and worker's compensation, while the American Community Survey relies on statistical surveys of self-reported data. The LEHD figures are generally considered more appropriate for traffic analysis purposes since the job information is more consistent and more likely to involve vehicular travel outside of the home.

The number of employed persons in Santa Ana was generated by multiplying the total population in households by the percentage of population age 16 and over by the employment-to-population ratio, as reported by the U.S. Census Bureau in 2018 (see Table 4). These calculations, drawn from the ACS, are then reduced proportionally to bring figures in line with the total reported by LEHD.

Buildout Conditions

Proposed Plan

In coordination with a General Plan Advisory Group, the City identified five areas suited for new growth and development: South Main Street, Grand Avenue/17th Street, West Santa Ana Boulevard, 55 Freeway/Dyer Road, and South Bristol Street. These five areas are located along major travel corridors, the future OC Streetcar line, and/or linked to the Downtown. In general, many areas currently designated for General Commercial and Professional Office are expanding opportunities for residential development through a proposed change to the Urban Neighborhood or District Center General Plan land use designations. Industrial Flex would be introduced where Industrial land use designations currently exist within each of the five focus areas in order to allow for cleaner industrial and commercial uses with live-work opportunities.

There are seven other planning areas that represent specific plans and other special zoning areas that were previously adopted: Adaptive Reuse Overlay (2014), Bristol Street Corridor Specific Plan (1991/2018), Harbor Mixed Use Corridor Specific Plan (2014), MainPlace Specific Plan (2019), Metro East Mixed Use Overlay Zone (2007/2018), Midtown Specific Plan (1996), and Transit Zoning Code Specific Development (2010). The potential for new development in these areas is based on the forecasted buildout at the time of the respective zoning

document's adoption, minus the amount of new development built between their adoption date and 2019. The most recent adoption/amendment date for each zoning document is noted above in parentheses.

Growth outside of the focus areas and special planning areas is expected to be incremental and limited. Some growth was projected for the professional office surrounding the Orange County Global Medical Center and along Broadway north of the Midtown Specific Plan. Some growth was also projected for the commercial and retail area south of the West Santa Ana Boulevard focus area. Finally, some additional residential development is expected to occur on a small portion (five percent) of single-family and multi-family lots through the construction of second units.

Focus Areas

Parcels within focus areas were first evaluated for the potential for new uses (units or building square footage), through redevelopment, intensification, and/or turnover. The analysis was conducted by MIG in 2019, in support of the City of Santa Ana, using the City of Santa Ana Planning Information Network as of April 2019. MIG determined the potential based on the building-to-land-value ratio. Those parcels that were vacant or exhibited a building-to-land-value ratio below 1.0 were determined to have potential for new uses. Exceptions include religious and governmental institutions.

For parcels without the potential for new uses, existing building square footage (non-residential) and/or existing units (residential) were carried over into future buildout. For parcels with potential for new uses, buildout factors can be found in Table 2. These factors were established by the City, assisted by MIG, based on a comparison of development throughout southern California that matched the vision established for each focus area. MIG identified the density and intensity factors corresponding with such development to inform the City's focus area buildout factors.

After calculating future buildout conditions using the density/intensity factors, PlaceWorks assisted the City in evaluating the potential implications of the potential buildout figures for each focus area, informed by analyses by IBI Group (circulation) and AECOM (market) conducted in 2019 and 2020. PlaceWorks concluded that the City should not assume a maximum theoretical buildout based on maximum density/intensity standards but should forecast and plan for growth beyond current market demand. PlaceWorks recommended that the City apply a buildout factor of 80% to the totals generated using the factors in Table 2 to arrive at buildout projections for 2045 that are realistic, market-friendly, consistent with the visions for each focus area, and more compatible with the proposed roadway network. The following information substantiates the General Plan buildout development assumptions and adjustments.

Realistic vs Maximum Theoretical Buildout

Density and intensity standards are provided in a general plan to convey the maximum scale and intensity for broad land use categories. Zoning standards are then applied at a parcel level to guide and control density and intensity at a development project level. When calculating buildout, a jurisdiction is permitted to assume that every single parcel will develop at the maximum permitted density/intensity. However, this assumption of absolute buildout runs the risk of overestimating the amount of building space and residential units within the identified planning horizon (in this case the year 2045). Overestimating buildout can lead to unnecessary and misleading concerns, mitigation measures, and planning efforts, as well as a misallocation of current and future

public funds. Accordingly, the City of Santa Ana General Plan calculated a realistic or more likely buildout scenario for projecting growth between 2020 and 2045.

Past Development Trends

While 25 years is a long period of time, the City of Santa Ana is a highly urbanized place containing relatively few vacant lots. The process of intensifying and/or redeveloping parcels of land that already contain functional uses and structures is often substantially more complicated and costly compared to developing vacant land. A review of the City's property records indicates that the pace of new development, intensification, and redevelopment has occurred over a much longer period of time to reach where the City is today. The average floor area ratios (amount of building space compared to the total area of the parcel) throughout the focus areas are 0.22 to 0.41 for commercial, 0.28 to 0.43 for industrial, 0.26 to 1.29 for office, and 0.40 for mixed use. Average densities are 4.5 to 6.5 dwelling units per acre (du/ac) for single family units and 13.5 to 24.8 units per acre for multi-family units.

Current Development Trends

Of course, past development trends do not necessarily match the likely and/or desired scale, intensity, or pace of new development envisioned by the updated General Plan. Current development trends can be identified through recent development projects and applications. The following list contains projects that were under construction, entitled, or in review as of January 2020. The projects are listed by planning area, with the proposed project intensity details shown alongside the maximum intensity standards of the desired general plan or zoning designation. This list demonstrates that some current projects are building to their maximum potential, but the majority are building at roughly 60% to 75% of the maximum potential (either in terms of residential density and/or building space).

- Metro East Mixed Use Overlay
  - Active Urban District, no maximum on stories
    - AMG Family Affordable Apartments, 6 stories, 80 du/ac, 10,000 sq. ft. of commercial
    - Central Pointe Mixed-Use Development, 5 stories, 75 du/ac, 8,800 sq. ft. of commercial
    - The Madison, 6 stories, 93 du/ac, 6,600 sq. ft. of commercial
    - Wermers Elks Site "Elan" Mixed-Use Development, 6 stories, 97 du/ac, 20,000 sq. ft. of commercial
  - Neighborhood Transitional District, allows up to 4 stories
    - AMCAL First Street Apartments, 3 stories, 32 du/ac
- 55/Dyer Focus Area
  - District Center, up to 90 du/ac, up to 1.7 FAR (Heritage) and up to 5.0 FAR (Bowery)
    - The Bowery Mixed-Use Project, 79 du/ac, 80,000 sq. ft. of commercial
    - The Heritage, 65 du/ac, 18,400 sq. ft. of commercial, and 56,000 sq. ft. of office
- MainPlace Specific Plan
  - District Center, up to 90 du/ac, up to 2.1 FAR
    - 2700 N Main, 71 du/ac
    - Magnolia at the Park, 58 du/ac
- Adaptive Reuse Overlay
  - Adaptive reuse standards/incentives, minimum 500-sq. ft. units, can exceed general plan density
    - Meta Housing Santa Ana Arts Collective Adaptive Re-Use, 61 du/ac

- Transit Zoning Code
  - Transit Village Zone, up to 25 stories
    - Crossroads at Washington, 4 stories, 38 du/ac, 10,060 sq. ft. of commercial
  - Downtown Zone, up to 10 stories
    - 3rd & Broadway, 10 stories of residential, 14,816 sq. ft. of commercial, 75-room hotel
    - 4th and Mortimer Mixed-Use Development, 6 stories of residential, 49 du/ac, 15,800 sq. ft. of commercial
    - First American Title Co. Site, 7 stories of residential, 12,350 sq. ft. of commercial
  - Urban Neighborhood 2, up to 5 stories
    - Tom's Trucks Residential & Adaptive Reuse Development, 3 stories, 14 du/ac

Market Analysis

AECOM conducted a market analysis for the General Plan update in 2019 and 2020 (final Santa Ana Economic Indicators Report, May 2020). The report concluded that the demand for new residential development could reach upwards of 15,520 units through 2040 (including pipeline projects, per Figure 7.2 in the Economic Indicators Report Report), although the report also noted that housing demand could increase if the housing pipeline remains strong if it can increase its capture rate of countywide growth. AECOM determined that future demand for office and industrial space would continue to be in line with historical rates, and demand for retail would continue to be tied to household growth and spending. While such findings may seem to justify relatively low levels of growth (especially compared to maximum buildout standards), jurisdictions must plan increased capacity throughout planning areas to create responsive and flexible market areas. New development requires not only market demand but also property owners willing to sell and/or redevelop. This means that new development is often limited to a fraction of the land theoretically available and suitable for reuse and/or development.

Density Bonus Assumptions

State law allows a graduated density bonus for the inclusion of affordable housing units --- for an increasing number of affordable units (by percentage), a project is allowed an increasing ability to exceed the permitted density. The amount of density bonus is generally capped at 35 percent. Recent updates to state housing law (Assembly Bill 1763, effect January 1, 2020), enables projects that are 100 percent affordable (either 100% lower income or 80% lower and 20% moderate (as defined in Section 50053 of the Health and Safety Code), to obtain a density bonus of 80 percent, or no limit if within one-half mile of a major transit stop.

However, not every project will include affordable units and not every project that includes affordable units will need a density bonus. Projects are not required to build at densities that exceed maximum limits; the law only requires that jurisdictions grant the density bonus if requested. The buildout methodology was based on past development trends, current development trends, and a forecasted market analysis. These trends accounted for any units approved (density bonus or otherwise), to determine the appropriate density and amount of development to assume.

Additionally, the optimal density of affordable units is at or below the densities levels assumed for forecasting buildout. Generally, projects beyond 50 to 70 units per acre require Type 1 construction (steel and concrete structure), which is dramatically more expensive compared to Type V construction (wood structure).

Accordingly, affordable projects are rarely greater than 70 units per acre (exceptions for very small parcels). The average densities used to calculate projected buildout at 2045 are 50 to 90 units per acre in the three most intense focus areas (55/Dyer, 17th/Grand, and South Bristol), with the other two applying a residential assumption at 30 units per acre over a broad area to account for development at or above the maximum density of 30 units per acre (maximum is 20 units per acre for projects proposed exclusively residential in the South Main Focus Area; maximum is 30 units per acre for a relatively small part of the West Santa Ana Boulevard Focus Area).

Roadway Network Performance

IBI Group conducted an analysis of existing roadway conditions in 2019 (documented in Section 5 of Santa Ana General Plan Update Traffic Impact Study, June 2020), including an analysis of existing and future roadway segment and intersections that are likely to experience roadway congestion issues created by future growth, even with feasible mitigation. While roadway congestion (level-of-service or LOS) is not a topic evaluated in the environmental impact report (removed through Senate Bill 743, passed in 2013), the performance of the City's roadway network remains a concern of the City and its residents, businesses, and other stakeholders. PlaceWorks and IBI Group recommended reduced (below absolute maximum) buildout assumptions for the focus areas given known or likely roadway (segment and/or intersection) performance issues alongside the City's desire to make adjustments to a number of roadway classifications.

Adopted and Existing Plans

Adaptive Reuse (AR) Overlay Zone

In consultation with the City, it was determined that 1,000 residential units could be developed over the planning period. ~~A total of 800 units were distributed proportionally among parcels covered by AR Zone only (not in a specific plan or focus area). The remaining 200 units were distributed proportionally among parcels throughout the Midtown Specific Plan.~~ For non-residential building square footage, it was assumed that no additional growth would occur during the planning period, and existing building square footage was carried over into future buildout.

Bristol Street Corridor Specific Plan

The City was determined that parcels with existing single/multi-family units would not redevelop during the planning period, and therefore existing units were carried forward into future buildout. For non-residential building square footage, due to the location and age of existing non-residential development, turnover was considered to potentially occur during the planning period.

Harbor Street Corridor Specific Plan

The Harbor Corridor Specific Plan was adopted in 2014 and included a comprehensive buildout analysis that spanned a similar planning period. Accordingly, the buildout conditions were carried over as detailed in the Specific Plan, adjusting for new development constructed or entitled since 2014.

MainPlace Specific Plan

The MainPlace Specific Plan was adopted in 2019 and included a comprehensive buildout analysis that spanned a similar planning period. Accordingly, the buildout conditions were carried over as detailed in the Specific Plan, adjusting for new development constructed or entitled since 2019.

Metro East Overlay Zone

The Metro East Mixed Use Overlay Zone, adopted in 2007 and amended in 2018, included a cumulative buildout analysis that spanned a similar planning period. Accordingly, the buildout conditions were carried over as detailed in the Specific Plan, distributed proportionally throughout the plan area and adjusting for new development constructed or entitled since 2019.

Midtown Specific Plan

The City determined that the Midtown Specific Plan (adopted in 1996) would experience little net growth during the planning period, so existing single/multi-family units and building square footage were ~~largely~~ carried forward into future buildout. ~~To account for adaptive reuse projects, 200 multifamily units were distributed across eligible parcels~~Some properties may turn over during the planning period, but the City does not expect redevelopment at a greater density or intensity.

Transit Zoning Code

The Transit Zoning Code was adopted in 2010 and included a cumulative buildout analysis that spanned a similar planning period. The cumulative buildout conditions for residential and non-residential development were carried over as detailed in the Specific Plan, distributed proportionally throughout the plan area according to the block system established in working maps (previously identified under the Draft Renaissance Specific Plan).

All Other Areas of the City

The City assumed a small increase (five percent) of residential units through the construction of second units, which are distributed throughout the City by traffic analysis zone and is not concentrated in a subset of neighborhoods. A 10 percent increase in non-residential building square footage (and associated employment), was assumed for the professional offices surrounding the Orange County Global Medical Center and along Broadway north of the Midtown Specific Plan, as well as the commercial and retail areas along 1st Street south of the West Santa Ana Boulevard focus area. Current development projects as listed in the City of Santa Ana monthly development project report (as of January 2020), were incorporated as follows: projects under construction and nearing occupancy were factored into the existing conditions figures; all other projects were included as potential future growth.

Current General Plan

As part of the technical analyses, it is common to evaluate a buildout scenario that reflects the currently adopted General Plan. It is also important to keep the overall buildout approach generally consistent with that used in developing the Proposed Plan buildout, with obvious exceptions for areas that are planned differently—in this case, the focus areas. The buildout for focus areas was based on the land designations as of January 2020, using a combination of current assumptions stated in the 1998 Land Use Element (Table A-4, Land Use Plan Build-out Capacities), past and current trends, and the results of the 2020 Economic Indicators Report by AECOM.

Other Projections

Orange County Projections (OCP)

The Center for Demographic Research (CDR) is the entity through which jurisdictions in Orange County distribute and generate population, housing, and employment projections for Orange County. This includes the use of OCP

figures to communicate expected growth for the regional transportation plan. The latest OCP figures were finalized (September 2018) prior to the current land use planning and buildout efforts associated with the General Plan update. Interim adjustments can be made to the OCP figures if significant changes in land use or other policies will have a significant impact on the projections, and if these changes can be documented. The buildout for the Santa Ana General Plan will be finalized upon the adoption of the General Plan at the end of 2020, with implementation beginning in 2021. The General Plan land use plan and buildout projections will be incorporated into the OCP figures in 2021/2022.

Southern California Association of Governments (SCAG)

As the metropolitan planning organization SCAG is responsible for developing long-range transportation plans and a sustainability strategy for the vast majority of Southern California. The centerpiece of that planning work is Connect SoCal, the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). This effort includes population, housing, and employment projections for each jurisdiction between 2020 and 2045.

SCAG is required by federal law to prepare and update (ever four years) a long-range RTP that identifies a feasible transportation system, adequate financial plan, and strategies to move people and goods efficiently. SCAG must also develop a SCS to integrate land use and transportation strategies that will achieve California Air Resources Board (CARB) greenhouse gas emissions reduction targets. In regard to housing, the SCS must demonstrate, on a regional level, areas sufficient to house all the population of the region, including the eight-year projection of the Regional Housing Needs Assessment (RHNA).

SCAG is also responsible for preparing the RHNA, a quantification of the housing need in each jurisdiction during specified planning periods. SCAG is in the process of developing the 6th cycle RHNA allocation plan which will cover the planning period October 2021 through October 2029. It is planned for adoption by SCAG in October 2020. Per Senate Bill 375 (2008), the RHNA must be consistent with the adopted SCS. The update process for the 2020 RTP/SCS began in 2018, and a draft of the proposed RTP/SCS was released in November 2019. SCAG's Regional Council approved the final RTP/SCS (aka Connect SoCal) on May 7, 2020, for the limited purpose of federal transportation conformity, so that SCAG could submit the plan to the Federal Highway Administration and Federal Transit Administration for review prior to the June 1, 2020, deadline, as required by the federal Clean Air Act. As of June 2020, the Regional Council anticipates the approval of Connect SoCal in its entirety sometime in late 2020 (possibly 120 days from May 7, 2020), following additional engagement with stakeholders to consider the impacts of the novel coronavirus (COVID-19) pandemic on the plan and its implementation.

The period to file RHNA appeals is expected to commence on the eighth day after the Regional Council adopts the Connect SoCal in its entirety. The appeals process will then follow the adopted RHNA Appeals Procedures with timelines updated to reflect the delay of the Connect SoCal Plan adoption.

Note that the adoption dates for the RTP/SCS and RHNA may be pushed due to circumstances related to the novel coronavirus (COVID-19) crisis. The buildout for the Santa Ana General Plan will be finalized upon the adoption of the General Plan at the end of 2020, with implementation beginning in 2021. The General Plan land use plan and buildout projections will be incorporated into the 2024 RTP/SCS, for which the update process should being in 2022.

Table 1 Existing Conditions, Potential Growth, and Buildout Conditions in Santa Ana, 2020 to 2045

	EXISTING [1]			GROWTH [2]			BUILDOUT		
PLANNING AREA	Housing Units	Bldg. Sq. Ft.[3]	Jobs	Housing Units	Bldg. Sq. Ft.[3]	Jobs	Housing Units	Bldg. Sq. Ft.[3]	Jobs
FOCUS AREAS	**6,380**	**13,421,155**	**28,428**	**17,575**	**2,263,130**	**6,616**	**23,955**	**15,684,285**	**35,044**
55 Freeway/Dyer Road	1,221	5,666,453	8,898	8,731	475,830	4,404	9,952	6,142,283	13,302
Grand Avenue/17th Street	561	1,400,741	3,568	1,722	-696,847	-1,946	2,283	703,894	1,622
South Bristol Street	220	1,577,511	3,337	5,272	3,505,130	7,855	5,492	5,082,641	11,192
South Main Street	1,720	1,685,978	3,455	588	-739,316	-1,304	2,308	946,662	2,151
West Santa Ana Boulevard	2,658	3,090,472	9,170	1,262	-281,667	-2,393	3,920	2,808,805	6,777
SPECIFIC PLAN / SPECIAL ZONING	**4,685**	**13,924,891**	**38,548**	**15,839**	**3,033,554**	**1,154**	**20,524**	**16,958,445**	**39,702**
Adaptive Reuse Overlay Zone [4]	260	976,935	3,043	1,000	0	-476	1,260	976,935	2,567
Bristol Street Corridor Specific Plan	136	140,348	294	-1	2,791	-12	135	143,139	282
Harbor Corridor Specific Plan	1,324	1,767,937	3,286	3,298	200,045	-1,708	4,622	1,967,982	1,578
Main Place Specific Plan	0	1,108,080	2,216	1,900	1,318,843	3,164	1,900	2,426,923	5,380
Metro East Overlay Zone	844	2,516,056	7,524	4,707	2,169,891	4,734	5,551	4,685,947	12,258
Midtown Specific Plan	607	1,885,065	4,824	0	-66,812	-209	607	1,818,253	4,615
Transit Zoning Code	1,514	5,530,470	17,361	4,935	-591,204	-4,339	6,449	4,939,266	13,022
ALL OTHER AREAS OF THE CITY [5]	**67,727**	**39,772,550**	**92,004**	**2,847**	**552,536**	**3,666**	**70,574**	**40,325,086**	**95,670**
CITYWIDE TOTAL	**78,792**	**67,118,596**	**158,980**	**36,261**	**5,849,220**	**11,436**	**115,053**	**72,967,816**	**170,416**

Notes:

1. Existing represents conditions as of December 2019 as derived from the City of Santa Ana Planning Information Network and projects already under construction per the January 2020 monthly development project report.
2. The potential growth for new development in specific plan / special zoning area is based on the forecasted buildout at the time of the respective zoning document's adoption, minus the amount of new development built between its adoption date and 2019.
3. Only includes nonresidential building square footage.
4. The figures shown on the row for the Adaptive Reuse Overlay represents parcels that are exclusively in the Adaptive Reuse Overlay boundary. Figures for parcels that are within the boundaries of both the Adaptive Reuse Overlay Zone and a specific plan, other special zoning, or focus area boundary are accounted for in the respective specific plan, other special zoning, or focus area.
5. The City has included an assumption for growth on a small portion (five percent) of residential parcels through the construction of second units, which is distributed throughout the City and is not concentrated in a subset of neighborhoods. Additional growth includes known projects in the pipeline and an increase of 10 percent in building square footage and employment for the professional office surrounding the Orange County Global Medical Center and along Broadway north of the Midtown Specific Plan, as well as the commercial and retail along 1st Street south of the West Santa Ana Boulevard focus area.

Source: City of Santa Ana with assistance from PlaceWorks, 2020.

Table 2: Focus Area Buildout Factors

Focus Area	Density [1]	Intensity (FAR) [1]					Use Ratio (pct. of land) [1]						
Land Use	*DU/ac*	*Comm.*	*Off.*	*Ind.*	*Ins.*	*Hotel*	*Res.*	*Comm.*	*Off.*	*Ind.*	*Ins.*	*Hotel*	*O.S.*
55 Freeway / Dyer Road													
District Center	85	0.5	0.5	-	-	1.0	75%	15%	5%	-	-	-	5%
General Commercial	-	1.0	-	-	-	-	-	100%	-	-	-	-	-
Industrial / Flex	-	0.5	1.0	0.75	-	-	-	5%	30%	65%	-	-	-
Open Space	-	-	-	-	-	-	-	-	-	-	-	-	100%
17th Street / Grand Avenue													
District Center	50	0.5	0.5	-	-	-	75%	15%	5%	-	-	-	5%
General Commercial	-	0.28	-	-	-	-	-	100%	-	-	-	-	-
Industrial / Flex	-	0.5	0.75	0.6	-	-	-	5%	30%	65%	-	-	-
Open Space	-	-	-	-	-	-	-	-	-	-	-	-	100%
Urban Neighborhood	30	0.5	0.5	-	-	-	75%	15%	5%	-	-	-	5%
South Bristol Street													
District Center Area A [2]	80	1.0	2.0	-	-	3.0	35%	5%	50%	-	-	5%	5%
District Center Area B [3]	90	1.0	2.0	-	-	3.0	75%	7%	7%	-	-	3%	8%
Open Space	-	-	-	-	-	-	-	-	-	-	-	-	100%
Urban Neighborhood	30	0.5	0.5	-	-	-	65%	25%	5%	-	-	-	5%
South Main Street													
Industrial / Flex	-	0.75	0.5	0.3	-	-	-	15%	30%	55%	-	-	-
Institutional	-	-	-	-	0.36	-	-	-	-	-	100%	-	-
Low Density Residential	7	-	-	-	-	-	100%	-	-	-	-	-	-
Open Space	-	-	-	-	-	-	-	-	-	-	-	-	100%
Urban Neighborhood	30	0.5	0.5	-	-	-	70%	20%	5%	-	-	-	5%
West Santa Ana Boulevard													
Corridor Residential	30	-	-	-	-	-	100%	-	-	-	-	-	-
General Commercial	-	1.0	-	-	-	-	-	100%	-	-	-	-	-
Industrial / Flex	15	0.5	0.75	0.6	-	-	5%	15%	30%	50%	-	-	-
Institutional	-	-	-	-	1.09	-	-	-	-	-	100%	-	-
Low Density Residential	7	-	-	-	-	-	100%	-	-	-	-	-	-
Low-Medium Density Residential	13.7	-	-	-	-	-	100%	-	-	-	-	-	-
Medium Density Residential	24.8	-	-	-	-	-	100%	-	-	-	-	-	-
Open Space	-	-	-	-	-	-	-	-	-	-	-	-	100%
Professional and Administrative Office	-	-	2.0	-	-	-	-	-	100%	-	-	-	-
Urban Neighborhood	30	0.5	0.5	-	-	-	80%	10%	5%	-	-	-	5%

Notes:

1. Density, intensity, and use ratio figures determined by the City of Santa Ana in collaboration with MIG, 2019. The FAR figures address nonresidential building square footage only. The resulting buildout figures, with the exception of South Bristol Street District Center Area B, were then multiplied by a factor of 80% to arrive at projections for 2045.
2. Includes all District Center areas north of MacArthur Blvd and on the east side of Bristol south of MacArthur (~52 acres).
3. Includes all District Center areas south of Macarthur Blvd and west of Bristol (~58 acres).

Table 3: Employment Factors

Employment Generation Factors		
Land Use	**Existing Factor**	**Buildout Factor**
Commercial	500 sq. ft. / emp.	500 sq. ft. / emp.
Office / Office Park	286 sq. ft. / emp.	364 sq. ft. / emp.
Business Park / R&D	300 sq. ft. / emp.	333 sq. ft. / emp.
Light Industrial	400 sq. ft. / emp.	500 sq. ft. / emp.
Heavy Industrial	500 sq. ft. / emp.	500 sq. ft. / emp.
Warehouse	800 sq. ft. / emp.	800 sq. ft. / emp.
Medical	400 sq. ft. / emp.	222 sq. ft. / emp.
Government Office	286 sq. ft. / emp.	286 sq. ft. / emp.
Hospital	400 sq. ft. / emp.	364 sq. ft. / emp.
Religious Institution	800 sq. ft. / emp.	800 sq. ft. / emp.
Hotel / Motel	0.9 / room	0.9 / room
School	0.1 / student	0.1 / student
Park	0.75 / acre	0.75 / acre
Employed Persons Factors		
Population age 16+ (% of total)	76.8%	
Employment/working population ratio	63.7%	
LEHD / ACS employment	84.0%	

Source:
- Existing employment generation factors based on U.S. Census Bureau, Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics (LEHD), 2017, accessed and aggregated by PlaceWorks in March 2020.
- Buildout employment generation factors based on OCTA Typical Employment Conversion Factors, June 2001 allowable ranges; adjusted by Santa Ana OCP 2002/2006 Interagency Team.
- Population age 16+ derived by comparing total population in households and workforce population 16 and over, reported by the U.S. Census, American Community Survey (ACS) 2018 5-Year Estimates, Tables B25033 and S2301), accessed in March 2020.
- Employed/ working population ratio as reported by the U.S. Census, ACS 2018 5-Year Estimates, Table S2301), accessed in March 2020.
- LEHD / ACS employment compares the number of employed residents reported by LEHD to self-reported data in ACS 2017 5-Year Estimates, accessed in March 2020.

Table 4: Persons per Household Assumptions

Units in Structure	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2045
Citywide	4.37	4.30	4.26	4.41	4.14	3.97	4.33	4.20	4.11	3.97	3.62
Single family[1]	5.01	4.92	4.98	4.94	4.84	4.81	5.00	4.85	4.73	**4.59[3]**	**4.30[4]**
Multi-family[2]	4.07	4.01	3.86	4.15	3.82	3.51	4.01	3.86	3.74	**3.58[3]**	**3.12[4]**
2 to 4	4.40	4.84	4.09	4.77	3.90	3.56	4.48	4.37	4.01	4.03	3.43
5 to 19	3.93	3.78	3.75	4.31	3.69	3.55	4.01	3.85	3.53	3.99	3.60
20 to 49	4.67	4.20	4.35	4.49	4.31	3.81	4.10	4.20	3.92	2.95	2.05
50 or more	3.71	3.58	3.67	3.55	3.71	3.19	3.43	3.18	3.74	2.77	2.41

Notes:
1. A category representing the aggregate figure for single family detached and single family attached units, as reported in the Census tables.
2. A category representing the aggregate figure for multi-family units with two or more units in the structure, as reported in the Census tables.
3. Factors used to generate population estimates for existing conditions.
4. Factors used to generate population estimates for buildout conditions.

Source:
- 2000 (Decennial Census Tables HCT003 and H033), accessed and aggregated (weighted average) by PlaceWorks in March 2020.
- 2010-218 (U.S. Census, American Community Survey 1-Year Estimates, Tables B25124 and B25033), accessed and aggregated (weighted average) by PlaceWorks in March 2020.
- 2045 derived through trendline analysis of 2000-2018 data by PlaceWorks in March 2020.
- Occupancy rate of 95.94% from the California Department of Finance, Table 2: E-5 City/County Population and Housing Estimates, 1/1/2019, downloaded in March 2020.

Table 5: Student Enrollment for Public and Private Schools in Santa Ana, 2018/2019

School	Enrollment	School	Enrollment
Garden Grove Unified School District		**Santa Ana Unified School District continued**	
Edward Russell Elementary	502	Manuel Esqueda Elementary	1,100
Heritage Elementary	452	Martin Elementary	645
Newhope Elementary	396	Martin Luther King Jr. Elementary	640
R. F. Hazard Elementary	468	Martin R. Heninger Elementary	1,151
Rosita Elementary	480	McFadden Intermediate	1,184
Stephen R. Fitz Intermediate	687	Middle College High	349
Bethel Baptist	225	Mitchell Child Development Center	419
Saint Barbara Elementary	325	Monroe Elementary	300
Santa Clara Nursery School	24	Monte Vista Elementary	516
Orange County Department of Education		Orange County School of the Arts	2,177
Samueli Academy	529	Pio Pico Elementary	563
Citrus Springs Charter	256	Raymond A. Villa Fund. Intermediate	1,390
College and Career Preparatory Academy	241	REACH Academy	34
Ednovate - Legacy College Prep.	189	Saddleback High	1574
Scholarship Prep	436	Santa Ana High	3,057
Vista Condor Global Academy	132	Santiago Elementary	1,152
Vista Heritage Global Academy	275	Segerstrom High	2,435
Orange Unified School District		Sierra Intermediate	757
Fairhaven Elementary	544	Taft Elementary	544
Panorama Elementary	404	Theodore Roosevelt Elementary	572
Santa Ana Unified School District		Thomas A. Edison Elementary	515
Edward B. Cole Academy	373	Valley High	2,150
Orange County Educational Arts Academy	622	Walker Elementary	401
Abraham Lincoln Elementary	790	Wallace R. Davis Elementary	538
Advanced Learning Academy	364	Washington Elementary	750
Andrew Jackson Elementary	745	Willard Intermediate	708
Carl Harvey Elementary	409	Wilson Elementary	578
Cesar E. Chavez High	385	**Tustin Unified School District**	
Century High	1,660	Arroyo Elementary	640
Community Day Intermediate and High	34	Foothill High	2,467
Diamond Elementary	509	Guin Foss Elementary	443
Douglas MacArthur Fundamental Intermediate	1,210	Hewes Middle	1,003
El Sol Santa Ana Science and Arts Academy	919	Loma Vista Elementary	454
Franklin Elementary	409	Red Hill Elementary	563
Fremont Elementary	536	Tustin Memorial Elementary	584
Garfield Elementary	723	**SBE – Magnolia Science Academy**	
George Washington Carver Elementary	386	Magnolia Science Academy Santa Ana	674
Gerald P. Carr Intermediate	1,405	**Private**	
Gonzalo Felicitas Mendez Fund. Intermediate	1,392	Ari Guiragos Minassian Armenian	109
Greenville Fundamental Elementary	1,043	Blind Children's Learning Center	60
Hector Godinez Fundamental High School	2,449	Calvary Chapel Private School	251
Heroes Elementary	565	Calvary Chapel High/Maranatha Christian Acad.	1,370
Hoover Elementary	357	Calvary Christian School	322
Jefferson Elementary	707	Fairmont Private School	300
Jim Thorpe Fundamental	927	Foothill Montessori School	76
John Adams Elementary	420	Mater Dei High School	2,200
John F. Kennedy Elementary	619	Nova Academy Early College High	430
John Muir Fundamental Elementary	876	Reedemer Christian School	19
Jose Sepulveda Elementary	372	Saint Anne School	220
Julia C. Lathrop Intermediate	948	Saint Joseph Elementary	220
Lorin Griset Academy	371	School of Our Lady	185
Lowell Elementary	709	The Prentice School	140
Lydia Romero-Cruz Elementary	196	**Rancho Santiago Community College District**	
Madison Elementary	1,009	Santa Ana College	36,411

Source: Santa Ana College student enrollment figure (2018 student headcount) from the Rancho Santiago Community College District, https://www.rsccd.edu/Discover-RSCCD/Pages/default.aspx, accessed in March 2020. All other student enrollment figures from the California Department of Education, California School Directory, 2018/2019 enrollment data, accessed in March 2020.

Table 6: Student Generation Rates

School District	Multi-Family Unit	Single Family Unit
Santa Ana Unified	0.4475	0.9099
Garden Grove Unified	0.3081	0.59877
Orange Unified	0.3735	0.4922
Tustin Unified	0.3072	0.6063

Sources:
- SAUSD, 2020 Residential Development School Fee Justification Study.
- GGUSD, 2020 Response to Service Questionnaire for Draft EIR. Multi-family rate reflects an average of rates for single family attached and multi-family units.
- OUSD, 2018 Fee Justification Report.
- TUSD, 2018 Fee Justification Report.

Table 7: Pipeline Projects as of January 2020

APN	Project Name	Address	Land Use	Res Units	Nonres Sq. Ft.	Status
198-081-28	The Line	3630 W Westminster Avenue	Residential Apartments and Commercial	228	4,248	Under Construction
002-312-35	Saint Thomas 3-Lot Subdivision	2828 N Flower Street	Single-Family Residential	3		Site Plan Review
002-210-40	2700 Main Street Apartments	2700 N Main Street	Residential Apartments	247		Site Plan Review
002-210-42	MainPlace Mall Revitalization Plan	2800 N Main Street	Residential	1900		DA Entitled
002-210-42	MainPlace Mall Revitalization Plan	2800 N Main Street	Hotel (400 rooms)		n/a	DA Entitled
002-210-42	MainPlace Mall Revitalization Plan	2800 N Main Street	Office		750,000	DA Entitled
002-210-42	MainPlace Mall Revitalization Plan	2800 N Main Street	Commercial		270,000	DA Entitled
041-213-04	Town and Country Manor (revise entitlement)	555 E Memory Lane	Senior Care Facility		46,218	Plan Check
390-171-03	Starbucks	2701 N Grand Avenue	Restaurant with Drive-thru		907	Under Construction
003-010-27	Magnolia at the Park	2525 N Main Street	Residential Apartments	347		Site Plan Review
003-010-27	Magnolia at the Park	2525 N Main Street	Demo Office Building for Apartments	0	-81,172	Site Plan Review
396-141-01	Starbucks Drive-thru & Retail Pad	2301 N Tustin Avenue	Restaurant with Drive-thru		3,567	Under Construction
003-113-41	Hampton Inn Hotel	2056 N Bush Street	Relocate SFD to 2125 North Main, change to commercial	-1	922	Plan Check
003-113-59	Hampton Inn Hotel	2115 N Main Street	SFD/Office Change to Commercial	-1	2,627	Plan Check
003-113-61	Hampton Inn Hotel	2058 N Bush Street	Demo SFD	-1		Plan Check
003-113-63	Hampton Inn Hotel	2119 N Main Street	Demo Office Building		-1,619	Plan Check
003-113-81	Hampton Inn Hotel	2129 N Main Street	Hampton Inn Hotel		73,322	Plan Check
399-031-23	The Academy Charter High School	1901 N Fairview Street	"Family" apartments	8		Under Construction
399-031-23	The Academy Charter High School	1901 N Fairview Street	Educational (High School)		146,136	Under Construction
399-031-24	Samuelli Academy Master Plan Revisions	1919 N Fairview Street	Master plan to modify schools classrooms		-6,530	Entitled
396-211-48	North Grand Car Wash	1821 N Grand Ave	Car Wash		5,243	Site Plan Review
396-211-48	North Grand Car Wash	1821 N Grand Ave	Demo Restaurant		-6,592	Site Plan Review

Table 7: Pipeline Projects as of January 2020

APN	Project Name	Address	Land Use	Res Units	Nonres Sq. Ft.	Status
396-031-16	Rocket Express Car Wash	1703 E Seventeenth Street	Car Wash		4,292	Entitled
396-031-16	Rocket Express Car Wash	1703 E Seventeenth Street	Demo Existing Commercial		-20,146	Entitled
396-052-43	Sexlinger Homes	1584 E Santa Clara Avenue	Single Family Residence	23		Under Construction
396-341-06	Tustin Service Station and Car Wash	2230 N Tustin Avenue	Commercial		3,600	Site Plan Review
405-262-20	In-N-Out Burger Bristol Rebuild & Expansion	815 N Bristol	Restaurant Rebuild & Expansion		1,776	Entitled
405-272-19	North Bristol Medical Project	1415 N Bristol	Medical Office Buildings		5,120	Plan Check
005-153-19	Arts Collective Meta Housing Adaptive Reuse	1666 N Main Street	Convert Office to Residential Apartments	58		Under Construction
398-522-18	Broadway Live/Work Units	1412 N Broadway	Live/work units	3		Site Plan Review
398-533-07	Craftsman Residential Duplex	1002 N Van Ness Avenue	Residential Apartments	2		Site Plan Review
398-541-13	The Orleans Adaptive Reuse Apartments	1212 N	Convert Existing Office to Residential Apartments	24		Under Construction
398-552-12	YCU Conversion of SFD to Office Use	1008 N Broadway	Convert Historic Structure SFD to Office	-1	2,800	Under Construction
398-561-18	One Broadway Plaza	1109 N Broadway	Office Tower		518,000	Entitled
398-561-18	One Broadway Plaza	1109 N Broadway	Restaurant		16,000	Entitled
003-153-48	Bridging the Aqua	317 E Seventeenth Street	Residential Apartments	57		Under Construction
100-161-46	Nguyen Medical Plaza	5030 Westminster Avenue	Commercial		5,800	Site Plan Review
004-020-12	Lam Residential	1514 N English Street	Single Family Residence	6		Site Plan Review
007-313-16	Tiny Tim Plaza Mixed Use	2223 W Fifth Street	Mixed Use Residential Apartments/Commercial	54	51,300	Under Construction
939-450-61	Vista Heritage School Expansion	2609 W Fifth Street	School Expansion (6-8th to K-8th/Enroll 470 to 870)		n/a	Site Plan Review
398-191-02	Certified Transportation	628 E Washington Avenue	Bus Terminal Maintenance Bldg		7,165	Plan Check
400-231-02	Target Shopping Center Commercial Pads	1330 E Seventeenth Street	Commercial		9,112	Under Construction
400-242-02	Ednovate Charter High School	1450 E Seventeenth Street	Convert 24,428 Office to School w/4,940 SF addition		4,940	Under Construction
400-062-01	Park Court Office Building A	1801 E Parkcourt Place	Office building		3,968	Site Plan Review
400-121-09	Raising Cane's Restaurant	2250 E Seventeenth Street	Demo Existing Restaurant		-10,000	Under Construction
400-121-09	Raising Cane's Restaurant	2250 E Seventeenth Street	Restaurant		3,935	Under Construction
400-164-10	Calvary Church Master Plan	1010 N Tustin Avenue	Master plan to modify center, classrooms, and office		50,000	Site Plan Review
198-101-07	Bewley Street Townhomes	1122 N Bewley Street	Residential Townhomes	11		Site Plan Review
198-102-20	John Le 5-Unit Development	1113 N Bewley Street	Residential Apartments	5		Site Plan Review
198-182-23	First & Harbor Commercial Development	121 N Harbor Boulevard	Commercial		36,606	Entitled
198-182-23	First & Harbor Commercial Development	121 N Harbor Boulevard	Demo Commercial		-6,400	Entitled
198-182-36	Fifth and Harbor Mixed Use Apartments	421 N Harbor Boulevard	Mixed Use Residential Apartments/Commercial	94	9,900	Entitled
198-281-05	Hue-Vo Two Unit Development	3402 W Seventh Street	Single-Family Residential	3		Site Plan Review
198-281-25	West Fifth Villas	3417 W Fifth Street	Residential Condos	8		Entitled
005-185-30	Eight Eight 8 - Adaptive Reuse	888 N Main Street	Convert Office to Mixed-Use/Residential Apartments	121	3,700	Plan Check
005-185-30	Eight Eight 8 - Adaptive Reuse	888 N Main Street	Convert Office to Mixed-Use/Residential Livework Aprt	25		Plan Check

Table 7: Pipeline Projects as of January 2020

APN	Project Name	Address	Land Use	Res Units	Nonres Sq. Ft.	Status
398-236-03	Legacy Square Mixed-Use Development	609 N Spurgeon Street	Demolition of Institutional Building	0	-8,030	Entitled
398-236-03	Legacy Square Mixed-Use Development	609 N Spurgeon Street	Demolition of Church	0	-22,330	Entitled
398-236-03	Legacy Square Mixed-Use Development	609 N Spurgeon Street	Mixed Use Residential Apartments/Commercial	93	7,267	Entitled
099-221-28	CN Square Office Building	402 N Euclid Street	Office Building		4,025	Site Plan Review
100-231-01	Euclid-Hazard 7-Eleven Service Station	813 N Euclid Street	Gas Station/Convenience Store		3,045	Site Plan Review
100-301-03	Euclid Commercial Plaza	111 N Euclid Street	Commercial		2,680	Plan Check
100-281-05	Bui 8-Unit Development	301 N Mountain View	Residential Apartments	8		Site Plan Review
398-214-01	Walnut Pump Station	723 W Walnut Street	Water Pump		3,800	Plan Check
398-325-01	4th and Mortimer (Block A)	409 E Fourth Street	Mixed Use Residential Apartments/Commercial	93	99,985	Site Plan Review
398-325-01	4th and Mortimer (Block A)	409 E Fourth Street	Demolition of Commercial Building		-22,330	Site Plan Review
398-327-09	201 E. 4th Street	401 N Bush Street	Residential Apartments	24		Under Construction
398-328-01	First American Site Mixed-Use Redevelopment	114 E Fifth Street	Mixed Use Residential Apartments/Commercial	218	8,900	Site Plan Review
398-330-08	4th and Mortimer (Block B)	509 E Fourth Street	Mixed Use Residential Apartments/Commercial	40	5,827	Site Plan Review
398-471-03	Tom's Trucks Residential Development	1008 E Fourth Street	Single Family Residence	117		Entitled
400-071-03	Madison Project	200 N Cabrillo Park Drive	Mixed Use Residential Apartments/Commercial	260	6,500	Entitled
402-181-11	AMG East First Senior Apartments	2222 E First Street	Residential Apartments	418	10,000	Under Construction
402-191-01	AMG East First Apartments/1st Point One	2114 E First Street	Mixed Use Residential Apartments/Commercial	552	10,000	Entitled
108-131-49	610 Newhope Condos	610 S Newhope Street	Residential Condos	9		Plan Check
188-021-08	4404 W. First Street	4404 W First Street	Commercial		3,662	Site Plan Review
144-341-04	Hoa Buddhist Center Addition	3222 W First Street	Church/Temple Expansion		9,256	Site Plan Review
144-551-51	Veteran's Village (Jamboree)	3314 W First Street	Residential Apartments	76		Under Construction
007-332-07	7-Eleven Store and Gas Station	1904 W First Street	Gas Station/Convenience Store		2,480	Site Plan Review
405-214-04	King Street Five Home Subdivision	1102 N King Street	Single Family Residence	5		Plan Check
011-154-43	AMCAL First Street Family Apartments	1440 E First Street	Residential Apartments	69		Under Construction
402-222-01	Wermers Properties Mixed-Use Development	1660 E First Street	Mixed Use Residential Apartments/Commercial	603	8,900	Entitled
108-073-14	Saigon Reformed Presbyterian	5321 W McFadden Avenue	Church/Temple Expansion		2,000	Site Plan Review
010-272-22	Star Wok	1019 S Bristol Street	Demo Apartment	-4		Plan Check
010-272-22	Star Wok	1019 S Bristol Street	Demo Mini Market		-1,645	Plan Check
010-272-22	Star Wok	1019 S Bristol Street	Restaurant		2,546	Plan Check
108-244-30	Archangel Michael Coptic Orthodox Church	4405 W Edinger Avenue	Church/Temple Expansion		9,928	Site Plan Review
108-244-30	Archangel Michael Coptic Orthodox Church	4319 W Edinger Avenue	Demo of SFD for church expansion	-1		Site Plan Review
108-244-30	Archangel Michael Coptic Orthodox Church	4325 W Edinger Avenue	Demo of SFD for church expansion	-1		Site Plan Review
108-244-30	Archangel Michael Coptic Orthodox Church	4326 W Regent Drive	Demo of SFD for church expansion	-1		Site Plan Review
108-244-30	Archangel Michael Coptic Orthodox Church	4330 W Regent Drive	Demo of SFD for church expansion	-1		Site Plan Review

Table 7: Pipeline Projects as of January 2020

APN	Project Name	Address	Land Use	Res Units	Nonres Sq. Ft.	Status
108-244-30	Archangel Michael Coptic Orthodox Church	4402 W Regent Drive	Demo of SFD for church expansion	-1		Site Plan Review
407-107-23	Haphan Housing	3025 W Edinger Avenue	Residential Townhomes	18		Entitled
402-111-36	McFadden Village Chevron	2120 E McFadden Avenue	Commercial		2,037	Under Construction
013-040-29	Mater Dei Park Structure	1202 W Edinger Avenue	Parking Structure		3 Story	Under Construction
403-164-08	TLC Care Facility	2032 S Cypress Avenue	Change of Use SF to Care Facility (12 Bed)		n/a	Site Plan Review
140-061-94	Shea Homes	2001 W MacArthur Boulevard	Single Family Residence	42		Under Construction
412-191-04	South Coast Speedwash	2402 S Bristol Street	Commercial Retail/Restaurant		8,183	Permits Issued
412-191-04	South Coast Speedwash	2402 S Bristol Street	Car Wash		26,153	Permits Issued
412-191-04	South Coast Speedwash	2402 S Bristol Street	Demo Existing Car Wash		-5,410	Permits Issued
016-051-28	Softscapes New Building	2605 S Cypress Avenue	Office/Industrial Building		2,665	Plan Check
016-082-48	Our Lady of Guadalupe Office/Residence	542 E Central	Office/Residential Apartment	1	6,372	Site Plan Review
016-151-11	Tapestry by Hilton and Restaurant	1580 E Warner Avenue	6-story Hotel		79,375	Site Plan Review
016-151-11	Tapestry by Hilton and Restaurant	1580 E Warner Avenue	Restaurant		5,000	Site Plan Review
430-221-13	Heritage Village Residential Phase A	1951 E Dyer Road	Mixed-Use Residential Apartments	335	65,700	Under Construction
430-221-13	Heritage Village Residential Phase B	1901 E Dyer Road	Mixed-Use Residential Apartments	403	4,100	Under Construction
430-221-13	Heritage Village Residential Phase C	2001 E Dyer Road	Mixed-Use Residential Apartments	483	4,200	Under Construction
430-222-07	Bowery: Redhill & Warner Mixed-Use	2300 S Redhill Ave	Residential Apartments and Commercial	1,150	80,000	Site Plan Review
411-141-12	Shea ITT	666 E Dyer Road	Industrial		40,000	Under Construction
411-074-03	Legado at the MET	200 E First American Way	Residential Apartments	278		Entitled
414-271-03	Shell Service Station Retail Building	3820 S Fairview Street	Demo Fuel Kiosk		-80	Site Plan Review
414-271-03	Shell Service Station Retail Building	3820 S Fairview Street	Gas Station/Convenience Store		1,600	Site Plan Review
412-541-07	Christ Our Savior Church	2000 W Alton Avenue	Demo Existing Modular Church		-7,190	Under Construction
412-541-07	Christ Our Savior Parcel Map	2000 W Alton Avenue	New Church, Community Center, and Office		46,307	Under Construction
410-111-02	Legacy Multi-Family Residential At Sunflower	651 W Sunflower Ave	Residential Apartments	226		Entitled
410-111-02	Legacy Multi-Family Residential At Sunflower	651 W Sunflower Ave	Demo Church	0	-9,875	Entitled
400-032-02	Russell/Fisher Gas Station & Com Ctr	325 N Tustin Avenue	Commercial		7,368	Entitled
400-032-02	Russell/Fisher Gas Station & Com Ctr	325 N Tustin Avenue	Demo Restaurant for commercial bldg.		-3,440	Entitled
400-032-02	Russell/Fisher Gas Station & Com Ctr	325 N Tustin Avenue	Car Wash		4,354	Site Plan Review
400-032-03	Russell/Fisher Gas Station & Com Ctr	301 N Tustin Avenue	Commercial		2,778	Entitled
400-032-03	Russell/Fisher Gas Station & Com Ctr	301 N Tustin Avenue	Demo Carwash for commercial gas station		-1,780	Entitled
400-032-03	Russell/Fisher Gas Station & Com Ctr	301 N Tustin Avenue	Commercial		2,778	Site Plan Review

Source: City of Santa Ana, Major Planning Projects and Monthly Development Reports, January 2020.

