



SANTA ANA GENERAL PLAN UPDATE

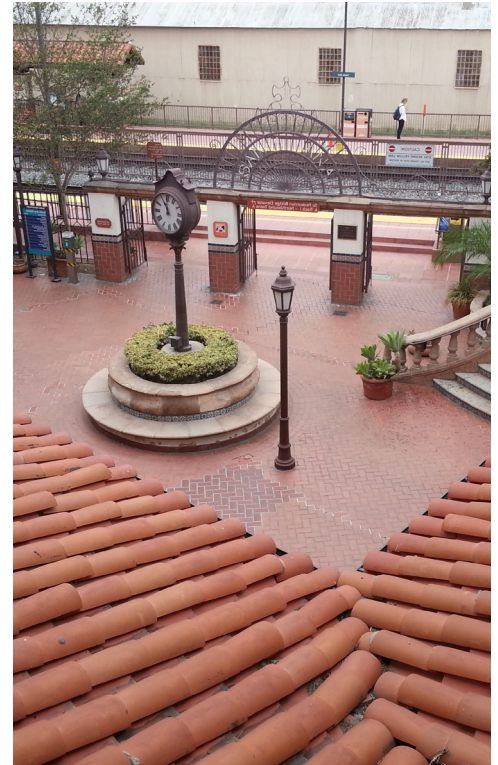


Recirculated Draft Program Environmental Impact Report

State Clearinghouse #2020029087

August 2021

Volume I



Prepared for:

City of Santa Ana

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Abbreviations and Acronyms

ABBREVIATIONS AND ACRONYMS

AAQS	ambient air quality standards
AB	Assembly Bill
ACM	asbestos-containing materials
ACS	American Community Survey
ADT	average daily traffic
AELUP	airport environs land use plan
af	acre-foot
afy	acre-feet per year
ALUC	airport land use commission
AQMD	air quality management district
AQMP	air quality management plan
AR4	<i>Fourth Assessment Report: Climate Change 2007</i> (Intergovernmental Panel on Climate Change)
BMP	best management practices
BPP	basin production percentage
CAFE	corporate average fuel economy
CalARP	California Accidental Release Prevention Program
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal OES	California Office of Emergency Services
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources, Recycling, and Recovery
Caltrans	California Department of Transportation
CAP	climate action plan
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDBG	Community Development Block Grants
CDFW	California Department of Fish and Wildlife
CDR	Center for Demographic Research
CEC	California Energy Commission

Abbreviations and Acronyms

CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFC	California Fire Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CHRIS	California Historical Resources Information System
CIP	capital improvements program
CMP	congestion management program
CNDDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CO	carbon monoxide
CO _{2e}	carbon dioxide equivalent
COG	council of governments
CPUC	California Public Utilities Commission
CRR	Community Risk Reduction (OCFA department)
CTC	California Transportation Commission
CUPA	Certified Unified Program Agency
dB	decibel
dBA	A-weighted decibel
DOF	Department of Finance (CA)
DOT	US Department of Transportation
DPM	diesel particulate matter
DSOD	Division of Safety of Dams
DTSC	Department of Toxic Substances Control
DU	dwelling unit
DWR	Department of Water Resources (CA)
EAP	emergency action plan
EDD	California Employment Development Department
EIR	environmental impact report
EOP	emergency operations plan
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FAA	Federal Aviation Administration

Abbreviations and Acronyms

FAR	Federal Aviation Regulation
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHSZ	fire hazard severity zone
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GGUSD	Garden Grove Unified School District
GHG	greenhouse gases
gpd	gallons per day
GPU	General Plan Update
GSP	groundwater sustainability plan
GWh	gigawatt-hour
GWP	global warming potential
GWRS	groundwater replenishment system
HAA	Housing Accountability Act
HCD	California Housing and Community Development Department
HCP	habitat conservation plan
HOO	housing opportunity ordinance (City)
HRC	Historic Resources Commission (City)
HUD	US Department of Housing and Urban Development
HVAC	heating, ventilating, and air conditioning system
IFC	International Fire Code
IPCC	Intergovernmental Panel on Climate Change
IRWD	Irvine Ranch Water District
JWA	John Wayne Airport
kWh	kilowatt hour
L _{dn}	day-night noise level
L _{eq}	equivalent continuous noise level
LACM	Natural History Museum of Los Angeles County
LBP	lead-based paint
LCFS	low-carbon fuel standard
LEPC	local emergency planning committee
LID	low impact development