Table 8: Focus Area Buildout Factors for Current General Plan Scenario *(the GP land use plan adopted in 1998, with amendments through 2019)*

Focus Area	Density [1]	Intensity (FAR) [1]					Use Ratio (pct. of land) [1]						
Land Use	*DU/ac*	*Comm.*	*Off.*	*Ind.*	*Ins.*	*Hotel*	*Res.*	*Comm.*	*Off.*	*Ind.*	*Ins.*	*Hotel*	*O.S.*
55 Freeway / Dyer Road													
District Center	90	1.0	1.0	-	-	-	40%	10%	50%	-	-	-	-
General Commercial	-	0.5	-	-	-	-	-	100%	-	-	-	-	-
Industrial	-	-	-	0.45	-	-	-	-	-	100%	-	-	-
Open Space	-	-	-	-	-	-	-	-	-	-	-	-	100%
Professional and Administrative Office	-	-	0.5	-	-	-	-	-	100%	-	-	-	-
17th Street / Grand Avenue													
General Commercial	-	0.5	-	-	-	-	-	100%	-	-	-	-	-
Institutional	-	-	-	-	0.5	-	-	-	-	-	100%	-	-
Low Density Residential	7	-	-	-	-	-	-	-	-	-	-	-	-
Open Space	-	-	-	-	-	-	-	-	-	-	-	-	100%
Professional and Administrative Office	-	-	0.5	-	-	-	-	-	100%	-	-	-	-
South Bristol Street													
District Center	90	1.0	1.0	-	-	-	40%	10%	50%	-	-	-	-
General Commercial	-	0.5	-	-	-	-	-	100%	-	-	-	-	-
Medium Density Residential	15	-	-	-	-	-	100%	-	-	-	-	-	-
Open Space	-	-	-	-	-	-	-	-	-	-	-	-	100%
Professional and Administrative Office	-	-	0.5	-	-	-	-	-	100%	-	-	-	-
South Main Street													
District Center	90	1.0	1.0	-	-	-	40%	10%	50%	-	-	-	-
General Commercial	-	0.5	-	-	-	-	-	100%	-	-	-	-	-
Industrial	-	-	-	0.45	-	-	-	-	-	100%	-	-	-
Institutional	-	-	-	-	0.5	-	-	-	-	-	100%	-	-
Low Density Residential	7	-	-	-	-	-	100%	-	-	-	-	-	-
West Santa Ana Boulevard													
General Commercial	-	0.5	-	-	-	-	-	100%	-	-	-	-	-
Industrial	-	-	-	0.45	-	-	-	-	-	100%	-	-	-
Institutional	-	-	-	-	0.5	-	-	-	-	-	100%	-	-
Low Density Residential	7	-	-	-	-	-	100%	-	-	-	-	-	-
Medium Density Residential	15	-	-	-	-	-	100%	-	-	-	-	-	-
Open Space	-	-	-	-	-	-	-	-	-	-	-	-	100%
Professional and Administrative Office	-	-	0.5	-	-	-	-	-	100%	-	-	-	-
Urban Neighborhood	30	0.5	0.5	-	-	-	50%	30%	20%	-	-	-	-

Notes:

1. Density, intensity, and use ratio figures determined using a combination of current assumptions stated in the 1998 Land Use Element (Table A-4, Land Use Plan Build-out Capacities), past and current trends, and the results of the 2020 Economic Indicators Report by AECOM. Maximum densities/intensities were assumed for conventional residential and industrial categories, while commercial and office categories were assumed to build out below maximum intensities. A balance of residential and nonresidential uses, with maximum residential densities and below-maximum nonresidential intensities, was assumed for the mixed used categories of Urban Neighborhood and District Center.

Table 9: Citywide Figures by Orange County Traffic Analysis Model (OCTAM) Category

Statistic	Existing Conditions	2045 Projections		
		Current GP	80% / 50% Prop GP	Proposed GP
K-12 Enrollment [1]	58,097	69,074	72,675	75,480
College Enrollment [2]	36,411	36,411	36,411	36,411
Total Population [3]	334,774	383,202	411,804	431,629
Household Population	330,256	378,684	407,286	427,111
Employed Population	135,717	155,615	167,368	175,515
Total Households	76,314	94,104	103,864	109,883
Median HH Income [4]	see note	see note	see note	see note
Retail Employment [5,8]	20,738	22,957	17,297	18,002
Services Employment [6,8]	45,602	60,513	48,260	52,367
Other Employment [7,8]	95,324	98,967	96,580	98,875

Notes:

1. Only includes students attending schools within the city boundaries.
2. No projection data was available.
3. Total Population includes all individuals living in households, institutional group quarters, and non-institutional group quarters.
4. Median household income figures generated by the traffic model.
5. Retail employment estimated to account for 50% of jobs generated by commercial land uses.
6. Services employment estimated to account for 50% of jobs generated by commercial land uses, 70% of jobs generated by office land uses, and 100% of jobs generated by hotel land uses.
7. Other ("Base") employment estimated to account for 30% of jobs generated by office land uses and 100% of jobs generated by industrial, institutional, and open space land uses.
8. The employment figures are subject to rounding when aggregated by parcel into traffic analysis zones, resulting in a 0.69% rounding delta.

Source: Figures aggregated and projected by PlaceWorks, 2020.

Appendix C Air Quality and Greenhouse Gas Emissions Modeling

Appendices

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Model Inputs

	Baseline Year 2020		Proposed GP 2045		Net Change
	City	Total	City	Total	Total
Households	78,792	78,792	115,053	115,053	36,261
Non-Residential Square Footage[1]	67,118,596	67,118,596	72,967,816	72,967,816	5,849,220
Population	334,774	334,774	431,629	431,629	96,855
Employment	158,980	158,980	170,416	170,416	11,436
Service Population	**493,754**	**493,754**	**602,045**	**602,045**	**108,291**

Notes:

[1] Based on the City of Santa Ana Existing Conditions, Potential Growth, and Buildout Conditions, 2020 to 2045.

Growth Rates from Baseline	Existing	2045
Housing Growth Rate	1.00	1.46
Population Growth Rate	1.00	1.29
Employment Growth Rate	1.00	1.07
Service Population Growth Rate	1.00	1.22

	Existing	**Proposed**	**Net Change**
ELECTRICITY	2020	2045	
City			
Residential Electricity (kWh)	380,621,219	555,787,557	175,166,337
Nonresidential Electricity (kWh)	1,189,836,014	1,275,425,174	85,589,160
Total Electricity (kWh)	**1,570,457,233**	**1,831,212,730**	260,755,497
NATURAL GAS	2020	2045	
City			
Residential Natural Gas (Therms)	21,783,050	31,807,865	10,024,814
Nonresidential Natural Gas (Therms)	27,074,864	29,022,456	1,947,592
Total Natural Gas (Therms)	**48,857,914**	**60,830,320**	11,972,406
TRANSPORTATION	2020	2045	
City			
VMT/Day	11,407,124	11,518,959	111,835
WATER	2020	2045	
City			
Water (acre-feet/year)	31,151	38,101	6,950
WASTEWATER	2020	2045	
City			
Indoor Water as a Percent of Total Water Use	95%	95%	
Wastewater (acre-feet/year)	29,593	36,196	6,603
SOLID WASTE	2020	2045	
Waste Generation (tons/year)	324,679	396,172	71,492
Waste Generation ADC (tons/year)	30,778	37,555	6,777
Total Waste Disposal (tons/year)	355,457	433,726	78,269

Sources:

Energy use utilizes a seven-year (2012-2018) average annual electricity consumption based on data provided by Southern California Edison (SCE) and and five-year (2014-2018) average annual natural gas consumtion average based on data provided by SoCal Gas. Baseline year energy estimates are also adjusted to account for energy consumption associated with the former SOI area recently annexed into the City. Forecasts in energy are based on the change in households.

VMT provided by IBI Group.

Total water demand and wastewater generation data provided by Fuscoe Engineering, Inc.

Waste generation based on waste commitment for the City of Santa Ana is obtained from CalRecycle. Forecasts are based on an average 2014-2016 disposal rate and adjusted for increases in population and employment for the City and SOI.

CITY OF SANTA ANA - CRITERIA AIR POLLUTANT INVENTORY

EXISTING BASELINE	2020 - lbs/day					
SECTORS	**ROG**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Transportation	831	5,596	25,067	90	1,362	602
Energy - Residential (Natural Gas)	64	550	234	4	44	44
Energy - Nonresidential* (Natural Gas)	80	727	611	4	55	55
Energy sub-total	*144*	*1,277*	*845*	*8*	*100*	*100*
Area Source - Consumer Products	4,212	0	0	0	0	0
Area Sources (Light Commercial Equipment,Portable Equip)	154	415	6,330	1	38	31
Other (Construction Equipment) **	28	182	589	0	13	11.11
Total	5,369	7,470	32,832	99	1,513	744

EXISTING w/2045 EMISSION RATES	2045 Existing Land Uses - lbs/day					
SECTORS	**ROG**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Transportation	355	2,232	13,143	59	1,296	532
Energy - Residential (Natural Gas)	64	550	234	4	44	44
Energy - Nonresidential* (Natural Gas)	80	727	611	4	55	55
Energy sub-total	144	1,277	845	8	100	100
Area Sources - Consumer Products	4,212	0	0	0	0	0
Area Sources (Light Commercial Equipment,Portable Equip)	154	415	6,330	0.96	38	31
Other (Construction Equipment) **	28	182	589	0	13	11
Total	4,893	4,106	20,907	69	1,447	673
Net Change from Baseline (2020)	-475	-3,364	-11,925	-30	-66	-71

FORECAST YEAR 2045	2045 Land Uses - lbs/day					
SECTORS	**ROG**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Transportation	359	2,254	13,272	60	1,309	537
Energy - Residential (Natural Gas)	94	803	342	5.13	65	65
Energy - Nonresidential* (Natural Gas)	86	780	655	4.68	59	59
Energy sub-total	180	1,583	997	9.80	124	124
Area Sources - Consumer Products	6,156	0	0	0	0	0
Area Sources (Light Commercial Equipment,Portable Equip)	165	445	6,786	1	41	33
Other (Construction Equipment) **	28	182	589	0	13	11
Total	6,888	4,463	21,643	71	1,487	705
Net Change from Baseline (2045 Existing)	1,994	357	736	3	40	32
Net Change from Baseline (2020)	1,519	-3,007	-11,189	-28	-26	-39

Notes:

Transportation. EMFAC2017 and IBI Group. The SAFE Rule NOx, CO, PM_{10}, and $PM_{2.5}$ exhaust adjustment factors for light duty vehicles (LDA, LDT1, LDT2, and MDV) is applied for year 2045.

Emissions forecasts estimated based on changes in housing (residential energy), employment (nonresidential energy), or service population (transportation)

Energy. Based on a five-year average (2014-2018) of natural gas data as provided by SoCal Gas.

Area Sources. OFFROAD2017. Estimated based on employment (Light Commercial Equipment) for City of Santa Ana as a percentage of Orange County. Does not include emissions from wood-burning fireplaces.

Other Sources. OFFROAD2017. Construction emissions estimated based on housing permit data for Orange County and City of Santa Ana from the US Census. **Excludes fugitive emissions from construction sites.

Excludes Permitted Sources: Because the reductions associated with the Industrial sector are regulated separately by SCAQMD and are not under the jurisdiction of the City of Santa Ana, these emissions are not included in the emissions inventory.

CITY OF SANTA ANA - COMMUNITY GHG EMISSIONS INVENTORY

	$MTCO_2e$			
SECTORS	**2020**	**Percent of Total**	**2045**	**Percent of Total**
Transportation	1,463,006	66%	1,061,237	54%
Residential (Natural Gas and Electricity)	208,050	9%	303,797	16%
Nonresidential* (Natural Gas and Electricity)	432,202	20%	463,292	24%
Solid Waste (Waste Commitment)	56,603	3%	69,017	4%
Water/Wastewater	34,084	2%	41,688	2%
Other - Offroad Equipment	18,678	1%	17,713	1%
Total Community Emissions	2,212,622	100%	1,956,744	100%
Service Population	493,754		602,045	
$MTCO_2e$/SP	4.48		3.25	

Notes: Based on IPCC's Fourth Assessment Report GWPs

Emissions forecast based on changes in housing (residential energy), employment (nonresidential energy), or service population (waste, water/wastewater, transportation).

Transportation. EMFAC2017 and IBI Group. The SAFE Rule CO_2 exhaust adjustment factor for light duty vehicles (LDA, LDT1, LDT2, and MDV) is applied for year 2045.

Energy. Energy use utilizes a seven-year (2012-2018) average annual electricity consumption average based on data provided by Southern California Edison (SCE) and a five-year (2014-2018) natural gas consumption average based on data provided by SoCal Gas. Emissions from electricity utilizes a CO_2e intensity factor based on the SCE CO_2 intensity factor reported for year 2019 identified in the SCE 2019 Corporate Responsibility & Sustainability report and the CH_4 and N_2O intensity factors from the latest US EPA eGRID data. Electricity and natural gas use from industrial and permitted facilities may be included with the overall amounts for non-residential uses as the 15/15 Rule was triggered.
Water/Wastewater. Includes fugitive emissions from wastewater processing and energy associated with water/wastewater treatment and conveyance. Water use is estimated based on data provided by Fuscoe Engineering.

Waste. Landfill Emissions Tool Version 1.3 and CalRecycle. Waste generation based on three year average (2016-2018) waste commitment for the City of Santa Ana obtained from CalRecycle. Assumes 75 percent of fugitive GHG emissions are captured within the landfill's Landfill Gas Capture System with a landfill gas capture efficiency of 75%. The Landfill gas capture efficiency is based on the California Air Resources Board's (CARB) Local Government Operations Protocol (LGOP), Version 1.1. Significant CH_4 production typically begins one or two years after waste disposal in a landfill and continues for 10 to 60 years or longer. Consequently, the highest CH_4 emissions from waste disposal in a given year are reported and have been adjusted to utilize IPCC's Fifth Assessment global warming potential assigned for CH_4.

Other Sources. OFFROAD2017. Estimated based on employment (Light Commercial Equipment) and construction permits (Construction Equipment) for the City of Santa Ana as a percentage of Orange County.

Industrial Sector are "point" sources that are permitted by SCAQMD and are not under the jurisdiction of the City of Santa Ana; and therefore, not included in the City of Santa Ana's community GHG emissions inventory.

CITY OF SANTA ANA - GHG EMISSIONS INVENTORY COMPARISON

	Substantial Increase	
	Change from 2020 $MTCO_2e$	
SECTORS	**2045 Buildout**	**Percent Change from 2020**
Transportation	(401,769)	-27%
Residential (Natural Gas and Electricity)	95,747	46%
Nonresidential* (Natural Gas and Electricity)	31,090	7%
Waste	12,414	22%
Water/Wastewater	7,604	22%
Other - Offroad Equipment	(965)	-5%
Total Community Emissions	(255,878)	-11.6%

Criteria Air Pollutants (VOCs): Area Sources - Consumer Products

Source: CalEEMod Users Guide. Version 2016.3.2

Residential and Non-Residential Consumer Product Use[a]

Emissions = EF x Building Area

SCAQMD EF =	2.04E-05	lbs/sqft/day
Non-SCAQMD EF =	2.14E-05	lbs/sqft/day

Sources/Notes:

a. California Emissions Estimator Model, Version 2016.3.2, Users Guide. Appendix A.

AVERAGE HOUSING SQFT ASSUMPTIONS

Year Structure was Built	Percent of Housing Stock [a]	Average Square Feet of New Single Family Homes[b]	Average Square Feet (Weighted)
2010 or later	0.9%	2,533	24
2000 to 2009	3.0%	2,404	72
1980 to 1999	15.0%	1,968	295
1979 or earlier	81.1%	1,699	1,378
	100%		1,768

Sources/Notes:

a. United States Cenus Bureau, American FactFinder, City of Santa Ana, California, Selected Housing Characteristics, 2016 American Community Survey 5-Year Estimates, Year structure built. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF

b. United States Census Bureau, Characteristics of New Housing, Characteristics of New Single-Family Houses Completed, Median and Average Square Feet by Location. Obtained from https://www.census.gov/construction/chars/completed.html

	2020	2045
	CEQA Baseline	**Proposed Project**
Non-Residential SQFT	67,118,596	72,967,816
Housing Units	78,792	115,053
Residential SQFT	139,342,204	228,798,091
lbs VOC per day	4,212	6,156

Water and Wastewater

Water Demand/Wastewater Generation Calculations

Source: Fuscoe Engineering, Inc. 2020, May 29. City of Santa Ana General Plan Update: Water Supply and Demand Technical Report

	Water Demand (acre-feet/year)	Water Demand (gallons/year)
Year	Total	Total
2020	31,151.00	10,150,597,865
2045	38,101.00	12,415,265,296

	Wastewater Generation (acre-feet/year)	Wastewater Generation (gallons/year)
Year	Total	Total
2020	29,593.45	9,643,067,972
2045	36,195.95	11,794,502,032

Wastewater, Percent of total Water Use: 95%

Fugitive Emissions - Process Emissions from WWTP with Nitrification/Denitrification

CH_4 - Microorganisms can biodegrade soluble organic material in wastewater under aerobic (presence of oxygen) or anaerobic (absence of oxygen) conditions. Anaerobic conditions result in the production of CH_4.

N_2O - Treatment of domestic wastewater during both nitrification and denitrification of the nitrogen present leads to the formation of N_2O, usually in the form of urea, ammonia, and proteins. These compounds are converted to nitrate through the aerobic process of nitrification. Denitrification occurs under anoxic conditions (without free oxygen), and involves the biological conversion of nitrate into dinitrogen. N_2O can be an intermediate product of both processes, but more often is associated with denitrification.

Notes: Waste discharge facilities in compliance with the United States Environmental Protection Agency's Clean Water Standards do not typically result in CH_4 emissions. However, poorly-operated aerobic wastewater treatment systems can result in the generation of CH_4. Because wastewater treatment systems are assumed to operate in compliance with state and federal laws pertaining to water quality, CH_4 emissions from centralized aerobic treatments are not included in the inventory.

Fugitive Emissions - Process Emissions from WWTP with Nitrification/Denitrification for combustion of biogas.

Anaerobic digesters produce methane-rich biogas which is typically combusted on-site. In some cases the biogas is combusted simply for the purpose of converting methane to CO_2, which has a lower global warming potential than methane. In many cases, a cogeneration system is used to harvest the heat from combustion and use it to generate electricity for on-site energy needs. In both cases, inherent inefficiencies in the system result in incomplete combustion of the biogas, which results in remaining methane emissions. Excludes biogenic emissions from combustion of biogas.

LGOP Version 1.1. Equation 10.1.

CH_4 = Wastewater x Digester Gas x FCH_4 x ρ_{CH4} x (1-DE) x 0.0283 x 10^-3 x 10^-3

	CEQA Baseline	Proposed Project
wastewater (gallons)=	9,643,067,972	11,794,502,032

Digester gas	0.01	ft^3 biogas/gallon wastewater
FCH_4	0.65	fraction of CH4 in biogas
ρ_{CH4}	662.00	g/m^3; density of CH_4 at standard conditions
DE	0.99	CH4 destruction efficiency
0.0283 =	0.0283	m^3/ft^3; conversion factor
10^-3 =	1.00E-03	MT/kg conversion factor
10^-3 =	1.00E-03	kg/g conversion factor

	CEQA Baseline	Proposed Project
	MTons	
CH_4 =	11.74	14.36
CO_2e =	329	402

Source: California Air Resources Board (CARB). 2010, May. Local Government Operations Protocol (LGOP), Version 1.1. The LGOP protocol provides default values for all the terms except the digester gas, which is assumed to be 0.1 cubic feet of biogas per gallon of wastewater effluent based on USEPA methodology outlined in the CalEEMod program manual. California Air Pollution COntrol Officers Association (CAPCOA). 2017. California Emissions Estimator Model (CalEEMod), Version 2016.3.2. User's Manual. USEPA. 2008. Page 8-12. USEPA cites Metcalf & Eddy, Inc., 1991, "Wastewater Engineering: Treatment Disposal, and Reuse," 3rd Ed. McGraw Hill Publishing.

Water and Wastewater

Buildout Fugitive Emissions - Process Emissions from WWTP with Nitrification/Denitrification from discharge into aquatic environments

LGOP Version 1.1. Equation 10.9.

N_2O = Wastewater x 10^-6 x Nload x 44/28 x EF effluent x 10^3

	2020	2040	
wastewater (Liters)=	36,499,012,272	44,642,190,189	
10^-6 =	1.00E-06		conversion factor; kg/mg
N Load	26.00		mg/L of wastewater
44/28	1.57		Ratio of molecular weights for N_2O and N_2
EF effluent	0.005		kg/N_2O/kg N
10^-3 =	1.00E-03		conversion factor: MTons/kg

	2020	**2040**
	MTons	
N_2O	7.46	9.12
CO_2e =	1,976	2,417

Source: California Air Resources Board (CARB). 2010, May. Local Government Operations Protocol (LGOP), Version 1.1. The LGOP protocol provides default values for all the terms except the Nitrogen Load, which is assumed to be 26 mg of N per Liter of wastewater effluent based on USEPA methodology outlined in the CalEEMod program manual. California Air Pollution Control Officers Association (CAPCOA). 2017. California Emissions Estimator Model (CalEEMod), Version 2016.3.2. Appendix A. USEPA 2013. California Statewide average. USEPA Database at http://cfpub.epa.gov/dmr/ez_search.cfm.

Total Fugitive Emissions - Process Emissions from WWTP with Nitrification/Denitrification

	2020	**2045**
CO_2e =	2,305	2,819

Wastewater Modeling assumes 0% septic treatment for years 2020 and 2045.

Water and Wastewater

Energy for Water Conveyance, Treatment, Distribution, and Wastewater Treatment (Southern California)

Water Supply and Conveyance	Water Treatment	Water Distribution	Total Water	Wastewater Treatment (Tertiary)
	kWhr/million gallons			
9,727	111	1,272	11,110	1,911

Source: California Energy Commission (CEC). 2006, December. Refining Estimates of Water-Related Energy Use in California. CEC-500-2006-118. Prepared by Navigant Consulting, Inc. Based on the electricity use for Southern California.

SCE

	WCI -WECC Region Intensity factor			CO_2e
	CO_2 MTons/MWH[1,2]	CH_4 MTons/MWH[3]	N_2O MTons/MWH[3]	MTons/MWh
2019	0.241	0.000015	0.000002	0.242

[1] Southern California Edison. 2020. 2019 Sustainability Report. https://www.edison.com/content/dam/eix/documents/sustainability/eix-2019-sustainability-report.pdf

[2] Based on SCE 2019 reported CO_2e intensity factor of 534 lbs/MWh subtracted by the CH_4 intensity factor of 0.034 lb/MWh and the N_20 intensity factor of 0.004 lb/MWh utilizing the IPCC Fifth Assessment Report global warming potentials of 28 and 265, respectively, to avoid double counting. Per methodology utilized in CalEEMod. Version 2016.3.2, User's Guide, however N2O and CH4 intensity factors based on US EPA eGRID2018 data.

[3] United State Environmental Protection Agency. 2020, March 9. eGRID2018 Total Output Emission Rates, WECC California Region. (CH_4 = 0.034 lbs/MWh & N_2O = 0.004 lbs/MWh)

ABAU Carbon Intensity for SCE Energy

	2019	2030	CO_2e
Assumed Percent Renewable[1]	35.0%	60%	MTons/MWh
CO_2e MTons/Mwh without Renewable	0.3726436		0.149

[1] Southern California Edison. 2020. 2019 Sustainability Report. https://www.edison.com/content/dam/eix/documents/sustainability/eix-2019-sustainability-report.pdf.

GHG Emissions from Energy Associated with Water/Wastewater

	2020	2045
Energy Associated with Water Use	**MwH/Year**	
Water	112,773	137,934
Wastewater	18,428	22,539
Total Water/Wastewater	131,201	160,473

Wastewater Modeling assumes 0% septic treatment for years 2020 and 2045.

GHG Emissions from Energy Associated with Water Use/Wastewater Generation	2020	2045
	$MTCO_2e$/Year	
Water	27,316	33,410
Wastewater	4,464	5,459
Total Water/Wastewater	31,779	38,869

Total GHGs

	2020	2045
GHG Emissions from Water/Wastewater Use	**$MTCO_2e$/Year**	
Water	27,316	33,410
Wastewater	6,768	8,278
Total Water/Wastewater	34,084	41,688

General Conversion Factors

lbs to kg	0.4536
kg to MTons	0.001
Mmbtu to Therm	0.1
Therms to kwh	29.30711111
kilowatt hrs to megawatt hrs	0.001
lbs to Tons	2000
Tons to MTon	0.9071847

Source: California Air Resources Board (CARB). 2010. Local Government Operations Protocol. Version 1.1. Appendix F, Standard Conversion Factors

General Conversion Factors

	Global Warming Potentials (GWP) AR5
CO_2	1
CH_4	28
N_2O	265

Water and Wastewater

Source: Intergovernmental Panel on Climate Change (IPCC). 2013. Fifth Assessment Report: Climate Change 2013. New York: Cambridge University Press.

gallons to Liters	3.785
killowatt hrs to megawatt hrs	0.001
gallons to AF	325851.4290

Water Demand and Wastewater for City of Santa Ana

Existing Annual AFY[1]

	Water Demands (AFY)	Average 2016-2018 Annual Units
Single Family Residential	19,323	19,323
Multi-Family Residential	5,862	5,862
Commercial	4,318	4,318
Potable and Recycled Irrigation	1,648	1,648
Total	31,151	31,151

[1] Fuscoe Engineering, Inc. 2020, May 29. City of Santa Ana General Plan Update: Water Supply and Demand Technical Report

Annual Gallons[1]

	7/1/17 to 6/30/18	Average 2016-2018 Annual Gallons
Single Family Residential	6,296,418,873	6,296,418,873
Multi-Family Residential	1,910,138,562	1,910,138,562
Commercial	1,407,024,618	1,407,024,618
Potable and Recycled Irrigation	537,002,448	537,002,448
City	10,150,584,501	10,150,584,501

[1] *1 acre-foot/year (AFY): 325,851 gallons/year*

Fuscoe Wastewater Generation

Annual Gallons[1]

	2016	Average 2012-2016 Annual Therms
Single Family Residential	5,981,597,929	5,981,597,929
Multi-Family Residential	1,814,631,634	1,814,631,634
Commercial	1,336,673,387	1,336,673,387
Potable and Recycled Irrigation	510,152,326	510,152,326
City	9,643,055,276	9,643,055,276

Area	Population	Employment
City	334,774	158,980

*Water Demand**

Residential Annual Gal/Resident:	18,808	gal/resident
Non-Residential Annual Gal/Employee:	3,378	gal/employee

** Annual use divided by residents/employees within the City of Santa Ana boundaries.*

*Wastewater**

Residential Annual Therms/Resident:	17,868	kWH/resident
Non-Residential Annual Therms/Employee:	3,209	kWH/employee

** Annual use divided by residents/employees within the City of Santa Ana boundaries.*

Solid Waste Disposal - City of Santa Ana

Source: CalRecycle, 2019, Disposal Reporting System, Jurisdiction Reporting by Facility, https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility

Waste Generated Within City Limits

Waste in Place Method

Years

historic population estimates

Year	Interstate Tons + Transform Tons	ADC+AIC	Total
2016	321,938	29,720	
2017	309,695	33,281	
2018	342,405	29,332	
2020[a]	324,679	30,778	355,457

City Service Popuation[b]	493,401	persons
Former SOI Area Service Population[c,d]	353	persons

	Interstate Tons + Transform Tons	ADC+AIC	Total
Disposal Rate / SP	0.658	0.062	0.720
2020 (Former SOI Area)	***232***	***22***	***254***
2020 (City)	***324,679***	***30,778***	***355,457***
2020 (Total City)	***324,911***	***30,800***	***355,711***
Year 2045 Buildout	***396,172***	***37,555***	***433,726***
Increase from 2020	71,260	6,755	78,015

[a] *Average 3-year disposal used to forecast waste disposal in 2040*

[b] *Represents the net change between the baseline service population for the City of 493,754 persons subtracted by the service population for the former 17th Street and Tustin Unincorporated Island SOI.*

[c] *Associated with the recently annexed 17th Street and Tustin Unincorporated Island area.*

[d] *Service population of 375 persons consist of 275 residents and 78 employees. Source: Orange County Local Agency Formation Commission. 2019, November 13. Proposed "Reorganization of the 17th Street and Tustin Unincorporated Island to the City of Santa Ana and Municipal Water District of Orange County (RO 19-07)"; Data compiled by MIG.*

Landfill Emission Tool (version 1.3) Model Results using the Methane Commitment Method (~50 years of decomposition)

	MT CH_4 in CO_2e	$MTCO_2e$ w/LFG Capture		$MTCO_2e$ w/LFG Capture	
Year	2020 Disposal	2020 Disposal	2020 Disposal (AR5 GWPs)*	2045 Disposal	2045 Disposal (FAR GWPs)*
1	2,999	750	1,000	914	1,219
2	5,919	1,480	1,973	1,804	2,406
3	5,802	1,450	1,934	1,769	2,358
4	5,687	1,422	1,896	1,734	2,311
5	5,574	1,394	1,858	1,699	2,266
6	5,464	1,366	1,821	1,666	2,221
7	5,356	1,339	1,785	1,633	2,177
8	5,250	1,312	1,750	1,600	2,134
9	5,146	1,286	1,715	1,569	2,091
10	5,044	1,261	1,681	1,538	2,050
11	4,944	1,236	1,648	1,507	2,009
12	4,846	1,212	1,615	1,477	1,970
13	4,750	1,188	1,583	1,448	1,931
14	4,625	1,156	1,542	1,410	1,880
15	4,519	1,130	1,506	1,377	1,837
16	4,412	1,103	1,471	1,345	1,793
17	4,306	1,077	1,435	1,313	1,750
18	4,200	1,050	1,400	1,280	1,707
19	4,094	1,023	1,365	1,248	1,664
20	3,988	997	1,329	1,216	1,621
21	3,881	970	1,294	1,183	1,578
22	3,775	944	1,258	1,151	1,534
23	3,669	917	1,223	1,118	1,491
24	3,563	891	1,188	1,086	1,448
25	3,457	864	1,152	1,054	1,405
26	3,350	838	1,117	1,021	1,362
27	3,244	811	1,081	989	1,319

28	3,138	785	1,046	957	1,275
29	3,032	758	1,011	924	1,232
30	2,926	731	975	892	1,189
31	2,819	705	940	859	1,146
32	2,713	678	904	827	1,103
33	2,607	652	869	795	1,060
34	2,501	625	834	762	1,016
35	2,395	599	798	730	973
36	2,288	572	763	698	930
37	2,182	546	727	665	887
38	2,076	519	692	633	844
39	1,970	492	657	600	801
40	1,864	466	621	568	757
41	1,757	439	586	536	714
42	1,651	413	550	503	671
43	1,545	386	515	471	628
44	1,439	360	480	439	585
45	1,333	333	444	406	542
46	1,226	307	409	374	498
47	1,120	280	373	341	455
48	1,014	254	338	309	412
49	908	227	303	277	369
50	802	200	267	244	326
51	695	174	232	212	283
52	589	147	196	180	239
53	483	121	161	147	196
54	377	94	126	115	153
55	271	68	90	82	110
56	164	41	55	50	67
57	58	15	19	18	24
TOTAL	**169,808**	**42,452**	**56,603**	**51,763**	**69,017**

*Landfill Emissions Tool Version 1.3 is based on the IPCC Second Assessment Report global warming potential. The numbers in this column are the CO_2e emissions from CH_4 based on IPCC's Fourth Assessment GWPs.

Conversion

SAR GWP CH4:*	21
AR5 GWP CH4:**	28

*Intergovernmental Panel on Climate Change (IPCC). 1995. Second Assessment Report: Climate Change 1995.

**Intergovernmental Panel on Climate Change (IPCC). 2014. Fifth Assessment Report: Climate Change 2014.

Waste. Landfill Emissions Tool Version 1.3 and CalRecycle. Biogenic CO_2 emissions are not included.

Notes

LFG capture Efficiency 0.75

Waste generation based on three year average (2016-2018) waste commitment for the City of Santa Ana obtained from CalRecycle. This sector captures only the waste that is generated by the City of Santa Ana residents in the inventory year. This sector does not include historically generated waste disposal.

This method assumes that the degradable organic component (degradable organic carbon, DOC) in waste decays slowly throughout a few decades, during which CH_4 and biogenic CO_2 are formed. If conditions are constant, the rate of CH_4 production depends solely on the amount of carbon remaining in the waste. As a result emissions of CH_4 from waste deposited in a disposal site are highest in the first few years after deposition, then gradually decline as the degradable carbon in the waste is consumed by the bacteria responsible for the decay. Significant CH_4 production typically begins one or two years after waste disposal in a landfill and continues for 10 to 60 years or longer.

Decomposition based on an average annual rainfall of 13.69 inches per year average in the City of Santa Ana (anaerobic decomposition factor (k) of 0.020) (Western Regional Climate Center. 2019. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7888).

The Landfill Gas Estimator only includes the landfill gas (LFG) capture in the landfill gas heat output and therefore the reduction and emissions from landfill gas capture are calculated separately. Assumes 75 percent of fugitive GHG emissions are captured within the landfill's Landfill Gas Capture System with a landfill gas capture efficiency of 75%. The Landfill gas capture efficiency is based on the California Air Resources Board's (CARB) Local Government Operations Protocol (LGOP), Version 1.1.

Biogenic CO_2 emissions are not included.

Electricity and Natural Gas Use Consumption for City of Santa Ana

Southern California Edison Electricity Use

Annual KWH

	2012	2013	2014	2015	2016	2017	2018	Average 2012-2018 Annual KWH
Residential	382,173,371	375,962,888	384,502,945	387,235,367	376,464,025	376,818,302	379,003,010	380,308,558
Commercial + Industrial	1,216,778,299	1,198,174,695	1,217,353,861	1,180,785,021	1,133,169,360	1,111,077,462	1,095,758,235	1,189,252,247

SoCal Gas Natural Gas Use

Annual Therms

	2012	2013	2014	2015	2016	2017	2018	Average 2014-2018 Annual Therms
Residential			21,909,034	21,220,339	21,842,233	22,062,372	21,791,804	21,765,156
Commercial + Industrial			26,450,661	27,324,706	24,279,474	28,365,442	28,887,618	27,061,580

Area	Population	Employment
City	334,499	158,902
Former SOI Area[a,b]	275	78

[a] *Associated with the recently annexed 17th Street and Tustin Unincorporated Island area.*

[b] *Source: Orange County Local Agency Formation Commission. 2019, November 13. Proposed "Reorganization of the 17th Street and Tustin Unincorporated Island to the City of Santa Ana and Municipal Water District of Orange County (RO 19-07)"; Data compiled by MIG.*

*Electricity**

Residential Annual KWH/Resident:	1,137	kWH/resident
Non-Residential Annual KWH/Employee:	7,484	kWH/employee

** Annual use divided by residents/employees within the City of Santa Ana boundaries minus the residents/employees in the former SOI area.*

Area	Residential Annual kWH	Commercial + Industrial Annual kWH
Former SOI Area	312,661	583,767

*Natural Gas**

Residential Annual Therms/Resident:	65	kWH/resident
Non-Residential Annual Therms/Employee:	170	kWH/employee

** Annual use divided by residents/employees within the City of Santa Ana boundaries minus the residents/employees in the former SOI area.*

Area	Residential Annual Therms	Commercial + Industrial Annual Therms
Former SOI Area	17,894	13,284

Disclaimer. The 15/15 Rule is intended to protect customer confidentiality by reducing the possibility of identifying customers through the release of usage information. The utilities apply the 15/15 Rule in releasing aggregated customer information. The rule was initially implemented by the California Public Utilities Commission during Direct Access proceedings in 1997 and was adopted through D. 97-10-031. The 15/15 rule requires that any aggregated information provided by the Utilities must be made up of at least 15 customers, and a customer's load must be less than 15% of an assigned category. If the number of customers in the compiled data is below 15, or if a single customer's load is more than 15% of the total data, categories (e.g., rate classes) must be combined before the information is released. The rule further requires that if the 15/15 rule is triggered for a second time after the data has been screened once already using the 15/15 rule, then the customer is dropped from the information provided.

Energy

Natural Gas Emission Factors

Natural Gas	Intensity factor			CO_2e
	$MTCO_2$/Therm	CH_4 MT/Therm	N_2O MT/Therm	MT/Therm
All Years	0.005302	5.E-07	1.E-08	**0.00532**

Source: CO_2, CH_4 and N_2O intensity based on Table G.3 of the LGOP for residential and non-residential (CO_2, 53.02 kg/Mmbtu; CH_4: 0.005 kg/MMBtu; N_2O: 0.0001 kg/MMBtu)

SCE

	WCI -WECC Region Intensity factor			CO_2e	
	CO_2 MTons/MWH[1,2]	CH_4 MTons/MWH[3]	N_2O MTons/MWH[3]	MTons/MWh	
2019	0.241	0.000015	0.000002	0.242	0.320

[1] Southern California Edison. 2020. 2019 Sustainability Report. https://www.edison.com/content/dam/eix/documents/sustainability/eix-2019-sustainability-report.pdf

[2] Based on SCE 2019 reported CO_2e intensity factor of 534 lbs/MWh subtracted by the CH_4 intensity factor of 0.034 lb/MWh and the N_20 intensity factor of 0.004 lb/MWh utilizing the IPCC Fifth Assessment Report global warming potentials of 28 and 265, respectively, to avoid double counting. Per methodology utilized in CalEEMod. Version 2016.3.2, User's Guide, however N2O and CH4 intensity factors based on US EPA eGRID2018 data.

[3] United State Environmental Protection Agency. 2020, March 9. eGRID2018 Total Output Emission Rates, WECC California Region. (CH_4 = 0.034 lbs/MWh & N_2O = 0.004 lbs/MWh)

ABAU Carbon Intensity for SCE Energy

	2019	2030	CO_2e
Assumed Percent Renewable[1]	35.0%	60%	MTons/MWh
CO_2e MTons/Mwh without Renewable	0.3726436		0.149

[1] Southern California Edison. 2020. 2019 Sustainability Report. https://www.edison.com/content/dam/eix/documents/sustainability/eix-2019-sustainability-report.pdf.

GHG Emissions from Energy Use

	2020	Proposed Project 2045	Proposed Project 2040 ABAU
Electricity	**$MTCO_2e$/Year**		
Residential Electricity - City	92,193	134,622	82,844
Commercial + Industrial - City	288,200	308,931	190,112
Total	380,394	443,553	272,956

	2020	Proposed Project 2045	Proposed Project 2040 ABAU
Natural Gas			
Residential Electricity - City	115,856	169,175	169,175
Commercial + Industrial - City	144,002	154,360	154,360
Total	259,858	323,535	323,535

	2020	Proposed Project 2045	Proposed Project 2040 ABAU
Summary			
Residential Total - City	208,050	303,797	252,019
Commercial Total - City	432,202	463,292	344,472
Total	640,252	767,088	596,491

General Conversion Factors

lbs to kg	0.4536
kg to MTons	0.001
Mmbtu to Therm	0.1
Therms to kwh	29.30711111
kilowatt hrs to megawatt hrs	0.001
lbs to Tons	2000
Tons to MTon	0.9071847

Source: California Air Resources Board (CARB). 2010. Local Government Operations Protocol. Version 1.1. Appendix F, Standard Conversion Factors

	Global Warming Potentials (GWP) AR5
CO_2	1
CH_4	28
N_2O	265

Source: Intergovernmental Panel on Climate Change (IPCC). 2013. Fifth Assessment Report: Climate Change 2013. New York: Cambridge University Press.

Criteria Air Pollutants from Natural Gas

Rate	lbs/MBTU					
Natural Gas	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Residential	0.01078431	0.09215686	0.03921569	0.00058824	0.00745098	0.00745098
Non-Residential	0.01078431	0.09803922	0.08235294	0.00058824	0.00745098	0.00745098

Source: CalEEMod Version 2016.3.2

Natural Gas	2020 lbs/day					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Residential	64	550	234	4	44	44
Nonresidential	80	727	611	4	55	55
Total	144	1277	845	8	100	100

Natural Gas	Project 2045 lbs/day					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Residential	94	803	342	5	65	65
Nonresidential	86	780	655	5	59	59
Total	180	1583	997	10	124	124
Increase from Baseline	35	305	152	2	24	24

General Conversion Factors	
Mmbtu to Therm	0.1
lbs to Tons	2000
Tons to MTon	0.9071847

Source: California Air Resources Board (CARB). 2010. Local Government Operations Protocol. Version 1.1. Appendix F, Standard Conversion Factors

City of Santa Ana — TRANSPORTATION SECTOR

CRITERIA AIR POLLUTANTS

	lbs/day					
	ROG	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Year 2020						
City	831	5,596	25,067	90	1,362	602
Total	**831**	**5,596**	**25,067**	**90**	**1,362**	**602**
Baseline in 2045						
City	355	2,232	13,143	59	1,296	532
Total	**355**	**2,232**	**13,143**	**59**	**1,296**	**532**
Year 2045						
City	359	2,254	13,272	60	1,309	537
Total	**359**	**2,254**	**13,272**	**60**	**1,309**	**537**

Source: EMFAC2017, Version 1.0.2.; California Air Resources Board. 2019, November 20. EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicle Rule Part One. https://ww3.arb.ca.gov/msei/emfac_off_model_adjustment_factors_final_draft.pdf.

GHG EMISSIONS

	MTons/year			
	N_2O	**CO_2**	**CH_4**	**CO_2e**
Year 2020				
City	57	1,447,080	26	1,463,006
Total	**57**	**1,447,080**	**26**	**1,463,006**
Year 2045				
City	42	1,049,931	10	1,061,237
Total	**42**	**1,049,931**	**10**	**1,061,237**

Source: EMFAC2017, Version 1.0.2

Note: MTons = metric tons; CO_2e = carbon dioxide-equivalent.

Source: EMFAC2017 v1.0.2 Web Database, https://www.arb.ca.gov/emfac/2017/; California Air Resources Board. 2020, June 26. EMFAC Off-Model Adjustment Factors for Carbon Dioxide (CO_2) Emissions to Account for the SAFE Vehicles Rule Part One and the Final Safe Rule. https://ww3.arb.ca.gov/msei/emfac_off_model_co2_adjustment_factors_06262020-final.pdf?utm_medium=email&utm_source=govdelivery; Based on the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) Global Warming Potentials (GWPs)

Note: MTons = metric tons; CO_2e = carbon dioxide-equivalent. Includes Pavley + California Advanced Clean Car Standards, the Low Carbon Fuel Standard (LCFS), on-road diesel fleet rules, and the Smartway/Phase I Heavy Duty Vehicle Greenhouse Gas Regulation.

Year 2045 Existing: Criteria Air Pollutants

Based on EMFAC2017, Version 1.0.2., Orange County - South Coast Air Basin

	VMT Per Trip Type			
	I-I	I-X	X-I	Total
City	697,779	5,356,504	5,352,841	11,407,124
TOTAL	697,779	5,356,504	5,352,841	11,407,124

[1] Based on data provided by IBI Group

Emission year

		Year 2020					lbs/day		
Vehicle Type		**Speed**	**Percent of VMT of SpeedBin**	**ROG**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
City of Santa Ana									
All Other Buses	DSL	Aggregated	0.04%	0.08	13.70	0.81	0.08	1.58	0.70
LDA	GAS	Aggregated	52.02%	23.40	218.77	5,355.80	25.21	592.86	239.07
LDA	DSL	Aggregated	0.65%	0.82	1.43	27.24	0.24	7.42	3.01
LDA	ELEC	Aggregated	3.54%	0.00	0.00	0.00	0.00	39.86	15.81
LDT1	GAS	Aggregated	6.08%	3.07	28.28	638.12	3.41	69.33	28.00
LDT1	DSL	Aggregated	0.00%	0.00	0.01	0.04	0.00	0.01	0.00
LDT1	ELEC	Aggregated	0.25%	0.00	0.00	0.00	0.00	2.77	1.10
LDT2	GAS	Aggregated	16.89%	11.17	73.32	2,020.78	9.38	192.55	77.69
LDT2	DSL	Aggregated	0.17%	0.75	1.39	7.67	0.09	2.16	0.97
LDT2	ELEC	Aggregated	0.56%	0.00	0.00	0.00	0.00	6.27	2.49
LHD1	GAS	Aggregated	1.15%	0.94	26.51	34.39	1.83	24.67	10.33
LHD1	DSL	Aggregated	1.33%	12.79	23.15	60.44	1.19	31.42	13.71
LHD2	GAS	Aggregated	0.20%	0.17	5.22	6.10	0.37	5.03	2.11
LHD2	DSL	Aggregated	0.52%	5.18	15.21	25.04	0.52	14.97	7.01
MCY	GAS	Aggregated	0.48%	271.72	132.73	2,016.47	0.25	2.18	1.00
MDV	GAS	Aggregated	10.52%	7.90	51.40	1,289.98	7.12	120.04	48.46
MDV	DSL	Aggregated	0.38%	0.55	0.97	18.08	0.24	4.37	1.78
MDV	ELEC	Aggregated	0.41%	0.00	0.00	0.00	0.00	4.59	1.82
MH	GAS	Aggregated	0.06%	0.14	2.91	2.58	0.20	2.27	0.95
MH	DSL	Aggregated	0.03%	0.31	14.93	0.94	0.05	1.21	0.59
Motor Coach	DSL	Aggregated	0.02%	0.09	10.27	0.95	0.06	0.92	0.43
OBUS	GAS	Aggregated	0.04%	0.12	4.06	2.54	0.14	1.59	0.66
PTO	DSL	Aggregated	0.05%	0.31	56.15	4.97	0.17	0.06	0.06
SBUS	GAS	Aggregated	0.04%	0.11	1.32	1.94	0.06	6.88	2.94
SBUS	DSL	Aggregated	0.04%	0.10	18.92	1.29	0.09	7.82	3.35
T6 CAIRP heavy	DSL	Aggregated	0.02%	0.04	5.73	0.39	0.04	0.90	0.39
T6 CAIRP small	DSL	Aggregated	0.00%	0.01	0.78	0.05	0.01	0.12	0.05
T6 instate construction heavy	DSL	Aggregated	0.02%	0.05	8.05	0.48	0.04	0.93	0.42
T6 instate construction small	DSL	Aggregated	0.13%	0.23	34.91	2.27	0.22	4.88	2.14
T6 instate heavy	DSL	Aggregated	0.95%	1.72	273.96	17.27	1.53	35.92	15.83
T6 instate small	DSL	Aggregated	1.26%	2.19	337.39	21.96	2.16	47.31	20.74
T6 OOS heavy	DSL	Aggregated	0.01%	0.02	3.24	0.22	0.02	0.51	0.22
T6 OOS small	DSL	Aggregated	0.00%	0.00	0.47	0.03	0.00	0.07	0.03
T6 Public	DSL	Aggregated	0.01%	0.02	2.68	0.19	0.02	0.46	0.20
T6 utility	DSL	Aggregated	0.01%	0.01	1.14	0.09	0.01	0.24	0.10
T6TS	GAS	Aggregated	0.24%	0.54	4.96	10.97	0.77	8.57	3.58
T7 Ag	DSL	Aggregated	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
T7 CAIRP	DSL	Aggregated	0.23%	0.95	115.41	10.20	0.48	6.61	3.00
T7 CAIRP construction	DSL	Aggregated	0.02%	0.07	9.03	0.80	0.04	0.51	0.23
T7 NNOOS	DSL	Aggregated	0.28%	1.08	128.26	11.68	0.59	7.91	3.52
T7 NOOS	DSL	Aggregated	0.09%	0.37	45.43	4.01	0.19	2.60	1.18
T7 POLA	DSL	Aggregated	0.39%	1.69	212.60	18.29	0.89	11.41	5.28
T7 Public	DSL	Aggregated	0.02%	0.10	9.95	0.84	0.06	0.64	0.27
T7 Single	DSL	Aggregated	0.24%	0.88	101.40	9.51	0.60	6.76	2.94
T7 single construction	DSL	Aggregated	0.04%	0.16	18.38	1.72	0.11	1.22	0.53
T7 SWCV	DSL	Aggregated	0.00%	0.00	3.99	0.01	0.01	0.03	0.01
T7 SWCV	NG	Aggregated	0.07%	1.29	9.62	256.19	0.00	1.77	0.67
T7 tractor	DSL	Aggregated	0.33%	1.38	168.62	14.87	0.72	9.63	4.37
T7 tractor construction	DSL	Aggregated	0.04%	0.16	19.38	1.68	0.09	1.06	0.49
T7 utility	DSL	Aggregated	0.00%	0.00	0.50	0.05	0.00	0.04	0.02
T7IS	GAS	Aggregated	0.00%	0.17	1.67	16.47	0.01	0.05	0.02
UBUS	GAS	Aggregated	0.02%	0.13	1.69	2.17	0.10	0.81	0.34
UBUS	DSL	Aggregated	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
UBUS	NG	Aggregated	0.10%	2.25	11.94	1,224.03	0.00	2.51	0.97

TOTAL	**355.23**	**2,231.84**	**13,142.67**	**59.42**	**1,296.34**	**531.60**

Based on EMFAC2017, Version 1.0.2, emission factors for Orange County - South Coast Air Basin

Year 2020 Existing: Criteria Air Pollutants

Based on EMFAC2017, Version 1.0.2., Orange County - South Coast Air Basin

	VMT Per Trip Type			
	I-I	I-X	X-I	Total
City	697,779	5,356,504	5,352,841	11,407,124
TOTAL	697,779	5,356,504	5,352,841	11,407,124

[1.] Based on data provided by IBI Group

Emission year

		Year 2020					lbs/day		
Vehicle Type		**Speed**	**Percent of VMT of SpeedBin**	**ROG**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
City of Santa Ana									
All Other Buses	DSL	Aggregated	0.03%	1.32	26.92	4.45	0.07	1.77	1.10
LDA	GAS	Aggregated	53.63%	165.55	602.41	10,197.06	37.16	626.86	260.82
LDA	DSL	Aggregated	0.49%	2.41	10.58	32.69	0.25	6.69	3.28
LDA	ELEC	Aggregated	0.90%	0.00	0.00	0.00	0.00	10.17	4.03
LDT1	GAS	Aggregated	5.53%	43.73	161.49	1,962.44	4.44	65.67	27.84
LDT1	DSL	Aggregated	0.00%	0.07	0.35	0.38	0.00	0.07	0.06
LDT1	ELEC	Aggregated	0.02%	0.00	0.00	0.00	0.00	0.23	0.09
LDT2	GAS	Aggregated	18.67%	86.40	399.01	4,694.99	16.49	218.08	90.67
LDT2	DSL	Aggregated	0.12%	0.55	1.32	4.54	0.08	1.51	0.69
LDT2	ELEC	Aggregated	0.09%	0.00	0.00	0.00	0.00	1.06	0.42
LHD1	GAS	Aggregated	1.52%	12.33	79.32	299.59	3.05	32.64	13.67
LHD1	DSL	Aggregated	0.99%	19.37	488.87	107.46	1.13	26.34	13.00
LHD2	GAS	Aggregated	0.25%	1.43	13.67	36.13	0.59	6.27	2.63
LHD2	DSL	Aggregated	0.38%	6.65	153.36	35.88	0.48	11.18	5.42
MCY	GAS	Aggregated	0.45%	272.17	126.17	2,163.37	0.24	2.00	0.90
MDV	GAS	Aggregated	12.51%	91.25	376.37	3,955.38	13.56	146.35	60.99
MDV	DSL	Aggregated	0.28%	1.09	4.39	17.65	0.26	3.53	1.63
MDV	ELEC	Aggregated	0.03%	0.00	0.00	0.00	0.00	0.32	0.13
MH	GAS	Aggregated	0.07%	1.20	7.58	34.90	0.31	2.63	1.10
MH	DSL	Aggregated	0.03%	0.58	31.93	2.54	0.07	1.97	1.25
Motor Coach	DSL	Aggregated	0.02%	1.06	22.53	4.00	0.07	1.16	0.74
OBUS	GAS	Aggregated	0.05%	0.83	6.33	21.58	0.21	1.78	0.74
PTO	DSL	Aggregated	0.03%	3.17	60.23	10.81	0.17	0.88	0.85
SBUS	GAS	Aggregated	0.02%	0.62	3.92	14.07	0.05	4.24	1.81
SBUS	DSL	Aggregated	0.05%	1.88	110.89	4.99	0.14	9.47	4.46
T6 Ag	DSL	Aggregated	0.00%	0.00	0.03	0.01	0.00	0.00	0.00
T6 CAIRP heavy	DSL	Aggregated	0.02%	0.19	7.12	0.81	0.04	0.81	0.40
T6 CAIRP small	DSL	Aggregated	0.00%	0.05	1.18	0.18	0.01	0.12	0.07
T6 instate construction heavy	DSL	Aggregated	0.03%	1.33	30.25	4.47	0.07	1.81	1.15
T6 instate construction small	DSL	Aggregated	0.16%	6.89	123.72	23.75	0.37	9.71	6.25
T6 instate heavy	DSL	Aggregated	0.65%	18.36	430.76	64.97	1.47	34.14	19.94
T6 instate small	DSL	Aggregated	1.05%	36.34	697.94	128.14	2.47	59.68	36.73
T6 OOS heavy	DSL	Aggregated	0.01%	0.10	3.92	0.45	0.02	0.46	0.23
T6 OOS small	DSL	Aggregated	0.00%	0.03	0.70	0.11	0.00	0.07	0.04
T6 Public	DSL	Aggregated	0.01%	0.22	24.30	0.68	0.04	0.68	0.36
T6 utility	DSL	Aggregated	0.01%	0.03	2.38	0.13	0.01	0.23	0.10
T6TS	GAS	Aggregated	0.46%	5.41	40.24	142.66	1.93	16.52	6.88
T7 Ag	DSL	Aggregated	0.00%	0.00	0.02	0.01	0.00	0.00	0.00
T7 CAIRP	DSL	Aggregated	0.19%	3.22	144.21	15.68	0.60	6.31	3.32
T7 CAIRP construction	DSL	Aggregated	0.02%	0.36	16.11	1.75	0.07	0.72	0.37
T7 NNOOS	DSL	Aggregated	0.23%	4.01	152.07	19.65	0.70	7.99	4.34
T7 NOOS	DSL	Aggregated	0.07%	1.21	55.86	5.94	0.23	2.46	1.29
T7 POLA	DSL	Aggregated	0.17%	6.50	222.30	20.83	0.65	5.88	3.13
T7 Public	DSL	Aggregated	0.02%	0.50	61.13	2.11	0.09	0.91	0.53
T7 Single	DSL	Aggregated	0.17%	7.33	193.85	28.27	0.60	8.12	5.27
T7 single construction	DSL	Aggregated	0.05%	2.54	72.08	9.61	0.19	2.63	1.75
T7 SWCV	DSL	Aggregated	0.02%	0.03	69.29	0.12	0.19	0.47	0.21
T7 SWCV	NG	Aggregated	0.04%	3.30	30.12	118.35	0.00	0.93	0.37
T7 tractor	DSL	Aggregated	0.29%	13.40	349.10	51.14	0.99	13.17	8.37
T7 tractor construction	DSL	Aggregated	0.04%	2.27	58.15	8.44	0.16	2.09	1.36
T7 utility	DSL	Aggregated	0.00%	0.02	1.54	0.08	0.01	0.04	0.02
T7IS	GAS	Aggregated	0.00%	0.19	1.38	7.98	0.01	0.02	0.01
UBUS	GAS	Aggregated	0.02%	0.12	2.19	2.56	0.13	0.78	0.32
UBUS	DSL	Aggregated	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
UBUS	NG	Aggregated	0.09%	3.07	115.95	803.66	0.00	2.52	1.01
			TOTAL	**830.68**	**5,595.54**	**25,067.39**	**89.87**	**1,362.14**	**602.16**

Based on EMFAC2017, Version 1.0.2, emission factors for Orange County - South Coast Air Basin

Year 2045 Project: Criteria Air Pollutants

Based on EMFAC2017, Version 1.0.2., Orange County - South Coast Air Basin

	VMT Per Trip Type			
	I-I	I-X	X-I	Total
City	637,655	5,432,337	5,448,967	11,518,959
TOTAL	637,655	5,432,337	5,448,967	11,518,959

[1.] Based on data provided by IBI Group

Emission year

		Year 2020					lbs/day		
Vehicle Type		**Speed**	**Percent of VMT of SpeedBin**	**ROG**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
City of Santa Ana									
All Other Buses	DSL	Aggregated	0.04%	0.08	13.83	0.82	0.08	1.60	0.71
LDA	GAS	Aggregated	52.02%	23.63	220.91	5,408.31	25.45	598.67	241.42
LDA	DSL	Aggregated	0.65%	0.83	1.44	27.51	0.24	7.49	3.04
LDA	ELEC	Aggregated	3.54%	0.00	0.00	0.00	0.00	40.25	15.97
LDT1	GAS	Aggregated	6.08%	3.10	28.56	644.38	3.45	70.01	28.27
LDT1	DSL	Aggregated	0.00%	0.00	0.01	0.04	0.00	0.01	0.00
LDT1	ELEC	Aggregated	0.25%	0.00	0.00	0.00	0.00	2.80	1.11
LDT2	GAS	Aggregated	16.89%	11.28	74.04	2,040.59	9.48	194.44	78.45
LDT2	DSL	Aggregated	0.17%	0.76	1.41	7.75	0.09	2.18	0.98
LDT2	ELEC	Aggregated	0.56%	0.00	0.00	0.00	0.00	6.34	2.51
LHD1	GAS	Aggregated	1.15%	0.95	26.77	34.73	1.85	24.91	10.43
LHD1	DSL	Aggregated	1.33%	12.92	23.38	61.03	1.20	31.73	13.85
LHD2	GAS	Aggregated	0.20%	0.17	5.27	6.16	0.38	5.08	2.13
LHD2	DSL	Aggregated	0.52%	5.24	15.36	25.29	0.52	15.12	7.08
MCY	GAS	Aggregated	0.48%	274.38	134.03	2,036.24	0.26	2.20	1.01
MDV	GAS	Aggregated	10.52%	7.98	51.90	1,302.63	7.19	121.22	48.94
MDV	DSL	Aggregated	0.38%	0.56	0.98	18.26	0.24	4.42	1.80
MDV	ELEC	Aggregated	0.41%	0.00	0.00	0.00	0.00	4.63	1.84
MH	GAS	Aggregated	0.06%	0.14	2.94	2.61	0.21	2.29	0.96
MH	DSL	Aggregated	0.03%	0.31	15.08	0.95	0.05	1.23	0.59
Motor Coach	DSL	Aggregated	0.02%	0.09	10.37	0.96	0.06	0.93	0.43
OBUS	GAS	Aggregated	0.04%	0.12	4.10	2.57	0.14	1.60	0.67
PTO	DSL	Aggregated	0.05%	0.31	56.70	5.02	0.17	0.06	0.06
SBUS	GAS	Aggregated	0.04%	0.11	1.33	1.96	0.07	6.95	2.97
SBUS	DSL	Aggregated	0.04%	0.10	19.11	1.31	0.09	7.89	3.38
T6 CAIRP heavy	DSL	Aggregated	0.02%	0.04	5.79	0.40	0.04	0.91	0.40
T6 CAIRP small	DSL	Aggregated	0.00%	0.01	0.79	0.05	0.01	0.12	0.05
T6 instate construction heavy	DSL	Aggregated	0.02%	0.05	8.13	0.49	0.05	0.94	0.42
T6 instate construction small	DSL	Aggregated	0.13%	0.23	35.25	2.29	0.23	4.93	2.16
T6 instate heavy	DSL	Aggregated	0.95%	1.74	276.64	17.44	1.55	36.27	15.98
T6 instate small	DSL	Aggregated	1.26%	2.21	340.70	22.18	2.19	47.77	20.94
T6 OOS heavy	DSL	Aggregated	0.01%	0.02	3.27	0.23	0.02	0.52	0.22
T6 OOS small	DSL	Aggregated	0.00%	0.00	0.48	0.03	0.00	0.07	0.03
T6 Public	DSL	Aggregated	0.01%	0.02	2.71	0.19	0.02	0.46	0.20
T6 utility	DSL	Aggregated	0.01%	0.01	1.15	0.09	0.01	0.24	0.10
T6TS	GAS	Aggregated	0.24%	0.54	5.01	11.08	0.78	8.65	3.61
T7 Ag	DSL	Aggregated	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
T7 CAIRP	DSL	Aggregated	0.23%	0.95	116.55	10.30	0.49	6.68	3.03
T7 CAIRP construction	DSL	Aggregated	0.02%	0.07	9.12	0.80	0.04	0.52	0.24
T7 NNOOS	DSL	Aggregated	0.28%	1.09	129.52	11.80	0.59	7.99	3.55
T7 NOOS	DSL	Aggregated	0.09%	0.38	45.88	4.05	0.19	2.63	1.19
T7 POLA	DSL	Aggregated	0.39%	1.71	214.69	18.47	0.90	11.53	5.34
T7 Public	DSL	Aggregated	0.02%	0.11	10.05	0.85	0.06	0.64	0.27
T7 Single	DSL	Aggregated	0.24%	0.89	102.39	9.60	0.60	6.83	2.97
T7 single construction	DSL	Aggregated	0.04%	0.16	18.56	1.74	0.11	1.23	0.54
T7 SWCV	DSL	Aggregated	0.00%	0.00	4.03	0.01	0.01	0.03	0.01
T7 SWCV	NG	Aggregated	0.07%	1.30	9.72	258.70	0.00	1.79	0.68
T7 tractor	DSL	Aggregated	0.33%	1.39	170.28	15.01	0.72	9.72	4.42
T7 tractor construction	DSL	Aggregated	0.04%	0.16	19.57	1.70	0.09	1.07	0.49
T7 utility	DSL	Aggregated	0.00%	0.00	0.50	0.05	0.00	0.04	0.02
T7IS	GAS	Aggregated	0.00%	0.17	1.69	16.63	0.01	0.05	0.02
UBUS	GAS	Aggregated	0.02%	0.13	1.70	2.19	0.10	0.82	0.35
UBUS	DSL	Aggregated	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
UBUS	NG	Aggregated	0.10%	2.27	12.06	1,236.03	0.00	2.53	0.98
			TOTAL	**358.71**	**2,253.72**	**13,271.52**	**60.01**	**1,309.05**	**536.81**

Based on EMFAC2017, Version 1.0.2, emission factors for Orange County - South Coast Air Basin

Year 2020 GHG Emissions: Existing

Based on EMFAC2017, Version 1.0.2., Orange County - South Coast Air Basin

				Days per year[1]	347
	VMT Per Trip Type[2]				
	I-I	I-X	X-I	Total	Annual
City	697,779	5,356,504	5,352,841	11,407,124	3,958,272,028
TOTAL	697,779	5,356,504	5,352,841	11,407,124	3,958,272,028

[1] Adjusted Daily vehicles miles traveled (VMT) multiplied by 347 days/year to account for reduced traffic on weekends and holidays. This assumption is consistent with the California Air Resources Board's (CARB) methodology within the Climate Change Scoping Plan Measure Documentation Supplement.

[2] Based on data provided by IBI Group

				N_2O	CO_2 (Pavley)	CH_4	
	Emission year			AR5 GWP	AR5 GWP	AR5 GWP	
	Year 2020			265	1	28	
Vehicle Type	**Fuel Type**	**Speed**	**Percent of VMT of SpeedBin**	**N_2O**	**CO_2 (Pavley)**	**CH_4**	**CO_2e w/ Pavley + LCFS**
Valley Region							
All Other Buses	DSL	Aggregated	0.03%	0.19	1,228.69	0.01	1,280
LDA	GAS	Aggregated	53.63%	10.47	591,003.93	6.67	593,966
LDA	DSL	Aggregated	0.49%	0.66	4,199.62	0.02	4,375
LDA	ELEC	Aggregated	0.90%	0.00	0.00	0.00	0
LDT1	GAS	Aggregated	5.53%	1.92	70,577.23	1.56	71,131
LDT1	DSL	Aggregated	0.00%	0.00	20.00	0.00	21
LDT1	ELEC	Aggregated	0.02%	0.00	0.00	0.00	0
LDT2	GAS	Aggregated	18.67%	5.28	262,326.86	3.37	263,822
LDT2	DSL	Aggregated	0.12%	0.22	1,404.45	0.00	1,463
LDT2	ELEC	Aggregated	0.09%	0.00	0.00	0.00	0
LHD1	GAS	Aggregated	1.52%	0.78	48,541.26	0.41	48,760
LHD1	DSL	Aggregated	0.99%	2.97	18,896.92	0.14	19,688
LHD2	GAS	Aggregated	0.25%	0.14	9,346.14	0.05	9,386
LHD2	DSL	Aggregated	0.38%	1.25	7,933.36	0.05	8,265
MCY	GAS	Aggregated	0.45%	1.15	3,792.42	6.25	4,273
MDV	GAS	Aggregated	12.51%	4.60	215,744.15	3.22	217,052
MDV	DSL	Aggregated	0.28%	0.68	4,295.85	0.01	4,475
MDV	ELEC	Aggregated	0.03%	0.00	0.00	0.00	0
MH	GAS	Aggregated	0.07%	0.07	4,876.32	0.04	4,897
MH	DSL	Aggregated	0.03%	0.19	1,226.78	0.00	1,278
Motor Coach	DSL	Aggregated	0.02%	0.18	1,149.15	0.01	1,197
OBUS	GAS	Aggregated	0.05%	0.05	3,314.03	0.03	3,328
PTO	DSL	Aggregated	0.03%	0.44	2,818.32	0.02	2,936
SBUS	GAS	Aggregated	0.02%	0.03	785.49	0.02	794
SBUS	DSL	Aggregated	0.05%	0.36	2,292.48	0.01	2,388
T6 Ag	DSL	Aggregated	0.00%	0.00	0.45	0.00	0
T6 CAIRP heavy	DSL	Aggregated	0.02%	0.11	693.80	0.00	723
T6 CAIRP small	DSL	Aggregated	0.00%	0.02	98.88	0.00	103
T6 instate construction heavy	DSL	Aggregated	0.03%	0.19	1,199.66	0.01	1,250
T6 instate construction small	DSL	Aggregated	0.16%	0.98	6,236.53	0.05	6,498
T6 instate heavy	DSL	Aggregated	0.65%	3.84	24,423.22	0.13	25,444
T6 instate small	DSL	Aggregated	1.05%	6.46	41,121.43	0.27	42,842
T6 OOS heavy	DSL	Aggregated	0.01%	0.06	395.32	0.00	412
T6 OOS small	DSL	Aggregated	0.00%	0.01	58.15	0.00	61
T6 Public	DSL	Aggregated	0.01%	0.10	634.89	0.00	661
T6 utility	DSL	Aggregated	0.01%	0.04	237.83	0.00	248
T6TS	GAS	Aggregated	0.46%	0.34	30,635.67	0.18	30,730
T7 Ag	DSL	Aggregated	0.00%	0.00	0.47	0.00	0
T7 CAIRP	DSL	Aggregated	0.19%	1.61	10,240.27	0.02	10,667
T7 CAIRP construction	DSL	Aggregated	0.02%	0.17	1,089.39	0.00	1,135
T7 NNOOS	DSL	Aggregated	0.23%	1.91	12,123.28	0.03	12,629
T7 NOOS	DSL	Aggregated	0.07%	0.73	4,641.11	0.02	4,835
T7 POLA	DSL	Aggregated	0.17%	1.74	11,094.74	0.03	11,558
T7 Public	DSL	Aggregated	0.02%	0.21	1,343.32	0.01	1,399
T7 Single	DSL	Aggregated	0.17%	1.61	10,272.53	0.06	10,702
T7 single construction	DSL	Aggregated	0.05%	1.59	10,145.44	0.00	10,568
T7 SWCV	DSL	Aggregated	0.02%	0.46	2,259.52	3.32	2,475
T7 SWCV	NG	Aggregated	0.04%	0.32	2,032.76	0.01	2,118
T7 tractor	DSL	Aggregated	0.29%	2.74	17,399.94	0.11	18,128
T7 tractor construction	DSL	Aggregated	0.04%	0.43	2,712.82	0.00	2,826
T7 utility	DSL	Aggregated	0.00%	0.01	119.88	0.01	123
T7IS	GAS	Aggregated	0.00%	0.00	95.20	0.00	96
UBUS	GAS	Aggregated	0.02%	0.00	0.00	0.00	0

UBUS	DSL	Aggregated	0.00%	0.00	0.00	0.00	0
UBUS	NG	Aggregated	0.09%	0.00	0.00	0.00	0
				57.33	**1,447,079.91**	**26.17**	**1,463,005.85**

Based on EMFAC2017, Version 1.0.2, emission factors for Orange County - South Coast Air Basin

Year 2045 GHG Emissions: Existing

Based on EMFAC2017, Version 1.0.2., Orange County - South Coast Air Basin

				Days per year[1]	347
	VMT Per Trip Type[2]				
	I-I	I-X	X-I	Total	Annual
City	637,655	5,432,337	5,448,967	11,518,959	3,997,078,773
TOTAL	637,655	5,432,337	5,448,967	11,518,959	3,997,078,773

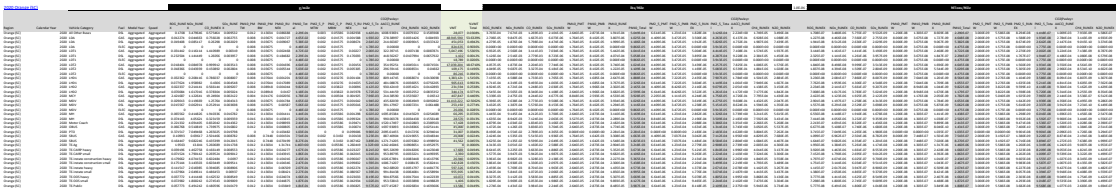
[1] Adjusted Daily vehicles miles traveled (VMT) multiplied by 347 days/year to account for reduced traffic on weekends and holidays. This assumption is consistent with the California Air Resources Board's (CARB) methodology within the Climate Change Scoping Plan Measure Documentation Supplement.

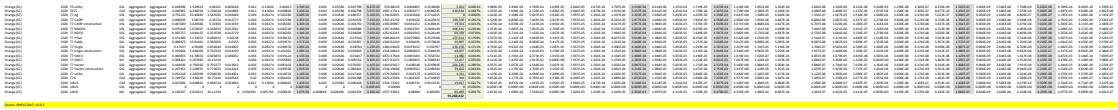
[2] Based on data provided by IBI Group

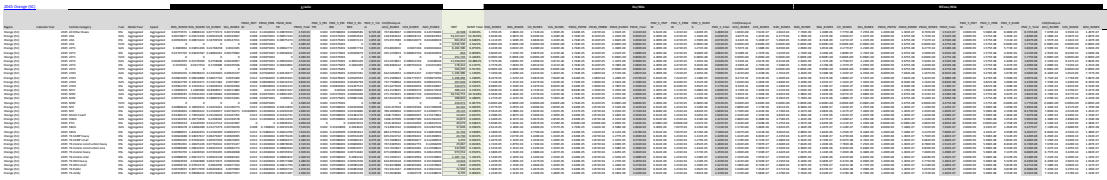
				N_2O	CO_2 (Pavley)	CH_4	
	Emission year			AR5 GWP	AR5 GWP	AR5 GWP	
	Year 2045			265	1	28	
Vehicle Type	**Fuel Type**	**Speed**	**Percent of VMT of SpeedBin**	**N_2O**	**CO_2 (Pavley)**	**CH_4**	**CO_2e w/ Pavley + LCFS**
Valley Region							
All Other Buses	DSL	Aggregated	0.04%	0.20	1,277.86	0.00	1,331
LDA	GAS	Aggregated	52.02%	5.92	455,179.15	1.37	456,786
LDA	DSL	Aggregated	0.65%	0.63	4,033.78	0.01	4,202
LDA	ELEC	Aggregated	3.54%	0.00	0.00	0.00	0
LDT1	GAS	Aggregated	6.08%	0.73	61,645.67	0.17	61,845
LDT1	DSL	Aggregated	0.00%	0.00	9.89	0.00	10
LDT1	ELEC	Aggregated	0.25%	0.00	0.00	0.00	0
LDT2	GAS	Aggregated	16.89%	1.93	169,438.33	0.62	169,968
LDT2	DSL	Aggregated	0.17%	0.23	1,444.03	0.01	1,504
LDT2	ELEC	Aggregated	0.56%	0.00	0.00	0.00	0
LHD1	GAS	Aggregated	1.15%	0.35	29,407.21	0.05	29,502
LHD1	DSL	Aggregated	1.33%	3.14	19,959.32	0.09	20,793
LHD2	GAS	Aggregated	0.20%	0.07	5,997.39	0.01	6,016
LHD2	DSL	Aggregated	0.52%	1.37	8,690.54	0.04	9,054
MCY	GAS	Aggregated	0.48%	1.22	4,074.84	6.43	4,579
MDV	GAS	Aggregated	10.52%	1.28	114,304.75	0.42	114,655
MDV	DSL	Aggregated	0.38%	0.64	4,076.95	0.00	4,247
MDV	ELEC	Aggregated	0.41%	0.00	0.00	0.00	0
MH	GAS	Aggregated	0.06%	0.04	3,292.59	0.01	3,304
MH	DSL	Aggregated	0.03%	0.14	900.40	0.00	938
Motor Coach	DSL	Aggregated	0.02%	0.16	1,039.32	0.00	1,083
OBUS	GAS	Aggregated	0.04%	0.04	2,298.20	0.01	2,308
PTO	DSL	Aggregated	0.05%	0.46	2,913.52	0.00	3,035
SBUS	GAS	Aggregated	0.04%	0.02	1,035.38	0.00	1,040
SBUS	DSL	Aggregated	0.04%	0.23	1,442.28	0.00	1,502
T6 CAIRP heavy	DSL	Aggregated	0.02%	0.10	624.73	0.00	651
T6 CAIRP small	DSL	Aggregated	0.00%	0.01	91.04	0.00	95
T6 instate construction heavy	DSL	Aggregated	0.02%	0.12	753.33	0.00	785
T6 instate construction small	DSL	Aggregated	0.13%	0.59	3,760.13	0.00	3,917
T6 instate heavy	DSL	Aggregated	0.95%	4.05	25,753.26	0.01	26,826
T6 instate small	DSL	Aggregated	1.26%	5.72	36,410.17	0.02	37,927
T6 OOS heavy	DSL	Aggregated	0.01%	0.06	353.87	0.00	369
T6 OOS small	DSL	Aggregated	0.00%	0.01	55.22	0.00	58
T6 Public	DSL	Aggregated	0.01%	0.06	364.82	0.00	380
T6 utility	DSL	Aggregated	0.01%	0.03	187.71	0.00	196
T6TS	GAS	Aggregated	0.24%	0.07	12,378.18	0.02	12,398
T7 Ag	DSL	Aggregated	0.00%	0.00	0.24	0.00	0
T7 CAIRP	DSL	Aggregated	0.23%	1.41	8,976.57	0.01	9,351
T7 CAIRP construction	DSL	Aggregated	0.02%	0.10	627.36	0.00	654
T7 NNOOS	DSL	Aggregated	0.28%	1.55	9,875.73	0.01	10,287
T7 NOOS	DSL	Aggregated	0.09%	0.55	3,470.66	0.00	3,615
T7 POLA	DSL	Aggregated	0.39%	2.59	16,451.62	0.01	17,137
T7 Public	DSL	Aggregated	0.02%	0.15	971.08	0.00	1,012
T7 Single	DSL	Aggregated	0.24%	1.58	10,027.42	0.01	10,445
T7 single construction	DSL	Aggregated	0.04%	1.33	8,462.87	0.00	8,815
T7 SWCV	DSL	Aggregated	0.00%	0.02	116.61	0.18	128
T7 SWCV	NG	Aggregated	0.07%	0.40	2,536.02	0.00	2,642
T7 tractor	DSL	Aggregated	0.33%	2.11	13,449.72	0.01	14,010
T7 tractor construction	DSL	Aggregated	0.04%	0.24	1,526.39	0.00	1,590
T7 utility	DSL	Aggregated	0.00%	0.01	95.07	0.00	97
T7IS	GAS	Aggregated	0.00%	0.00	149.51	0.00	150
UBUS	GAS	Aggregated	0.02%	0.00	0.00	0.00	0
UBUS	DSL	Aggregated	0.00%	0.00	0.00	0.00	0

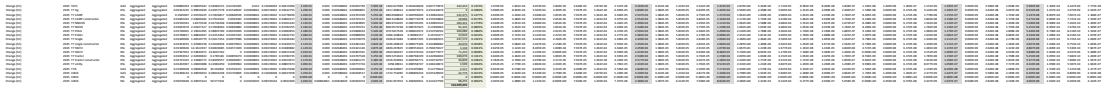
UBUS	NG	Aggregated	0.10%	0.00	0.00	0.00	0
				41.66	**1,049,930.76**	**9.53**	**1,061,237.21**

Based on EMFAC2017, Version 1.0.2, emission factors for Orange County - South Coast Air Basin









Appendix D Biological and Natural Resource Inventory and Assessment

Appendices

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May 26, 2020

Dina El Chammas
Placeworks
3 MacArthur Place, Suite 1100
Santa Ana, CA 92707

Subject: Biological and Natural Resource Inventory and Assessment for the City of Santa Ana General Plan update

Dear Ms. El Chammas,

This letter describes the methods and results of the Biological and Natural Resource Inventory and Assessment for the City of Santa Ana (City), in support of the City's General Plan update and corresponding Environmental Impact Report (EIR). The City of Santa Ana is a built, urban community. As a result, readily-apparent resources, such as natural habitat and wildlife, are limited. Carlson Strategic Land Solutions (CSLS) conducted an aerial review and inventory of all open space, recreational (parks), and vacant land within the City limits, as well as within the Sphere of Influence (SOI). Following the aerial overview, CSLS conducted field surveys to spot check the results of the aerial survey. The purpose of this letter is to describe the biological and natural resource inventory within the City limits and SOI. The report provides a summary of natural resources for the entire City as well as for the following five Focus Areas in support of any required future environmental documents.

- 55 Freeway/Dyer Road
- South Bristol Street
- Grand Avenue/17th Street
- South Main Street
- West Santa Ana Boulevard

1.0 Project Location

The City of Santa Ana is located approximately 30 miles southeast of downtown Los Angeles and 10 miles northeast of Newport Beach. The City is located in the western central section of Orange County. The City is bordered by the City of Orange to the north; the City of Tustin to the east; the cities of Irvine and Costa Mesa to the south; and the cities of Fountain Valley and Garden Grove to the west (Figures 1 and 2).

Freeway access to the City is provided by the Garden Grove Freeway (SR-22) and State Route-57 (SR-57) to the north, Interstate-5 (I-5) on the northeast, State Route (SR-55) on the east, and Interstate-405 (I-405) on the south.

1.1 Environmental Setting

The City is largely urbanized with open space and vacant land scattered in various locations throughout the City. The majority of the City is developed with a mix of residential, commercial, and industrial land uses.

2.0 Methodology

2.1 Biological Survey

The Biological and Natural Resource inventory began with a thorough investigation of available literature and databases regarding existing and known open space through the City's current General Plan mapping, sensitive habitats, special status plants, and wildlife species within the City boundary and SOI.

Following the database and literature investigation, a visual aerial survey of the City was completed utilizing Google Earth aerials and existing City of Santa Ana General Plan Open Space land use designations. CSLS started with parcels currently designated Open Space on the existing City's General Plan Map. Those parcels were inventoried to determine current use and current habitat classifications on each parcel. CSLS then searched aerial photographs and identified remaining vacant parcels. For those vacant parcels, CSLS identified the APN, current land use designation, and current habitat classifications on each parcel. All parcels, open space and non-open space, are also linked to the City's GIS identification number and the size of each parcel is also provided. Following the aerial inventory of parcels, both appearing as vacant and designated as Open Space, CSLS spot-checked the parcels in the field to confirm the vegetation community onsite.

3.0 Results

Please refer to Figure 3 for City-wide inventory of vacant parcels and parcels designated open space. The inventory is also provided in tabular form in Attached A.

3.1 Vegetation Communities

Based on the aerial inventory and the field spot-check, a total of seven vegetation communities were identified within the open space and vacant parcels within the City boundary and SOI. A list of each of the vegetation communities observed is provided below.

3.1.1 Riparian

This community consists of willow spices (*Salix sp.*), mulefat (*Baccharis salicifolia*), Fremont's cottonwood, elderberry (*Sambucus nigra*), and western sycamore (*Platanus racemosa*). Portions of the riparian community consists of white alder (*Alnus rhombifolia*), tree tobacco (*Nicotiana glauca*), castor bean (*Rincinus communis*), and eucalyptus trees (*Eucalyptus sp.*). This community is associated with the Santiago Creek.

3.1.2 Unvegetated Streambed

This community is associated with the natural bottom portion of the Santa Ana River. This community contains minimal amounts of vegetation or is void of vegetation completely.

3.1.3 Oak Woodland

This community consists of primarily coast live oak trees (*Quercus agrifolia*). The understory consists of minimal non-native grasses and bare ground. This community is found adjacent to Santiago Creek in the north eastern portion of the City and appeared to be associated with conserved land.

3.1.4 Ornamental

This community includes maintained landscaped areas. The ornamental vegetation is non-native, and some of it is considered invasive. The ornamental habitat type includes shade trees, such as Peruvian pepper tree (*Schinus molle*), Brazilian pepper (*Schinus terebinthifolius*), and grass associated with the City parks, primarily Kentucky bluegrass (*Poa pratensis*). This vegetation community includes River View Golf Course, Willowick Golf Course, and other various community parks found within the City boundary.

3.1.5 Ruderal

This community is associated with areas that are heavily disturbed by human activities, such as demolition of existing structures, annual mowing, and dominance of non-native and/or invasive species. The parcels mapped as ruderal include Russian thistle (*Salsola tragus*), mustard (*Brassica sp.*), cheeseweed (*Malva parviflora*), and large areas which are bare and void of vegetation.

3.1.6 Disturbed

This community is void of any vegetation and completely bare.

3.1.7 Developed

This community consists of General Plan designated Open Space parcels that are developed with structures. This community includes the Fairhaven Memorial Park and Mortuary, the Santa Ana Zoo, and the concrete lined channels found within Santa Ana River and Santiago Creek. These areas consist of primarily built materials and are frequently maintained.

3.2 Overall City Biological Inventory

CSLS identified a total of 499 parcels designated as Open Space land use within the City boundary. An additional 135 parcels were identified as vacant, or contain natural resources, and not designated Open Space. See Figure 3 for City-wide inventory of vacant parcels and parcels designated open space.

In additional to those parcels identified within the City boundary, an additional 4 parcels, consisting of 83.37 acres, were identified as vacant parcels located outside of the City boundary but within the SOI boundary. The SOI parcels include vacant parcels found portions of the concrete lined Santa Ana River located on the southwestern portion of the SOI boundary (Figure 4). Table 1 below provides the physical land use, vegetation community, acreage, and Assessor's Parcel Number (APN) for the vacant parcels and concrete lined portions of the Santa Ana River. Attachment A contains a complete list of the open space and natural resources parcels found within the City and SOI.

Table 1. Sphere of Influence Open Space Inventory

Sphere of Influence Location	Land Use	Vegetation Community	Acreage (acres)	APN	Proposed General Plan Designation	Impact
Santa Ana River	Concrete Channel	Developed	3.53	portion of 144-261-41	No change	No
Santa Ana River	Concrete Channel	Developed	33.00	000	No change	No
Santa Ana River	Concrete Channel	Developed	5.34	000	No change	No
Santa Ana River	Concrete Channel	Developed	41.50	000	No change	No
		Total	**83.37**			

Source: City of Santa Ana GIS, 2019; Carlson SLS, 2019.

3.2.1 Existing Plans

Figure 3 identifies areas referred to as Existing Plans. The Existing Plans pertain to three approved Specific Plans, an Adaptive Reuse Ordinance, and two areas with Zoning Overlays (Metro East Mixed Use Overlay Zone and Transit Zoning Area). The boundaries of the Existing Plans are shown on Figure 3 for reference and the results of the inventory tabulated in Attachment A. The Existing Plan areas have not been separately tabulated as has been done for the Focus Areas.

3.3 Focus Areas

Five Focus Areas have been identified as part of the City's General Plan Update. The Natural Resources Inventory provided in this report has been summarized by Focus Area. Summary tables provided for the five Focus Areas inventory Open Space designated land use or vacant lots and identify the existing General Plan Land Use Designation, the physical land use, vegetation community, acreage, and APN. It should be noted that some APNs, primarily the railroad right-of-way, do not provide an APN but rather are given the designation 000.

3.3.1 South Main Street

The South Main Street Focus Area does not contain any Open Space designated parcels or vacant lots (Figure 5). The parcels found within this Focus Area consists all of developed land. Furthermore, due to the built nature of this Focus Area, no impacts will occur with the proposed changes in General Plan Designations.

3.3.2 Grand Avenue/17th Street

The Grand Avenue/17th Street Focus Area consist of 2 parcels of Open Space designated parcels and 9 non-open space designated vacant parcels (Figure 6). The parcels total 3.15 acres. Table 2 below summarizes the open space designated lots found within the Focus Area Boundary and the associated vegetation community.

Table 2. Grand Avenue/17th Street Focus Area Open Space Inventory

City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Vegetation Community	Acreage (acres)	APN	Proposed General Plan Designation	Impact
74684	GC	General Commercial	Vacant	Disturbed	0.20	398-384-01	Urban Neighborhood	No; Disturbed vegetation community
74685	GC	General Commercial	Vacant	Disturbed	0.14	398-384-02	Urban Neighborhood	No; Disturbed vegetation community
74686	POA	Professional and Administrative Office	Vacant	Disturbed	0.14	398-384-03	Urban Neighborhood	No; Disturbed vegetation community
74692	GC	General Commercial	Vacant	Disturbed	0.26	398-384-09	Urban Neighborhood	No; Disturbed vegetation community
74693	GC	General Commercial	Vacant	Disturbed	0.29	398-384-15	Urban Neighborhood	No; Disturbed vegetation community

City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Vegetation Community	Acreage (acres)	APN	Proposed General Plan Designation	Impact
74694	LR-7	Low Density Residential	Vacant	Disturbed	0.14	398-384-11	Urban Neighborhood	No; Disturbed vegetation community
74695	LR-7	Low Density Residential	Vacant	Disturbed	0.14	398-384-12	Urban Neighborhood	No; Disturbed vegetation community
74696	LR-7	Low Density Residential	Vacant	Disturbed	0.21	398-384-17	Urban Neighborhood	No; Disturbed vegetation community
74697	LR-7	Low Density Residential	Vacant	Disturbed	0.16	398-384-17	Urban Neighborhood	No; Disturbed vegetation community
84970	OS	Open Space	Railroad	Developed	1.07	398-071-65	Open Space	No
84907	OS	Open Space	Railroad	Developed	0.40	000	Open Space	No
				Total	**3.15**			
Source: City of Santa Ana GIS, 2019; Carlson SLS, 2019.								

3.3.3 West Santa Ana Boulevard

The West Santa Ana Boulevard Focus Area consist of 28 parcels of Open Space designated parcels and no non-open space designated vacant parcels (Figure 7). The parcels total 148.11 acres. The focus area includes the Willowick Golf Course, Angels Community Park, and a portion of the Santa Ana River (SAR). Table 3 below summarizes the open space parcels found within the Focus Area Boundary.