Abbreviations and Acronyms

LIP	local implementation plan
LOS	level of service
LRA	local responsibility area
LRTP	long range transportation plan
LST	localized significance thresholds
MATES	Multiple Air Toxics Exposure Study
MEMU	Metro East Mixed Use (Overlay Zone)
mgd	million gallons per day
MMcf	million cubic feet
MMT	million metric tons
MPAH	Master Plan of Arterial Highways (OCTA)
MPD	master plan of drainage
MPO	metropolitan planning organization
MPSH	Master Plan of Streets and Highways (City)
MRZ	mineral recovery zone
MT	metric ton
MWD	Metropolitan Water District of Southern California
MWDOC	Municipal Water District of Orange County
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NCCP/HCP	natural communities conservation plan/habitat conservation plan
NHMP	natural hazards mitigation plan
NHPA	National Historic Preservation Act
NO _x	nitrogen oxides
NOP	Notice of Preparation
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
O ₃	ozone
OCFA	Orange County Fire Authority
OCFCD	Orange County Flood Control District
OCHCA	Orange County Health Care Agency
OCPW	Orange County Public Works
OCSD	Orange County Sanitary District

Abbreviations and Acronyms

OCTA	Orange County Transportation Authority
OCTAM	Orange County Traffic Analysis Model
OCWD	Orange County Water District
OEHHA	California Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
OPR	Governor's Office of Planning and Research
OUSD	Orange Unified School District
P-C regions	production-consumption regions
PEIR	program environmental impact report
PHGA	peak horizontal ground acceleration
PHMSA	Pipeline and Hazardous Materials Safety Administration (US)
PM	particulate matter
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
PRD	permit registration document
RCRA	Resource Conservation and Recovery Act
RHNA	regional housing needs assessment
RMS	root mean square
RPS	renewable portfolio standard
RTP	regional transportation plan
RTP/SCS	regional transportation plan / sustainable communities strategy
RWQCB	Regional Water Quality Control Board
SAMC	Santa Ana Municipal Code
SARA	Superfund Amendments and Reauthorization Act
SAUSD	Santa Ana Unified School District
SB	Senate Bill
SCAG	Southern California Association of Governments
SCCIC	South Central Coastal Information Center
SCD	Statewide Compliance Division
SCE	Southern California Edison
SCS	sustainable communities strategy
SD	specific development

Abbreviations and Acronyms

SERC	State Emergency Response Commission
SGMA	California Sustainable Groundwater Management Act
SIP	state implementation plan
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SMP	sewer master plan
SoCAB	South Coast Air Basin
SO _x	sulfur oxides
SOI	sphere of influence
SQMP	stormwater quality management plan
SRA	source receptor area (air quality)
SRA	state responsibility area (wildfire)
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCR	tribal cultural resource
TDS	total dissolved solids
TIA	traffic impact analysis
TMDL	total maximum daily load
TNM	transportation noise model
tpd	tons per day
TUSD	Tustin Unified School District
UASI	Urban Area Security Initiative
USACE	US Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	urban water management plan
VdB	velocity decibels
VMT	vehicle miles traveled
VOC	volatile organic compound
WMP	water master plan

Abbreviations and Acronyms

WQMP	water quality management plan
WUI	wildland-urban interface
ZE/NZE	zero emissions / near-zero emissions
ZNE	zero net energy

1. Executive Summary

1.1 INTRODUCTION

Pursuant to the California Environmental Quality Act (CEQA), this document is a Recirculated Draft Program Environmental Impact Report (PEIR) which has been prepared as supplemental analysis to the original Draft PEIR on the City of Santa Ana's General Plan Update (GPU) to reflect updates to the GPU (proposed project). It also updates changes that have occurred in the environmental setting subsequent to the preparation and distribution of the original Draft PEIR (State Clearinghouse No. 2020-029087). The environmental setting is also supplemented to provide additional context for expanded discussions of particularly controversial impacts (air quality/health risk, health risks, hazards, and recreation). An additional project alternative has been defined and analyzed to specifically address the proposed GPU's impact on park and open space.