Table 3. West Santa Ana Boulevard Focus Area Open Space Inventory

City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Vegetation Community	Acreage (acres)	APN	Proposed General Plan Designation	Impact
47033	OS	Open Space	Vacant	Disturbed	2.05	198-091-56	Open Space	No
47231	OS	Open Space	Vacant	Disturbed	3.55	198-211-03	Open Space	No
47286	OS	Open Space	Willowick Golf Course	Ornamental	1.23	198-233-11	Open Space	No

City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Vegetation Community	Acreage (acres)	APN	Proposed General Plan Designation	Impact
47295	OS	Open Space	Willowick Golf Course	Ornamental	0.52	198-281-09	Open Space	No
47296	OS	Open Space	Willowick Golf Course	Ornamental	0.74	198-281-10	Open Space	No
47297	OS	Open Space	Willowick Golf Course	Ornamental	1.02	198-281-11	Open Space	No
47298	OS	Open Space	Willowick Golf Course	Ornamental	1.01	198-281-12	Open Space	No
47299	OS	Open Space	Willowick Golf Course	Ornamental	2.02	198-281-13	Open Space	No
47300	OS	Open Space	Willowick Golf Course	Ornamental	1.01	198-281-14	Open Space	No
47301	OS	Open Space	Willowick Golf Course	Ornamental	0.96	198-281-15	Open Space	No
47302	OS	Open Space	Willowick Golf Course	Ornamental	1.58	198-281-16	Open Space	No
47317	OS	Open Space	Willowick Golf Course	Ornamental	0.19	198-282-01	Open Space	No
47318	OS	Open Space	Willowick Golf Course	Ornamental	0.60	198-282-02	Open Space	No
47319	OS	Open Space	Willowick Golf Course	Ornamental	0.56	198-291-01	Open Space	No
47320	OS	Open Space	Vacant	Disturbed	5.65	198-291-02	Open Space	No
47321	OS	Open Space	Willowick Golf Course	Ornamental	0.02	198-291-03	Open Space	No
47322	OS	Open Space	Willowick Golf Course	Ornamental	3.78	198-291-04	Open Space	No

City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Vegetation Community	Acreage (acres)	APN	Proposed General Plan Designation	Impact
47323	OS	Open Space	Willowick Golf Course	Ornamental	0.20	198-291-05	Open Space	No
47324	OS	Open Space	Willowick Golf Course	Ornamental	0.45	198-291-06	Open Space	No
47325	OS	Open Space	Willowick Golf Course	Ornamental	0.63	198-291-07	Open Space	No
47326	OS	Open Space	Willowick Golf Course	Ornamental	94.44	198-291-08	Open Space	No
65826	OS	Open Space	Vacant	Disturbed	1.45	007-022-26	Open Space	No
66037	OS	Open Space	Concrete SAR	Developed	14.51	198-151-35	Open Space	No
66085	OS	Open Space	Vacant	Disturbed	2.18	402-221-05	Open Space	No
66094	OS	Open Space	Vacant	Disturbed	1.09	405-241-02	Open Space	No
66102	OS	Open Space	Vacant	Disturbed	1.92	007-100-08	Open Space	No
66170	OS	Open Space	Vacant	Disturbed	3.02	007-120-48	Open Space	No
77919	OS	Open Space	Angels Community Park	Ornamental	1.72	405-164-01	Open Space	No
				Total	**148.11**			

Source: City of Santa Ana GIS, 2019; Carlson SLS, 2019.

3.3.4 55 Freeway/Dyer Road

The 55 Freeway/Dyer Road Focus Area consist of 7 parcels of Open Space designated and 3 parcels of Non-Open Space designated parcels (Figure 8). The parcels total 6.22 acres. Table 4 below provides the open space and vacant non-open space designated parcels found within the Focus Area Boundary.

Table 4. 55 Freeway/Dyer Road Focus Area Open Space Inventory

City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Vegetation Community	Acreage (acres)	APN	Proposed General Plan Designation	Impact
78591	OS	Open Space	Railroad	Developed	0.70	000	Open Space	No
78706	PAO	Professional and Administrative Office	Vacant	Ruderal	1.75	016-221-27	Industrial	No; Ruderal vegetation community
78707	PAO	Professional and Administrative Office	Vacant	Ruderal	0.81	016-221-28	Industrial	No; Ruderal vegetation community
78708	PAO	Professional and Administrative Office	Vacant	Ruderal	0.27	016-221-29	Industrial	No; Ruderal vegetation community
78904	OS	Open Space	Concrete Channel	Developed	0.04	411-141-05	Open Space	No
78905	OS	Open Space	Vacant	Ruderal	0.07	411-141-06	Open Space	No
79053	OS	Open Space	Railroad	Developed	0.98	411-131-20	Open Space	No
84986	OS	Open Space	Railroad	Developed	0.01	000	Open Space	No
85358	OS	Open Space	Railroad	Developed	0.56	000	Open Space	No
85519	OS	Open Space	Concrete channel/ Freeway	Developed	1.04	000	Open Space	No
				Total	**6.22**			

Source: City of Santa Ana GIS, 2019; Carlson SLS, 2019.

3.3.5 South Bristol Street

The South Bristol Street Focus Area consist of 10 parcels of Open Space designated land use (Figure 9) and no vacant non-open space designated parcels. The parcels total 6.94 acres. Table 5 below provides the open space designated parcels found within the Focus Area Boundary.

Table 5. South Bristol Street Focus Area Open Space Inventory

City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Vegetation Community	Acreage (acres)	APN	Proposed General Plan Designation	Impact
54311	OS	Open Space	Concrete Channel	Developed	1.05	412-141-05	Open Space	No

City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Vegetation Community	Acreage (acres)	APN	Proposed General Plan Designation	Impact
71079	OS	Open Space	Concrete Channel	Developed	2.57	000	Open Space	No
72061	OS	Open Space	Concrete Channel - Parking lot	Developed	0.27	410-301-09	Open Space	No
72537	OS	Open Space	Linear Park	Ornamental	0.18	410-223-07	Open Space	No
84946	OS	Open Space	Railroad	Developed	0.67	Portion of 000	Open Space	No
84953	OS	Open Space	Railroad	Developed	0.60	Portion of 000	Open Space	No
84954	OS	Open Space	Concrete Channel	Developed	1.30	000	Open Space	No
84955	OS	Open Space	Underground Channel - Turf	Developed	0.18	412-131-27	Open Space	No
85349	OS	Open Space	Railroad	Developed	0.11	Portion of 000	Open Space	No
85350	OS	Open Space	Linear Park	Ornamental	0.01	Portion of 410-223-07	Open Space	No
				Total	**6.94**			

Source: City of Santa Ana GIS, 2019; Carlson SLS, 2019.

4.0 Impact Analysis

Following the Biological and Natural Resource inventory an impact analysis was conducted for each Focus Area. For each parcel analyzed, a determination was made whether the proposed change in land use from existing land use to proposed land use would cause a biological impact. The results of that analysis, summarized on the preceding tables and in the discussion below, determined that the proposed change in land uses would not cause a significant biological impact. The parcels outside of the Focus Areas are summarized in Appendix A. None of the parcels outside of the Focus Areas with a non-open space land use designation have sensitive habitat or any indication that a biological impact would occur if developed.

The inventory of existing conditions determined that no parcels with a proposed land use designation that allows for development (i.e. not an open space designation) currently has sensitive vegetation. All parcels currently have ruderal vegetation and little to no biological value. Therefore, there is no current indication that future development in accordance with the

proposed General Plan Update would have significant unavoidable biological impacts. However, a complete biological analysis of each parcel has not been conducted. Therefore, there is a potential that site-specific analysis would reveal biological resources not identified in this report. Additionally, biological resources change over time. Therefore, there is a potential for biological impacts associated with implementation of the General Plan Update that could require mitigation.

4.1 Overall City Biological Inventory

The parcels identified as open space or vacant parcels within the SOI area propose no change in General Plan Land Use Designations; therefore, no impacts would occur from the proposed General Plan Update. The remaining balance of parcels identified as open space or vacant parcels within the City limits propose no change in General Plan Land Use Designation.

The parcels outside of the Focus Areas are summarized in Appendix A. Since none of the parcels outside of the Focus Areas have a proposed land use change as part of this General Plan Update, they are not included in the following discussion. However, it is important to note that none of the parcels outside of the Focus Areas with a non-open space land use designation have sensitive habitat, native habitat, or any indication at this time that a biological impact would occur if developed.

No sensitive or native habitat occur within the non-open space land use designated parcels within the SOI and City limits; however, a complete site-specific biological analysis was not conducted. Therefore, there may be potential for biological impacts, such as to nesting birds.

4.2 Focus Areas Impacts

4.2.1 South Main Street

The South Main Street Focus Area does not contain any Open Space designated parcels or vacant lots. Furthermore, due to the built nature of this Focus Area, no impacts will occur with the proposed changes in General Plan Designations.

4.2.2 Grand Avenue/17th Street

Of the total eleven parcels identified within the Grand Avenue/17th Street Focus Area, nine parcels are changed as part of the General Plan Update. The nine parcels would change the land use designation to Urban Neighborhood. Since the changes proposed are developable uses (Professional and Administration Office, General Commercial and Low Density Residential) to Industrial, both which are developable land uses, no impact would occur from the proposed land use change. Further, the vegetation community observed within these parcels is disturbed, which is not native or considered a sensitive vegetation community. Since the nine parcels for the

proposed General Plan Update changes occur to non-native communities, these impacts are not considered significant. The remaining two parcels are designated Open Space and the proposed General Plan Update does not propose any revisions to the existing land use designation; therefore, no impacts will occur.

4.2.3 West Santa Ana Boulevard

All parcels identified within the West Santa Ana Boulevard Focus Area are designated Open Space. The proposed General Plan Update does not propose any revisions to the existing land use designations; therefore, no impact would occur.

4.2.4 55 Freeway/Dyer Road

The parcels identified within 55 Freeway/Dyer Road Focus Area contain three parcels that have General Plan Land Use Designation changes. These three parcels, City identification numbers 78706, 78707, and 7808, are currently designated as Professional and Administrative Office. The proposed General Plan Update would change the land use designation for these parcels to Industrial. Since the proposed change in land use designation from Professional and Administration Office to Industrial are both developable land uses, no impact would occur from the proposed land use change. Furthermore, the vegetation community observed within these parcels is ruderal, which is not native or considered a sensitive vegetation community. Since the three parcels for the proposed General Plan Update changes occur to non-native communities, these impacts are not considered significant. The remaining parcels identified within the 55 Freeway/Dyer Road Focus Area do not have a change to General Plan land use designation and therefore, no impacts will occur.

4.2.5 South Bristol Street

All parcels identified within South Bristol Street Focus Area are designated Open Space. The proposed General Plan Update does not propose any revisions to the existing land use designations; therefore, no impacts would occur.

While the inventory of existing conditions determined that no parcels with a proposed land use designation that allows for development (i.e. not an open space designation) currently has sensitive vegetation. These parcels currently have ruderal vegetation and little to no biological value. Therefore, there is no current indication that future development in accordance with the General Plan Update would have significant unavoidable biological impacts. However, a complete biological analysis of each parcel has not been conducted and there is a potential for biological impacts, such as to nesting birds, that could require mitigation.

4.3 Regulatory Requirements and Mitigation Measures

Regulatory requirements that would protect biological resources include:

- The Federal Endangered Species Act (FESA): THE FESA protects and conserves any species of plant or animal that is endangered or threatened with extinction, as well as the habitats where these species are found. Take of endangered species is prohibited under Section 9 of the FESA.
- Clean Water Act (CWA): The United States Army Corps of Engineers (Corps) regulates discharge of dredged or fill material into "waters of the United States." Any filling or dredging within waters of the United States requires a permit pursuant to the CWA, which entails assessment of potential adverse impacts to Corps wetlands and jurisdictional waters.
- California Fish and Game Code: Section 1600 of the California Fish and Game Code requires a project proponent to notify the California Department of Fish and Wildlife (CDFW) of any proposed alteration of streambeds, rivers, and lakes. Additionally, migratory nongame native bird species are protected by the California Fish and Game Code, Sections 3503, 3503.5, and 3513, which prohibit the take of all birds and their active nests. Compliance with the California Fish and Game Code ensures that if construction occurs during the avian breeding season, appropriate measures would be taken to avoid impacts to nesting birds. The Code requires preconstruction surveys. The surveys would be conducted no more than three days prior to construction activities. If an active bird nest is observed, the surveyor/biologist determines the appropriate buffer around the nest. Buffers are determined on species-specific requirements and nest location. No construction activity would occur within the buffer zone until the nest is vacated, juveniles have fledged, and there is no evidence of a second attempt at nesting.
- The California Endangered Species Act (CESA): The CESA generally parallels the main provisions of the FESA. Its intent is to prohibit take and protect state-listed endangered and threatened species of fish, wildlife, and plants.
- Santa Ana Municipal Code: Chapter 33, Article VII, *Regulation of the Planting, Maintenance, and Removal of Trees*, of the City's municipal code establishes regulations and standards necessary to protect publicly owned trees.

While regulatory requirements would protect potential biological resources the following mitigation measure is required to reduce the impacts to less than significant:

Mitigation Measure 1: For development or redevelopment projects that would disturb vegetated land and is subject to CEQA, a qualified biologist shall conduct an initial screening to determine whether a site-specific biological resource report is warranted. If needed, a qualified biologist shall conduct a field survey for the site and prepare a biological resource assessment for the project, including an assessment of potential impacts to sensitive species, habitat and jurisdictional waters. The report shall recommend mitigation measures as appropriate, to avoid or limit potential biological resource impacts to less than significant.

5.0 Summary

CSLS identified a total of 499 parcels designated as Open Space land use within the City boundary. An additional 135 parcels were identified as vacant, or contain natural resources, and not designated Open Space.

In additional to those parcels identified within the City boundary, an additional 4 parcels, consisting of 83.37 acres, were identified as vacant parcels located outside of the City boundary but within the SOI boundary. The SOI parcels include vacant parcels found within the concrete lined Santa Ana River.

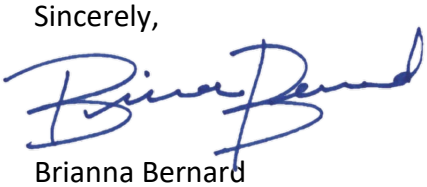
Of the total parcels identified, the CSLS inventory identified a total of 59 parcels, either vacant or designated open space, within the five specified focus areas. The 59 parcels within the five focused areas total 164.42 acres of open space and vacant parcels. Of those 59 parcels, 47 parcels are designated Open Space by the existing General Plan Land Use Map. With the proposed General Plan Update all 47 parcels remain designated Open Space. Therefore, no designated open space would change to developable land uses and no impacts would occur. The remaining twelve parcels currently have developable land use designations (Professional and Administrative Office, General Commercial, or Low Density Residential) and are proposed to change to other developable land use designations (Industrial and Urban Neighborhood). Since both the existing and proposed land use designations permit developable land uses, no impacts would occur.

While the inventory of existing conditions determined that no parcels with a proposed land use designation that allows for development (i.e. not an open space designation) currently has sensitive vegetation. All parcels currently have ruderal vegetation and little to no biological value. Therefore, there is no current indication that future development of the vacant parcels would have significant unavoidable biological impacts. However, a complete biological analysis of each parcel has not been conducted and there is a potential for biological impacts, such as to nesting

birds, that could require mitigation. Regulatory requirements and Mitigation Measure 1 would reduce impacts to less than significant.

If you have any questions, please feel free to contact me at bbernard@carlsonsls.com or at (916) 218-2644.

Sincerely,



Brianna Bernard
Project Manager

Enclosures

Figures

- Figure 1: Site Location Map
- Figure 2: Study Area Map
- Figure 3: General Plan Designated Open Space Parcels and Vacant Parcels
- Figure 4: Santa Ana River Sphere of Influence Open Space Inventory
- Figure 5: South Main Street Focus Area Open Space Inventory
- Figure 6: Grand Avenue/ 17th Street Focus Area Open Space Inventory
- Figure 7: West Santa Ana Boulevard Focus Area Open Space Inventory
- Figure 8: 55 Freeway/Dyer Road Focus Area Open Space Inventory
- Figure 9: South Bristol Street Focus Area Open Space Inventory

Attachments

- Attachment A: Citywide Biological Inventory Excel Sheet

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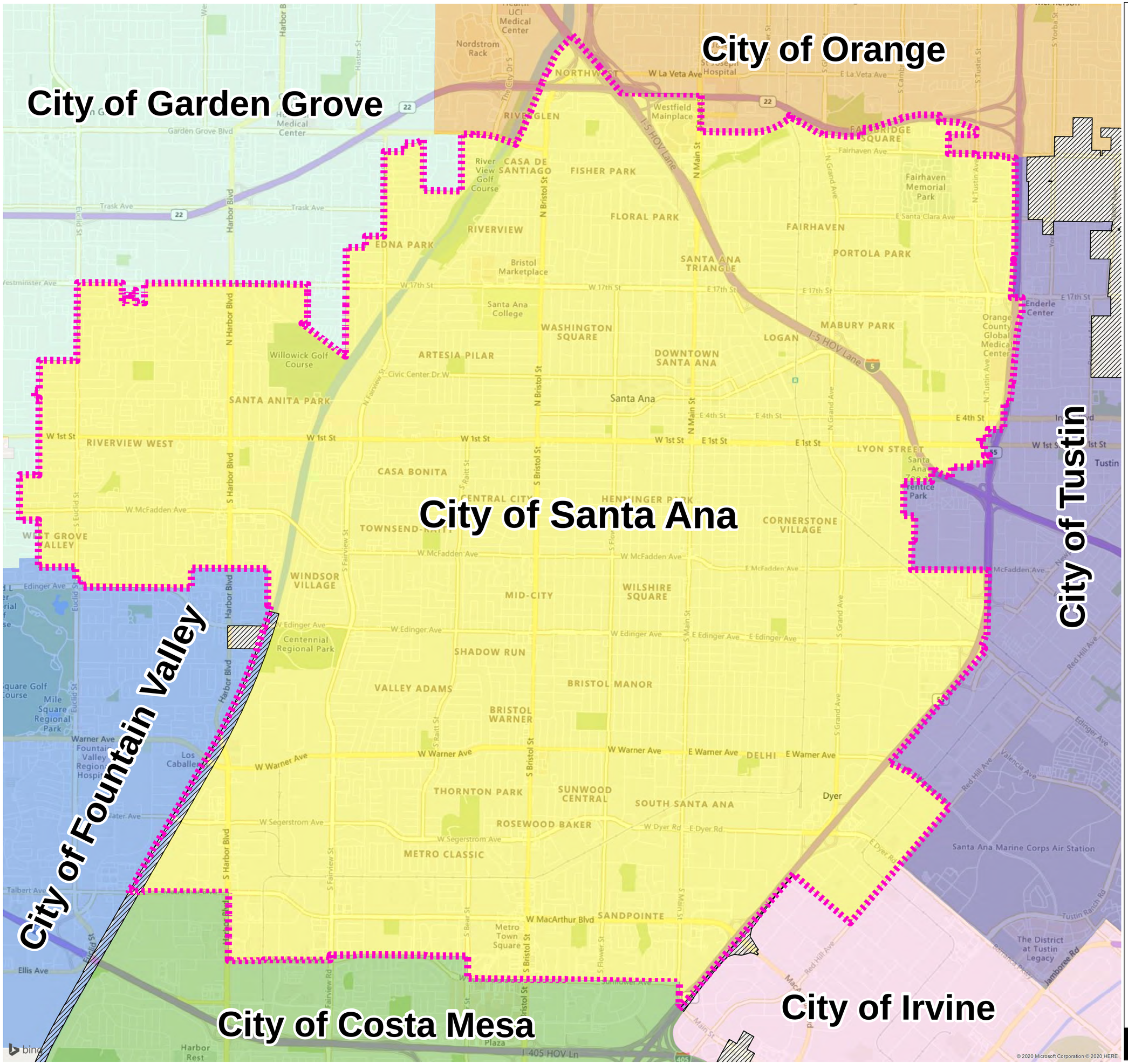
Figures


City of Orange
City of Garden Grove
City of Santa Ana
City of Tustin
City of Fountain Valley
City of Costa Mesa
City of Irvine
Legend
City of Santa
Sphere of Influence
Surrounding Cities
Costa Mesa
Fountain Valley
Garden Grove
Irvine
Orange
Tustin
Unincorporated County of Orange
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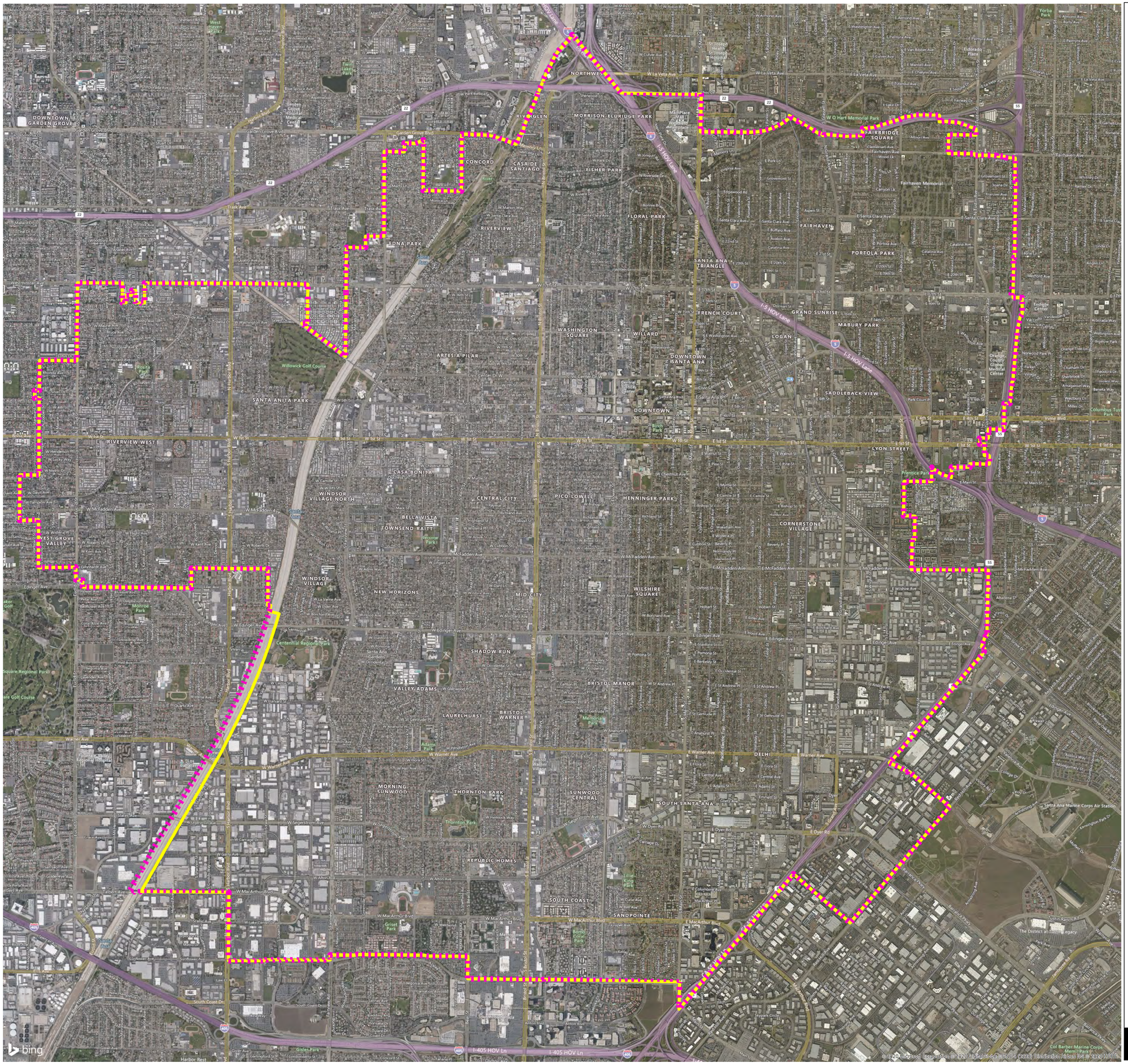
1
Miles
Created: June 24, 2019
Location Map

Figure 1



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Legend

City of Santa Ana Boundary

Sphere of Influence

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0 0.5 1

Miles

Created: June 24, 2019

Study Area Map

Figure 2

General Plan Designated Open Space Parcels and Vacant Parcels

- Sphere of Influence
- Santa Ana City Boundary
- Existing Plans

Working Focus Areas

- 55 Freeway/Dyer Road
- Grand Avenue/17th Street
- South Main Street
- West Santa Ana Boulevard
- South Bristol Street

Habitat Classification

- Riparian
- Unvegetated Streambed
- Oak Woodland
- Ornamental
- Ruderal
- Disturbed
- Developed

N
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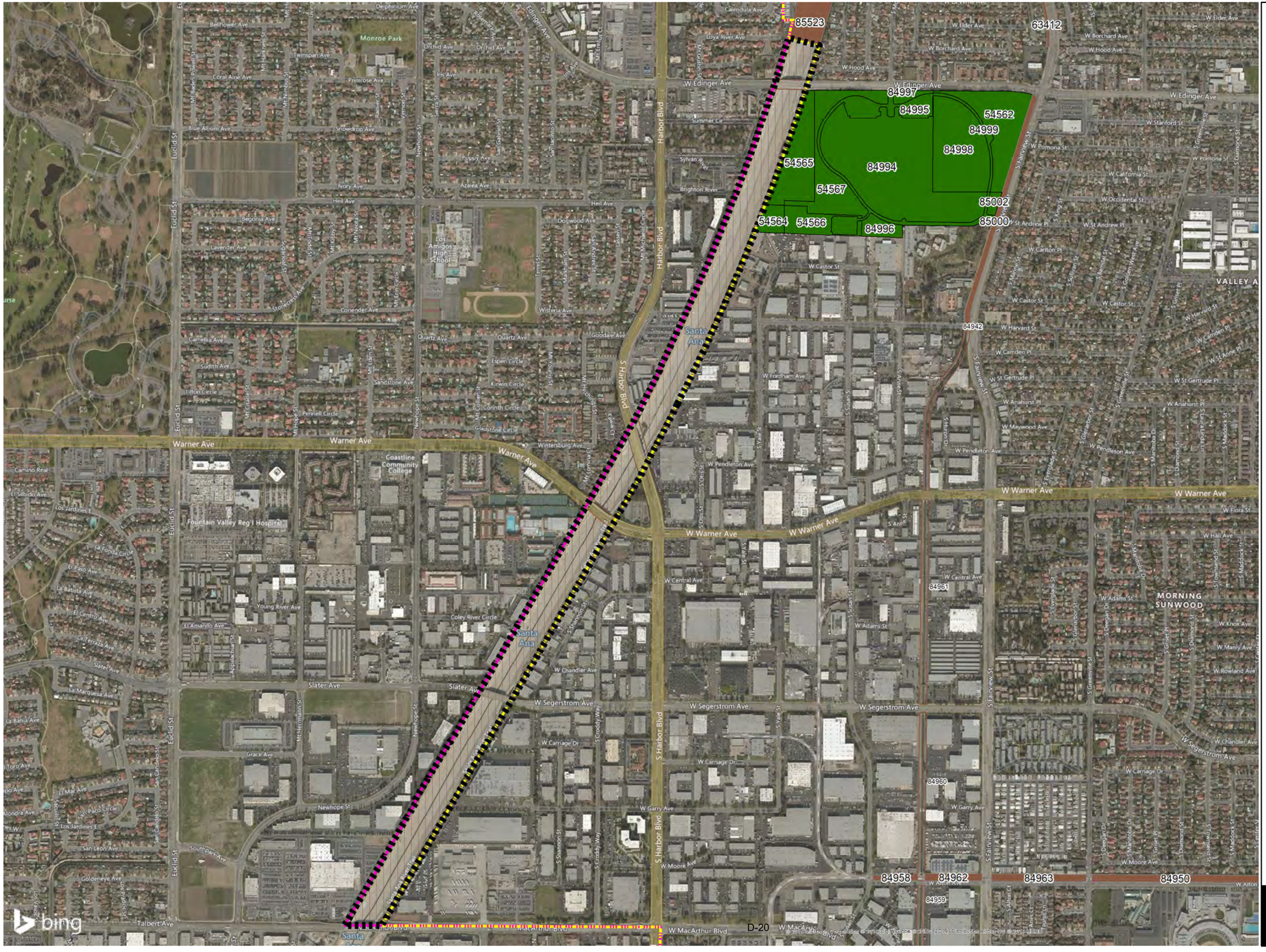
Miles

Created: April 2, 2020

Open Space Inventory

Figure 3



General Plan Open Space Inventory

Sphere of Influence

Santa Ana City Boundary

Existing Plans

Sphere of Influence

Santa Ana River

General Plan Designated Open Space Habitat Classification

Riparian

Unvegetated Streambed

Oak Woodland

Ornamental

Ruderal

Disturbed

Developed

Vacant Parcels Non-Open Space Designated Habitat Classification

Ornamental

Ruderal

Disturbed

Developed

N

W E

S

0 250 500 1,000 1,500 2,000

Feet

Created: June 20, 2019

Santa Ana River
Sphere of Influence
Open Space Inventory

Figure 4

General Plan Open Space Inventory

- Sphere of Influence
- Santa Ana City
- Existing Plans

Working Focus Area

- South Main Street

General Plan Designated Open Space Habitat Classification

- Riparian
- Unvegetated Streambed
- Oak Woodland
- Ornamental
- Ruderal
- Disturbed
- Developed

Vacant Parcels Non-Open Space Designated Habitat Classification

- Ornamental
- Ruderal
- Disturbed
- Developed

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0 300 600 1,200 1,800 2,400

Feet

Created: April 1, 2020

South Main Street
Focus Area
Open Space Inventory

Figure 5

General Plan Open Space Inventory

Santa Ana City Boundary

Sphere of Influence

Existing Plans

Working Focus Area

Grand Avenue/17th Street

General Plan Designated Open Space Habitat Classification

Riparian

Unvegetated Streambed

Oak Woodland

Ornamental

Ruderal

Disturbed

Developed

Vacant Parcels Non-Open Space Designated Habitat Classification

Ornamental

Ruderal

Disturbed

Developed

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0 275 550 1,100 1,650 2,200

Feet

Created: April 1, 2020

Grand Avenue/17th Street
Focus Area
Open Space Inventory

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Figure 6

General Plan Open Space Inventory

Sphere of Influence

Santa Ana City Boundary

Existing Plans

Working Focus Area

West Santa Ana Boulevard

General Plan Designated Open Space Habitat Classification

Riparian

Unvegetated Streambed

Oak Woodland

Ornamental

Ruderal

Disturbed

Developed

Vacant Parcels Non-Open Space Designated Habitat Classification

Ornamental

Ruderal

Disturbed

Developed

N

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0 550 1,100 2,200

Feet

Created: April 1, 2020

West Santa Ana Boulevard
Focus Area
Open Space Inventory

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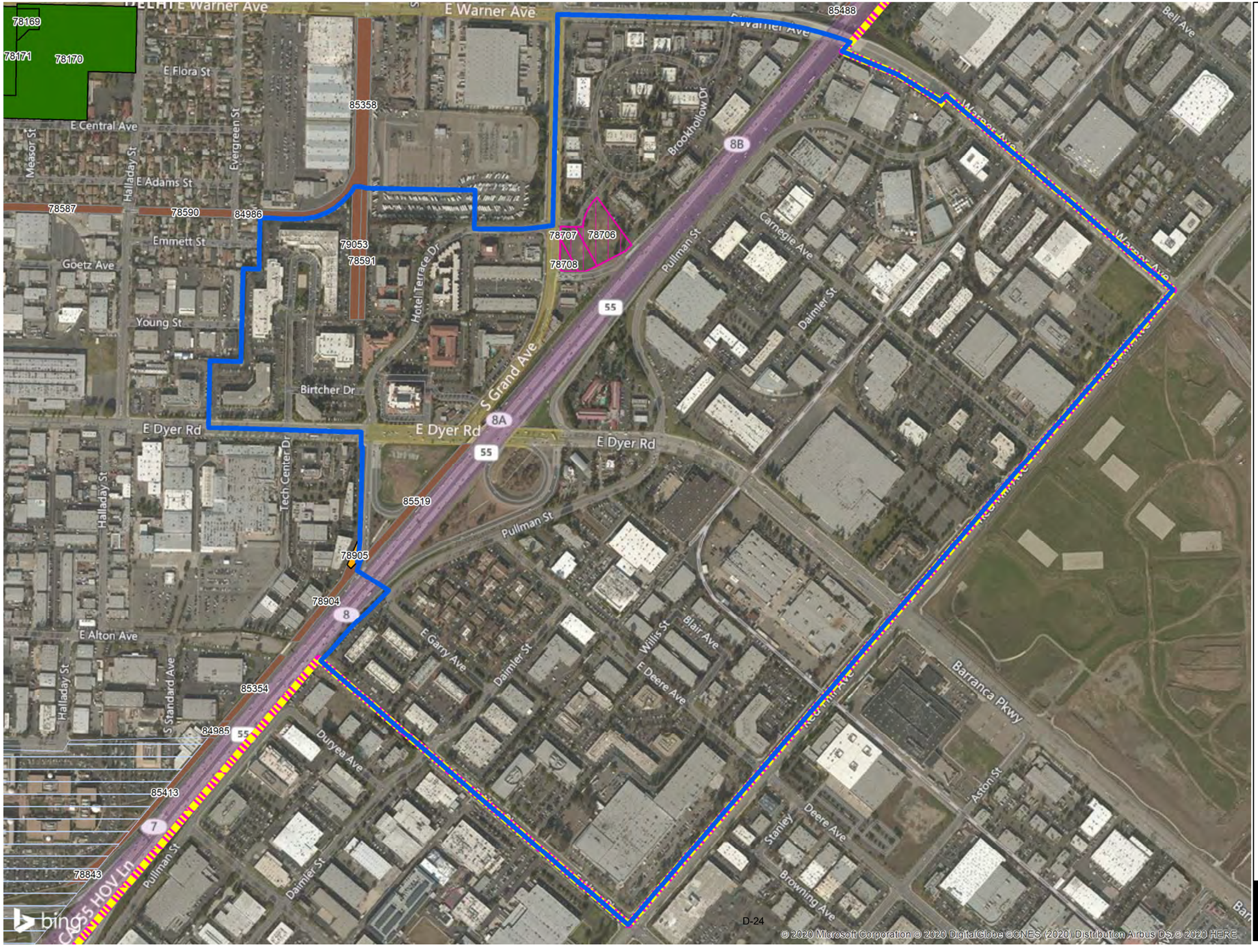
Figure 7



General Plan Open Space Inventory

Sphere of Influence

Santa Ana City Boundary

Existing Plans

Working Focus Area

55 Freeway/Dyer Road

General Plan Designated Open Space Habitat Classification

Riparian

Unvegetated Streambed

Oak Woodland

Ornamental

Ruderal

Disturbed

Developed

Vacant Parcels Non-Open Space Designated Habitat Classification

Ornamental

Ruderal

Disturbed

Developed

N

W E

S

0 125 250 500 750 1,000

Feet

Created: April 1, 2020

55 Freeway/Dyer Road
Focus Area
Open Space Inventory

Figure 8

General Plan Open Space Inventory

Sphere of Influence

Santa Ana City Boundary

Existing Plans

Working Focus Area

South Bristol Street

General Plan Designated Open Space Habitat Classification

Riparian

Unvegetated Streambed

Oak Woodland

Ornamental

Ruderal

Disturbed

Developed

Vacant Parcels Non-Open Space Designated Habitat Classification

Ornamental

Ruderal

Disturbed

Developed

N

W E

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0 200 400 800 1,200 1,600

Feet

Created: April 1, 2020

South Bristol Street
Focus Area
Open Space Inventory

Figure 9

Attachment A: Citywide Inventory

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
1	43089	OS	Open Space	Park/Trail adjacent to Santiago Creek	Oak Woodland	3.79	
2	43948	OS	Open Space	Concrete lined Channel	Developed	0.45	
3	43971	OS	Open Space	River View Golf Course	Ornamental	0.00	
4	44055	OS	Open Space	Neighborhood Park	Ornamental	0.15	
5	44056	OS	Open Space	Neighborhood Park	Ornamental	0.15	
6	44057	OS	Open Space	Neighborhood Park	Ornamental	0.15	
7	44058	OS	Open Space	Neighborhood Park	Ornamental	0.15	
8	44060	OS	Open Space	Neighborhood Park	Ornamental	0.17	
9	44061	OS	Open Space	Neighborhood Park	Ornamental	0.15	
10	44062	OS	Open Space	Neighborhood Park	Ornamental	0.16	
11	44063	OS	Open Space	Neighborhood Park	Ornamental	0.19	
12	44094	OS	Open Space	River View Golf Course	Ornamental	0.26	
13	44110	OS	Open Space	Morrison Park - Tennis Courts	Developed	1.08	
14	44258	OS	Open Space	Morrison Park - Ornamental	Ornamental	4.79	
15	44262	OS	Open Space	Santiago Creek Trail	Oak Woodland	0.55	
16	44421	OS	Open Space	Cemetery	Developed	10.32	
17	44422	OS	Open Space	Cemetery	Developed	0.36	
18	44500	OS	Open Space	Santiago Creek Trail	Ornamental	4.60	
19	44501	OS	Open Space	Santiago Creek	Riparian	1.75	
20	44502	OS	Open Space	Santiago Creek Trail	Oak Woodland	1.99	
21	44503	OS	Open Space	Santiago Creek Trail	Oak Woodland	0.37	
22	44504	OS	Open Space	Santiago Creek Trail	Oak Woodland	0.16	
23	44505	OS	Open Space	Santiago Creek Trail	Oak Woodland	0.47	
24	45365	OS	Open Space	Rosita Park	Ornamental	3.86	
25	45918	OS	Open Space	River View Golf Course	Ornamental	1.96	
26	47033	OS	Open Space	Vacant	Disturbed	2.05	West Santa Ana Boulevard Focus Area
27	47231	OS	Open Space	Vacant	Disturbed	3.55	West Santa Ana Boulevard Focus Area
28	47286	OS	Open Space	Willowick Golf Course	Ornamental	1.23	West Santa Ana Boulevard Focus Area
29	47295	OS	Open Space	Willowick Golf Course	Ornamental	0.52	West Santa Ana Boulevard Focus Area
30	47296	OS	Open Space	Willowick Golf Course	Ornamental	0.74	West Santa Ana Boulevard Focus Area
31	47297	OS	Open Space	Willowick Golf Course	Ornamental	1.02	West Santa Ana Boulevard Focus Area
32	47298	OS	Open Space	Willowick Golf Course	Ornamental	1.01	West Santa Ana Boulevard Focus Area
33	47299	OS	Open Space	Willowick Golf Course	Ornamental	2.02	West Santa Ana Boulevard Focus Area
34	47300	OS	Open Space	Willowick Golf Course	Ornamental	1.01	West Santa Ana Boulevard Focus Area
35	47301	OS	Open Space	Willowick Golf Course	Ornamental	0.96	West Santa Ana Boulevard Focus Area
36	47302	OS	Open Space	Willowick Golf Course	Ornamental	1.58	West Santa Ana Boulevard Focus Area
37	47317	OS	Open Space	Willowick Golf Course	Ornamental	0.19	West Santa Ana Boulevard Focus Area
38	47318	OS	Open Space	Willowick Golf Course	Ornamental	0.60	West Santa Ana Boulevard Focus Area
39	47319	OS	Open Space	Willowick Golf Course	Ornamental	0.56	West Santa Ana Boulevard Focus Area
40	47320	OS	Open Space	Vacant	Disturbed	5.65	West Santa Ana Boulevard Focus Area
41	47321	OS	Open Space	Willowick Golf Course	Ornamental	0.02	West Santa Ana Boulevard Focus Area
42	47322	OS	Open Space	Willowick Golf Course	Ornamental	3.78	West Santa Ana Boulevard Focus Area
43	47323	OS	Open Space	Willowick Golf Course	Ornamental	0.20	West Santa Ana Boulevard Focus Area

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
44	47324	OS	Open Space	Willowick Golf Course	Ornamental	0.45	West Santa Ana Boulevard Focus Area
45	47325	OS	Open Space	Willowick Golf Course	Ornamental	0.63	West Santa Ana Boulevard Focus Area
46	47326	OS	Open Space	Willowick Golf Course	Ornamental	94.44	West Santa Ana Boulevard Focus Area
47	47527	OS	Open Space	Concrete Channel	Developed	1.16	
48	48973	OS	Open Space	RipRap Lined Channel	Developed	1.64	
49	49597	OS	Open Space	Heritage Park	Ornamental	4.70	
50	49739	OS	Open Space	Heritage Park	Ornamental	1.82	
51	49817	OS	Open Space	Concrete Channel	Developed	0.16	
52	50832	OS	Open Space	Santa Anita Park	Ornamental	4.47	
53	51784	OS	Open Space	Mabury Park	Ornamental	5.46	
54	51875	OS	Open Space	Cabrillo Park	Ornamental	3.61	
55	51876	OS	Open Space	Cabrillo Park	Ornamental	7.60	
56	53663	OS	Open Space	Water District Buidlings	Developed	1.30	
57	54194	OS	Open Space	Water District Buildings	Developed	5.00	
58	54284	OS	Open Space	Thornton Park	Ornamental	0.01	
59	54285	OS	Open Space	Thornton Park	Ornamental	21.31	
60	54286	OS	Open Space	Thornton Park	Ornamental	0.03	
61	54297	OS	Open Space	Thornton Park	Ornamental	0.01	
62	54298	OS	Open Space	Thornton Park	Ornamental	0.01	
63	54299	OS	Open Space	Thornton Park	Ornamental	11.34	
64	54311	OS	Open Space	Concrete Channel	Developed	1.05	South Bristol Street Focus Area
65	54342	OS	Open Space	Grislet Park	Ornamental	2.00	
66	54343	OS	Open Space	Grislet Park	Ornamental	4.79	
67	54562	OS	Open Space	Centennial Regional Park	Ornamental	9.39	
68	54564	OS	Open Space	Centennial Regional Park	Ornamental	1.81	
69	54565	OS	Open Space	Centennial Regional Park	Ornamental	8.60	
70	54566	OS	Open Space	Centennial Regional Park	Ornamental	3.51	
71	54567	OS	Open Space	Centennial Regional Park	Ornamental	8.83	
72	55926	OS	Open Space	Adams Park	Ornamental	5.68	
73	56118	OS	Open Space	Channel R/W	Disturbed	0.09	
74	56205	OS	Open Space	Concrete Channel	Developed	0.36	
75	56231	OS	Open Space	Channel R/W	Disturbed	0.47	
76	56232	OS	Open Space	Channel R/W	Disturbed	0.84	
77	56290	OS	Open Space	Concrete Channel	Developed	0.10	
78	56300	OS	Open Space	Concrete/Riprap Lined Channel	Developed	0.50	
79	56312	OS	Open Space	Concrete/Riprap Lined Channel	Developed	0.33	
80	56488	OS	Open Space	Concrete/Riprap Lined Channel	Developed	0.04	
81	56611	OS	Open Space	Vacant	Disturbed	0.19	
82	56628	OS	Open Space	Vacant	Disturbed	0.19	
83	56629	OS	Open Space	Vacant	Disturbed	0.19	
84	56646	OS	Open Space	Vacant	Disturbed	0.19	
85	56647	OS	Open Space	Vacant	Disturbed	0.17	
86	56664	OS	Open Space	Vacant	Disturbed	0.16	

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
87	56665	OS	Open Space	Vacant	Disturbed	0.16	
88	56682	OS	Open Space	Vacant	Disturbed	0.16	
89	56683	OS	Open Space	Vacant	Disturbed	0.16	
90	56970	OS	Open Space	Riprap Lined Channel	Developed	0.46	
91	57069	OS	Open Space	Riprap Lined Channel	Developed	0.74	
92	59311	OS	Open Space	Memorial Park	Ornamental	15.49	
93	59403	OS	Open Space	Vacant	Disturbed	0.15	
94	59483	OS	Open Space	Vacant	Disturbed	0.12	
95	59484	OS	Open Space	Vacant	Disturbed	0.14	
96	59485	OS	Open Space	Vacant	Disturbed	0.14	
97	59486	OS	Open Space	Vacant	Disturbed	0.15	
98	59487	OS	Open Space	Developed	Developed	0.15	
99	59488	OS	Open Space	Developed	Developed	0.15	
100	59489	OS	Open Space	Vacant	Disturbed	0.13	
101	59497	OS	Open Space	Developed	Developed	0.26	
102	59641	OS	Open Space	Vacant	Disturbed	0.15	
103	60380	OS	Open Space	Park	Ornamental	0.15	
104	60422	OS	Open Space	Concrete Channel	Developed	0.46	
105	60423	OS	Open Space	Jerome Park	Ornamental	9.37	
106	60590	OS	Open Space	Vacant	Disturbed	0.11	
107	60591	OS	Open Space	Vacant	Disturbed	0.10	
108	60592	OS	Open Space	Vacant	Disturbed	0.10	
109	60593	OS	Open Space	Vacant	Disturbed	0.10	
110	60594	OS	Open Space	Vacant	Disturbed	0.10	
111	60595	OS	Open Space	Vacant	Disturbed	0.10	
112	60596	OS	Open Space	Vacant	Disturbed	0.10	
113	60597	OS	Open Space	Vacant	Disturbed	0.10	
114	60598	OS	Open Space	Vacant	Disturbed	0.10	
115	60599	OS	Open Space	Vacant	Disturbed	0.10	
116	60864	OS	Open Space	Concrete Channel	Developed	0.31	
117	60865	OS	Open Space	Concrete Channel	Developed	0.27	
118	60954	OS	Open Space	Jerome Park	Ornamental	2.73	
119	60955	OS	Open Space	Jerome Park	Ornamental	1.49	
120	60956	OS	Open Space	Jerome Park	Ornamental	0.62	
121	60957	OS	Open Space	Jerome Park	Ornamental	3.72	
122	60994	OS	Open Space	Riprap Channel	Developed	0.69	
123	61372	OS	Open Space	Channel R/W	Disturbed	0.28	
124	61720	OS	Open Space	Riprap Channel	Developed	0.64	
125	61721	OS	Open Space	Riprap Channel	Developed	0.48	
126	62004	OS	Open Space	Channel R/W	Disturbed	0.03	
127	62005	OS	Open Space	Channel R/W	Disturbed	0.10	
128	62180	OS	Open Space	Riprap Channel	Developed	0.64	
129	62817	OS	Open Space	Park	Ornamental	10.48	

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
130	63029	OS	Open Space	Concrete Channel	Developed	0.66	
131	63412	OS	Open Space	Concrete Channel	Developed	0.70	
132	63619	OS	Open Space	Concrete Channel	Developed	0.11	
133	64158	OS	Open Space	Vacant	Disturbed	0.10	
134	64159	OS	Open Space	Vacant	Disturbed	0.10	
135	64160	OS	Open Space	Vacant	Disturbed	0.10	
136	64161	OS	Open Space	Vacant	Disturbed	0.10	
137	64162	OS	Open Space	Vacant	Disturbed	0.10	
138	64163	OS	Open Space	Vacant	Disturbed	0.10	
139	64164	OS	Open Space	Vacant	Disturbed	0.10	
140	64165	OS	Open Space	Vacant	Disturbed	0.10	
141	64166	OS	Open Space	Vacant	Disturbed	0.10	
142	64167	OS	Open Space	Vacant	Disturbed	0.10	
143	64168	OS	Open Space	Vacant	Disturbed	0.10	
144	64231	OS	Open Space	Concrete Channel	Developed	0.11	
145	64264	OS	Open Space	Concrete Channel	Developed	0.87	
146	64265	OS	Open Space	Concrete Channel	Developed	0.57	
147	64266	OS	Open Space	Linear Park	Ornamental	0.09	
148	64462	OS	Open Space	Linear Park	Ornamental	0.14	
149	64802	OS	Open Space	Linear Park	Ornamental	0.07	
150	65826	OS	Open Space	Vacant	Disturbed	1.45	West Santa Ana Boulevard Focus Area
151	65997	OS	Open Space	Concrete SAR	Developed	10.54	
152	66037	OS	Open Space	Concrete SAR	Developed	31.92	West Santa Ana Boulevard Focus Area (14.51 ac)
153	66085	OS	Open Space	Vacant	Disturbed	2.18	West Santa Ana Boulevard Focus Area
154	66094	OS	Open Space	Vacant	Disturbed	1.09	West Santa Ana Boulevard Focus Area
155	66102	OS	Open Space	Vacant	Disturbed	1.92	West Santa Ana Boulevard Focus Area
156	66170	OS	Open Space	Vacant	Disturbed	3.02	West Santa Ana Boulevard Focus Area
157	66469	OS	Open Space	Vacant	Disturbed	0.44	
158	66470	OS	Open Space	Vacant	Disturbed	0.57	
159	66487	OS	Open Space	Concrete Channel	Developed	0.89	
160	67201	OS	Open Space	El Salvador Park	Ornamental	4.56	
161	67474	OS	Open Space	Developed	Developed	0.16	
162	67507	OS	Open Space	Vacant	Disturbed	0.15	
163	67508	OS	Open Space	Vacant	Disturbed	0.16	
164	67553	OS	Open Space	Vacant	Disturbed	0.11	
165	70026	OS	Open Space	Cemetery	Developed	0.07	
166	70027	OS	Open Space	Cemetery	Developed	1.66	
167	70028	OS	Open Space	Cemetery	Developed	0.27	
168	70029	OS	Open Space	Cemetery	Developed	2.02	
169	70030	OS	Open Space	Cemetery	Developed	0.77	
170	70031	OS	Open Space	Cemetery	Developed	1.43	
171	70032	OS	Open Space	Cemetery	Developed	1.43	
172	70043	OS	Open Space	Cemetery	Developed	1.64	

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
173	70044	OS	Open Space	Cemetery	Developed	2.82	
174	70045	OS	Open Space	Cemetery	Developed	16.67	
175	70046	OS	Open Space	Cemetery	Developed	5.55	
176	70047	OS	Open Space	Cemetery	Developed	2.74	
177	70048	OS	Open Space	Cemetery	Developed	50.94	
178	70049	OS	Open Space	Cemetery	Developed	5.20	
179	70246	OS	Open Space	Portola Park	Ornamental	9.07	
180	71079	OS	Open Space	Concrete Channel	Developed	2.57	South Bristol Street Focus Area
181	71080	OS	Open Space	Riprap Channel	Developed	3.51	
182	71407	OS	Open Space	Little King Park	Ornamental	8.64	
183	71832	OS	Open Space	Sandpointe Park	Ornamental	0.68	
184	71833	OS	Open Space	Sandpointe Park	Ornamental	5.95	
185	72058	OS	Open Space	Bomo Coral Park	Ornamental	11.01	
186	72061	OS	Open Space	Concrete Channel - Parking lot	Developed	0.27	South Bristol Street Focus Area
187	72368	OS	Open Space	Bike Trail	Ornamental	0.09	
188	72465	OS	Open Space	Bike Trail	Ornamental	0.75	
189	72537	OS	Open Space	Linear Park	Ornamental	0.18	South Bristol Street Focus Area
190	72916	OS	Open Space	Concrete Channel	Developed	0.28	
191	73215	OS	Open Space	Park	Ornamental	0.17	
192	73635	OS	Open Space	Logan Park	Ornamental	0.41	
193	74079	OS	Open Space	Neighborhood Park	Ornamental	0.14	
194	74080	OS	Open Space	Neighborhood Park	Ornamental	0.14	
195	74094	OS	Open Space	Neighborhood Park	Ornamental	0.14	
196	74099	OS	Open Space	Neighborhood Park	Ornamental	0.14	
197	74265	OS	Open Space	Parking Lot	Developed	0.81	
198	74893	OS	Open Space	Railroad	Developed	1.27	
199	74896	OS	Open Space	Railroad	Developed	1.45	
200	74898	OS	Open Space	Railroad	Developed	0.07	
201	74899	OS	Open Space	Railroad	Developed	0.34	
202	74900	OS	Open Space	Railroad	Developed	0.53	
203	76616	OS	Open Space	Birch Park	Ornamental	2.66	
204	76934	OS	Open Space	Park	Ornamental	0.32	
205	76935	OS	Open Space	Park	Ornamental	0.60	
206	77245	OS	Open Space	Tennis Courts	Developed	3.54	
207	77681	OS	Open Space	Linear Park	Ornamental	0.06	
208	77682	OS	Open Space	Linear Park	Ornamental	0.04	
209	77688	OS	Open Space	Linear Park	Ornamental	0.23	
210	77818	OS	Open Space	Linear Park	Ornamental	0.08	
211	77919	OS	Open Space	Angels Community Park	Ornamental	1.72	West Santa Ana Boulevard Focus Area
212	78015	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.28	
213	78053	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.81	
214	78067	OS	Open Space	Turf	Ornamental	0.12	
215	78169	OS	Open Space	Delhi Park	Ornamental	0.49	

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
216	78170	OS	Open Space	Delhi Park	Ornamental	10.44	
217	78171	OS	Open Space	Delhi Park	Ornamental	2.14	
218	78172	OS	Open Space	Delhi Park	Ornamental	0.64	
219	78282	OS	Open Space	Sidewalk	Developed	0.01	
220	78586	OS	Open Space	Railroad	Developed	1.28	
221	78587	OS	Open Space	Railroad	Developed	2.15	
222	78588	OS	Open Space	Railroad	Developed	1.73	
223	78589	OS	Open Space	Railroad	Developed	1.43	
224	78590	OS	Open Space	Railroad	Developed	0.68	
225	78591	OS	Open Space	Railroad	Developed	0.77	55 Freeway/Dyer Road Focus Area (0.70 ac)
226	78843	OS	Open Space	Concrete Channel	Developed	0.43	
227	78904	OS	Open Space	Concrete Channel	Developed	0.66	55 Freeway/Dyer Road Focus Area (0.04 ac)
228	78905	OS	Open Space	Vacant	Disturbed	0.15	55 Freeway/Dyer Road Focus Area (0.07 ac)
229	79053	OS	Open Space	Railroad	Developed	1.08	55 Freeway/Dyer Road Focus Area (0.98 ac)
230	79072	OS	Open Space	River View Golf Course	Ornamental	0.35	
231	79073	OS	Open Space	Natural Bottom SAR	Unvegetated with areas of Riparian	2.50	
232	79074	OS	Open Space	River View Golf Course	Ornamental	27.88	
233	79075	OS	Open Space	River View Golf Course	Ornamental	0.64	
234	79076	OS	Open Space	River View Golf Course	Ornamental	6.60	
235	79077	OS	Open Space	Park - adjacent SAR	Ornamental	0.01	
236	79078	OS	Open Space	Natural Bottom SAR	Unvegetated with areas of Riparian	30.88	
237	79079	OS	Open Space	Natural/Concrete SAR	Unvegetated and Developed	14.27	
238	79081	OS	Open Space	River View Golf Course	Ornamental	3.64	
239	79084	OS	Open Space	River View Golf Course	Ornamental	7.80	
240	79085	OS	Open Space	Riprap Channel	Developed	5.68	
241	79217	OS	Open Space	Linear Park	Ornamental	0.17	
242	79218	OS	Open Space	Linear Park	Ornamental	0.16	
243	79219	OS	Open Space	Linear Park	Ornamental	0.16	
244	79220	OS	Open Space	Linear Park	Ornamental	0.18	
245	79284	OS	Open Space	Developed	Developed	0.14	
246	79285	OS	Open Space	Developed	Developed	0.14	
247	79286	OS	Open Space	Developed	Developed	0.14	
248	79288	OS	Open Space	Developed	Developed	0.16	
249	79452	OS	Open Space	Developed	Developed	0.14	
250	79453	OS	Open Space	Developed	Developed	0.14	
251	79454	OS	Open Space	Developed	Developed	0.14	
252	79455	OS	Open Space	Developed	Developed	0.14	
253	79456	OS	Open Space	Developed	Developed	0.14	
254	79457	OS	Open Space	Developed	Developed	0.14	
255	79458	OS	Open Space	Developed	Developed	0.14	
256	79459	OS	Open Space	Developed	Developed	0.14	
257	79460	OS	Open Space	Developed	Developed	0.14	
258	79461	OS	Open Space	Developed	Developed	0.14	

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
259	79462	OS	Open Space	Developed	Developed	0.14	
260	79642	OS	Open Space	Developed	Developed	0.14	
261	79725	OS	Open Space	Developed	Developed	0.14	
262	79726	OS	Open Space	Developed	Developed	0.14	
263	79727	OS	Open Space	Developed	Developed	0.14	
264	79728	OS	Open Space	Developed	Developed	0.14	
265	79729	OS	Open Space	Developed	Developed	0.14	
266	79730	OS	Open Space	Developed	Developed	0.14	
267	79731	OS	Open Space	Developed	Developed	0.14	
268	79732	OS	Open Space	Developed	Developed	0.14	
269	79733	OS	Open Space	Developed	Developed	0.20	
270	79745	OS	Open Space	River View Golf Course	Ornamental	0.26	
271	79854	OS	Open Space	River View Golf Course	Ornamental	0.69	
272	79990	OS	Open Space	Developed	Developed	0.17	
273	79991	OS	Open Space	Developed	Developed	0.17	
274	79992	OS	Open Space	Developed	Developed	0.17	
275	80829	OS	Open Space	Developed	Developed	0.16	
276	80830	OS	Open Space	Developed	Developed	0.17	
277	80831	OS	Open Space	Developed	Developed	0.17	
278	80832	OS	Open Space	Developed	Developed	0.17	
279	80833	OS	Open Space	Developed	Developed	0.17	
280	80839	OS	Open Space	Developed	Developed	0.16	
281	80840	OS	Open Space	Developed	Developed	0.17	
282	80856	OS	Open Space	Vacant	Disturbed	0.17	
283	82722	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.63	
284	82807	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.29	
285	82808	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.28	
286	82886	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.84	
287	83008	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.56	
288	83088	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.55	
289	83188	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.25	
290	83206	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.84	
291	83288	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.52	
292	83346	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.11	
293	83391	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.52	
294	84201	OS	Open Space	Madison Park	Ornamental	6.06	
295	84905	OS	Open Space	Channel	Developed	2.74	
296	84907	OS	Open Space	Railroad	Developed	0.99	Grand Avenue/17th Street Focus Area (0.40 ac)
297	84908	OS	Open Space	Railroad	Developed	0.84	
298	84914	OS	Open Space	Santiago Creek	Riparian	1.20	
299	84917	OS	Open Space	Railroad	Developed	2.26	
300	84918	OS	Open Space	Concrete Channel	Developed	5.19	
301	84921	OS	Open Space	Santiago Creek Park	Oak Woodland	0.38	

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
302	84924	OS	Open Space	Riprap Channel	Developed	4.30	
303	84925	OS	Open Space	Concrete Channel	Developed	0.23	
304	84926	OS	Open Space	Concrete Channel	Developed	1.09	
305	84929	OS	Open Space	Concrete Channel	Developed	1.49	
306	84937	OS	Open Space	Railroad	Developed	1.88	
307	84938	OS	Open Space	Railroad	Developed	1.35	
308	84939	OS	Open Space	Railroad	Developed	0.95	
309	84940	OS	Open Space	Railroad	Developed	0.60	
310	84944	OS	Open Space	Riprap Channel	Developed	0.43	
311	84945	OS	Open Space	Riprap Channel	Developed	0.46	
312	84946	OS	Open Space	Railroad	Developed	0.67	South Bristol Street Focus Area
313	84949	OS	Open Space	Riprap Channel	Developed	3.29	
314	84950	OS	Open Space	Railroad	Developed	3.48	
315	84952	OS	Open Space	Railroad	Developed	2.62	
316	84953	OS	Open Space	Railroad	Developed	3.45	South Bristol Street Focus Area (0.60 ac)
317	84954	OS	Open Space	Concrete Channel	Developed	1.30	South Bristol Street Focus Area
318	84955	OS	Open Space	Underground Channel - Turf	Developed	0.18	South Bristol Street Focus Area
319	84958	OS	Open Space	Railroad	Developed	0.64	
320	84962	OS	Open Space	Railroad	Developed	1.11	
321	84963	OS	Open Space	Railroad	Developed	1.84	
322	84967	OS	Open Space	Santiago Creek	Riparian	3.80	
323	84968	OS	Open Space	Railroad	Developed	0.26	
324	84969	OS	Open Space	Railroad	Developed	0.18	
325	84970	OS	Open Space	Railroad	Developed	1.16	Grand Avenue/17th Street Focus Area (1.07 ac)
326	84972	OS	Open Space	Railroad	Developed	0.85	
327	84975	OS	Open Space	Railroad	Developed	2.90	
328	84978	OS	Open Space	Riprap Channel	Developed	1.19	
329	84979	OS	Open Space	Railroad	Developed	1.76	
330	84981	OS	Open Space	Railroad	Developed	3.49	
331	84983	OS	Open Space	Railroad	Developed	1.24	
332	84985	OS	Open Space	Concrete Channel	Developed	0.14	
333	84986	OS	Open Space	Railroad	Developed	0.16	55 Freeway/Dyer Road Focus Area (0.01 ac)
334	84991	OS	Open Space	Santiago Creek	Riparian	0.83	
335	84993	OS	Open Space	Concrete SAR	Developed	12.62	
336	84994	OS	Open Space	Centennial Regional Park	Ornamental	30.97	
337	84995	OS	Open Space	Centennial Regional Park	Ornamental	8.07	
338	84996	OS	Open Space	Centennial Regional Park	Ornamental	1.89	
339	84997	OS	Open Space	Centennial Regional Park	Ornamental	0.87	
340	84998	OS	Open Space	Centennial Regional Park	Ornamental	12.90	
341	84999	OS	Open Space	Centennial Regional Park	Ornamental	1.10	
342	85000	OS	Open Space	Riprap Channel	Developed	3.35	
343	85002	OS	Open Space	Centennial Regional Park	Ornamental	0.65	
344	85062	OS	Open Space	Railroad	Developed	1.32	

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
345	85269	OS	Open Space	Riprap Channel	Developed	1.00	
346	85270	OS	Open Space	Concrete/Riprap Lined Channel	Developed	1.05	
347	85279	OS	Open Space	River View Golf Course	Ornamental	4.54	
348	85345	OS	Open Space	Vacant	Disturbed	0.17	
349	85346	OS	Open Space	Thorton Park- School	Ornamental	12.18	
350	85348	OS	Open Space	Concrete Channel	Developed	2.25	
351	85349	OS	Open Space	Railroad	Developed	4.61	South Bristol Street Focus Area (0.11 ac)
352	85350	OS	Open Space	Linear Park	Ornamental	0.01	South Bristol Street Focus Area
353	85354	OS	Open Space	Concrete Channel	Developed	0.54	
354	85358	OS	Open Space	Railroad	Developed	2.98	55 Freeway/Dyer Road Focus Area (0.56 ac)
355	85376	OS	Open Space	Cemetery	Developed	1.11	
356	85413	OS	Open Space	Concrete Channel	Developed	0.86	
357	85415	OS	Open Space	Concrete Channel	Developed	3.33	
358	85417	OS	Open Space	Santiago Creek Park	Oak Woodland	1.77	
359	85421	OS	Open Space	Developed	Developed	0.07	
360	85426	OS	Open Space	Santiago Creek Park	Oak Woodland	0.54	
361	85428	OS	Open Space	Railroad	Developed	1.37	
362	85429	OS	Open Space	Railroad	Developed	0.79	
363	85430	OS	Open Space	Railroad	Developed	0.42	
364	85437	OS	Open Space	River View Golf Course	Ornamental	10.09	
365	85442	OS	Open Space	Developed	Developed	0.16	
366	85444	OS	Open Space	Developed	Developed	0.16	
367	85448	OS	Open Space	Vacant	Disturbed	0.80	
368	85450	OS	Open Space	Vacant	Disturbed	0.26	
369	85452	OS	Open Space	Vacant	Disturbed	0.03	
370	85454	OS	Open Space	Santiago Creek Park	Oak Woodland	0.20	
371	85485	OS	Open Space	Concrete Channel	Developed	0.86	
372	85486	OS	Open Space	Concrete Channel	Developed	0.57	
373	85487	OS	Open Space	Concrete Channel	Developed	0.47	
374	85488	OS	Open Space	Concrete Channel	Developed	0.18	
375	85489	OS	Open Space	Railroad	Developed	0.35	
376	85490	OS	Open Space	Railroad	Developed	0.68	
377	85491	OS	Open Space	Railroad	Developed	0.57	
378	85492	OS	Open Space	Railroad	Developed	0.73	
379	85493	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.18	
380	85494	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.14	
381	85495	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.14	
382	85496	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.15	
383	85497	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.15	
384	85498	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.16	
385	85499	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.21	
386	85500	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.20	
387	85501	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.22	

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
388	85502	OS	Open Space	Pacific Electric Bike Trail	Ornamental	0.20	
389	85503	OS	Open Space	Riprap Channel	Developed	2.38	
390	85504	OS	Open Space	Riprap Channel	Developed	2.57	
391	85505	OS	Open Space	Channel R/W	Disturbed	0.04	
392	85506	OS	Open Space	Concrete Channel	Developed	0.04	
393	85507	OS	Open Space	Concrete Channel	Developed	0.09	
394	85509	OS	Open Space	Riprap Channel	Developed	0.63	
395	85510	OS	Open Space	Linear Park	Ornamental	0.83	
396	85511	OS	Open Space	Riprap Lined Channel	Developed	1.39	
397	85513	OS	Open Space	Concrete Channel	Developed	3.53	
398	85514	OS	Open Space	Concrete Channel	Developed	0.40	
399	85515	OS	Open Space	Concrete Channel	Developed	0.90	
400	85516	OS	Open Space	Concrete Channel	Developed	0.89	
401	85517	OS	Open Space	Concrete Channel	Developed	0.64	
402	85518	OS	Open Space	Concrete Channel	Developed	0.96	
403	85519	OS	Open Space	Concrete channel/ Freeway	Developed	1.04	55 Freeway/Dyer Road Focus Area
404	85522	OS	Open Space	Concrete Lined SAR	Developed	26.82	
405	85523	OS	Open Space	Concrete Lined SAR	Developed	27.50	
406	85726	OS	Open Space	Santiago Creek Trail	Ornamental	8.69	
407	85727	OS	Open Space	Vacant	Disturbed	0.05	
408	85729	OS	Open Space	Santiago Creek	Riparian	0.14	
409	85730	OS	Open Space	Santiago Creek	Riparian	0.11	
410	85731	OS	Open Space	Santiago Creek	Riparian	1.90	
411	85745	OS	Open Space	Santiago Creek Trail	Oak Woodland	1.23	
412	85746	OS	Open Space	Santiago Creek	Riparian	3.78	
413	85763	OS	Open Space	Santa Ana Zoo and Parking	Developed	3.45	
414	85764	OS	Open Space	Santa Ana Zoo and Parking	Developed	9.14	
415	85765	OS	Open Space	Santa Ana Zoo and Parking	Developed	6.20	
416	85784	OS	Open Space	Santa Ana Zoo and Parking	Developed	1.04	
417	85785	OS	Open Space	Santa Ana Zoo and Parking	Developed	0.19	
418	85991	OS	Open Space	Santa Ana Zoo and Parking	Developed	0.13	
419	85993	OS	Open Space	Santa Ana Zoo and Parking	Developed	1.28	
420	86000	OS	Open Space	Vacant Lot	Disturbed	0.54	
421	86037	OS	Open Space	Linear Park	Ornamental	0.03	
422	86046	OS	Open Space	Linear Park	Ornamental	0.09	
423	86051	OS	Open Space	Linear Park	Ornamental	0.07	
424	86052	OS	Open Space	Linear Park	Ornamental	0.07	
425	86053	OS	Open Space	Linear Park	Ornamental	0.08	
426	86059	OS	Open Space	Parking Lot	Developed	0.15	
427	86060	OS	Open Space	Parking Lot	Developed	0.10	
428	86061	OS	Open Space	Parking Lot	Developed	0.18	
429	86062	OS	Open Space	Parking Lot	Developed	0.09	
430	86063	OS	Open Space	Parking Lot	Developed	0.09	

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
431	86064	OS	Open Space	Parking Lot	Developed	0.09	
432	86065	OS	Open Space	Parking Lot	Developed	0.09	
433	86066	OS	Open Space	Parking Lot	Developed	0.09	
434	86067	OS	Open Space	Parking Lot	Developed	0.09	
435	86068	OS	Open Space	Parking Lot	Developed	0.09	
436	86069	OS	Open Space	Parking Lot	Developed	0.09	
437	86070	OS	Open Space	Parking Lot	Developed	0.09	
438	86071	OS	Open Space	Parking Lot	Developed	0.09	
439	86072	OS	Open Space	Parking Lot	Developed	0.09	
440	86073	OS	Open Space	Parking Lot	Developed	0.09	
441	86074	OS	Open Space	Parking Lot	Developed	0.09	
442	86075	OS	Open Space	Parking Lot	Developed	0.09	
443	86076	OS	Open Space	Parking Lot	Developed	0.09	
444	86077	OS	Open Space	Parking Lot	Developed	0.10	
445	86078	OS	Open Space	Linear Park	Ornamental	0.09	
446	86079	OS	Open Space	Linear Park	Ornamental	0.08	
447	86080	OS	Open Space	Linear Park	Ornamental	0.08	
448	86081	OS	Open Space	Linear Park	Ornamental	0.09	
449	86082	OS	Open Space	Linear Park	Ornamental	0.09	
450	86083	OS	Open Space	Linear Park	Ornamental	0.09	
451	86084	OS	Open Space	Linear Park	Ornamental	0.09	
452	86085	OS	Open Space	Linear Park	Ornamental	0.09	
453	86086	OS	Open Space	Linear Park	Ornamental	0.09	
454	86087	OS	Open Space	Linear Park	Ornamental	0.09	
455	86088	OS	Open Space	Linear Park	Ornamental	0.09	
456	86089	OS	Open Space	Linear Park	Ornamental	0.09	
457	86092	OS	Open Space	Linear Park	Ornamental	0.09	
458	86093	OS	Open Space	Linear Park	Ornamental	0.09	
459	86094	OS	Open Space	Linear Park	Ornamental	0.10	
460	86095	OS	Open Space	Linear Park	Ornamental	0.10	
461	86096	OS	Open Space	Linear Park	Ornamental	0.10	
462	86097	OS	Open Space	Linear Park	Ornamental	0.10	
463	86098	OS	Open Space	Linear Park	Ornamental	0.10	
464	86099	OS	Open Space	Linear Park	Ornamental	0.10	
465	86132	OS	Open Space	Linear Park	Ornamental	0.11	
466	86133	OS	Open Space	Linear Park	Ornamental	0.02	
467	86134	OS	Open Space	Linear Park	Ornamental	0.02	
468	86135	OS	Open Space	Linear Park	Ornamental	0.02	
469	86136	OS	Open Space	Linear Park	Ornamental	0.01	
470	86137	OS	Open Space	Linear Park	Ornamental	0.02	
471	86146	OS	Open Space	Linear Park	Ornamental	0.05	
472	86147	OS	Open Space	Linear Park	Ornamental	0.14	
473	86148	OS	Open Space	Linear Park	Ornamental	0.03	

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
474	86149	OS	Open Space	Linear Park	Ornamental	0.03	
475	86150	OS	Open Space	Linear Park	Ornamental	0.03	
476	86151	OS	Open Space	Linear Park	Ornamental	0.03	
477	86152	OS	Open Space	Linear Park	Ornamental	0.07	
478	86153	OS	Open Space	Linear Park	Ornamental	0.07	
479	86154	OS	Open Space	Linear Park	Ornamental	0.02	
480	86155	OS	Open Space	Linear Park	Ornamental	0.06	
481	86156	OS	Open Space	Linear Park	Ornamental	0.05	
482	86157	OS	Open Space	Linear Park	Ornamental	0.06	
483	86158	OS	Open Space	Linear Park	Ornamental	0.07	
484	86159	OS	Open Space	Linear Park	Ornamental	0.02	
485	86160	OS	Open Space	Linear Park	Ornamental	0.07	
486	86161	OS	Open Space	Linear Park	Ornamental	0.07	
487	86162	OS	Open Space	Linear Park	Ornamental	0.03	
488	86163	OS	Open Space	Linear Park	Ornamental	0.06	
489	86164	OS	Open Space	Linear Park	Ornamental	0.02	
490	86165	OS	Open Space	Linear Park	Ornamental	0.04	
491	86166	OS	Open Space	Linear Park	Ornamental	0.02	
492	86167	OS	Open Space	Linear Park	Ornamental	0.04	
493	86168	OS	Open Space	Linear Park	Ornamental	0.01	
494	86169	OS	Open Space	Linear Park	Ornamental	0.02	
495	86170	OS	Open Space	Linear Park	Ornamental	0.01	
496	86171	OS	Open Space	Linear Park	Ornamental	0.02	
497	86172	OS	Open Space	Linear Park	Ornamental	0.05	
498	86173	OS	Open Space	Vacant	Disturbed	0.03	
499	86174	OS	Open Space	Developed	Developed	0.15	
500	43181	LR-7	Low Density Residential	Ornamental	Santiago Creek Trail	0.26	
501	43182	LR-7	Low Density Residential	Ornamental	Santiago Creek Trail	0.27	
502	43183	LR-7	Low Density Residential	Ornamental	Santiago Creek Trail	0.55	
503	43184	LR-7	Low Density Residential	Ornamental	Santiago Creek Trail	0.46	
504	43185	LR-7	Low Density Residential	Ornamental	Santiago Creek Trail	0.30	
505	43186	LR-7	Low Density Residential	Ornamental	Santiago Creek Trail	0.52	
506	43189	LR-7	Low Density Residential	Ornamental	Santiago Creek Trail	0.70	
507	44344	LR-7	Low Density Residential	Ornamental	Santiago Creek Trail	1.09	
508	44512	LR-7	Low Density Residential	Ornamental	Santiago Creek Trail	0.96	
509	44513	LR-7	Low Density Residential	Ornamental	Santiago Creek Trail	0.03	
510	45364	INS	Institution	Ornamental	Rosita Park	3.52	
511	47805	UN	Urban Neighborhood	Disturbed	Vacant	0.07	
512	47806	UN	Urban Neighborhood	Disturbed	Vacant	0.10	
513	47807	UN	Urban Neighborhood	Disturbed	Vacant	0.06	
514	47839	UN	Urban Neighborhood	Disturbed	Vacant	0.81	
515	47840	UN	Urban Neighborhood	Disturbed	Vacant	0.29	
516	51782	DC	District Center	Ruderal	Vacant - Ruderal	1.32	

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
517	56699	LR-7	Low Density Residential	Disturbed	Vacant	0.16	
518	59491	GC	General Commercial	Disturbed	Vacant	0.14	
519	59492	GC	General Commercial	Disturbed	Vacant	0.14	
520	59493	GC	General Commercial	Disturbed	Vacant	0.27	
521	59494	GC	General Commercial	Disturbed	Vacant	0.13	
522	59495	GC	General Commercial	Disturbed	Vacant	0.13	
523	59496	GC	General Commercial	Disturbed	Vacant	0.24	
524	66528	PAO	Professional and Administrative Office	Disturbed	Vacant	0.05	
525	66529	PAO	Professional and Administrative Office	Disturbed	Vacant	0.12	
526	66530	PAO	Professional and Administrative Office	Disturbed	Vacant	0.12	
527	66531	PAO	Professional and Administrative Office	Disturbed	Vacant	0.12	
528	66532	PAO	Professional and Administrative Office	Disturbed	Vacant	0.12	
529	66533	PAO	Professional and Administrative Office	Disturbed	Vacant	0.12	
530	66534	PAO	Professional and Administrative Office	Disturbed	Vacant	0.12	
531	67585	LR-7	Low Density Residential	Disturbed	Vacant	0.14	
532	67615	GC	General Commercial	Disturbed	Vacant	0.33	
533	67617	GC	General Commercial	Disturbed	Vacant	0.04	
534	67618	GC	General Commercial	Disturbed	Vacant	0.19	
535	67999	LR-7	Low Density Residential	Disturbed	Vacant	0.13	
536	68000	LR-7	Low Density Residential	Disturbed	Vacant	0.08	
537	68001	LR-7	Low Density Residential	Disturbed	Vacant	0.08	
538	74019	UN	Urban Neighborhood	Disturbed	Vacant	0.43	
539	74020	UN	Urban Neighborhood	Disturbed	Vacant	0.57	
540	74059	UN	Urban Neighborhood	Disturbed	Vacant	0.12	
541	74060	UN	Urban Neighborhood	Disturbed	Vacant	1.24	
542	74061	UN	Urban Neighborhood	Disturbed	Vacant	0.99	
543	74064	UN	Urban Neighborhood	Disturbed	Vacant	0.74	
544	74066	UN	Urban Neighborhood	Disturbed	Vacant	0.99	
545	74067	UN	Urban Neighborhood	Disturbed	Vacant	0.56	
546	74068	UN	Urban Neighborhood	Disturbed	Vacant	0.84	
547	74069	UN	Urban Neighborhood	Disturbed	Vacant	0.28	
548	74070	UN	Urban Neighborhood	Disturbed	Vacant	0.52	
549	74130	UN	Urban Neighborhood	Disturbed	Vacant	0.14	
550	74477	DC	District Center	Disturbed	Vacant	0.86	
551	74478, 85554	DC	District Center	Disturbed	Vacant	1.46	
552	74684	GC	General Commercial	Disturbed	Vacant	0.20	Grand Avenue/17th Street Focus Area
553	74685	GC	General Commercial	Disturbed	Vacant	0.14	Grand Avenue/17th Street Focus Area
554	74686	PAO	Professional and Administrative Office	Disturbed	Vacant	0.14	Grand Avenue/17th Street Focus Area
555	74692	LR-7	Low Density Residential	Disturbed	Vacant	0.26	Grand Avenue/17th Street Focus Area
556	74693	LR-7	Low Density Residential	Disturbed	Vacant	0.29	Grand Avenue/17th Street Focus Area
557	74694	LR-7	Low Density Residential	Disturbed	Vacant	0.14	Grand Avenue/17th Street Focus Area
558	74695	LR-7	Low Density Residential	Disturbed	Vacant	0.14	Grand Avenue/17th Street Focus Area
559	74696	LR-7	Low Density Residential	Disturbed	Vacant	0.21	Grand Avenue/17th Street Focus Area

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
560	74697	LR-7	Low Density Residential	Disturbed	Vacant	0.16	Grand Avenue/17th Street Focus Area
561	75516	GC	General Commercial	Disturbed	Vacant	0.17	
562	75530	GC	General Commercial	Disturbed	Vacant	0.15	
563	75531	GC	General Commercial	Disturbed	Vacant	0.25	
564	75534	GC	General Commercial	Disturbed	Vacant	0.38	
565	75566	GC	General Commercial	Disturbed	Vacant	0.15	
566	75567	GC	General Commercial	Disturbed	Vacant	0.14	
567	75568	GC	General Commercial	Disturbed	Vacant	0.15	
568	75569	GC	General Commercial	Disturbed	Vacant	0.14	
569	75570	GC	General Commercial	Disturbed	Vacant	0.15	
570	75571	GC	General Commercial	Disturbed	Vacant	0.14	
571	75572	GC	General Commercial	Disturbed	Vacant	0.15	
572	75573	GC	General Commercial	Disturbed	Vacant	0.15	
573	75574	GC	General Commercial	Disturbed	Vacant	0.28	
574	75597	GC	General Commercial	Disturbed	Vacant	0.12	
575	75598	GC	General Commercial	Disturbed	Vacant	0.22	
576	75599	GC	General Commercial	Disturbed	Vacant	0.16	
577	75600	GC	General Commercial	Disturbed	Vacant	0.79	
578	75658	GC	General Commercial	Disturbed	Vacant	0.16	
579	75659	GC	General Commercial	Disturbed	Vacant	0.17	
580	75660	GC	General Commercial	Disturbed	Vacant	0.15	
581	75661	GC	General Commercial	Disturbed	Vacant	0.23	
582	75662	GC	General Commercial	Disturbed	Vacant	0.15	
583	75663	GC	General Commercial	Disturbed	Vacant	0.13	
584	75664	GC	General Commercial	Disturbed	Vacant	0.17	
585	75665	GC	General Commercial	Disturbed	Vacant	0.17	
586	75666	GC	General Commercial	Disturbed	Vacant	0.17	
587	75667	GC	General Commercial	Disturbed	Vacant	0.17	
588	75668	GC	General Commercial	Disturbed	Vacant	0.17	
589	75671	GC	General Commercial	Disturbed	Vacant	0.20	
590	75672	GC	General Commercial	Disturbed	Vacant	0.17	
591	75861	GC	General Commercial	Disturbed	Vacant	0.33	
592	78706	PAO	Professional and Administrative Office	Ruderal	Vacant Ruderal	1.75	55 Freeway/Dyer Road Focus Area
593	78707	PAO	Professional and Administrative Office	Ruderal	Vacant Ruderal	0.81	55 Freeway/Dyer Road Focus Area
594	78708	PAO	Professional and Administrative Office	Ruderal	Vacant Ruderal	0.27	55 Freeway/Dyer Road Focus Area
595	78842	DC	District Center	Disturbed	Vacant	3.11	
596	82277	DC	District Center	Ruderal	Vacant - Ruderal	2.43	
597	84942	IND	Industrial	Developed	Concrete Channel	2.59	
598	84959	IND	Industrial	Developed	Concrete Channel	2.00	
599	84960	IND	Industrial	Developed	Concrete Channel	3.17	
600	84961	IND	Industrial	Developed	Concrete Channel	3.84	
601	84990	IND	Industrial	Developed	Concrete Channel	2.59	
602	85006	DC	District Center	Disturbed	Vacant	2.79	

	City Identification Number	Existing General Plan Land Use Designation	General Plan Land Use	Land Use	Habitat Classification	Acreage	Focus Area Location
603	85146	IND	Industrial	Ornamental	Vacant - Turf	2.78	
604	85331	INS	Institution	Ornamental	El Salvador Park	3.82	
605	85425	LR-7	Low Density Residential	Ornamental	Santiago Creek Trail	1.13	
606	85607	LR-7	Low Density Residential	Ornamental	Neighborhood Park	0.25	
607	85608	LR-7	Low Density Residential	Ornamental	Neighborhood Park	0.17	
608	85610	LR-7	Low Density Residential	Ornamental	Neighborhood Park	0.18	
609	85612	LR-7	Low Density Residential	Ornamental	Neighborhood Park	0.29	
610	85614	LR-7	Low Density Residential	Ornamental	Neighborhood Park	0.19	
611	85616	LR-7	Low Density Residential	Ornamental	Neighborhood Park	0.32	
612	85751	DC	District Center	Ruderal	Vacant - Ruderal	6.25	
613	85752	DC	District Center	Ruderal	Vacant - Ruderal	1.05	
614	86034	LR-7	Low Density Residential	Disturbed	Vacant	0.05	
615	86116	GC	General Commercial	Disturbed	Vacant	0.10	
616	86117	GC	General Commercial	Disturbed	Vacant	0.46	
617	86118	GC	General Commercial	Disturbed	Vacant	0.44	
618	86138	GC	General Commercial	Disturbed	Vacant	0.06	
619	86139	GC	General Commercial	Disturbed	Vacant	0.06	
620	86140	LR-7	Low Density Residential	Disturbed	Vacant	0.08	
621	86141	LR-7	Low Density Residential	Disturbed	Vacant	0.06	
622	86142	LR-7	Low Density Residential	Disturbed	Vacant	0.07	
623	86143	LR-7	Low Density Residential	Disturbed	Vacant	0.07	
624	86144	LR-7	Low Density Residential	Disturbed	Vacant	0.07	
625	86145	LR-7	Low Density Residential	Disturbed	Vacant	0.12	
626	-	GC	General Commercial	Vacant	Ruderal	0.54	
627	-	GC	General Commercial	Vacant	Ruderal	0.45	
628	-	GC	General Commercial	Vacant	Ruderal	0.19	
629	-	GC	General Commercial	Vacant	Ruderal	0.23	
630	-	GC	General Commercial	Vacant	Ruderal	0.15	
631	-	GC	General Commercial	Vacant	Ruderal	0.85	
632	-	GC	General Commercial	Vacant	Ruderal	0.19	
633	-	GC	General Commercial	Vacant	Ruderal	0.19	
634	-	GC	General Commercial	Vacant	Ruderal	0.52	
635	-	-	Santa Ana River	Concrete Channel	Developed	3.53	Santa Ana River - SOI
636	-	-	Santa Ana River	Concrete Channel	Developed	33.00	Santa Ana River - SOI
637	-	-	Santa Ana River	Concrete Channel	Developed	5.34	Santa Ana River - SOI
638	-	-	Santa Ana River	Concrete Channel	Developed	41.50	Santa Ana River - SOI

Appendix J-b Service Provider Questionnaire Responses

Appendices

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1. Please **confirm or update** the following information we obtained from the District's website:

   SAUSD schools serving the City of Santa Ana include:
   (Please enter enrollments and capacities in the table.)

SAUSD Schools Serving Residents from the City of Santa Ana				
School	***Grades***	***Location***	***Academic Year 2019-2020 Enrollment***	***Capacity***
John Adams Elementary School	K-5th	2130 South Raitt Street	411	650
Advanced Learning Academy (ALA)	3rd-6th	335 East Walnut Street	108	300
Advanced Learning Academy Early College	7th-8th	1325 E. Fourth Street	253	525
Gerald P. Carr Intermediate School	6th-8th	2120 West Edinger Avenue	1424	2135
George Washington Carver Elementary School	K-3rd	1401 West Santa Ana Boulevard	694	1475
Century High School	9th-12th	1401 South Grand Avenue	1565	3744
Cesar E. Chavez High School	9th-12th	2128 Cypress Avenue	85	576
Wallace R. Davis Elementary School	K-5th	1405 French Street	513	925
Diamond Elementary School	K-5th	1450 South Center Street	470	750
Thomas A. Edison Elementary School	K-5th	2063 Orange Avenue	463	1000
Manuel Esqueda Elementary School	K-5th	2240 South Main Street	1039	1200
Benjamin Franklin Elementary School	K-5th	210 West Cubbon Street	377	325
John C. Fremont Elementary School	K-5th	1930 West Tenth Street	480	775
James A. Garfield Elementary School	K-5th	850 Brown Street	664	875
Godinez Fundamental High School	9th-12th	3002 Centennial Road	2341	3744
Greenville Fundamental School	K-5th	3600 South Riatt Street	1002	1100
Lorin Griset Academy	9th-12th	1915 West McFadden Avenue	309	648
Carl Harvey Elementary School	K-5th	1635 South Center Street	399	650
Martin R. Heninger Elementary School	K-5th	417 West Walnut Street	1114	1275
Heroes Elementary School	K-5th	1111 West Civic Center Drive	526	725
Herbert Hoover Elementary School	K-5th	408 East Santa Clara Avenue	335	575
Andrew Jackson Elementary	K-5th	1143 South Nakoma Drive	672	1300
Thomas Jefferson Elementary School	K-5th	1522 West Adam Street	661	975
John F. Kennedy	K-5th	1300 East McFadden	581	925

Elementary School		Avenue		
Dr. Martin Luther King Jr. Elementary School	K-5th	1001 Graham Lane	609	925
Julia C. Lathrop Technology Magnet Intermediate School	6th-8th	1111 South Broadway	876	1820
Abraham Lincoln Elementary School	K-5th	425 South Sullivan Street	691	1400
James Russell Lowell Elementary School	K-5th	700 South Flower Street	630	1050
Douglas MacArthur Fundamental Intermediate School	6th-8th	600 West Alton Avenue	1190	1540
James Madison Elementary School	K-5th	1124 Hobart Street	990	1325
Glenn L. Martin Elementary School	K-5th	939 West Wilshire Avenue	620	1050
McFadden Intermediate School	6th-8th	2701 South Raitt Street	1141	2065
Gonzalo and Felicitas Mendez Fundamental Intermediate School	6th-8th	2000 North Bristol Street	1428	1890
Middle College High School	9th-12th	1530 West 17th Street	348	540
James Monroe Elementary School	K-5th	417 East Central Avenue	272	550
Monte Vista Elementary School	K-5th	2116 West Monte Vista Avenue	458	850
John Muir Fundamental Elementary School	K-5th	1951 Mabury Street	787	1175
Pio Pico Elementary School	K-5th	931 West Highland Street	513	800
REACH Academy	-	804 North Fairview Road	41	540
Romero-Cruz Academy	K-8th	2701 West Fifth Street	1009	1525
Roosevelt Elementary School	K-5th	501 Halladay Street	558	1150
Saddleback High School	9th-12th	2802 South Flower Street	1491	3204
Santa Ana High School	9th-12th	520 West Walnut Street	3237	4212
Santiago Elementary School	K-5th	2212 North Baker Street	1103	1250
Segerstrom High School	9th-12th	2301 West High School	2472	3024
Jose A. Sepulveda Elementary School	K-5th	1801 South Poplar Street	342	625
Sierra Preparatory Academy	6th-8th	2021 North Grand Avenue	673	1680
Taft Elementary School	K-5th	500 Keller Avenue	560	1325
Jim Thorpe Fundamental Elementary School	K-5th	2450 West Alton Avenue	886	1050
Valley High School	9th-12th	1801 South Greenville Street	2222	4032
Raymond A. Villa Fundamental Intermediate School	6th-8th	1441 East Chestnut Avenue	1375	1575
Adeline C. Walker Elementary School	K-5th	811 East Bishop Street	399	575

2. Does the District plan to build any new schools that would potentially serve the project area? If so, please provide grade levels, location, and capacity for each planned school.

Grades	***Location/Address***	***Capacity***	***Anticipated Opening Year***

3. Are there any existing shortages in the amount of classroom, athletic, recreational or other facilities available to serve the current number of students? If shortages exist, what is the basis for determining those shortages?

None at this time.

4. Please **confirm or update** the following developer impact fees for residential and commercial development (obtained from the SAUSD Facilities Master Plan 2020).

   a. The school impact fees are Level 1 fees.

   b. Residential development fees are $4.08 per square foot.

   c. Commercial development fees are $0.66 per square foot.

5. Please **confirm or update** the following student generation rates for elementary, intermediate, and high schools obtained from the District's 2020 Residential Development School Fee Justification Study.

    a. Elementary school (Grades K-5): 0.4028 per single-family housing unit/0.1937 per multi-family housing unit

    b. Intermediate school (Grades 6-8): 0.2203 per single-family housing unit/ 0.1111 per multi-family housing unit

    c. High school (Grades 9-12): 0.2868 per single-family housing unit/0.1427 per multi-family housing unit

6. How would the proposed project, which includes land use designation changes that would accommodate a buildout of 6,819,422 additional nonresidential square feet, 36,167 additional dwelling units, and 14,362 jobs affect the existing SAUSD school services and facilities?

Traffic and safety concerns for students that are in areas or close proximity to the school

7. Please provide any additional comments you may have regarding the proposed project.

n/a

Response Prepared By:

Name	**Title**
Agency	**Date**

PLACEWORKS

RECEIVED
MAR 05 2020
FACILITIES

G.G.U.S.D.
MAR 02 2020
BUSINESS SERVICES

→ J. Hills for response to questionnaire

TRANSMITTAL

DATE	February 26, 2020
TO	Garden Grove Unified School District
ADDRESS	10331 Stanford Avenue, Garden Grove, CA 92840
CONTACT	Rick Nakano, Assistant Superintendent of Business Services
FROM	Jasmine A. Osman, Project Planner
SUBJECT	Service Provider Questionnaire
PROJECT NUMBER	SNT-20.0

These items are transmitted via: ☒ US Mail ☐ Express Mail ☐ Courier ☐ Hand Delivery ☐ E-mail

GENERAL REMARKS

PlaceWorks has been retained by the City of Santa Ana to prepare an Environmental Impact Report for the proposed City of Santa Ana General Plan Update. This letter is to request your assistance in updating information regarding existing school services in the City and assessing the potential impacts that would be created by the proposed project.

Please see the attached Notice of Preparation which provides details on the proposed project. Additionally, a brief questionnaire has been included.

Please provide your responses to the enclosed questionnaire. Note that your responses will become a part of the administrative record for this project and will be included as an appendix to the EIR. Please respond to PlaceWorks no later than March 6th, 2020. If you need additional time to respond or would like an MSWord version of the questionnaire, please let us know. You may mail the responses to the questionnaire to the address in the footer, or you may email the responses to josman@placeworks.com

Please feel free to call at 714.966.9220 if you have any questions or require further information.