The original Draft PEIR was distributed for the required 45-day public review between August 3, 2020, and September 16, 2020. The review period was subsequently extended until October 6, 2020. As described in Chapter 2, *Introduction*, and Chapter 3, *Project Description*, GPU policies and implementation measures were modified and supplemented to respond to concerns expressed by the public and agencies during the Draft PEIR public review period and during the Planning Commission public hearing held on November 9, 2020. The GPU modifications also reflect input received from an intensive, extended community outreach program conducted by the City between January and May 2021.

This Recirculated Draft PEIR provides an update of the project description and provides updated environmental setting and impact analyses for the Air Quality, Hazards, and Recreation sections of the original Draft PEIR. It also updated the Project Alternatives section to incorporate a new alternative. The analysis for each environmental impact is quantified, as applicable, for the updated GPU in accordance with CEQA. As described in Section 1.4.4, *Recirculated Draft PEIR Format and Process*, and as allowed by CEQA, this Recirculated Draft PEIR does not include all the topical sections from the original Draft PEIR. Also, as encouraged by CEQA as a means of reducing paperwork, this Recirculated Draft PEIR incorporates the previous PEIR by reference, as appropriate. In particular, the previous document and its appendices are referenced for long and/or technical descriptions of the environmental setting that remain applicable to the updated GPU. As required by CEQA, documents incorporated by reference in the Recirculated Draft PEIR, including the previous Draft PEIR, have been made available for public review at the lead agency office (City of Santa Ana) and public libraries.

1.2 PROJECT BACKGROUND

The updated General Plan is based on a vision statement and core values established as part of an extensive, multiyear community outreach effort. This effort culminated in the Draft General Plan Update and Draft

1. Executive Summary

Program Environmental Impact Report, which were considered in a Planning Commission public hearing on November 9, 2020. A summary of events is shown in Table 1.1, *General Plan Update Chronology*:

Table 1-1 General Plan Update Chronology

Date	Activity
2015–2016	Community Outreach Program
2017	General Plan Advisory Group (GPAG)
2018	Vision Statement/Policy Framework Development
2019	Land Use Alternatives and Focus Areas
February 26, 2020, through March 27, 2020	Program EIR (PEIR) Notice of Preparation and 30-day Public Review
March 5, 2020	Public Scoping Meeting
August 3, 2020, through September 16, 2020	45-day Draft PEIR Public Review Period
September 17, 2020, to October 6, 2020	20-day extension, Draft PEIR Public Review
August 24, 2020, and September 14, 2020	Planning Commission Study Sessions
November 9, 2020	Planning Commission Public Hearing
February 2021 through May 2021	Extended Public Outreach and GPU Modifications
January 2021 through early August 2021	Preparation of Recirculated DPEIR
Mid-August 2021 to September 2021	Recirculated Draft PEIR Public Review
Winter 2021	Public Hearings to Consider GPU Modifications and Recirculated PEIR

1.3 ENVIRONMENTAL PROCEDURES

The Draft PEIR was prepared pursuant to CEQA to assess the environmental effects associated with implementation of the GPU, as well as anticipated future discretionary actions and approvals. The six main objectives of this document as established by CEQA are listed below:

1. To disclose to decision makers and the public the significant environmental effects of proposed activities.
2. To identify ways to avoid or reduce environmental damage.
3. To prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.
4. To disclose to the public reasons for agency approval of projects with significant environmental effects.
5. To foster interagency coordination in the review of projects.
6. To enhance public participation in the planning process.

An EIR is the most comprehensive form of environmental documentation identified in CEQA and the CEQA Guidelines and provides the information needed to assess the environmental consequences of a proposed project, to the extent feasible. An EIR is intended to provide an objective, factually supported, full-disclosure analysis of the environmental consequences associated with a proposed project that has the potential to result in significant, adverse environmental impacts.

1. Executive Summary

An EIR is also one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Prior to approving a proposed project, the lead agency must consider the information in the EIR, determine whether the EIR was properly prepared in accordance with CEQA and the CEQA Guidelines, determine that it reflects the independent judgment of the lead agency, adopt findings concerning the project's significant environmental impacts and alternatives, and adopt a Statement of Overriding Considerations if the proposed project would result in significant impacts that cannot be avoided.