Jasmine A Osman

Jasmine A. Osman

California Environmental Quality Act

NOTICE OF PREPARATION AND SCOPING MEETING

Date: February 26, 2020
To: Responsible Agencies and Interested Parties
Subject: Notice of Preparation and Scoping Meeting for the Santa Ana General Plan Program Environmental Impact Report

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To: Reviewing Agencies and Other Interested Parties

Project Title: Santa Ana General Plan

Project Applicant: City of Santa Ana

Notice of Preparation Review Period: 2/26/20 through 3/27/2020 (30 days)

Scoping Meeting: Thursday, March 5, 2020, Santa Ana Police Community Room

NOTICE IS HEREBY GIVEN that the City of Santa Ana (City) will prepare a program environmental impact report (EIR) for the Santa Ana General Plan. The City is the lead agency for the project. The purpose of this notice is (1) to serve as a Notice of Preparation of an EIR pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15082, (2) to advise and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed project, and (3) to notice the public scoping meeting.

The City determined that the proposed project would require preparation of a full-scope EIR; thus, an Initial Study was not prepared in conjunction with this Notice of Preparation.

1. Introduction

The City's General Plan was last comprehensively updated in 1982. Various updates to the City's Land Use Element, Circulation Element, Urban Design Element and Economic Development were completed in 1998. In March 2014 the City Council adopted the Santa Ana Strategic Plan. The Strategic Plan was the result of an extensive community outreach process and established specific goals, objectives and strategies to guide the City's major efforts. One of the key strategies identified is to complete a comprehensive update of the City's Existing General Plan. The updated General Plan will provide long-term policy direction to guide the physical development, quality of life, economic health, and sustainability of the Santa Ana community through 2045. The updated General Plan will address the eight topics required by state law as well as five optional topics. The topic of housing will also be addressed as a separate effort in late 2021 in accordance with state law.

2. Environmental Setting

Project Location

The City of Santa Ana encompasses roughly 27 square miles of land in central Orange County. The cities of Orange and Costa Mesa border Santa Ana to the north and south, respectively. Santa Ana's western border connects with the cities of Garden Grove, Westminster, and Fountain Valley, while Santa Ana's eastern border touches the cities of Irvine and Tustin. Regional connectivity to the City of Santa Ana is provided by interstates 15 and 405 and by State Routes 22 and 55. The City of Santa Ana is the second largest city in Orange County in terms of both population (approximately 340,000 residents as of 2019) and workers (approximately 160,000 jobs as of 2019).

3. Project Description

The City of Santa Ana is in the process of preparing a comprehensive update to its existing General Plan. Santa Ana's "Golden City Beyond: A Shared Vision" General Plan is expected to be completed in 2020 and will guide the City's development and conservation for the next 25 years through 2045. The update will provide long-term policy direction and communicate the vision, values, and goals for the City's physical development, fiscal and environmental sustainability, and overall quality of life. The new Santa Ana General Plan will serve to identify areas of opportunity and provide options to enhance development potential in key areas of the city while bringing the City into compliance with recent state laws and reflect updates to current conditions and input from the general public, city staff, and other stakeholders.

Santa Ana's General Plan is based on a vision statement and core values established as part of an extensive multi-year community outreach effort, a Technical Advisory Committee, and a General Plan Advisory Group.

Vision Statement

"Santa Ana is a city that promotes the physical, social, and economic health and wellness of our people and our community. We celebrate our past, embrace the power of diversity, and work together to create economic and educational opportunities for the next generation, leading to a more sustainable and prosperous future."

Core Values

- **Health.** The people of Santa Ana value a physical environment that encourages healthy lifestyles, a planning process that ensures that health impacts are considered, and a community that actively pursues policies and practices that improve the health of our residents.
- **Equity**. Our residents value taking all necessary steps to ensure equitable outcomes, expanding access to the tools and resources that residents need, and to balance competing interests in an open and democratic manner.
- **Sustainability.** Santa Ana values land use decisions that benefit future generations, plans for the impacts of climate change, and incorporates sustainable design practices at all level of the planning process.
- **Culture.** Our community values efforts that celebrate our differences as a source of strength, preserve and build upon existing cultural resources, and nurture a citywide culture of empowered residents.
- **Education.** We are a city that values the creation of lifelong learners, the importance of opening up educational opportunities to all residents and investing in educational programs that advance our residents' economic wellbeing.

General Plan Topics

State law requires that a general plan address eight specific topics, which each topic commonly presented as an element of the general plan. State law gives jurisdictions the discretion to incorporate optional topics and to address any of these topics in a single element or across multiple elements of the general plan. Santa Ana's General Plan will address the following eight mandatory and five optional topics:

Mandatory Topics

- Land Use
- Circulation
- Housing*
- Environmental Justice**
- Open Space
- Conservation
- Safety
- Noise

Optional Topics

- Health and Wellness
- Historic Preservation
- Urban Design
- Economic Prosperity
- Community Services

** The updated General Plan will incorporate the current 2014–2021 Housing Element and no substantive changes are anticipated as part of the comprehensive general plan update. The topic of housing will be addressed as a separate effort in late 2021 in accordance with state law.*

*** The topic of environmental justice will be incorporated throughout the General Plan, with goals and policies incorporated into multiple elements.*

Project Buildout

In coordination with the General Plan Advisory Group, the City identified five areas suited for new growth and development: South Main Street, Grand Avenue/17th Street, West Santa Ana Boulevard, 55 Freeway/Dyer Road, and South Bristol Street. These five areas are located along major travel corridors, the future OC Streetcar line, and/or linked to the Downtown. In general, many areas currently designated for General Commercial and Professional Office are expanding opportunities for residential development through a proposed change to the Urban Neighborhood or District Center General Plan land use designations. Industrial Flex would be introduced where Industrial land use designations currently exist within each of the five focus areas in order to allow for cleaner industrial and commercial uses with live-work opportunities.

There are seven other planning areas that represent specific plans and other special zoning areas that were previously adopted: Adaptive Reuse Overlay (2014), Bristol Street Corridor Specific Plan (1991/2018), Harbor Mixed Use Corridor Specific Plan (2014), MainPlace Specific Plan (2019), Metro East Overlay Zone (2007/2018), Midtown Specific Plan (1996), and Transit Zoning Code Specific Development (2010). The potential for new development in these areas is based on the forecasted buildout at the time of the respective zoning document's adoption, minus the amount of new development built between their adoption date and 2019. The most recent adoption/amendment date for each zoning document is noted in parentheses.

Growth outside of the focus areas and special planning areas is expected to be incremental and limited. Some growth was projected for the professional office surrounding the Orange County Global Medical Center and along Broadway north of the Midtown Specific Plan. Some growth was also projected for the commercial and retail area south of the West Santa Ana Boulevard focus area. Finally, some additional residential development is expected to occur on a small portion (five percent) of single-family and multi-family lots through the construction of second units.

Table 1 provides a statistical summary of the buildout potential associated with the General Plan compared to existing conditions. Figure 1 displays the draft General Plan Land Use Map while Figure 2 illustrates the boundaries of the five focus areas and special planning areas.

4. Probable Environmental Effects

The City has determined that a Program EIR will be prepared for the proposed General Plan. Section 15168 of the CEQA Guidelines states that a Program EIR may be prepared on a series of actions that can be characterized as one large project and are related either: 1) geographically; 2) as logical parts in the chain of contemplated actions; 3) in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or 4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways.

The Program EIR will be prepared in accordance with the requirements of CEQA Statute and Guidelines, as amended. Pursuant to Section 15146 of the CEQA Guidelines, the degree of specificity in the Program EIR will correspond to the degree of specificity involved in the proposed General Plan. The EIR will focus on the primary effects that can be expected to follow from adoption of the proposed project and will not be as detailed as an EIR on the specific development or construction projects that may follow. Based on the City's preliminary analysis of the project, the following environmental impact categories and their associated impact thresholds will be examined in the Program EIR:

- Aesthetics
- Agricultural/Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems
- Wildfire

The Draft EIR will address the short- and long-term effects of the General Plan on the environment. Mitigation measures will be proposed for impacts that are determined to be significant. A mitigation monitoring program will also be developed as required by Section 15150 of the CEQA Guidelines.

5. Public Review Period

This NOP will be available for a 30-day public review period from **February 26, 2020,** to **March 27, 2020,** on the City's website at https://www.santa-ana.org/general-plan. Hard copies will also be available at:

City of Santa Ana, Planning Division
20 Civic Center Plaza, M-20
Santa Ana, CA 92701

City of Santa Ana Public Library
26 Civic Center Plaza
Santa Ana, CA 92701

The City is seeking input from both agencies and members of the public on the scope and content of the environmental information and analysis in the EIR. Due to the time limits mandated by state law, written comments must be sent via mail, e-mail, or fax no later than 5:00 PM on **Thursday March 27, 2020**. Please send your comments at the earliest possible date to:

Verny Carvajal, Principal Planner
City of Santa Ana Planning and Building Agency
PO BOX 1988 (M-20)
Santa Ana, CA 92702
Email: VCarvajal@santa-ana.org

6. Public Scoping Meeting

Pursuant to the California Public Resources Code Section 21083.9, the City will conduct a public scoping meeting. This meeting will provide a public forum for information dissemination and dialogue regarding the components of the proposed project and the environmental review process. Please note the main purpose of the public scoping meeting is to provide a project description and solicit comments to refine and/or expand the scope of the EIR. **Although staff will summarize the issues raised at these meetings, anyone wishing to make formal comments on the scope of the EIR must do so in writing.** The public scoping meeting will be held on:

Date: Thursday, March 5, 2020
Time: from 6:00 to 7:30 PM
Location: Santa Ana Police Community Room, 60 Civic Center Plaza, Santa Ana, CA 92701

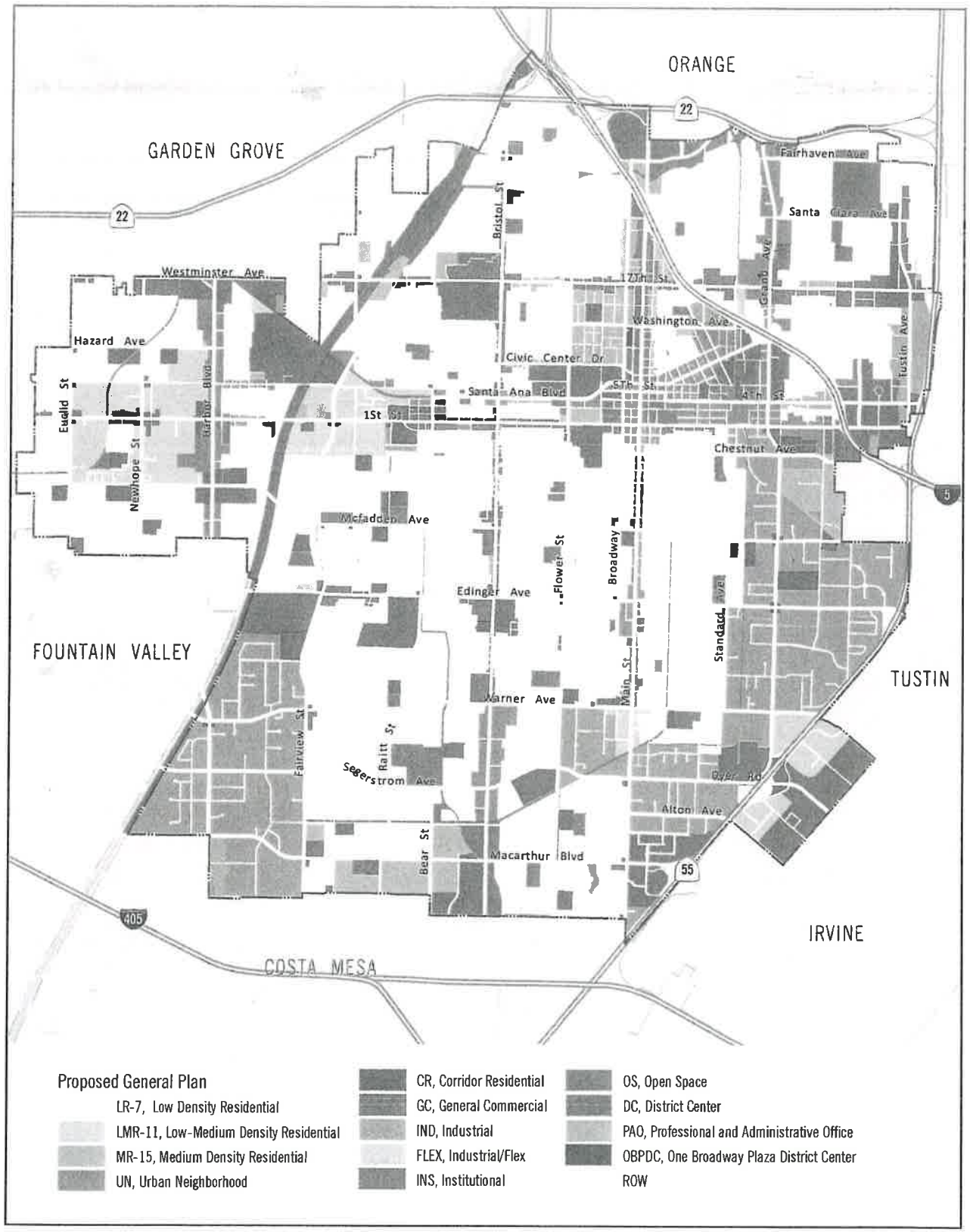
Table 1 Existing Conditions, Potential Growth, and Buildout Conditions in Santa Ana, 2020 to 2045

PLANNING AREA	EXISTING [1]			GROWTH [2]			BUILDOUT		
	Housing Units	Bldg. Sq. Ft.[3]	Jobs	Housing Units	Bldg. Sq. Ft.[3]	Jobs	Housing Units	Bldg. Sq. Ft.[3]	Jobs
FOCUS AREAS	**6,380**	**12,849,259**	**29,931**	**17,481**	**3,233,332**	**9,542**	**23,861**	**16,082,591**	**39,473**
55 Freeway/Dyer Road	1,221	5,094,557	10,401	8,731	1,434,665	3,849	9,952	6,529,222	14,250
Grand Avenue/17th Street	561	1,400,741	3,568	1,667	-689,325	-1,929	2,228	711,416	1,639
South Bristol Street	220	1,577,511	3,337	5,233	3,508,975	11,319	5,453	5,086,486	14,656
South Main Street	1,720	1,685,978	3,455	588	-739,316	-1,304	2,308	946,662	2,151
West Santa Ana Boulevard	2,658	3,090,472	9,170	1,262	-281,667	-2,393	3,920	2,808,805	6,777
SPECIFIC PLAN / SPECIAL ZONING	**4,685**	**13,924,891**	**38,548**	**15,839**	**3,033,554**	**1,154**	**20,524**	**16,958,445**	**39,702**
Adaptive Reuse Overlay Zone [4]	260	976,935	3,043	1,000	0	-476	1,260	976,935	2,567
Bristol Street Corridor Specific Plan	136	140,348	294	-1	2,791	-12	135	143,139	282
Harbor Corridor Specific Plan	1,324	1,767,937	3,286	3,298	200,045	-1,708	4,622	1,967,982	1,578
Main Place Specific Plan	0	1,108,080	2,216	1,900	1,318,843	3,164	1,900	2,426,923	5,380
Metro East Overlay Zone	844	2,516,056	7,524	4,707	2,169,891	4,734	5,551	4,685,947	12,258
Midtown Specific Plan	607	1,885,065	4,824	0	-66,812	-209	607	1,818,253	4,615
Transit Zoning Code	1,514	5,530,470	17,361	4,935	-591,204	-4,339	6,449	4,939,266	13,022
ALL OTHER AREAS OF THE CITY [5]	**67,727**	**39,772,550**	**92,004**	**2,847**	**552,536**	**3,666**	**70,574**	**40,325,086**	**95,670**
CITYWIDE TOTAL	**78,792**	**66,546,700**	**160,483**	**36,167**	**6,819,422**	**14,362**	**114,959**	**73,366,122**	**174,845**

Source: City of Santa Ana, 2020.

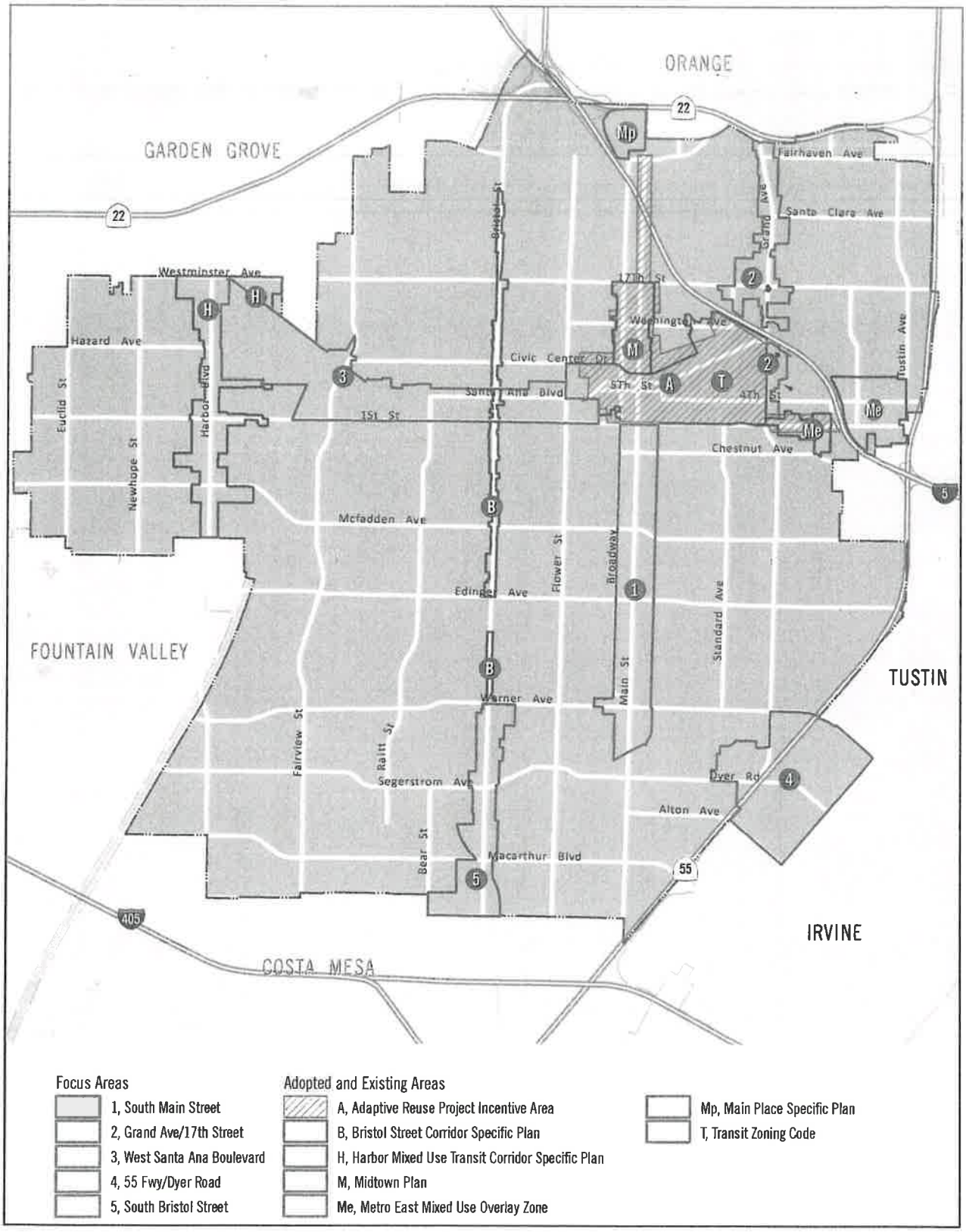
1. Existing represents conditions as of December 2019 as derived from the City of Santa Ana Planning Information Network and projects already under construction per the January 2020 monthly development project report.
2. The potential growth for new development in specific plan/special zoning area is based on the forecasted buildout at the time of the respective zoning document's adoption, minus the amount of new development built between its adoption date and 2019.
3. Only includes nonresidential building square footage.
4. The figures shown on the row for the Adaptive Reuse Overlay represents parcels that are exclusively in the Adaptive Reuse Overlay boundary. Figures for parcels that are within the boundaries of both the Adaptive Reuse Overlay Zone and a specific plan, other special zoning, or focus area boundary are accounted for in the respective specific plan, other special zoning, or focus area.
5. The City has included an assumption for growth on a small portion (five percent) of residential parcels through the construction of second units, which is distributed throughout the City and is not concentrated in a subset of neighborhoods. Additional growth includes known projects in the pipeline and an increase of 10 percent in building square footage and employment for the professional office surrounding the Orange County Global Medical Center and along Broadway north of the Midtown Specific Plan, as well as the commercial and retail area south of the West Santa Ana Boulevard focus area.

Figure 1 - Proposed General Plan Land Use



PlaceWorks

Figure 2 - Proposed General Plan Focus Areas and Other Special Planning Areas



1. Please **confirm or update** the following information we obtained from the District's website:

Data only Available for 2019-2020

GGUSD schools serving the City of Santa Ana include:
(Please enter enrollments and capacities in the table.)

GGUSD Schools Serving Residents from the City of Santa Ana

School	*Grades*	*Location*	*Academic Year 2020-2021 Enrollment*	Perm/ Inc. Portable *Capacity*
R. F. Hazard Elementary School	K-6th	4218 West Hazard Avenue	432	350/700
Rosita Elementary School	K-6th	4726 West Hazard Avenue	503	450/725
Heritage Elementary School	K-6th	426 South Andres Place	506	550/850
Edward Russell Elementary School	K-6th	600 South Jackson	492	500/875
Newhope Elementary	K-6th	4419 West Regent Drive	394	450/600
Stephen R. Fitz Intermediate	7th-8th	4600 West McFadden Avenue	640	783/719

Calculated at 25 per class k-6, 27 per class 7-12

2. Does the District plan to build any new schools that would potentially serve the project area? If so, please provide grade levels, location, and capacity for each planned school.

Grades	*Location/Address*	*Capacity*	*Anticipated Opening Year*

NA

3. Are there any existing shortages in the amount of classroom, athletic, recreational or other facilities available to serve the current number of students? If shortages exist, what is the basis for determining those shortages?

TABLE 1
FACILITIES CAPACITY AND STUDENT ENROLLMENT

SCHOOL LEVEL	EXISTING PERMANENT FACILITIES CAPACITY	STUDENT ENROLLMENT (OCTOBER 2019)	AVAILABLE/ (DEFICIT) CAPACITY
Elementary School (TK-6)	22,100	20,748	1,352
Intermediate School (7-8)	6,399	6,735	(336)
High School (9-12)	12,069	13,742	(1,673)
TOTAL	**40,568**	**41,225**	**(657)**

4. Please **confirm or update** the following developer impact fees for residential and commercial development (obtained from the GGUSD's Website).

   a. Residential development fees are $3.79 per square foot.
   Proposed increase to $4.09 on 5/16/20

   b. Commercial/Industrial/Senior Housing development fees are $0.61 per square foot.
   Proposed increase to $0.66 on 5/16/20

   c. Assessable space for self-storage development fees are $0.06 per square foot.
   Confirmed

5. What are the student generation rates for elementary, intermediate, and high schools within the District?

   a. Are there generation rates specific to housing type (i.e., single-family, multifamily, etc.)?

TABLE 3
STUDENT GENERATION RATES

SCHOOL LEVEL	STUDENT GENERATION RATES PER RESIDENTIAL UNIT		
	SFD	SFA	MF
Elementary School (TK-6)	0.2989	0.0876	0.2296
Intermediate School (7-8)	0.0969	0.0272	0.0734
High School (9-12)	0.2029	0.0562	0.1421
TOTAL	**0.5987**	**0.1710**	**0.4451**

6. How would the proposed project, which includes land use designation changes that would accommodate a buildout of 6,819,422 additional nonresidential square feet, 36,167 additional dwelling units, and 14,362 jobs affect the existing GGUSD school services and facilities?

   In the 2 areas where GGUSD students are drawn from: Focus area 3, West Santa Ana Boulevard and Specific plan area H, Harbor Mixed use Transit corridor residential units and Commercial square footage will produce an estimated 848 net increase in students.

7. Please provide any additional comments you may have regarding the proposed project.

Response Prepared By:

Jerry Hills	Facilities Director
Name	**Title**
Garden Grove Unified School District	3/10/20
Agency	**Date**

School site	grades	location	2019-2020 enrollment	capacity permanent building	Capacity relocatable	total capacity
Clinton	k-6	13641 Clinton St., Garden Grove	595	600	475	**1075**
Post	k-6	14641 Ward St. ,Westminster	462	500	150	**650**
Paine	k-6	15792 Ward st., Garden Grove	442	500	75	**575**
Monroe	k-6	16225 Newhope St., Fountain Valley	416	500		**500**
Riverdale	k-6	13222 Lewis St., Garden Grove	558	350	375	**725**
Anthony	k-6	15320 Pickford st., Westminster	359	500	50	**550**
Morningside	k-6	10521 Morningside Dr., Garden Grove	432	500	100	**600**
Peters	k-6	13162 Newhope st., Garden Grove	1118	775	675	**1450**
Doig	7-8	12752 Trask Ave., Garden Grove	765	621	297	**918**
Irvie	7-8	10552 Hazard Ave., Garden Grove	674	783	108	**891**
Santiago	9-12	12342 Trask Ave., Garden Grove	1967	1782	621	**2403**
Los Amigos	9-12	16566 Newhope St., Fountain Valley	1741	1539	540	**2079**
LaQuinta	9-12	10372 McFadden Ave., Westminster	2145	2214	243	**2457**
Bolsa Grande	9-12	9401 Westminster Ave., Garden Grove	1916	1674	216	**1890**

SANTA ANA GENERAL PLAN UPDATE
Tustin Unified School District Questionnaire

1. Please provide the following:

   - A list of all the schools in TUSD that service Santa Ana residents,
   - The existing enrollments of each of these schools, and
   - The existing capacities of each of these schools.

   Please see Appendix A from the attached a table Fee Justification Report adopted by the Board of Education on April 13, 2020. Schools that service students from the general plan area are highlighted in yellow.

2. Does the District plan to build any new schools that would potentially serve the project area? If so, please provide grade levels, location, and capacity for each planned school.

Grades	***Location/Address***	***Capacity***	***Anticipated Opening Year***

3. Are there any existing shortages in the amount of classroom, athletic, recreational or other facilities available to serve the current number of students? If shortages exist, what is the basis for determining those shortages?

   As a whole, schools in the District are at or above capacity per the Table attached in item 1. The District strives to provide adequate facilities at all of its schools. The collection of developer fees helps the District to fund projects that may help to fill any shortages.

4. Please **confirm or update** the following developer impact fees for residential and commercial development (obtained from the TUSD website).

    a. Residential development fees are $3.79 per square foot.

    b. Commercial development fees are $0.61 per square foot.

The Board of Education took action of April 13, 2020 to increase residential development fees to $4.08 per square foot and commercial/industrial development fees to $0.66 per square foot. These increased fees will take effect on June 12, 2020.

5. Please **confirm or update** the following student generation rates for elementary, intermediate, and high schools obtained from the District's 2018 Residential, Commercial/Industrial Development School Fee Justification Study.

    a. Elementary school (Grades K-5): 0.1434 per multi-family housing unit

    b. Intermediate school (Grades 6-8): 0.0736 per multi-family housing unit

    c. High school (Grades 9-12): 0.0902 per multi-family housing unit

There are no student generation rates for single-family homes because "the vast majority of future unmitigated residential dwelling units expected to be constructed consist of multi-family dwelling units."[1]

Table 4 on page 8 of the attached District's Fee Justification Report adopted by the Board of Education on April 13, 2020, shows current student generation rates, including rates for single family detached units.

6. How would the proposed project, which includes land use designation changes that would accommodate a buildout of 6,819,422 additional nonresidential square feet, 36,167 additional dwelling units, and 14,362 jobs affect the existing TUSD school services and facilities?

As stated above, school facilities in TUSD are at or near capacity. The addition of k-12 students would create a major impact on our facilities unless mitigation is provided to help the District respond to the facilities needs created by those new students.

[1] Fee Justification Report for Residential and Commercial/Industrial Development https://www.tustin.k12.ca.us/uploaded/District_Office/Business_Services/Fiscal_Services/School_Facilities_Fees/Fee_Justification_Report_March_2018.pdf (page 13)

7. Please provide any additional comments you may have regarding the proposed project.

The District expects that all future development created by this project will pay the maximum development fee in place at the time building permits are obtained.

The District has attached the Fee Justification Report adopted by the Board of Education on April 13, 2020 as a reference to this request.

Response Prepared By:

Tom Rizzuti	Director, Facilities & Planning
Name	**Title**
Tustin Unified School District	April 17, 2020
Agency	**Date**

Tustin Unified School District
Capacity Calculation - State Loading Standards

Fiscal Year 2019/20

	School	Total CR [1]	Current Classroom Counts [1] TK-6 25		7-12 27		Severe 9		Non Severe 13		Capacity 2019/20 100%	Enrollment 2019/20 Enrollment	State Loading 100% Capacity vs Enrollment +/-
ELEM	Arroyo	24	24	600		0	0	0	0	0	600	637	-37
ELEM	Benson	17	14	350		0	0	0	3	39	389	391	-2
ELEM	Beswick	12	11	275		0	0	0	1	13	288	511	-223
ELEM	Estock	21	21	525		0	0	0	0	0	525	516	9
ELEM	Guin Foss	15	15	375		0	0	0	0	0	375	427	-52
ELEM	Heideman	29	29	725		0	0	0	0	0	725	606	119
ELEM	Heritage	21	21	525		0	0	0	0	0	525	485	40
ELEM	Hicks Canyon	36	36	900		0	0	0	0	0	900	934	-34
ELEM	Ladera	14	14	350		0	0	0	0	0	350	318	32
ELEM	Loma Vista	25	22	550		0	0	0	3	39	589	469	120
ELEM	Myford	28	25	625		0	0	0	3	39	664	594	70
ELEM	Nelson	26	24	600		0	0	0	2	26	626	531	95
ELEM	Orchard Hills - k-8 (see below)	18	18	450		0	0	0	0	0	450	431	19
ELEM	Peters Canyon	22	19	475		0	0	0	3	39	514	510	4
ELEM	Red Hill	23	21	525		0	0	0	2	26	551	553	-2
ELEM	Thorman	30	30	750		0	0	0	0	0	750	787	-37
ELEM	Tustin Connect Academy	1	1	25		0	0	0	0	0	25	17	8
ELEM	Tustin Memorial Academy	22	22	550		0	0	0	0	0	550	602	-52
ELEM	Tustin Ranch	21	21	525		0	0	0	0	0	525	570	-45
		405	388		0		0		17		9,921	9,889	32

	School	Total CR	TK-6 25		7-12 27		Severe 9		Non Severe 13		2019/20 100%	2019/20 Enrollment	100% Capacity vs Enrollment +/-
MID	Columbus Tustin	38	0	0	28	756	0		5	65	821	808	13
MID	Currie	31	0	0	24	648	0		2	0	648	591	57
MID	Hewes	38	0	0	33	891	0		1	13	904	984	-80
MID	Orchard Hills	28	0	0	25	675	0		2	26	701	993	-292
MID	Pioneer	46	0	0	41	1107	0		1	13	1,120	1,189	-69
MID	Tustin Connect Academy	1	0	0	1	27	0		0	0	27	31	-4
MID	Utt	36	0	0	29	783	0		3	39	822	937	-115
	Totals	218	0		181		0		14		5,043	5,533	-490

	School	Total CR	TK-6 25		7-12 27		Severe 9		Non Severe 13		2019/20 100%	2019/20 Enrollment	100% Capacity vs Enrollment +/-
HIGH	Beckman	107		0	91	2457	0	0	6	78	2,535	2,947	-412
HIGH	Foothill	95		0	81	2187	0	0	6	78	2,265	2,424	-159
HIGH	Hillview/Sycamore at Lambert	25		0	13	351	0	0	0	0	351	230	121
HIGH	Tusin Connect Center	3		0	3	273	0	0	0	0	273	98	175
HIGH	Tustin	97		0	82	2214	0	0	8	104	2,318	2,282	36
		327	0		270		0		20		7,742	7,981	-239

SUMMARY	Total CR	TK-6	7-12	Severe	Non Severe	2019/20 Capacity 100%	2019/20 Enrollment	100% Capacity vs Enrollment +/-
	950	388	451	0	51	22,706	23,403	-697

(1) Classroom Counts exclude classroom facilities that do not meet state requirements (i.e., less < 960 square feet) or which are used for other educational purposes (ROP, etc).

SDFA

SPECIAL DISTRICT
FINANCING & ADMINISTRATION

437 W. Grand Avenue, Escondido CA 92025
Tel: 760.233.2630 | Fax: 760.233.2631

Tustin Unified School District

FEE JUSTIFICATION REPORT

For Residential & Commercial/Industrial Development

March 2020

PREPARED FOR:
Tustin Unified School District
300 South C Street
Tustin, CA 92780
Tel: 714 • 730 • 7301
Contact: Anthony Soria

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EXECUTIVE SUMMARY

This Fee Justification Report ("Report") for Residential and Commercial/Industrial Development has been prepared by Special District Financing & Administration ("SDFA") for the purpose of identifying the impact of projected future development on the school facilities of the Tustin Unified School District ("TUSD" or "District"), the ability of the District's current facilities to accommodate the impact, and the extent to which projected demand exceeds the District's current facilities capacity as well as quantify the costs associated with meeting the increased demand.

Specifically, this Report is intended to provide the Board of Education of the District with the required information to make the necessary findings set forth in Government Code Section 66001 et seq. and in accordance with Government Code Section 65995 et. seq, to support the District's collection of its fair share of the statutory fees allowed by the State of California, which for unified districts (K-12) is currently $4.08 per square foot of new residential development and $0.66 per square foot of new commercial/industrial development. The TUSD is a unified school district providing school facilities to elementary and secondary students living within the cities of Irvine, Santa Ana and Tustin as well as small portions of unincorporated areas within the County of Orange.

The findings contained in this Report include the following:

- *In accordance with state classroom loading standards, the District currently has school capacity to house approximately 22,706 students.*

- *As of October 2, 2019, current enrollment, including Special Day Class students, is approximately 23,403 students resulting in an aggregate capacity deficit of 697 seats.*

- *At least 3,127 new dwelling units could be constructed during the next twenty years within the boundaries of the school district and for which they have not mitigated the impact of their development through participation in a community facilities district, a negotiated fee payment or some other mitigation measure ("Mitigated Developments").*

- *Future development of single-family housing is largely expected to occur within the District's remaining mitigated developments (i.e., Orchard Hills and Tustin Legacy) and almost all future unmitigated development will consist of multi-family housing and the District's student generation rates indicate that almost one and one-half elementary, one middle, and one high school student is generated from every ten multi-family ("MF") dwelling units constructed.*

- *Approximately eighty-two percent (82%) of an elementary school and forty-two percent (42%) of a Grade 6-12 school facility will need to be constructed in order to*

provide adequate facilities to house students to be generated from currently unmitigated developments which lie within the boundaries of the District. The estimated cost of these school facilities, excluding interim housing requirements and central administrative support, is almost $78 million dollars.

- *Taking into account the cost of interim housing and administrative support, the total cost of school facilities results in a cost of approximately $78,661 per elementary student, $90,919 per school student in grades 6-12. Thus, estimated school facilities cost per dwelling unit is approximately $26,065.*

- *Based on development plans for projects within the Cities of Irvine, Santa Ana and Tustin, the District estimates that the average size of future residential dwelling units to be constructed within the TUSD will be approximately 1,414 square feet. Based upon the average square footage, the District would need to collect approximately $18.43 per square foot of new residential development to mitigate the school facilities impacts. This amount is well in excess of the amount that may be currently collected by the District (i.e., the District's maximum fee amount is $4.08 per square foot) and permitted by state statute. Thus, the District is justified in collecting the statutory fees for residential development as permitted by state law.*

- *Utilizing estimates regarding employee generation and associated residential household generation gleaned from recent Census data, it was determined that the District would need to collect between $0.38 and $60.35 per square foot of commercial/industrial development to mitigate the gross school facilities impacts resulting from almost all new non-residential development. This amount is well in excess of the amount currently collected by the District (i.e., the District's maximum fee amount is $0.66 per square foot) and permitted by state statute. Thus, the District is justified in collecting $0.38 per square foot for new self-storage development and the District is justified in collecting the matimum statutory fee of $0.66 per square foot for all commercial/industrial development as permitted by state law.*

- *Absent additional state or local funding, the District will not be able to provide adequate school facilities for new residential, commercial or industrial developments that are constructed within the boundaries of the District and for which no additional mitigation is received.*

Section
One

INTRODUCTION

This Section of the Report sets forth the legislative requirements as well as the methodology and data sources utilized in the analysis of the District's school facilities impact. Also included in this Section is a brief description of the TUSD, its current student enrollment and its current capacity.

The Tustin Unified School District

The TUSD is a political subdivision of the State of California and encompasses more than twenty-four (24) square miles in central Orange County and includes almost all of the territory within the boundaries of the City of Tustin as well as portions of the cities of Irvine and Santa Ana as well as an unincorporated area known as Tustin Foothills located primarily in the northern portion of the District. Its western boundary includes portions of Santa Ana with the portion of the western boundary line that lies north of Interstate 5 running along Marbury and Wright Streets and the portion that lies south of the Interstate largely coterminous with Lyon Avenue. Its southern boundary line runs along Warner Avenue on both the west and east areas of the District with the central portion of the district's southern boundary (between Armstrong and Jamboree) extending south to McGaw Avenue. The eastern boundary of the District is coterminous with Jamboree Road south of Interstate 5 and then is represented by Culver Drive north of Interstate 5 with the boundary line extending north of Portola Parkway into the area known as Orchard Hills (Planning Area No. 1 of the City of Irvine). The eastern portion of the District's northern boundary lies adjacent to Peters Canyon Regional Park and then follows along a number of residential streets in the Tustin Foothills on the west side of the District.

The TUSD is a geographically small, unified (K-12) school district that primarily serves an urban population with an enrollment of almost 24,000 students housed in twenty-nine different schools, including seventeen elementary, one K-8 school, five middle (grades 6-8), three comprehensive high schools as well as one alternative education school and one continuation school. The District serves a diverse ethnic population that includes more than 100,000 people in the cities of Irvine, Tustin and Santa Ana as well as the unincorporated area known as the Tustin Foothills.

Synopsis of District Growth & Student Capacity

During the past thirty years, the District has experienced significant student growth as well as accompanying demographic changes both in terms of ethnicity and economic diversity. With the development of Tustin Ranch, Lower Peter's Canyon, MCAS/Legacy and Orchard Hills master-planned communities as well as other projects, the last decade has seen continuous enrollment growth. During the ten-year period from 2009 to 2018, District enrollment went up by almost 1,800 students, an increase of more than eight percent (8%).

Student enrollment for 2019/20 by school type is as follows:

Table I

FY 2019/20 Student Enrollment

School Type	Current Enrollment (1)
Elementary School (Grades K-6)	9,889
Middle School (Grades 7-8)	5,533
High School (Grades 9-12)	7,981
Total 2019/20 Enrollment	23,403

(1) Reflects enrollment in District's iniital enrollment data file from October 2, 2019 and may not correspond to CSIS enrollment figures.

Current enrollment figures show that the total student population is just over 23,400 students. For purposes of calculating current capacity under the School Facilities Program the District relies on capacity computations as summarized on its School Capacity Study worksheet, attached as Appendix "A". This worksheet indicates that the District's current school facilities are sufficient to house 9,921 elementary, 5,034 middle, and 7,742 high school students or a total of 22,706 pupils. A comparison of current student enrollment to current capacity demonstrates that the District currently has insufficient facilities to adequately house its current enrollment at both middle and high school levels with approximately one classroom of excess capacity at the elementary school level. While there may be some short-term surplus capacity at various sites, with the pending build-out of the Orchard Hills Development (which has already mitigated its obligation via the funding and construction of the Orchard Hills K-8 facility located in CFD No. 14-1), any current surplus seats in the District will likely be absorbed as students from CFD 14-1 are generated.

Based upon the most recent population and housing estimates and trends as indicated by recent census data and corroborated by recent development within the District, it is anticipated that the growth experienced by the District during the past decade is likely to continue in the near future with the redevelopment of the Marine Corps Air Base (MCAS). Specifically, current growth estimates of the cities of Santa Ana, and Irvine indicate that housing development in the northwest portion of Irvine and the eastern portion of Santa Ana, and more particularly within the jurisdictional boundaries of the TUSD, will continue. Thus, as the District's current facilities are inadequate to house *all* of the additional students beyond its current enrollment and the future dwelling units to be constructed within Mitigated Developments, additional facilities must be added to provide some incremental capacity for students that will be generated from new non-mitigated development.

During the past twenty-eight years the District and the development community have entered into various mitigation agreements in order to ensure the timely construction of school facilities to house students from new development (Mitigated Development). The primary financing mechanism authorized in the mitigation agreements is the formation of a community facilities district (CFD). The District can then issue bonds to construct school facilities with repayment of the bonds being accomplished through the levy of a special tax on properties within the CFDs. These developments that are subject to the special tax are considered Mitigated Developments as they have provided significant funding and support to the TUSD facilities program since 1989. Nevertheless, increased student generation within existing developments as well as new residential construction for which a mitigation agreement does not exist continues to cause the District to operate with inadequate school facilities.

Legislative History

School districts have historically relied upon state funds and local bond measures to provide funding for the acquisition and construction of new school facilities. Prior to the passage of Proposition 13 in 1978, a school district's share of local property taxes was typically sufficient to build necessary schools to accommodate new development. The rapid increase in real estate prices within California during the 1970's and 1980's ensured that revenues would expand as the "ad valorem" tax base grew. However, limitations on the growth of this funding source were significantly constrained by the passage of Proposition 13, which limited annual increases in assessed values, except in the case of ownership transfers, to two percent (2%). This action, combined with a compounding need for new construction monies, caused significant hardships in many school districts during the early 1980's.

In 1986 the state legislature attempted to address this funding shortfall through the enactment of Assembly Bill 2926 ("School Fee Legislation"), which provided for the imposition of development fees on new residential and commercial/industrial construction. The School Fee Legislation provides that development fees are to be collected prior to the issuance of a building permit. Furthermore, no city or county is authorized to issue a building permit for new residential or commercial/industrial projects unless it first certifies with the appropriate school districts that the developer of the project has complied with the development fee requirement.

Shortly thereafter, AB 1600 ("Mitigation Fee Act") was enacted by the state legislature and took effect on January 1, 1989. Government Code Section 66001 and following sets forth the requirements for establishing, imposing and increasing development fees initially authorized under AB 2926. Specifically, the Mitigation Fee Act requires that a reasonable relationship or "nexus" exist between the type and the amount of a development fee imposed and the cost of the benefit to be derived from the fee. Specifically, Section 66001 of the Government Code with respect to the imposition of development fees provides, in pertinent part, that any action establishing, increasing, or imposing a fee on new development shall do all the following:

- *Identify the purpose of the fee.*
- *Identify the use to which the fee is to be put.*

- *Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed.*
- *Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.*

The development fees are currently authorized under Education Code Section 17620 and are $4.08 per square foot of new residential construction and $0.66 per square foot of new commercial/industrial development (for K-12 school districts). These development fees may next be increased by the SAB in 2022 and every two years thereafter.

In June of 2006, Assembly Bill 2751 was passed which added the criteria that a fee is prohibited from including the cost attributable to existing deficiencies in public facilities. In the case of a school district, this would mean that existing capacity deficits could not be added to the facilities funding required from future development. In this Report, this is demonstrated in the calculations by not including any deficit which would be shown in Table II, if any, to the School Facilities Required for New Development (Unmitigated) (Table X) or to the cost of such school facilities (Tables XII, XIII and XIV).

Methodology

In order to determine the impact of new construction on TUSD facilities the relationship between the new construction and its impact on the demand for school facilities must be identified. For residential development this determination includes the following:

- *Projecting the number of future residential dwelling units to be constructed within TUSD boundaries.*
- *Calculating a student generation rate (i.e., students expected to be generated from each new home) for the future dwelling types expected to be constructed in the future.*
- *Determining the number of students to be generated from new development.*
- *Identifying the "per student cost" for new elementary, middle and high school facilities.*
- *Multiplying the per student costs for elementary, middle and high school facilities by the applicable student generation rate.*

The methodology for determining the impact of new commercial/industrial development is similar. However, instead of determining the number of students to be generated per new dwelling unit, the focus is on the number of students generated per employee.

This Report utilizes in part, employee generation factors derived from the Traffic Generator's Guide prepared by the San Diego Association of Governments (SANDAG), last updated in April of 2002, as well as certain census data compiled by the U.S. Census Bureau.

Data Sources

The primary information used to establish a nexus between new development and school facilities impacts includes residential housing projections, employment impacts from new commercial/industrial development, historical student generation rates and facilities cost estimates. Primary information sources regarding future housing projections includes preliminary data for the Legacy Project gleaned from the Specific Plan for the Marine Corps Air Station (MCAS) as well as planning and current project documents obtained from the cities of Irvine, Santa Ana and Tustin. Data for determining commercial/industrial impacts was derived from the Traffic Generators Guide prepared by SANDAG as well as 2006-2010 Census Data for the cities of Irvine, Tustin and Santa Ana. Student generation rates for this Report were calculated by SDFA. Equal Employment Opportunity Commission (EEOC) worksite data derived from the American Community Survey (2006-10) conducted by the US Census Bureau was utilized to determine school facilities impacts associated with new non-residential development. Facilities cost estimates were prepared using cost information obtained from the District's Facilities Department.

Section
Two

RESIDENTIAL DEVELOPMENT

This Section of the Report identifies the school facilities impact from new residential construction.