1.3.1 Draft PEIR Format

Section 1. Executive Summary. Summarizes the background and description of the GPU, the format of the PEIR, project alternatives, any critical issues remaining to be resolved, and the potential environmental impacts and mitigation measures identified for the project.

Section 2. Introduction. Describes the purpose of the Draft PEIR, background on the project, the Notice of Preparation, the use of incorporation by reference, and Final PEIR certification.

Section 3. Project Description. A detailed description of the GPU, its objectives, the plan area, approvals anticipated to be needed, the necessary environmental clearances for the project, and the intended uses of the Draft PEIR.

Section 4. Environmental Setting. A description of the physical environmental conditions in the plan area as they existed at the time the Notice of Preparation was published, from both a local and regional perspective. The environmental setting provides baseline physical conditions from which the lead agency determines the significance of environmental impacts resulting from the GPU.

Section 5. Environmental Analysis. Provides, for each environmental parameter analyzed, a description of the thresholds used to determine if a significant impact would occur; the methodology to identify and evaluate the potential impacts; the existing environmental setting; the potential adverse and beneficial effects of the GPU; the level of impact significance before mitigation; the mitigation measures; the level of significance of the adverse impacts of the GPU after mitigation is incorporated; and the potential cumulative impacts associated with the GPU and other existing, approved, and proposed development in the area.

Section 6. Significant Unavoidable Adverse Impacts. Describes the significant unavoidable adverse impacts of the GPU.

Section 7. Alternatives to the Proposed Project. Describes the impacts of the alternatives to the GPU, including the No Project Alternative and three alternative land use plans. In accordance with the CEQA Guidelines, this section identifies a superior environmental alternative among the alternatives (exclusive of the No Project alternative) and evaluates the potential for each alternative to achieve the project objectives.

Section 8. Impacts Found Not to Be Significant. Briefly describes the potential impacts of the project that were determined not to be significant were therefore not discussed in detail in Section 5.

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Section 9. Significant Irreversible Changes Due to the Proposed Project. Describes the significant irreversible environmental changes associated with the project.

Section 10. Growth-Inducing Impacts of the Project. Describes the ways in which the GPU would cause increases in employment or population that could result in new physical or environmental impacts.

Section 11. Organizations and Persons Consulted. Lists the people and organizations that were contacted during the preparation of the Draft PEIR for the GPU.

Section 12. Qualifications of Persons Preparing EIR. Lists the people who prepared the Draft PEIR.

Section 13. Bibliography. A bibliography of the technical reports and other documentation used in the preparation of the Draft PEIR for the GPU.

Appendices. The Draft PEIR appendices (presented in Volumes II and III, and in PDF format on a CD attached to the back cover) contain the following supporting documents:

Volume II

- Appendix A-a: NOP, NOP Comment Letters, and Scoping Meeting Sign-In Sheet and Comments
- Appendix A-b: EJ Background Analysis
- Appendix B-a: Proposed General Plan Update Policies
- Appendix B-b: Santa Ana Buildout Methodology
- Appendix C: Air Quality and Greenhouse Gas Emissions Modeling
- Appendix D: Biological and Natural Resource Inventory and Assessment
- Appendix E-a: Historical Resources Technical Report
- Appendix E-b: Archeological Resources Technical Report
- Appendix F: Energy Worksheet
- Appendix G-a: Geological Background Technical Report
- Appendix G-b: Paleontological Existing Conditions Technical Report
- Appendix H-a: Infrastructure Technical Report for Hydrology, Sewer, Water, and Water Quality
- Appendix H-b: Water Supply and Demand Technical Report
- Appendix I-a: Noise Existing Condition Report
- Appendix I-b: Noise Monitoring and Modeling Data
- Appendix J-a: Existing Conditions Report for Fire and Police Services
- Appendix J-b: Service Provider Questionnaire Responses

Volume III

- Appendix K: Transportation Impact Study
- Appendix L: Tribal Consultation Correspondence

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1.3.2 Type and Purpose of the PEIR

The Draft PEIR fulfills the requirements for a Program EIR. Although the legally required contents of a Program EIR are the same as those for a Project EIR, Program EIRs are typically more conceptual and may contain a more general discussion of impacts, alternatives, and mitigation measures than a Project EIR. As provided in Section 15168 of the State CEQA Guidelines, a Program EIR may be prepared on a series of actions that may be characterized as one large project. Use of a Program EIR provides the City (as lead agency) with the opportunity to consider broad policy alternatives and programwide mitigation measures and provides the City with greater flexibility to address project-specific and cumulative environmental impacts on a comprehensive basis.