Existing Facilities Capacity and Current Enrollment

Prior to examining the school facilities impacts from new development, the District's current capacity and enrollment were reviewed to identify existing facilities that may be available to house future students. As shown in Appendix "A" (School Capacity Worksheet), the District has determined that its existing school building capacity is approximately 22,706 elementary, middle and high school seats. As shown in Table I, CSIS enrollment figures for 2019/20 include 23,403 students. The resulting capacity deficit is shown in Table II.

Table II
Existing School Facilities Capacity

School Type	2019/20 Capacity (1)	2019/20 Enrollment (2)	Existing Seat Surplus/(Deficit)
Elementary (K-6)	9,921	9,889	32
Middle (7-8)	5,043	5,533	(490)
High (9-12)	7,742	7,981	(239)
Aggregate	22,706	23,403	(697)

(1) Includes Permanent Facilities & Interim Facilities.

(2) For purposes of determining available overall facilities capacity in accordance with state classroom loading standards, both capacity and enrollment figures identified in Appendix "A" and Table II reflect grades K-6 at the elementary school level and grades 7-8 at the middle school level. However, consistent with current District educational program policies, the District's sixth graders are predominantly attending the District's middle schools. Thus, for determining the facilities impact from future development and future school design goals, the District will assume that sixth grade students generated from future unmitigated development will continue to be housed at middle school facilities.

Future Residential Unit Projections

In the summer of 2005, the District entered into a mitigation agreement with the Irvine Company for the future development project known as Orchard Hills (Planning Area No. 1), which is primarily located northwest of the intersection of Culver Drive and Portola Parkway in the City of Irvine. And in the fall of 2015, TUSD completed its negotiations with the City Tustin related to the redevelopment of the remaining portion of the Tustin Marine Corps Air Station (MCAS). Both of these projects are expected to generate a significant number of students that must be housed in school facilities provided by the District but as a result of successful negotiations, their anticipated facilities impacts will be met through the formation of two CFDs and the issuance of bonds to construct facilities to serve their communities.

As a result, the anticipated student impacts from these communities at grades kindergarten through twelfth (K-12) are excluded from this analysis, so that only the net impact from unmitigated developments that will be subject to statutory fees will be considered.

Thus, for purposes of this analysis, the District's projection of future housing that is not yet mitigated consists primarily of (i) underdeveloped property located north of McGaw Avenue between Armstrong and Jamboree Road which is referred to as the IBC (Irvine Business Center), (ii) the Metro-East Overlay Zone located in the City of Santa Ana and (iii) future "in-fill" developments within the City of Tustin. The District has not incorporated in its estimate a significant number of future dwelling units expected from currently unidentified in-fill development. This estimate is summarized in Table III and is also included in Appendix "D".

Table III
Projected Future Residential Units located within Unmitigated Developments [(1)]

Jurisdiction	Single-Family Detached (SFD) Dwelling Units	Single-Family Attached (SFA) Dwelling Units	Multi-Family Apartment Dwelling Units	Total Future Dwelling Units
City of Irvine (IBC)	0	357	0	357
City of Santa Ana	24	0	2,205	2,229
City of Tustin	0	115	426	541
Unincorporated	0	0	0	0
Total for TUSD	24	472	2,631	3,127

(1) Future Planned Residential Projects without Mitigation as identified in planning documents or as estimated by planning agencies responsible for approving projects located within the jurisdictional boundaries of TUSD.

As previously indicated, a significant number of future dwelling units will be constructed within master-planned communities which are considered Mitigated Developments because they have already mitigated their school impacts through the formation of a community facilities district. These units are considered part of Mitigated Developments and therefore, both their impact on school facilities and their mitigation payments are excluded from the fee calculation in this Report.

Student Generation Rates

To establish a nexus between anticipated future residential development and a corresponding need for additional school facilities, the number of future students anticipated to be generated from the new residential development must be determined. This calculation often results in a student generation rate or factor, which represents the number of students, or portion thereof, expected to attend District schools from each new house. While additional single-family and multi-family housing will be constructed in both Orchard Hills and in Tustin Legacy (MCAS), these two areas represent mitigated developments and are excluded from this report.

For purposes of estimating the school facilities impact expected from future development, the District utilized its student generation rates tabulated for single-family detached (SFD), single-family attached (SFA) and multi-family units (apartments) located within its CFDs (CFD Nos. 88-1, 97-1, 06-1, 07-1 and 14-1) as well as the City of Tustin's CFD 14-1 – (Greenwood @ Legacy). Student generation rates for the District's CFDs were computed in February of 2020 and a summary of these generation rates is contained in Appendix "C". The student generation rates for multi-family apartment units, single-family attached (SFAs) and single-family detached (SFDs) dwellings located within the District's CFDs are summarized in Table IV.

Table IV
Student Generation Rates for Residential Units Located in CFDs (1)

School Level	Multi-Family Units (Apartments)	Single-Family Attached (SFAs)	Single-Family Detached (SFDs)
Elementary (K-5) (2)	0.1402	0.1584	0.1968
Middle (6-8) (2)	0.0647	0.0945	0.1319
High (9-12)	0.0878	0.1154	0.1968
Aggregate	0.2927	0.3683	0.5255

(1) *Rounded to the nearest ten-thousandth.*
(2) *For determining the facilities impact from future development and future school design goals, the District assume that sixth-grade students generated from future unmitigated development will continue to be housed at middle school facilities.*

Students Generated by New Unmitigated Development

The number of students estimated to be generated from future Unmitigated Development is determined by multiplying the projected number of future unmitigated dwelling units (Table III) by the corresponding generation rates (Tables IV). This computation is reflected in Table V:

Table V
Student Generation from Future Residential Dwelling Units

	Future MF (Apt) Units: *2,631*		Future SFA Dwellings: *472*		Future SFD Dwellings: *24*	
School Level	MF Student Generation Rate	MF Future Students (1)	SFA Student Generation Rate	SFA Future Students (1)	SFD Student Generation Rate	SFD Future Students (1)
Elementary (K-5)	0.1402	369	0.1584	75	0.1968	5
Middle (6-8)	0.0647	170	0.0945	45	0.1319	3
High (9-12)	0.0878	231	0.1154	54	0.1968	5
Aggregate (K-12)	0.2927	770	0.3683	174	0.5255	13

(1) Students shown are rounded to the nearest integer.

School Facilities Required to Serve New Development

In order to determine the number of schools, or portions thereof, necessary to serve students generated from new development, the aggregate future students shown in Table V is divided by the school capacity (i.e., design population). Table VI shows the number of new elementary, middle and high schools required to serve new development:

Table VI
School Facilities Required for New Development (Unmitigated)

School Facility	Current Available Capacity (1)	Design Capacity	Future Unhoused Students	Required Facilities (2)
Elementary School (K-5)	0	550	449	0.8164
Middle/High School (6-12)	0	1,200	508	0.4233

(1) While Table II indicates a current capacity surplus of 32 seats at the Elementary school level, these seats are reserved for future mitigated students expected to be generated from new residential development in Orchard Hills (CFD No. 14-1).
(2) Rounded to the nearest ten-thousandth.

Estimated School Facilities Costs

To calculate the cost for new school facilities, SDFA relied on actual historical costs and current estimates of costs associated with the construction of recent school facilities. These numbers reflect the District's estimate of land acquisition and construction costs, and also include anticipated costs for furniture, equipment and technology. Based on the District's most recent transfer of property to the City of Tustin, the District has utilized a land cost of $1.5 million per acre as the *average* acquisition price associated with providing future elementary school facilities for future unmitigated development. For future middle and high school facilities the District has assumed that such facilities may be partially or entirely housed at a facility to be constructed on the 40-acre site located within the MCAS/Legacy project area. Pursuant to the Reuse Plan for the MCAS, this site has already been acquired from the City.

The estimated costs for elementary, middle and high school facilities are contained in Appendix "E". The resulting facilities costs per school site, including acquisition and site development are shown in Table VII.

Table VII
Estimated Facilities Costs per School Site

School Facility	Site Acquisition/ Development	Construction (1)	Total Cost
Elementary (K-5)	$16,000,000	$25,000,000	$41,000,000
Middle & High (6-12)	$4,000,000	$100,000,000	$104,000,000

(1) Includes plans, tests and inspections, furniture and equipment, technology and other items.

The aggregate facilities cost impact from new, Unmitigated Development is determined by multiplying the per site costs shown in Table VII by the required number of sites reflected in Table VI. This resulting impact is shown in Table VIII.

Table VIII
Estimated Facilities Costs (Excluding Interim Housing & Admin. Facilities)

School Type	Required Schools (1)	Site Acquisition/ Development	Construction (2)	Total Cost
Elementary (K-5)	0.8164	$13,062,400	$20,410,000	$33,472,400
Middle & High (9-12)	0.4233	$1,693,333	$42,333,333	$44,026,666
Aggregate		$14,755,733	$62,743,333	$77,499,066

(1) Rounded to four decimals.
(2) Includes plans, tests and inspections, furniture and equipment, technology and other items.

Interim Housing and Administrative Support

In addition to the need for incremental permanent K-12 school facilities, new development imposes additional facilities impacts on school districts. Because development fees are collected at the time a building permit is issued, funds to provide facilities accumulate over a period of time and revenues, particularly when other local or state funds are not available, are not sufficient to build a school when development so warrants. The solution to this problem is most often addressed through "interim housing" in which the District purchases or leases relocatable classrooms that are used to temporarily alleviate overcrowding at existing school sites. Utilizing recent cost data associated with the setup and leasing of portables at its current sites, the TUSD has determined that it costs the District approximately $3,212 per elementary, and $3,352 per middle or high school student to provide interim housing until new facilities are available.

Additional central administrative facilities and support is also required as new students place incremental demands on school administration. The District has determined that $900 for each new student is necessary to provide for corresponding central administrative facilities. The estimated total cost of interim housing and central administrative facilities is shown in Table IX.

Table IX
Costs for Interim Housing & Administrative Support Facilities

School Level	Future Students	Per Pupil Costs		Total Cost
		Interim Housing (1)	Administrative Support (1)	
Elementary (K-5)	449	$3,212	$900	$1,846,288
Middle/High (6-8)	508	$3,352	$900	$2,160,016
Aggregate	957			$4,006,304

(1) Per Pupil costs estimates for interim Housing and administrative support are included in Appendix E-2..

Thus, the estimated total cost of school facilities (Table VIII) and ancillary facilities (Table IX) necessary to accommodate students generated from new residential development is shown in Table X:

Table X
Total Estimated Facilities Costs

School Level	School Facilities	Interim Housing (1)	Administrative Support (1)	Total Cost
Elementary (K-5)	$33,472,400	$1,442,188	$404,100	$35,318,688
Middle & High (6-12)	$44,026,666	$1,702,816	$457,200	$46,186,682
Aggregate	$77,499,066	$3,145,004	$861,300	$81,505,370

(1) Amounts shown are equal to the number of future students shown in Table IX multiplied by the respective estimated facilities costs included in Appendix E-1 and E-2.

Total Estimated Cost per Student

The estimated facilities cost for each elementary, middle and high school student is derived by dividing the school facilities costs by the respective number of students expected to be generated from new residential development. The per pupil costs for interim housing and administrative support (Table IX) are added to the per pupil school facilities cost to determine the total per student facilities costs for elementary, middle and high school facilities. The total estimated per pupil facilities cost is shown below:

Table XI
Total Facilities Costs per Pupil

School Level	Base School Facilities Cost	Future Students	Per Pupil Costs (1)			
			School Facilities	Interim Housing	Administrative Support	Total Cost
Elementary (K-5)	$33,472,400	449	$74,549	$3,212	$900	$78,661
Middle & High (6-12)	$44,026,666	508	$86,667	$3,352	$900	$90,919
Weighted Average (2)	$77,499,066	957	$80,981	$3,287	$900	$85,167

(1) Rounded to the nearest dollar.
(2) Reflects a weighted average based upon anticipated number of K-5 and 6-12 pupils expected to be generated.

School Facilities Impact per Dwelling Unit

The total estimated facilities cost for each new residential unit is determined by multiplying the facilities costs per student (Table XI) by the applicable student generation rate (Table IV) and is shown in the following table:

Table XII
Total Facilities Costs per Residential Unit

Housing Type	Per Pupil Cost	Composite -Wtd Avg. Student Generation Rate (1)	Composite -Wtd Avg. Facilities Cost Per Dwelling Unit (2)
Elementary (K-5)	$78,661	0.1436	$11,295
Middle &High (6-12)	$90,919	0.1625	$14,770
Weighted Average	$85,168	0.3060	$26,065

(1) Rounded to the nearest ten-thousandth.

(2) Facilities costs per dwelling unit as shown differs slightly from the product of the Per Pupil Cost and the SGRs shown above because the Per Pupil Cost is, in part, derived from the number of students generated to the nearest whole integer.

The District estimates that the weighted average assessable space of future multi-family dwelling units constructed within the expected unmitigated development will be approximately 1,414 square feet. This figure incorporates the weighted average size of future dwelling units as identified in Appendix "D". Dividing the total facilities cost per dwelling unit of $26,065 by the average size of a dwelling unit yields a school facility cost of $18.43 per square foot.

As previously indicated, the current statutory development fee authorized by Government Code Section 65995 (b)(1) for new residential construction is $4.08 per square foot. Based on the District's student generation rates, actual costs to provide school facilities and the average square footage for new dwelling units, the District, as outlined above, would need to levy an additional $14.35 per square foot to actually provide the school facilities necessitated by new residential development. This Report demonstrates that the school facilities impact amount per square foot equals $18.43 for future unmitigated residential development within the boundaries of the District, Thus, there is full justification for collecting the District's share of the maximum statutory developer fee allowed of $4.08 per square foot (K-12) of new residential development.

Since the District's school facilities impact per square foot is greater than the maximum statutory fee allowed under Government Code Section 65995 (b)(1), the District actually suffers unmitigated impacts from new residential development, which not only supports the collection of the statutory development fee for residential developments, but also those fees for new commercial/industrial development as provided for in Section Three of this Report. In this instance, TUSD is justified in levying and collecting the maximum fee per square foot from new residential developments in the amount indicated in the following Table:

Table XIII
Fee Allocation by School Type -- Residential Development

Authorized Fee Pursuant to Government Code Section 65995	Amount (*)
Statutory School Fee (Level I Fee)	$4.08 per square foot

* Fees collected by TUSD effective June 12, 2020 if adopted by the Board on April 13, 2020.

Table XIV identifies the facilities costs per dwelling unit and on a square foot basis -- the facilities cost per square foot, the amount of the proposed fee to be collected by TUSD and the net fee deficit for new development. As can be seen, the amount required is over five times the amount that can be collected ($4.08) by the TUSD if adopted by the Board:

Table XIV
Comparison of Facilities Cost to Currently Authorized Fee (*)

Facilities Cost Per D/U	Average SqFt Per Dwelling Unit	Facilities Cost Per Sqft	Current Fee Per Sqft	Fee Deficit Per Sqft
$26,065	1,414	$18.43	$4.08	($14.35)

* Fees collected by TUSD effective June 12, 2020 if adopted by the Board on April 13, 2020.

Section
Three

COMMERCIAL/INDUSTRIAL DEVELOPMENT

This Section of the Report identifies the school facilities impact from new commercial and industrial development.

School Facilities Impacts from Commercial/Industrial Development

Just as the District is required to establish the impact of new residential development on student enrollment and a corresponding need for additional school facilities, a similar nexus must be established between new commercial/industrial development and the corresponding need for additional school facilities. The four-step methodology used to quantify the impact of commercial/industrial development on student enrollment is discussed in this section of the report and is summarized as follows:

1. *Determine the number of employees required per square foot for specific types of commercial and industrial development (i.e., new jobs created within the school district).*
2. *Determine the number of new employees that would both live and work within the school district.*
3. *Determine the number of occupied housing units that would be associated with new employees.*
4. *Determine the number of new students generated from these employees utilizing the estimated student generation rates.*

Estimated Number of Employees per Square Foot

Because the utilization of commercial and industrial buildings varies significantly, in order to estimate the number of employees and hence, the number of school age children generated by employees, it is important that the relationship between the size of any commercial/industrial development and its associated employee base, be established for various development or land use types. To do this, the TUSD relied on survey results published in SANDAGs report entitled Traffic Generators Guide. This Traffic Generators Guide reflects data gleaned from a site-specific employment inventory of diverse developments throughout San Diego County. Multiple sites for 17 different development types are included in the survey data and the square footage and number of employees has been averaged for each development type yielding the average number of employees per thousand square feet as shown in the following table:

Table XV
Region-wide Employment Per 1,000 Square Feet by Development Type [1]

Development Type	Square Feet of Dev. Type	Total Employees	Employees per 1,000 Sqft. [2]
Self-Storage	34,191	2	0.058
Specialized Recreation	19,850	9	0.453
Hotel /Motel	165,200	184	1.114
Discount Retail Club	128,679	215	1.671
Commercial Strip Center	27,677	50	1.807
Regional Shopping Center	1,496,927	2,777	1.855
Car Dealers	28,433	57	2.005
Industrial Parks (No Commercial)	351,266	733	2.087
Community Shopping Center	151,525	363	2.396
Industrial Plants (Mult. Shift)	456,000	1,120	2.456
Neighborhood Shopping Center	69,509	178	2.561
Corporate Office (Single User)	127,331	342	2.686
Banks	9,203	26	2.825
Scientific Research & Development	221,184	673	3.043
Industrial/Business Parks	260,379	972	3.733
Commercial Offices (>100,000 sqft)	135,433	625	4.615
Commercial Offices (<100,000 sqft)	27,100	130	4.797
Medical Offices	15,306	96	6.272
Restaurants	5,267	48	9.113

(1) Source: SANDAG Publication, Traffic Generators Guide
(2) Employees per 1,000 Sqft = (Total Employees divided by Square Feet of Development Type x .0001)

Estimated Number of Employees Living & Working within the School District

In order to determine the minimum number of students that will be generated as a result of new commercial/industrial development, an estimate of the number of employees (i.e., parents of the children expected to attend schools within the District) that will both work and live within the District must be determined. To make this determination, SDFA relied on Census data and Worksite information provided by the Equal Employment Opportunity Commission (EEOC). Specifically, SDFA obtained employment and population estimates for the cities of Irvine, Santa Ana and Tustin. Tabulations of the Worksite and population estimates are contained in Appendix 'F'.

Based on its American Community Survey (2006-2010), the US Census Bureau estimated that there was a total of 408,950 employees working within the cities of Irvine, Santa Ana and Tustin (the "Worksite Census Area"). The census data also contains "place of residence" information for these employees. The following table identifies the residential employee generation rate (REGR) for the three cities, which is determined by dividing the total number of employees within the Worksite Census Area by the total number of employees that *both live and work* within the boundaries of Worksite Census Area.

Table XVI
Estimated Resident Employees within the Worksite Census Area [1]

Jurisdiction	Total Employees	Place of Residence			Pct of Employees Residing in Irvine, Santa Ana or Tustin
		Irvine	Santa Ana	Tustin	
Irvine	216,375	42,265	19,910	7,495	32.20%
Santa Ana	154,675	6,390	41,630	5,460	34.58%
Tustin	37,900	2,815	4,490	6,325	35.96%
Total	408,950	51,470	66,030	19,280	33.45%

(1) Source: US Census Bureau American Community Survey (2006-2010)

Because the census data does not identify a place of residence which corresponds solely to the jurisdictional boundaries of the TUSD, it was assumed that the REGR for the Worksite Census Area would produce a close approximation of the actual REGR for the TUSD. This assumption is reasonable because the commercial and industrial development characteristics of areas outside of the TUSD but within the jurisdictional boundaries of the Worksite Census Area are similar to those of commercial and industrial developments within the boundaries of the TUSD.

It should be noted that by considering only those employees that both live and work within the TUSD (as expressed by the REGR), the District is being conservative in its estimate of the impact of commercial/industrial development on student enrollment because the methodology identified herein does not take into account any students who may attend schools within the District as a result of Education Code Section 48204 (i.e., interdistrict transfers). Section 48204 of the Education Code permits employees working within the school district who do not reside within the boundaries of the school district to request that their children be permitted to attend a school within the boundaries of the District in which they work. The census data suggests that approximately sixty-seven percent (67%) of Worksite Census Area workers commute from outside of the Worksite Census Area to their jobs.

Nevertheless, by multiplying the number of employees per thousand square feet as shown in Table XV by the REGR computed for the Worksite Census Area, one can derive a REGR for the various commercial/industrial development types. The following table indicates that for every 1,000 square feet of new commercial or industrial development, expected residential employee generation ranges from a low of 0.019 employees for *Self-Stor5age* to a high of 3.048 employees for *Restaurants*.

Table XVII
Resident Employee Generation Factors by Development Type

Development Type	Employees per 1,000 Sqft.	Residential Employment Generation Rate	Resident Employee Per 1,000 Sqft.
Self-Storage	0.058	.3345	0.019
Specialized Recreation	0.453	.3345	0.152
Lodging	1.114	.3345	0.373
Discount Retail Club	1.671	.3345	0.559
Commercial Strip Center*	1.807	.3345	0.604
Regional Shopping Center	1.855	.3345	0.620
Car Dealers*	2.005	.3345	0.671
Industrial Parks (No Commercial)	2.087	.3345	0.698
Community Shopping Center	2.396	.3345	0.801
Industrial Plants (Mult. Shift)*	2.456	.3345	0.821
Neighborhood Shopping Center	2.561	.3345	0.857
Corporate Office (Single User)	2.686	.3345	0.898
Banks	2.825	.3345	0.945
Scientific Research & Development	3.043	.3345	1.018
Industrial/Business Parks	3.733	.3345	1.249
Commercial Offices (>100,000 sqft)	4.615	.3345	1.544
Commercial Offices (<100,000 sqft)	4.797	.3345	1.604
Medical Offices	6.272	.3345	2.098
Restaurants*	9.113	.3345	3.048

Estimated Household Rate per Resident Worker

In order to quantify the impact of these residential workers on the District, two additional relationships must be established. The first of these is the number of households per resident worker. Utilizing estimates of occupied housing within the Worksite Census Area as prepared by the California Department of Finance, SDFA identified the household rate (i.e., the number of occupied housing units per residential worker) to be 0.7596:

Table XVIII
Household Rate for Worksite Census Area

Worksite Census Area Component	Resident Workers (Irvine, Santa Ana or Tustin)	Occupied Housing Units	Household Rate *
City of Irvine	51,470	81,165	63.41%
City of Santa Ana	66,030	73,242	90.15%
City of Tustin	19,280	25,662	75.13%
Aggregate Worksite Census Area	**136,780**	**180,069**	**75.96%**

Source: 2006-2010 Census Data and 2013 Housing Unit Estimates from the California Department of Finance
** Household Rate = Occupied Housing Units / Resident Workers*

By applying the household generation rate for the Worksite Census Area of .7596 to the Resident Employee Generation Factors shown in Table XVII, housing units required per employee for each commercial/industrial land use category can then be determined. Expected household generation per 1,000 square feet of commercial/industrial development appears in the following table:

Table XIX
Household Generation for Commercial/Industrial Land Uses

Development Type	Residential Employees per 1,000 Sqft.	Household Generation Rate	District Households Per 1,000 Sqft
Self-Storage	0.019	.7596	0.015
Specialized Recreation	0.152	.7596	0.115
Lodging	0.373	.7596	0.283
Discount Retail Club	0.559	.7596	0.425
Commercial Strip Center*	0.604	.7596	0.459
Regional Shopping Center	0.620	.7596	0.471
Car Dealers*	0.671	.7596	0.509
Industrial Parks (No Commercial)	0.698	.7596	0.530
Community Shopping Center	0.801	.7596	0.609
Industrial Plants (Mult. Shift)*	0.821	.7596	0.624
Neighborhood Shopping Center	0.857	.7596	0.651
Corporate Office (Single User)	0.898	.7596	0.682
Banks	0.945	.7596	0.718
Scientific Research & Development	1.018	.7596	0.773
Industrial/Business Parks	1.249	.7596	0.948
Commercial Offices (>100,000 sqft)	1.544	.7596	1.172
Commercial Offices (<100,000 sqft)	1.604	.7596	1.219
Medical Offices	2.098	.7596	1.593
Restaurants*	3.048	.7596	2.315

School Facilities Cost from Commercial/Industrial Development

Since the school facilities cost per new dwelling unit was already identified in Table XII, by applying the total cost per dwelling unit to the district household generation shown in Table XIX, the gross school facilities impact of commercial/industrial development can be determined. The resulting facilities cost per square foot is shown in Table XX and ranges from $.038 to $60.35 per square foot of development.

Table XX
Gross School Facilities Impact for Commercial/Industrial Land Uses

Development Type	District Households Per Sqft of Non-Res. Dev.	School Facilities Cost Per Dwelling Unit	Gross Facilities Cost Per Sqft of Commercial/industrial Development
Self-Storage	0.0000147	$26,0650.00	$0.38
Specialized Recreation	0.0001151	$26,065.00	$3.00
Lodging	0.0002830	$26,065.00	$7.38
Discount Retail Club	0.0004245	$26,065.00	$11.07
Commercial Strip Center*	0.0004591	$26,065.00	$11.97
Regional Shopping Center	0.0004713	$26,065.00	$12.28
Car Dealers*	0.0005094	$26,065.00	$13.28
Industrial Parks (No Commercial)	0.0005032	$26,065.00	$13.82
Community Shopping Center	0.0006087	$26,065.00	$15.87
Industrial Plants (Mult. Shift)*	0.0006240	$26,065.00	$16.26
Neighborhood Shopping Center	0.0006506	$26,065.00	$16.96
Corporate Office (Single User)	0.0006824	$26,065.00	$17.79
Banks	0.0007177	$26,065.00	$18.71
Scientific Research & Development	0.0007731	$26,065.00	$20.15
Industrial/Business Parks	0.0009484	$26,065.00	$24.72
Commercial Offices (>100,000 sqft)	0.0011725	$26,065.00	$30.56
Commercial Offices (<100,000 sqft)	0.0012187	$26,065.00	$31.77
Medical Offices	0.0015935	$26,065.00	$41.53
Restaurants*	0.0023152	$26,065.00	$60.35

Commercial/Industrial Development Impact

As noted, the school facilities impact shown above represents the total cost to provide school facilities required to serve new students resulting from the construction of new commercial/industrial development. This amount reflects the gross impact of such development and does not consider the impact fees already collected from new residential construction. Nor does it consider that as new commercial/industrial development occurs, some portion of the new employees will be housed in existing housing (from which no additional residential impact fee may be collected). Assuming that each resident employee also resides in a dwelling unit for which the statutory fee amount has also been paid, one could then derive the net facilities impact associated with each development type. If the statutory fee of $4.08 per square foot is imposed on the average home size of 1,414 per square foot (see Table XIV), then a total of $5,769 would be collected for each dwelling unit leaving a facilities deficit of $20,296 per dwelling unit. By applying the Per Square Foot Household Factors (PSFHF) shown in Table XX, one can then identify the net facilities impact.

The following table shows the *net facilities* impact remaining if the currently authorized maximum statutory fee (Level I Fee) was collected from all new residential development:

By multiplying the "fee deficit per D/U" of $20,296 by the PSFHF applicable to each of the non-residential development types, we can then see the net facilities cost remaining after collection of the statutory residential fee:

Table XXI
Net Facilities Deficit After Collection of Residential Impact Fee

Development Type	District Households Per Square Foot of Non-Residential Development	Unfunded Impact Per Square Foot After Collection of Statutory Fee
Self-Storage	0.0000147	$0.10
Specialized Recreation	0.0000115	$2.43
Lodging	0.0000283	$5.98
Discount Retail Club	0.0004245	$8.98
Commercial Strip Center*	0.0004591	$9.71
Regional Shopping Center	0.0004713	$9.96
Car Dealers*	0.0005094	$10.77
Industrial Parks (No Commercial)	0.0005032	$11.21
Community Shopping Center	0.0006087	$12.87
Industrial Plants (Mult. Shift) *	0.0006240	$13.19
Neighborhood Shopping Center	0.0006506	$13.76
Corporate Office (Single User)	0.0006824	$14.43
Banks	0.0007177	$15.18
Scientific Research & Development	0.0007731	$16.35
Industrial/Business Parks	0.0009484	$20.05
Commercial Offices (>100,000 sqft)	0.0011725	$24.79
Commercial Offices (<100,000 sqft)	0.0012187	$25.77
Medical Offices	0.0015935	$33.69
Restaurants*	0.0002315	$48.95

Thus, assuming that all employees working in new non-residential developments within the District also reside in new housing within the District and the District was collecting the current statutory fee (Level I) of $4.08 per square foot from each home, a fee deficit *after collecting the maximum statutory fee for residential development* would still range between $0.10 (Self-Storage) and $48.95 (Restaurants) per square foot of new non-residential development.

Thus, based on TUSD's authorized share of the proposed non-residential fee (i.e., $0.66 per square foot of non-residential development), assuming that every employee within the TUSD also resided within the TUSD and was housed in a dwelling unit for which the statutory fee (Level I Fee) for residential and the statutory non-residential fee was collected, with the exception of Self-Storage, a net facilities funding deficit would still remain for all of the development types listed in Table XXI .

And as previously mentioned, this analysis does not consider inter-district transfers pursuant to Education Code Section 48204. Section 48204 of the Education Code permits employees working within the school district who do not reside within the boundaries of the school district to

request that their children be permitted to attend a school within the boundaries of the District in which they work. For any of these pupils, the District will have collected no corresponding residential development impact fees.

Pursuant to Government Code Section 65995(b)(2), a unified school district is authorized to collect $0.66 per square foot of new commercial/industrial development. Since not all employees reside within the District and live in homes that have or will pay statutory school fees, for Self-Storage development, the District is justified in collecting the gross school facility impact of $0.38 per square foot as indicated in Table XX. For all other commercial/industrial development types shown in Table XXI, TUSD is justified in levying the maximum fee of $0.66 per square foot as shown in the following table.

Table XXII
Authorized Development Fee -- Commercial/Industrial Development

Fee Component	Total Statutory Fee Collected per Government Code §65995
Authorized Statutory Fee (Level 1) Per Square Foot of New Commercial/Industrial Development	$0.66 per square foot

Impacts from Senior Housing

As it relates to the imposition of developer fees upon senior citizen housing projects, Section 65995.1(a) of the Government Code reads as follows:

> *Notwithstanding any other provision of law, as to any development project for the construction of senior citizen housing, as described in Section 51.3 of the Civil Code, a residential care facility for the elderly as described in subdivision (k) of Section 1569.2 of the Health and Safety Code[1], or a multilevel facility for the elderly as described in paragraph (9) of subdivision (d) of Section 15432, any fee charge, dedication or other requirement that is levied under Section 53080[2] may be applied only to new construction and is subject to the limits and conditions under subdivision (b) of Section 65995 in the case of commercial or industrial development.*
>
> *[1] Although described in subdivision (k), the definition is found under subdivision (o) and (p).*
> *[2] Government Code Section 53080 was revised to Education Code Section 17620.*

The District acknowledges that students will not reside in senior citizen housing units. However, the development of such housing generally generates jobs for facilities maintenance and administration, and in the case of assisted care living situations, health professionals. These jobs may be filled by persons living either within the boundaries of the District or outside the boundaries of the District. In either case, the employees may enroll their students in the District. As, a result some students may be generated as a result of the development of new senior citizen housing.

The District conducted a survey of senior citizen housing projects within the District- both assisted-care and independent-living facilities and as a result of applying the methodology used to quantify the impacts of commercial and industrial development as set forth in this report,

determined that the expected facilities cost per square foot of senior housing was $2.40. Thus, the District acknowledges Section 65995.1 and will levy its share of developer fees on any senior citizen housing projects at the current commercial/industrial rate of $0.66 per square foot.

Redevelopment

Redevelopment means the voluntary demolition of existing residential dwelling units or commercial or industrial construction and the subsequent construction of new residential dwelling units or commercial/industrial construction (“Redevelopment”).

The District acknowledges that Redevelopment projects, more specifically, the demolishing of existing development replaced with new construction, may occur within the next five-year period. In such a situation, the District shall levy school fees authorized pursuant to Education Code Section 17620 and Government Code Sections 65995 et seq. ("School Fees") if there is a nexus established between the impact of the new construction in terms of a net increase in students generated and the fee to be imposed. In other words, the School Fees must bear a nexus to the burden caused by the Redevelopment project.

The purpose of this section is to set forth a general policy for the levy of Statutory School Fees on future Redevelopment projects within the District. The District may levy the applicable Statutory School Fees if an unmitigated impact exists once an analysis has been done on the impact on school facilities from such construction and consideration has been given as to the applicability of a “credit” for previously existing impacts, if any.

The analysis will identify if the Redevelopment project results in any additional impact to the District by comparing the potential students to be generated from the new construction to the potential students generated from the existing construction to be demolished. Statutory School Fees will be assessed only to the extent of the net school facilities impact from the new construction as noted above, but in no event will the School Fees assessed be greater than the applicable Statutory School Fees.

The District will perform an analysis utilizing the above-mentioned criteria to determine the applicability of Statutory School Fees to each Redevelopment project presented to the District.

Section
Four

CONCLUSIONS & STATEMENT OF FINDINGS

Based upon the data gathered by SDFA regarding future development within the boundaries of the TUSD, student generation, school facilities costs and the methodology employed to determine the school facilities impact from new residential and commercial development, TUSD makes the following findings pursuant to Section 66001 of the California Government Code:

- *The purpose of the fee is to pay for the construction and/or acquisition of new school facilities and equipment necessary to serve students expected to be generated from new residential and commercial/industrial development.*

- *The fees will be collected and may be used to repay debt service on bonds issued for the purpose of providing new school facilities or to pay directly for the acquisition and/or construction of such facilities and equipment. The fees may also be used to pay for the leasing or acquisition of portable classrooms to meet the temporary needs of students generated from new development.*

- *There is a reasonable relationship between the expected use of the fee (i.e., new school facilities and equipment) and the development on which the fee is imposed (i.e., new residential, commercial and industrial development) because additional students will be generated by new residential and commercial/industrial development.*

- *There is a reasonable relationship between the number of new residential units constructed and the number of elementary school students expected to be generated from the construction of such units. There is also a reasonable relationship between the construction of new commercial and industrial development and the number of students expected to be generated from the construction of such commercial/industrial development, as the parents of students will be employed by new businesses occupying the new commercial or industrial development and a portion of the students' parents will also choose to live within the boundaries of the District.*

- *There is a reasonable relationship between the amount of the fee identified in this Report and the cost of the school facilities to be constructed and deemed required to serve new residential, commercial and industrial developments.*

- *There is a reasonable relationship between the amount of the fee identified in this Report and the cost of the school facilities to be constructed and deemed required to serve new development projects that are intended to house senior citizens.*

Section
Five

APPENDICES

Appendix A: School Capacity Worksheet

Appendix B: Department of Finance – Population & Household Projections

Appendix C: Student Generation Rate Computations

Appendix D: Future Development Projects

Appendix E: School Facilities Cost Estimates

Appendix F: 2006-10 Census Data – Employment & Housing

Appendix A: School Capacity Worksheet

Tustin Unified School District
Capacity Calculation - State Loading Standards

Fiscal Year 2019/20

	School	Total CR [1]	Current Classroom Counts [1]								Capacity	Enrollment	State Loading
			TK-6		7-12		Severe		Non Severe		2019/20	2019/20 Enrollment	100% Capacity vs Enrollment +/-
			25		27		9		13		100%		
ELEM	Arroyo	24	24	600		0	0	0	0	0	600	637	-37
ELEM	Benson	17	14	350		0	0	0	3	39	389	391	-2
ELEM	Beswick	12	11	275		0	0	0	1	13	288	511	-223
ELEM	Estock	21	21	525		0	0	0	0	0	525	516	9
ELEM	Guin Foss	15	15	375		0	0	0	0	0	375	427	-52
ELEM	Heideman	29	29	725		0	0	0	0	0	725	606	119
ELEM	Heritage	21	21	525		0	0	0	0	0	525	485	40
ELEM	Hicks Canyon	36	36	900		0	0	0	0	0	900	934	-34
ELEM	Ladera	14	14	350		0	0	0	0	0	350	318	32
ELEM	Loma Vista	25	22	550		0	0	0	3	39	589	469	120
ELEM	Myford	28	25	625		0	0	0	3	39	664	594	70
ELEM	Nelson	26	24	600		0	0	0	2	26	626	531	95
ELEM	Orchard Hills - k-8 (see below)	18	18	450		0	0	0	0	0	450	431	19
ELEM	Peters Canyon	22	19	475		0	0	0	3	39	514	510	4
ELEM	Red Hill	23	21	525		0	0	0	2	26	551	553	-2
ELEM	Thorman	30	30	750		0	0	0	0	0	750	787	-37
ELEM	Tustin Connect Academy	1	1	25		0	0	0	0	0	25	17	8
ELEM	Tustin Memorial Academy	22	22	550		0	0	0	0	0	550	602	-52
ELEM	Tustin Ranch	21	21	525		0	0	0	0	0	525	570	-45
		405	388		0		0		17		9,921	9,889	32

	School	Total CR	TK-6		7-12		Severe		Non Severe		2019/20	2019/20 Enrollment	100% Capacity vs Enrollment +/-
			25		27		9		13		100%		
MID	Columbus Tustin	38	0	0	28	756	0		5	65	821	808	13
MID	Currie	31	0	0	24	648	0		2	0	648	591	57
MID	Hewes	38	0	0	33	891	0		1	13	904	984	-80
MID	Orchard Hills	28	0	0	25	675	0		2	26	701	993	-292
MID	Pioneer	46	0	0	41	1107	0		1	13	1,120	1,189	-69
MID	Tustin Connect Academy	1	0	0	1	27	0		0	0	27	31	-4
MID	Utt	36	0	0	29	783	0		3	39	822	937	-115
	Totals	218	0		181		0		14		5,043	5,533	-490

	School	Total CR	TK-6		7-12		Severe		Non Severe		2019/20	2019/20 Enrollment	100% Capacity vs Enrollment +/-
			25		27		9		13		100%		
HIGH	Beckman	107		0	91	2457	0	0	6	78	2,535	2,947	-412
HIGH	Foothill	95		0	81	2187	0	0	6	78	2,265	2,424	-159
HIGH	Hillview/Sycamore at Lambert	25		0	13	351	0	0	0	0	351	230	121
HIGH	Tusin Connect Center	3		0	3	273	0	0	0	0	273	98	175
HIGH	Tustin	97		0	82	2214	0	0	8	104	2,318	2,282	36
		327	0		270		0		20		7,742	7,981	-239

SUMMARY	Total CR	TK-6	7-12	Severe	Non Severe	2019/20 Capacity 100%	2019/20 Enrollment	100% Capacity vs Enrollment +/-
	950	388	451	0	51	22,706	23,403	-697

(1) Classroom Counts exclude classroom facilities that do not meet state requirements (i.e., less < 960 square feet) or which are used for other educational purposes (ROP, etc).

Appendix B: DOF – Population & Household Projections

Table 2: E-5 City/County Population and Housing Estimates, 1/1/2013

County / City	POPULATION			HOUSING UNITS							Vacancy Rate	Persons per Household
	Total	Household	Group Quarters	Total	Single Detached	Single Attached	Two to Four	Five Plus	Mobile Homes	Occupied		
Orange County												
Aliso Viejo	49,477	49,008	469	19,251	7,002	5,176	666	6,407	0	18,574	3.5%	2.64
Anaheim	346,161	342,604	3,557	105,846	44,903	8,902	11,390	35,966	4,685	99,811	5.7%	3.43
Brea	41,394	41,325	69	15,365	8,550	1,412	497	3,899	1,007	14,826	3.5%	2.79
Buena Park	81,953	81,139	814	24,714	14,396	1,812	1,740	6,413	353	23,774	3.8%	3.41
Costa Mesa	111,358	108,607	2,751	42,162	16,641	4,301	5,714	14,576	930	39,986	5.2%	2.72
Cypress	48,547	48,045	502	16,094	9,819	2,594	576	2,684	421	15,680	2.6%	3.06
Dana Point	33,863	33,622	241	15,960	8,724	1,995	2,633	2,372	236	14,201	11.0%	2.37
Fountain Valley	56,180	55,743	437	19,196	12,632	1,897	682	3,594	391	18,679	2.7%	2.98
Fullerton	138,251	134,246	4,005	47,976	24,279	4,856	4,040	13,922	879	45,492	5.2%	2.95
Garden Grove	173,075	171,134	1,941	47,702	27,284	3,976	4,188	10,626	1,628	45,986	3.6%	3.72
Huntington Beach	193,616	192,726	890	78,732	38,741	9,219	9,649	18,036	3,087	74,884	4.9%	2.57
Irvine	231,117	214,949	16,168	86,376	32,604	16,722	4,734	31,151	1,165	81,165	6.0%	2.65
Laguna Beach	23,105	23,016	89	12,958	8,533	686	1,523	1,927	289	10,851	16.3%	2.12
Laguna Hills	30,703	30,334	369	10,993	6,399	1,917	571	1,754	352	10,421	5.2%	2.91
Laguna Niguel	64,065	63,817	248	25,392	14,458	5,107	1,406	4,373	48	24,309	4.3%	2.63
Laguna Woods	16,500	16,333	167	13,079	918	3,721	2,237	6,203	0	11,360	13.1%	1.44
La Habra	61,202	60,862	340	19,963	10,560	1,509	1,553	5,449	892	19,015	4.7%	3.20
Lake Forest	78,501	77,986	515	27,142	14,683	4,125	1,513	5,549	1,272	26,276	3.2%	2.97
La Palma	15,818	15,798	20	5,234	3,764	469	127	861	13	5,090	2.8%	3.10
Los Alamitos	11,626	11,383	243	4,362	2,074	371	766	1,050	101	4,219	3.3%	2.70
Mission Viejo	94,824	93,882	942	34,307	24,771	4,122	936	4,427	51	33,284	3.0%	2.82
Newport Beach	86,436	86,034	402	44,221	20,146	7,010	5,114	10,777	1,174	38,775	12.3%	2.22
Orange	138,792	132,303	6,489	45,215	26,052	4,865	4,884	8,192	1,222	43,467	3.9%	3.04
Placentia	51,776	51,439	337	17,049	10,078	1,911	1,398	3,077	585	16,537	3.0%	3.11
Rancho Santa Margarita	48,550	48,548	2	17,268	9,355	3,538	622	3,743	10	16,673	3.4%	2.91
San Clemente	64,542	64,269	273	26,018	14,844	2,602	4,092	3,879	601	23,954	7.9%	2.68
San Juan Capistrano	35,321	35,234	87	12,022	6,402	2,362	795	1,079	1,384	11,472	4.6%	3.07
Santa Ana	329,915	324,685	5,230	76,968	35,481	5,657	7,499	24,283	4,048	73,242	4.8%	4.43
Seal Beach	24,487	24,263	224	14,546	4,734	1,518	1,120	7,020	154	13,004	10.6%	1.87
Stanton	38,764	38,414	350	11,296	3,059	1,799	1,321	3,679	1,438	10,837	4.1%	3.55
Tustin	77,983	77,463	520	26,958	9,454	3,564	4,048	8,983	909	25,662	4.8%	3.02
Villa Park	5,900	5,855	45	2,018	1,987	23	8	0	0	1,978	2.0%	2.96
Westminster	91,169	90,499	670	27,715	14,907	2,056	2,478	5,129	3,145	26,226	5.4%	3.45
Yorba Linda	66,437	66,247	190	22,751	17,852	2,245	760	1,466	428	22,007	3.3%	3.01
Balance Of County	120,396	119,628	768	39,346	30,476	3,794	865	3,578	633	37,835	3.8%	3.16
Incorporated	2,961,408	2,911,812	49,596	1,016,849	506,086	124,039	91,280	262,546	32,898	961,717	5.4%	3.03
County Total	3,081,804	3,031,440	50,364	1,056,195	536,562	127,833	92,145	266,124	33,531	999,552	5.4%	3.03

Appendix C: Student Generation Rate Computations

Tustin Unified School District

Student Generation Rate Computations - Dwelling Units Permitted from Project Inception through December 31, 2018
(Reflects Dwelling Units Constructed within CFD Nos. 88-1, 97-1, 06-1, 07-1 and 14-1)

CFD	Project Number	Project Name	Tract No.	Permitted Dwelling Units	Permitted D/Us with Sq Ft	Permitted Square Footage	Average Square Footage	Student Totals Grades K- 5	Grades 6 - 8	Grades 9 -12	Grades K - 12	Student Generation Rates Grades K- 5	Grades 6 - 8	Grades 9 -12	Grades K - 12
Apartment Units:															
07-1	99	Orchard Hills Apartments	16529	500	500	796,384	1,593	72	57	46	175	0.1440	0.1140	0.0920	0.3500
88-1	1	Rancho Maderas	13030	266	0			45	17	24	86	0.1692	0.0639	0.0902	0.3233
88-1	2	Rancho Tierra	13038	252	0			54	33	30	117	0.2143	0.1310	0.1190	0.4643
88-1	12	Rancho Mariposa	13735	238	0			23	9	13	45	0.0966	0.0378	0.0546	0.1891
88-1	14	Sierra Vista	13786	306	0			31	12	17	60	0.1013	0.0392	0.0556	0.1961
88-1	15	Shadow Canyon	13788	170	0			11	4	13	28	0.0647	0.0235	0.0765	0.1647
88-1	29	Rancho Monterey	14447	436	0			46	27	27	100	0.1055	0.0619	0.0619	0.2294
88-1	37	Rancho Santa Fe	15350	316	0			72	42	41	155	0.2278	0.1329	0.1297	0.4905
97-1	54	Estancia	15652-A	388	388	515,480	1,329	144	46	60	250	0.3711	0.1186	0.1546	0.6443
97-1	55	Solano	15652-B	356	356	424,941	1,194	79	24	23	126	0.2219	0.0674	0.0646	0.3539
97-1	56	Montecito Vista (Affordable)	15661	162	162	212,248	1,310	25	28	37	90	0.1543	0.1728	0.2284	0.5556
97-1	68	Somerset	15871	378	756	565,012	747	42	15	26	83	0.1111	0.0397	0.0688	0.2196
97-1	76	Las Palmas	15922-A	380	380	577,966	1,521	44	20	43	107	0.1158	0.0526	0.1132	0.2816
97-1	77	Anacapa	15922-B	736	736	888,429	1,207	85	40	57	182	0.1155	0.0543	0.0774	0.2473
97-1	94	Serrano	16319	756	756	910,093	1,204	68	24	86	178	0.0899	0.0317	0.1138	0.2354
MCAS	Aff	Amalfi (St Anton) - 3100 Park	17404	225	225	285,487	1,269	44	13	18	75	0.1956	0.0578	0.0800	0.3333
MCAS	Mkt	Anton @ Legacy - 16000 Legacy	17404	533	533	781,044	1,465	12	3	1	16	0.0225	0.0056	0.0019	0.0300
Total Apartment Dwelling Units:				6,398	4,792	5,957,084	1,243	897	414	562	1,873	0.1402	0.0647	0.0878	0.2927
Single-Family Attached (SFAs):															
06-1	102	Cambridge	16857	156	156	203,695	1,306	19	8	6	33	0.1218	0.0513	0.0385	0.2115
06-1	103	Camden	16857	222	222	354,108	1,595	39	12	12	63	0.1757	0.0541	0.0541	0.2838
06-1	105	Meriwether	16857	114	114	187,085	1,641	19	1	2	22	0.1667	0.0088	0.0175	0.1930
06-1	107	Mirabella	16857	60	60	114,594	1,910	7	4	4	15	0.1167	0.0667	0.0667	0.2500
14-1	115	Terraza	16719	149	149	307,459	2,063	36	13	10	59	0.2416	0.0872	0.0671	0.3960
88-1	6	Arcadia	13096	237	0	0		32	25	24	81	0.1350	0.1055	0.1013	0.3418
88-1	7	Sevilla	13106	110	0	0		19	9	15	43	0.1727	0.0818	0.1364	0.3909
88-1	8	Estancia	13161	145	0	0		10	10	13	33	0.0690	0.0690	0.0897	0.2276
88-1	10	Miramonte	13733	138	0	0		21	26	35	82	0.1522	0.1884	0.2536	0.5942
88-1	13	Mandevilla	13746	316	0	0		23	5	11	39	0.0728	0.0158	0.0348	0.1234
88-1	16	Corte Villa	13796	108	0	0		10	8	12	30	0.0926	0.0741	0.1111	0.2778
88-1	17	Rancho Vera Cruz	13824	317	0	0		18	3	4	25	0.0568	0.0095	0.0126	0.0789
88-1	18	Venturanza	13835	268	55	174,418	3,171	45	35	30	110	0.1679	0.1306	0.1119	0.4104
88-1	22	Ventana	14110	129	0	0		12	16	12	40	0.0930	0.1240	0.0930	0.3101
88-1	27-A	Presidio	14381	32	0	0		9	6	4	19	0.2813	0.1875	0.1250	0.5938
88-1	27-B	Presidio	14567	33	0	0		5	1	10	16	0.1515	0.0303	0.3030	0.4848
88-1	27-C	Presidio	14748	102	0	0		27	15	9	51	0.2647	0.1471	0.0882	0.5000
88-1	30	Cantada	14499	208	0	0		29	10	12	51	0.1394	0.0481	0.0577	0.2452
88-1	34	The Orchards	14883	223	0	0		26	16	26	68	0.1166	0.0717	0.1166	0.3049
97-1	58	Sheridan Place	15712	147	147	289,002	1,966	36	25	28	89	0.2449	0.1701	0.1905	0.6054
97-1	60	Brisbane	15740	130	130	275,530	2,119	21	16	18	55	0.1615	0.1231	0.1385	0.4231
97-1	61	Evergreen	15741	108	108	283,848	2,628	20	23	25	68	0.1852	0.2130	0.2315	0.6296
97-1	72	Summer Place	15875	69	69	172,335	2,498	12	11	11	34	0.1739	0.1594	0.1594	0.4928
97-1	74	Mandeville	15877	132	132	260,556	1,974	37	17	21	75	0.2803	0.1288	0.1591	0.5682
97-1	75	Andover	15878	138	138	257,007	1,862	35	21	31	87	0.2536	0.1522	0.2246	0.6304
97-1	81	Auburn	15975	152	152	328,268	2,160	45	17	22	84	0.2961	0.1118	0.1447	0.5526
97-1	82	San Simeon	15976	116	98	200,757	2,049	24	26	28	78	0.2069	0.2241	0.2414	0.6724
97-1	88	Vintner's Reserve	16080	64	64	162,078	2,532	9	10	21	40	0.1406	0.1563	0.3281	0.6250
97-1	92	San Juan Batista	16084	108	108	225,141	2,085	16	15	28	59	0.1481	0.1389	0.2593	0.5463
97-1	93	Monticello	16085	112	104	211,816	2,037	13	8	17	38	0.1161	0.0714	0.1518	0.3393
97-1	96	Tamarisk	16644	113	113	157,002	1,389	32	9	13	54	0.2832	0.0796	0.1150	0.4779
Total Single-Family Attached (SFAs):				4,456	2,119	4,164,699	1,965	706	421	514	1,641	0.1584	0.0945	0.1154	0.3683
Single-Family Detached (SFDs):															
06-1	101	Astoria	16857	102	102	298,214	2,924	26	5	1	32	0.2549	0.0490	0.0098	0.3137
06-1	104	Gables	16857	84	84	257,187	3,062	17	3	2	22	0.2024	0.0357	0.0238	0.2619
06-1	106	Verandas	16857	97	97	211,020	2,175	27	10	5	42	0.2784	0.1031	0.0515	0.4330
14-1	108	La Vita	16702	72	72	260,108	3,613	10	7	4	21	0.1389	0.0972	0.0556	0.2917
14-1	109	Saviero/Pasadena	16703	90	64	251,039	3,922	13	9	8	30	0.1444	0.1000	0.0889	0.3333
14-1	110	Vicenza	16704	91	91	364,354	4,004	24	17	14	55	0.2637	0.1868	0.1538	0.6044
14-1	111	Messina	16705	43	37	137,496	3,716	7	4	1	12	0.1628	0.0930	0.0233	0.2791
14-1	112	Tevi II	16707	35	29	154,708	5,335	8	5	5	18	0.2286	0.1429	0.1429	0.5143
14-1	113	Amelia	16708	70	65	300,357	4,621	12	8	7	27	0.1714	0.1143	0.1000	0.3857
14-1	114	Lucia (Amelia Ext)	16709	17	4	17,626	4,407	0	0	1	1	0.0000	0.0000	0.0588	0.0588
14-1	116	Strada	16722-Ptn	59	59	151,063	2,560	14	7	8	29	0.2373	0.1186	0.1356	0.4915
14-1	117	Messina II	16741	59	59	218,122	3,697	20	7	9	36	0.3390	0.1186	0.1525	0.6102
14-1	118	Trevi	17091	37	35	199,412	5,697	9	6	5	20	0.2432	0.1622	0.1351	0.5405
14-1	119	Capella	17619	72	72	221,669	3,079	32	12	8	52	0.4444	0.1667	0.1111	0.7222
14-1	120	Trevi III	17628	10	6	31,498	5,250	0	1	1	2	0.0000	0.1000	0.1000	0.2000
14-1	121	Bella Vista	17746	95	26	132,130	5,082	7	6	3	16	0.0737	0.0632	0.0316	0.1684
14-1	122	Alta Vista	17746	97	31	181,488	5,854	5	3	6	14	0.0515	0.0309	0.0619	0.1443
14-1	123	Varenna	17768	99	43	111,490	2,593	5	3	1	9	0.0505	0.0303	0.0101	0.0909
14-1	124	Pavoda	17767	69	12	37,997	3,166	4	3	3	10	0.0580	0.0435	0.0435	0.1449
88-1	3	Almeria	13053	118	0	0		18	14	24	56	0.1525	0.1186	0.2034	0.4746
88-1	4	Maricopa	13080	100	0	0		15	12	29	56	0.1500	0.1200	0.2900	0.5600
88-1	5	Monterey	13094	103	0	0		24	12	20	56	0.2330	0.1165	0.1942	0.5437
88-1	9	Malaga	13701	70	0	0		15	15	14	44	0.2143	0.2143	0.2000	0.6286
88-1	11	Pala Vista	13734	118	0	0		17	10	14	41	0.1441	0.0847	0.1186	0.3475
88-1	19	Montecito	13902	115	0	0		22	2	7	31	0.1913	0.0174	0.0609	0.2696
88-1	20	Sorrento	13908	97	0	0		9	6	10	25	0.0928	0.0619	0.1031	0.2577
88-1	21	Alicante	13990	91	0	0		16	15	17	48	0.1758	0.1648	0.1868	0.5275
88-1	23-A	San Miguel	14168	69	0	0		10	6	16	32	0.1449	0.0870	0.2319	0.4638
88-1	23-B	San Miguel	14669	69	0	0		20	10	18	48	0.2899	0.1449	0.2609	0.6957
88-1	24	San Marco	14188	57	0	0		8	8	14	30	0.1404	0.1404	0.2456	0.5263
88-1	25	Barcelona	14295	77	0	0		14	8	16	38	0.1818	0.1039	0.2078	0.4935
88-1	26-A	Serrano	14366	48	0	0		10	5	14	29	0.2083	0.1042	0.2917	0.6042
88-1	26-B	Serrano	14576	43	0	0		13	10	6	29	0.3023	0.2326	0.1395	0.6744
88-1	28	El Dorado	14410	171	0	0		53	38	58	149	0.3099	0.2222	0.3392	0.8713
88-1	31	Travilla	14782	94	0	0		16	8	5	29	0.1702	0.0851	0.0532	0.3085
88-1	32-A	Valencia	14784	98	0	0		10	10	11	31	0.1020	0.1020	0.1122	0.3163
88-1	32-B	Valencia	14837	52	0	0		9	9	9	27	0.1731	0.1731	0.1731	0.5192
88-1	33-A	Vidorra	14797	31	31	63,411	2,046	6	8	6	20	0.1935	0.2581	0.1935	0.6452
88-1	33-B	Vidorra	15428	30	2	3,572	1,786	10	4	14	28	0.3333	0.1333	0.4667	0.9333
88-1	33-C	Vidorra	15429	27	27	46,707	1,730	8	6	7	21	0.2963	0.2222	0.2593	0.7778
88-1	33-D	Vidorra	15430	34	34	60,846	1,790	9	7	8	24	0.2647	0.2059	0.2353	0.7059

Tustin Unified School District

Student Generation Rate Computations - Dwelling Units Permitted from Project Inception through December 31, 2018
(Reflects Dwelling Units Constructed within CFD Nos. 88-1, 97-1, 06-1, 07-1 and 14-1)

CFD	Project Number	Project Name	Tract No.	Permitted Dwelling Units	Permitted D/Us with Sq Ft	Permitted Square Footage	Average Square Footage	Student Totals Grades K- 5	Grades 6 - 8	Grades 9 -12	Grades K - 12	Student Generation Rates Grades K- 5	Grades 6 - 8	Grades 9 -12	Grades K - 12
88-1	35	La Montana	15292	65	0	0		9	11	19	39	0.1385	0.1692	0.2923	0.6000
88-1	36-A	Estrella	15316	28	28	48,482	1,732	8	4	8	20	0.2857	0.1429	0.2857	0.7143
88-1	36-B	Estrella	15373	3	0	0		2	0	0	2	0.6667	0.0000	0.0000	0.6667
88-1	36-C	Estrella	15374	30	0	0		5	9	13	27	0.1667	0.3000	0.4333	0.9000
88-1	36-D	Estrella	15375	10	10	16,472	1,647	3	2	0	5	0.3000	0.2000	0.0000	0.5000
88-1	38-A	Columbia/Westmont	15380	25	25	79,178	3,167	1	4	9	14	0.0400	0.1600	0.3600	0.5600
88-1	38-B	Columbia/Westmont	15502	9	9	27,962	3,107	1	0	0	1	0.1111	0.0000	0.0000	0.1111
88-1	38-C	Columbia/Westmont	15503	22	22	57,827	2,629	8	3	7	18	0.3636	0.1364	0.3182	0.8182
88-1	38-D	Columbia/Westmont	15504	17	17	51,174	3,010	3	5	6	14	0.1765	0.2941	0.3529	0.8235
88-1	38-E	Columbia/Westmont	15505	36	36	96,551	2,682	6	4	18	28	0.1667	0.1111	0.5000	0.7778
88-1	38-F	Columbia/Westmont	15506	23	23	60,327	2,623	10	5	5	20	0.4348	0.2174	0.2174	0.8696
88-1	38-G	Columbia/Westmont	15507	30	30	89,562	2,985	6	6	9	21	0.2000	0.2000	0.3000	0.7000
88-1	39	Madrid	15420	75	75	251,538	3,354	9	9	16	34	0.1200	0.1200	0.2133	0.4533
88-1	40-A	Arborwalk	15427	16	16	23,740	1,484	3	1	5	9	0.1875	0.0625	0.3125	0.5625
88-1	40-B	Arborwalk	15474	16	0	0		3	0	0	3	0.1875	0.0000	0.0000	0.1875
88-1	41	Arborwalk	15475	21	21	31,390	1,495	4	3	4	11	0.1905	0.1429	0.1905	0.5238
88-1	42-A	Tustin Estates	15563	46	38	184,812	4,863	8	4	12	24	0.1739	0.0870	0.2609	0.5217
88-1	42-B	Tustin Estates	15993	22	0	0		8	2	1	11	0.3636	0.0909	0.0455	0.5000
88-1	42-C	Tustin Estates	16184	51	27	149,172	5,525	7	3	8	18	0.1373	0.0588	0.1569	0.3529
88-1	43	Sedona	15568	130	90	200,896	2,232	35	27	34	96	0.2692	0.2077	0.2615	0.7385
88-1	44	Treviso	15601	44	33	135,084	4,093	5	6	14	25	0.1136	0.1364	0.3182	0.5682
88-1	45	Emerson	15681	114	107	397,577	3,716	11	14	33	58	0.0965	0.1228	0.2895	0.5088
88-1	97	Lennar - Tea Leaf	16782	25	0	0		9	7	9	25	0.3600	0.2800	0.3600	1.0000
97-1	46	Traditions	15432	127	114	394,867	3,464	27	13	22	62	0.2126	0.1024	0.1732	0.4882
97-1	47	Heritage	15433	46	46	118,642	2,579	15	5	15	35	0.3261	0.1087	0.3261	0.7609
97-1	48-A	Liberty	15434	74	74	165,473	2,236	16	13	19	48	0.2162	0.1757	0.2568	0.6486
97-1	48-B	Liberty	15512	72	72	188,552	2,619	20	8	19	47	0.2778	0.1111	0.2639	0.6528
97-1	49	Legacy	15435	37	23	93,605	4,070	2	1	12	15	0.0541	0.0270	0.3243	0.4054
97-1	50	Heritage	15511	65	37	94,604	2,557	15	10	17	42	0.2308	0.1538	0.2615	0.6462
97-1	51	Amberwood	15555	92	76	212,051	2,790	20	19	41	80	0.2174	0.2065	0.4457	0.8696
97-1	52	Glen Willows	15641	194	104	243,307	2,339	47	33	60	140	0.2423	0.1701	0.3093	0.7216
97-1	53	Briarwood	15642	78	20	65,164	3,258	15	7	14	36	0.1923	0.0897	0.1795	0.4615
97-1	57	Sheridan Square	15711	104	84	261,873	3,118	22	22	38	82	0.2115	0.2115	0.3654	0.7885
97-1	59	Terra Bella	15739	128	128	248,576	1,942	12	9	8	29	0.0938	0.0703	0.0625	0.2266
97-1	62-A	Sonoma	15742	42	35	90,490	2,585	4	8	11	23	0.0952	0.1905	0.2619	0.5476
97-1	62-B	Sonoma	15814	38	38	121,623	3,201	6	4	8	18	0.1579	0.1053	0.2105	0.4737
97-1	63	Mendocino	15743	88	88	258,916	2,942	15	17	27	59	0.1705	0.1932	0.3068	0.6705
97-1	64	Saratoga	15744	86	77	246,240	3,198	18	13	19	50	0.2093	0.1512	0.2209	0.5814
97-1	65-A	Brentwood	15745	71	71	251,321	3,540	14	16	20	50	0.1972	0.2254	0.2817	0.7042
97-1	65-B	Brentwood	15978	62	51	180,671	3,543	8	5	22	35	0.1290	0.0806	0.3548	0.5645
97-1	66-A	Huntington	15746	10	10	41,960	4,196	0	4	6	10	0.0000	0.4000	0.6000	1.0000
97-1	66-B	Huntington	15801	8	8	34,138	4,267	0	5	1	6	0.0000	0.6250	0.1250	0.7500
97-1	66-C	Huntington	15802	11	11	47,097	4,282	0	2	1	3	0.0000	0.1818	0.0909	0.2727
97-1	66-D	Huntington	15803	11	11	47,391	4,308	0	2	1	3	0.0000	0.1818	0.0909	0.2727
97-1	66-E	Huntington	15804	12	12	50,472	4,206	4	0	2	6	0.3333	0.0000	0.1667	0.5000
97-1	67	Cambria	15747	53	53	261,195	4,928	15	10	23	48	0.2830	0.1887	0.4340	0.9057
97-1	69	Concorde	15872	113	101	344,366	3,410	26	21	55	102	0.2301	0.1858	0.4867	0.9027
97-1	70	Barrington	15873	126	126	351,298	2,788	36	16	40	92	0.2857	0.1270	0.3175	0.7302
97-1	71	Kelsey Lane	15874	134	125	327,593	2,621	38	26	60	124	0.2836	0.1940	0.4478	0.9254
97-1	73	Wisteria	15876	164	164	329,142	2,007	37	27	34	98	0.2256	0.1646	0.2073	0.5976
97-1	78	Santa Venetia	15972	96	76	202,486	2,664	14	19	22	55	0.1458	0.1979	0.2292	0.5729
97-1	79	Mendocino North	15973	93	71	210,315	2,962	13	9	24	46	0.1398	0.0968	0.2581	0.4946
97-1	80	Miramar	15974	66	62	209,678	3,382	13	16	14	43	0.1970	0.2424	0.2121	0.6515
97-1	83	Monterey	15977	127	127	293,026	2,307	41	23	24	88	0.3228	0.1811	0.1890	0.6929
97-1	84-B	Huntington Collection	15980	13	13	58,475	4,498	1	1	4	6	0.0769	0.0769	0.3077	0.4615
97-1	84-C	Huntington Collection	16064	17	17	71,595	4,211	0	4	4	8	0.0000	0.2353	0.2353	0.4706
97-1	84-D	Huntington Collection	16065	15	15	67,172	4,478	0	1	3	4	0.0000	0.0667	0.2000	0.2667
97-1	84-E	Huntington Collection	16159	14	14	62,508	4,465	1	2	4	7	0.0714	0.1429	0.2857	0.5000
97-1	84-F	Huntington Collection	16160	10	10	45,353	4,535	0	1	3	4	0.0000	0.1000	0.3000	0.4000
97-1	84-G	Huntington Collection	16161	12	12	53,341	4,445	0	2	6	8	0.0000	0.1667	0.5000	0.6667
97-1	84-H	Huntington Collection	16162	15	14	62,828	4,488	3	2	1	6	0.2000	0.1333	0.0667	0.4000
97-1	84-I	Huntington Collection	16185	8	0	0		1	0	2	3	0.1250	0.0000	0.2500	0.3750
97-1	84-J	Huntington Collection	15979	8	8	30,994	3,874	0	0	0	0	0.0000	0.0000	0.0000	0.0000
97-1	85-A	Bel Air	16076	68	41	147,938	3,608	10	11	27	48	0.1471	0.1618	0.3971	0.7059
97-1	85-B	Bel Air	16077	53	29	108,567	3,744	6	12	22	40	0.1132	0.2264	0.4151	0.7547
97-1	86-A	Manchester	16078	42	25	95,757	3,830	5	11	12	28	0.1190	0.2619	0.2857	0.6667
97-1	86-B	Manchester	16086	26	26	99,025	3,809	9	1	6	16	0.3462	0.0385	0.2308	0.6154
97-1	86-C	Manchester	16087	27	27	104,163	3,858	10	6	14	30	0.3704	0.2222	0.5185	1.1111
97-1	87	Rutherford	16079	99	96	254,426	2,650	10	8	10	28	0.1010	0.0808	0.1010	0.2828
97-1	89	Triana	16081	92	91	314,469	3,456	8	5	10	23	0.0870	0.0543	0.1087	0.2500
97-1	90-A	Alder Creek	16082	51	50	126,873	2,537	18	11	16	45	0.3529	0.2157	0.3137	0.8824
97-1	90-B	Alder Creek	16088	80	56	144,687	2,584	24	15	26	65	0.3000	0.1875	0.3250	0.8125
97-1	91-A	Tiburon	16083	12	12	26,159	2,180	4	2	1	7	0.3333	0.1667	0.0833	0.5833
97-1	91-B	Tiburon	16172	10	10	21,456	2,146	4	2	4	10	0.4000	0.2000	0.4000	1.0000
97-1	91-D	Tiburon	16173	11	11	24,683	2,244	2	6	3	11	0.1818	0.5455	0.2727	1.0000
97-1	91-E	Tiburon	16174	13	13	27,544	2,119	1	3	3	7	0.0769	0.2308	0.2308	0.5385
97-1	91-F	Tiburon	16175	12	12	26,174	2,181	3	0	2	5	0.2500	0.0000	0.1667	0.4167
97-1	91-G	Tiburon	16176	12	12	26,361	2,197	0	2	8	10	0.0000	0.1667	0.6667	0.8333
97-1	92	San Juan Batista	16084	108	108	225,141	2,085	16	15	28	59	0.1481	0.1389	0.2593	0.5463
97-1	93	Monticello	16085	112	104	211,816	2,037	13	8	17	38	0.1161	0.0714	0.1518	0.3393
97-1	95	Mericort	16644	79	79	164,688	2,085	17	11	16	44	0.2152	0.1392	0.2025	0.5570
97-1	98	Montellena	16811	68	68	167,021	2,456	24	20	18	62	0.3529	0.2941	0.2647	0.9118
City	130	Sheldon	17507	103	103	216,519	2,102	11	3	4	18	0.1068	0.0291	0.0388	0.1748
City	131	Huntley	17507	77	77	219,481	2,850	19	3	2	24	0.2468	0.0390	0.0260	0.3117
City	132	Crawford	17507	96	96	332,073	3,459	31	2	1	34	0.3229	0.0208	0.0104	0.3542
City	133	Stafford	17507	99	99	376,432	3,802	27	2	0	29	0.2727	0.0202	0.0000	0.2929
Total Single-Family Detached (SFDs):				7,758	5,132	15,513,109	3,023	1,527	1,023	1,527	1,527	0.1968	0.1319	0.1968	0.5255
All Dwelling Types:				18,612	12,043	25,634,892	2,129	3,130	1,858	2,603	5,041	0.1682	0.0998	0.1399	0.4079
Weighted Average - Multi-Family				10,854	6,911	10,121,783	1,465	1,603	835	1,076	3,514	0.1477	0.0769	0.0991	0.3238

Appendix D: Future Development Projects

Tustin Unified School District
Pending and Future Development Areas - Unmitigated

General TUSD Location	Data Source	Project Status	Proposed Dwelling Type	Residential Land Use	Total Project D/Us	Permittted Prior to 01/01/2019	Net Future Unmitigated D/Us	Estimated Assessable Space Per Dwelling Unit	(1)
City of Tustin - Future Projects: (2)(3)									
S.E. Corner of Sixth & "B" Street	Vintage Website	Under Construction	SFA	Identified	140	(25)	115	1,742	(4)
Unmitigated High Density (5)	Tustin Housing Element		Multi-family	Unidentified	426		426	1,500	(6)
Subtotal - City of Tustin (3)					**566**	**(25)**	**541**	**1,551**	
Irvine Business Center (IBC): (3)									
Paseo Del Mar KB Homes (#42)	IBC Project List - Aug. 2018	Under Construction	Multi-family	Apartments/Condos	357	0	357	1,551	(7)
Subtotal - IBC (3)					**357**	**0**	**357**	**1,551**	
Santa Ana Metro-East Overlay Zone & Other TUSD Areas: (3)									
Madison - 200 N. Cabrillo Park Drive (#3)	Planning Dept's Website	Entitled	Multi-family	6-Story Mixed Use	260		260	1,346	(8)
Central Point Mixed-Use 1801 East 4th St	Planning Dept's Website	Under review	Multi-family	5-Story Mixed Use	650		650	1,346	(8)
AMG Family Units 2114 First St. (#25) (8)	Planning Dept's Website	Under Construction	Multi-family	6-Story Mixed use	694	0	694	1,346	(8)
Avery @ The Grove (Sexlinger Farmhouse)	Planning Dept's Website	Entitled	SFD	2,340-2,777 Sqft	24		24	2,500	
Wermer's Site 1660 E First St. (#26)	Planning Dept's Website	Entitled	Multi-family	6-Story Mixed use	601		601	1,346	(8)
Subtotal - Santa Ana (3)					**2,229**		**2,229**	**1,359**	
				Total Future TUSD Residential Dwelling Units:	**3,152**		**3,127**	**1,414**	(9)

(1) The plans and permit information for selected multifamily projects located within the Cities of Irvine, Santa Ana and Tustin were reviewed by SDFA in order to estimate the assessable space likely to be realized from similar projects to be constructed in the future.

(2) Excludes Future Development identified in the Housing Element as being located in Tustin/MCAS as that development has been mitigated with the formation of CFD No. 15-2.

(3) Includes only those projects that are located within the boundaries of TUSD and have not yet been constructed or were not issued a building permit as of January, 1, 2019.

(4) Average Square Footage of Project Ranges from 1,386 - 2,187 Square feet as identified on the Website for Vintage at Old Town Tustin by Taylor-Morrison.

(5) Of the 566 Multi-family units identified in the Housing Element of the 2013 General Plan, estimate assumes that 140 of those units are represented by the Vintage at Old Town project.

(6) Average Square Footage assumes a 50/ 50 mix of apartments and "for sale units with assessable space of 1,250 per apartment unit and average square footage of 1,750 for future "For-Sale condominium and townhome units. For that portion of the unidentified multi-family housing expected to be developed as apartments.

(7) For the Paseo Del Mar project located within the IBC, the average square footage was derived from the building permits issued in lated 2019 for 38 dwellling units.

(8) For the five and six-story residential and mixed-use projects expected in be developed within the the City of Santa Ana, the District estimates that the average assessable space per dwelling unit will be similar to the average assessable space computed for that portion of AMG Family Units for which permits were recently issued .

(9) Reflects the estimated weighted average of the 3,127 future unmitigated dwelling units expected to be constructed within District.

Appendix E: School Facilities Cost Estimates

TUSTIN UNIFIED SCHOOL DISTRICT
SUMMARY OF ESTIMATED COSTS

		Prototype Grade K-5 Elementary School	Prototype Grades 6-12 Academy School School
SITE ACQUISITION & DEVELOPMENT:			
Required Usable Acreage		10.0	40.0
Estimated Site Acquisition Costs (Per Acre)		$1,500,000	$0
Total Site Acquisition Costs [1]		$15,000,000	$0
Site Development Costs (Incl off-site, service site & utility services)	$100,000	$1,000,000	$4,000,000
Total Site Acquisition & Site Development Costs		$16,000,000	$4,000,000
SCHOOL CONSTRUCTION:			
Baseline Construction Cost Estimate [2]		$25,000,000	$100,000,000
TOTAL ESTIMATED COST:		$41,000,000	$104,000,000
DESIGN CAPACITY OF SCHOOL FACILITY		550	1,200
COST PER STUDENT		$74,545	$86,667

(1) Land price reflects District current estimated "average" land acquisition costs for future unidentified school sites; assumes that 6-12 will be located on the MCAS with no land cost.

(2) Reflects District's current estimate of construction costs to construct school facilities to serve the design capacities as shown.

Tustin Unified School District
Interim and Administrative Facilities Cost Estimates

Per Student Cost of Interim Facilities:

Per Student Cost for K-5 Interim Housing:

Estimated four-year period for unhoused students.
Monthly charges assumed for 1.5 years as an average requirement.

Monthly charges:	$850
Number of Periods:	18
Cost Per Classroom Unit	$15,300
Plus Incidentals (Set-up)	$65,000
Total Cost of Classroom	$80,300
Students to be Housed	25
Cost Per Student	**$3,212**

Per Student Cost for 6-8 Interim Housing:

Estimated four-year period for unhoused students.
Monthly charges assumed for 2.5 years as an average requirement.

Monthly charges:	$850
Number of Periods:	30
Cost Per Classroom Unit	$25,500
Plus Incidentals (Set-up)	$65,000
Total Cost of Classroom	$90,500
Students to be Housed	27
Cost Per Student	**$3,352**

Per Student Cost for High School Interim Housing:

Estimated six-year period for unhoused students.
Monthly charges assumed for 2.5 years as an average requirement.

Monthly charges:	$850
Number of Periods:	30
Cost Per Classroom Unit	$25,500
Plus Incidentals (Set-up)	$65,000
Total Cost of Classroom	$90,500
Students to be Housed	27
Cost Per Student	**$3,352**

Per Student Cost of Central Administrative Facilities:

Est Sqft. of Admin Facilities Required Per Student	4
Estimated Cost Per Sqft. of Construction	$225
Current Administrative Facilities Cost per Student	**$900**

Appendix F: 2006-2010 Census Data Employment and Housing Estimates

EEO-ALL01W

EEO 1w. Detailed Census Occupation by Sex and Race/Ethnicity for Worksite Geography

Universe: Civilians employed at work 16 years and over
EEO Tabulation 2006-2010 (5-year ACS data)

Note: This is a modified view of the original table.

The EEO Tabulation is sponsored by four Federal agencies consisting of the Equal Employment Opportunity Commission (EEOC), the Employment Litigation Section of the Civil Rights Division at the Department of Justice (DOJ), the Office of Federal Contract Compliance Programs (OFCCP) at the Department of Labor, and the Office of Personnel Management (OPM).

Geography: Irvine city, California
Estimate: Estimate

Occupation Code	Residence to Work Place Flows	Subject	Total, race and ethnicity
Total, all occupations	Worksite Total	Total, both sexes	
Total, all occupations	Worksite Total	Number	216,375
Total, all occupations	Irvine city, California to Irvine city, California	Total, both sexes	
Total, all occupations	Irvine city, California to Irvine city, California	Number	42,265
Total, all occupations	Santa Ana city, California to Irvine city, California	Total, both sexes	
Total, all occupations	Santa Ana city, California to Irvine city, California	Number	19,910
Total, all occupations	Tustin city, California to Irvine city, California	Total, both sexes	
Total, all occupations	Tustin city, California to Irvine city, California	Number	7,495

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Source: U.S. Census Bureau, 2006-2010 American Community Survey

Explanation of Symbols:
An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended

distribution. A statistical test is not appropriate.
An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
An '(X)' means that the estimate is not applicable or not available.

The U.S. Census Bureau collects race data in accordance with guidelines provided by the U.S. Office of Management and Budget (OMB). Except for the total, all race and ethnicity categories are mutually exclusive. "Black" refers to Black or African American; "AIAN" refers to American Indian and Alaska Native; and "NHPI" refers to Native Hawaiian and Other Pacific Islander. The reference to "Hawaii only" indicates that these columns are only tabulated for areas in the state of Hawaii. "Balance of Not Hispanic or Latino" includes the balance of non-Hispanic individuals who reported multiple races or reported Some Other Race alone. For more information on race and Hispanic origin, see the Subject Definitions at http://www.census.gov/acs/www/data_documentation/documentation_main/.

Race and Hispanic origin are separate concepts on the American Community Survey. "White alone Hispanic or Latino" includes respondents who reported Hispanic or Latino origin and reported race as "White" and no other race. "All other Hispanic or Latino" includes respondents who reported Hispanic or Latino origin and reported a race other than "White," either alone or in combination. To get a total for "Hispanic or Latino," add the two columns for "White alone Hispanic or Latino" and "All other Hispanic or Latino."

Occupation codes are 4-digit codes and are based on Standard Occupational Classification 2010.

EEO-ALL01W

EEO 1w. Detailed Census Occupation by Sex and Race/Ethnicity for Worksite Geography

Universe: Civilians employed at work 16 years and over
EEO Tabulation 2006-2010 (5-year ACS data)

Note: This is a modified view of the original table.

The EEO Tabulation is sponsored by four Federal agencies consisting of the Equal Employment Opportunity Commission (EEOC), the Employment Litigation Section of the Civil Rights Division at the Department of Justice (DOJ), the Office of Federal Contract Compliance Programs (OFCCP) at the Department of Labor, and the Office of Personnel Management (OPM).

Geography: Santa Ana city, California
Estimate: Estimate

Occupation Code	Residence to Work Place Flows	Subject	Total, race and ethnicity
Total, all occupations	Worksite Total	Total, both sexes	
Total, all occupations	Worksite Total	Number	154,675
Total, all occupations	Irvine city, California to Santa Ana city, California	Total, both sexes	
Total, all occupations	Irvine city, California to Santa Ana city, California	Number	6,390
Total, all occupations	Santa Ana city, California to Santa Ana city, California	Total, both sexes	
Total, all occupations	Santa Ana city, California to Santa Ana city, California	Number	41,630
Total, all occupations	Tustin city, California to Santa Ana city, California	Total, both sexes	
Total, all occupations	Tustin city, California to Santa Ana city, California	Number	5,460

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Source: U.S. Census Bureau, 2006-2010 American Community Survey

Explanation of Symbols:
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Race and Hispanic origin are separate concepts on the American Community Survey. "White alone Hispanic or Latino" includes respondents who reported Hispanic or Latino origin and reported race as "White" and no other race. "All other Hispanic or Latino" includes respondents who reported Hispanic or Latino origin and reported a race other than "White," either alone or in combination. To get a total for "Hispanic or Latino," add the two columns for "White alone Hispanic or Latino" and "All other Hispanic or Latino."

Occupation codes are 4-digit codes and are based on Standard Occupational Classification 2010.

EEO-ALL01W

EEO 1w. Detailed Census Occupation by Sex and Race/Ethnicity for Worksite Geography

Universe: Civilians employed at work 16 years and over
EEO Tabulation 2006-2010 (5-year ACS data)

Note: This is a modified view of the original table.

The EEO Tabulation is sponsored by four Federal agencies consisting of the Equal Employment Opportunity Commission (EEOC), the Employment Litigation Section of the Civil Rights Division at the Department of Justice (DOJ), the Office of Federal Contract Compliance Programs (OFCCP) at the Department of Labor, and the Office of Personnel Management (OPM).

Geography: Tustin city, California
Estimate: Estimate

Occupation Code	Residence to Work Place Flows	Subject	Total, race and ethnicity
Total, all occupations	Worksite Total	Total, both sexes	
Total, all occupations	Worksite Total	Number	37,900
Total, all occupations	Irvine city, California to Tustin city, California	Total, both sexes	
Total, all occupations	Irvine city, California to Tustin city, California	Number	2,815
Total, all occupations	Santa Ana city, California to Tustin city, California	Total, both sexes	
Total, all occupations	Santa Ana city, California to Tustin city, California	Number	4,490
Total, all occupations	Tustin city, California to Tustin city, California	Total, both sexes	
Total, all occupations	Tustin city, California to Tustin city, California	Number	6,325

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Source: U.S. Census Bureau, 2006-2010 American Community Survey

Explanation of Symbols:
An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
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distribution. A statistical test is not appropriate.
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Occupation codes are 4-digit codes and are based on Standard Occupational Classification 2010.

1. Please confirm or correct:
The Newhope Library at 122 North Newhope Street would serve the project area.

   Confirmed.

2. What is the square footage of the existing Newhope Library? What resources and special services are provided at this location?

   Santa Ana has two facilities, a Main library and the Newhope Library Learning Center. The Main Library is 39,790 square feet in size and the Newhope Library is 10,600 square feet. The libraries offer access to books, periodicals, e-content, online databases, computers and internet, a Learning Center, a TeenSpace, a Higher Education Center, and programming for all ages.

   a. Are the existing library space and number of books considered adequate for the existing population within the libraries' service area?

      No. A library service master plan or facility standards assessment would be required to best determine the needs of our service area. For the purpose of this questionnaire, the data will be gathered in comparison to Anaheim Public Library, who are simliar in terms of population to the City of Santa Ana.

   b. If not, what are the estimated deficits of:

      i. Building area in square feet? Deficit of 99,409 square feet total for the entire City population.

      ii. Volumes or collection size? Deficit of 234,483 in collection size This is total for the entire City.

      iii. Other resources (computers, etc.)? Yes, additional computers, staffing and programs.

3. What demand factors or standards are used to determine the amount of library space and number of volumes, or collection size, needed to serve a given population?

   A master plan or facility standards assessment would best determine the needs to serve the population. The library has neither, so we look at the circulation data as well as foot traffic at our existing libraries to help determine the needs. We also look at the service level of nearby cities with similar population sizes. For example, the Anaheim Public Library has 0.416 total library square footage per capita, while Santa Ana is at 0.1633.

4. The proposed project would introduce up to 36,167 residential units. What demands would you estimate the project would create:

   a. For library facilities in square feet? Additional 15,190 square feet

   b. For collection items? Additional 81,353 items

   c. For additional library staff? Additional 16.25 full time staff (FTE)

   d. Other? Additional computers and programming

5. Are there any plans for future library expansion or new libraries that would potentially serve the proposed project? If so, how would these facilities be funded?

There is currently no plan for future library facilities. The City is in the process of procuring a mobile library unit or bookmobile to better serve the population.

6. What measures, if any, would you recommend to reduce project impacts to library facilities and/or collections?

The recommendation would be to increase the number of library facillities and the number of resources.

7. Please add any other comments you may wish to make regarding this project.

Response Prepared By:

Lupita Arroyo	Principal Librarian
Name	**Title**
City of Santa Ana - Library Services	4/1/2020
Agency	**Date**

SANTA ANA GENERAL PLAN UPDATE
Recreation and Parks Questionnaire

1. The existing General Plan states that the City has approximately 400 acres of public parks and recreation facilities distributed generally uniformly throughout the City. Please **confirm or update** the information in the following table reproduced from the City's website.

City Parks	Park Acreage	Joint Use Sites	Recreation Facilities
Adams Park	5.68	Godinez High School	Cabrillo Tennis Center
Angels Community Park	1.72	Madison Elementary School	Corbin Center
Birch Park	2.66	Monte Vista Elementary School	El Salvador Community Center+
Bomo Koral Park	10.40	Roosevelt Elementary School	Jerome Recreation Center+
Cabrillo Park	7.60	Spurgeon Intermediate School	Logan Recreation Center
Centennial Park	69.50	Willard Intermediate School	Memorial Recreation Center+
Cesar Chavez Camoesino Park	6.30	Garfield Elementary	Neal Machander Tennis Center
Chepa's Park	0.41	Monroe Elementary School	Salgado Recreation Center+
Delhi Park	10.40		Santa Anita Recreation Center+
Eldridge Park	1.2		Santa Ana Senior Center
Edna Park	2.82		Southwest Senior Center
El Salvador Park	8.4		Wildlife and Watershed Interpretive Center
Fairview Triangle Park	0.30		Godinez Gym and Performing Arts Center
Fisher Cabin Park	2.34		Santiago Lawn Bowling Center
French Park	0.17		Fisher Cabin
Friendship Park	0.09		Santiago Cabin
Garfield Exercise	0.10		Santa Ana Zoo at Prentice Park
Grise! Park	6.79		Santa Ana Stadium
Heritage Park	6.51		Central Public Library
Jerome Park	17.92		Newhope Library
Lillie King Park	9.60		Garfield Center
Mabury Park	5.46		RooseveiUWalker Community Center
Madison Park	6.06		
Maple and Occidental Park	0.43		
McFadden Triangle Park	0.80		
Memorial Park	17		
Memory Lane Park	0.47		
Morrison Park	5.07		

Pacific Electric Park	1.39		
Plaza Calle Cuatro Park	0.20		
Portola Park	9.07		
Prentice Park	18.75		
RaitUMyrtle Park*	1.09		
Riverview Park	8.76		
Rosita Park	8.68		
Saddleback View Park	0.92		
Sandpointe Park	6.63		
Santa Anita Park	4.86		
Santiago Park	34.43		
Sara May Downie Herb Garden	0.13		
Segerstrom Triangle Park	1.22		
Sasscer Park	0.92		
Standard/McFadden Park*	.75		
17th Stree!Triangle Park	0.66		
6th and Lacy Park*	0.42		
Thornton Park	32.83		
Windsor Park	10.48		
TOTAL	348.39	-	-

*Future Parks
+ Centers with oars

2. The City's website also identified future parks as noted in the table above.

   a. Have any of these parks been built? Which ones?

   Yes, 6th and Lacy (Mariposa Park) was built and opened on December 14, 2019.

   b. If not, are there stiU plans to build these parks?

   Yes, Grant funding was recently approved to develop Standard/McFadden and Raitt/Myrtle Park sites.

3. What is the City's funding source for park and recreational facilities maintenance and improvements?

   City General Funds are used to maintain the park sites. Improvement funding mainly comes from Federal/State Grants , Community Development Block Grant or Park Residential Development Fees (A & D Fees).

4. Are the existing parks and recreational facilities in the City adequate to serve the demands of the residents?

   No, the City has not met the Municipal Code 2 acres per/ 1000 requirement.

5. Are the existing parks and recreation facilities able to accommodate buildout of the proposed project, which includes land use designation changes that would accommodate a buildout of 6,776,298 additional nonresidential square feet, 36,167 additional dwelling units, and would create 14,276 jobs? If not, what additional facilities would be needed and how will they be funded?

   No, additional park acres, recreational support facilities and community centers are needed to meet the increasing population demand. Park/Recreational Improvements would be funded by grants, CDBG funds, and Park residential development fees.

6. What mitigation measures, if any, would you recommend for the proposed project?

   Additional Park Open Space.

7. Please add any other comments you may wish to make regarding the proposed project.

Response Prepared By:

RON ONO	PRCSA ADMINISTRATIVE SERVICES MANAGER
Name	Title
PARK, RECREATION AND COMMUNITY SERVICES AGENCY	3/9/20
Agency	Date

SANTA ANA GENERAL PLAN UPDATE
Solid Waste Disposal Questionnaire

1. What generation rates are used to estimate solid waste service requirements for various land uses (residential, commercial, industrial) in pounds/day or tons/year?

See attached solid waste generation by land use type. This information was obtained from the California Department of Resources Recovery and Recycling (CalRecycle) website.

2. Is Orange County currently meeting AB 939 goals?

AB 939, also known as the California Integrated Waste Management Act of 1989, requires all counties in California to prepare a Siting Element as part of each county's Countywide Integrated Waste Management Plan. As part of the Siting Element, each county is required to demonstrate that it has 15 years of available countywide solid waste landfill capacity, either in its jurisdiction, or has contracted with another entity (i.e., another county or waste hauler that owns a landfill that has available landfill capacity) to ensure 15 years of available countywide solid waste landfill capacity.

The County of Orange has 15 years of available countywide solid waste landfill capacity with available landfill capacity at the Olinda Alpha, Frank R. Bowerman and Prima Deshecha Landfills. All three landfills are owned by the County of Orange and are operated by the OC Waste & Recycling department.

3. Please provide any additional comments you may have regarding the proposed project.

The Orange County solid waste landfill system can serve the proposed project on both a project-specific and cumulative basis and will provide the project with long-term solid waste landfill capacity.

Response Prepared By:

John J. Arnau, CEQA Manager

Name	**Title**
OC Waste & Recycling	March 3, 2020
Agency	**Date**

1. Please **confirm** that the disposal sites used for the City's solid waste are the Frank R. Bowerman Landfill in Irvine and Olinda Alpha Landfill in Brea.

Confirmed.

   a. What additional sites, if any, are planned for solid waste disposal in the future?

None.

2. Please **confirm or update** the information in Table 1, using data from CalRecycle, regarding the three landfill's location, current remaining capacity, maximum capacity, estimated close date, and maximum daily load.

Table 1 Landfill Capacity

Landfill	Location	Current Remaining Capacity (cubic yards)	Maximum Capacity (cubic yards)	Estimated Close Date	Maximum Daily Load (tons/day)
Frank R. Bowerman	11002 Bee Canyon Road Irvine, CA 92602	~~205,000,000~~ 170,400,000*	266,000,000	2053	11,500
Olinda Alpha	1942 North Valencia Avenue Brea, CA 92823	~~34,200,000~~ 24,500,000	148,800,000	2021**	8,000

*Remaining capacity for Frank R. Bowerman and Olinda Alpha Landfills as of June 30, 2019.
**OC Waste & Recycling is currently working with the City of Brea to revise the closure date of the Olinda Alpha Landfill.

3. Are the existing landfill facilities able to accommodate buildout of the proposed project, which includes land use designation changes that would accommodate a buildout of 6,776,298 additional nonresidential square feet, 36,167 additional dwelling units, and would create 14,276 jobs? If not, what additional facilities would be needed?

Yes, the Orange County solid waste landfill system would have the ability to provide the proposed project with long-term solid waste landfill capacity, both on a project specific and cumulative basis. The County of Orange maintains 15-years of countywide solid waste landfill capacity, as required by AB 939.

4. Please provide any additional comments you may have regarding the proposed project.

N/A.

Response Prepared By:

John J. Arnau, CEQA Manager

Name	**Title**
OC Waste & Recycling	March 3, 2020
Agency	**Date**

Estimated Solid Waste Generation Rates by Land Use Type

Land Use Type	Estimated Solid Waste Generation Rate
Residential	12.23 lbs./household/day
Offices	0.084 lb./sq. ft./day
Commercial/Retail	3.12 lbs./100 sq. ft./day
Restaurants	.005 lb./s.f./day
Industrial/Warehouse	1.42 lb./100 sq. ft./day
Schools	1 lb./student/day
Hotel/Motel	4 lbs./room/day
Public/Institutional	.007 lb./sq. ft./day

Source: CalRecycle, 2020