Agencies generally prepare Program EIRs for programs or a series of related actions that are linked geographically; are logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program; or are individual activities carried out under the same authority and having generally similar environmental effects that can be mitigated in similar ways.

Once a Program EIR has been prepared, subsequent activities in the program must be evaluated to determine whether an additional CEQA document needs to be prepared. However, if the Program EIR addresses the program's effects as specifically and comprehensively as possible, many subsequent activities could be found to be within the Program EIR scope, and additional environmental documents may not be required (Guidelines Section 15168[c]). When a Program EIR is relied on for a subsequent activity, the lead agency must incorporate feasible mitigation measures and alternatives developed in the Program EIR into the subsequent activities (Guidelines Section 15168[c][3]). If a subsequent activity would have effects not within the scope of the Program EIR, the lead agency must prepare an Initial Study leading to a Negative Declaration, Mitigated Negative Declaration, or an EIR. In this case, the Program EIR still serves a valuable purpose as the first-tier environmental analysis. The CEQA Guidelines (Section 15168[h]) encourage the use of Program EIRs, citing five advantages:

- Provide a more exhaustive consideration of impacts and alternatives than would be practical in an individual EIR.
- Focus on cumulative impacts that might be slighted in a case-by-case analysis.
- Avoid continual reconsideration of recurring policy issues.
- Consider broad policy alternatives and programmatic mitigation measures at an early stage when the agency has greater flexibility to deal with them.
- Reduce paperwork by encouraging the reuse of data (through tiering).

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1.4 RECIRCULATED DRAFT PEIR

1.4.1 Conditions for EIR Recirculation

State CEQA Guidelines Section 15088.5 defines the circumstances under which a lead agency must recirculate an EIR. A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR but before certification of the Final EIR. Such information can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not considered “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement. As defined in State CEQA Guidelines Section 15088.5(a), significant new information requiring recirculation is that which shows any of the following:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project’s proponents decline to adopt it.
4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

1.4.2 GPU Draft PEIR: Reasons for Recirculation

At its November 9, 2020, public hearing, the Planning Commission voted not to certify the Final PEIR and continue work on the GPU to a future date to allow additional time for outreach to Santa Ana’s environmental justice (EJ) communities. As described in Section 2.4, *Environmental Justice Outreach*, the City initiated an expanded outreach program focusing on environmental justice and specific community concerns raised in comments received on the draft GPU and the Draft PEIR and voiced during the Planning Commission public hearing. The decision was made to prepare a Recirculated Draft PEIR to:

- Conclude that the recreation-related impacts of the proposed GPU would result in a significant impact and to define a new project alternative to reduce these impacts.
- More thoroughly discuss and evaluate impacts related to environmental justice, including air quality, hazards, and recreation/open space.

1.4.3 Options for Recirculation

Pursuant to CEQA Guidelines Section 15088.5, if the required revision is limited to a few chapters or portions of the EIR, the lead agency need only recirculate the chapters or portions that have been modified.

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A Recirculated EIR requires the same noticing and consultation as the original Draft EIR (CEQA Guidelines Sections 15086 and 15087).

CEQA allows two different ways to respond to comments on the Recirculated Draft EIR:

- 1) When an EIR is substantially revised and the entire document is recirculated, the lead agency may require reviewers to submit new comments and, in such cases, need not respond to those comments received during the earlier circulation period.
- 2) Or, when the EIR is only partly revised and the lead agency recirculates only the revised chapter or portions of the EIR, the lead agency may request that reviewers limit their comments to the revised chapters or portions of the recirculated EIR. The lead agency need only respond to (i) comments received during the initial circulation period that relate to chapters or portions of the document that were not revised and recirculated, and (ii) comments received during the recirculation period that relate to the chapter of the earlier EIR that were revised and recirculated.

1.4.4 Recirculated DEIR Format and Process

Based on the limited number of chapters requiring modification, the City has decided to only recirculate the Draft PEIR chapters that have been revised. A Recirculated EIR requires the same noticing and consultation as the original Draft EIR (CEQA Guidelines Section 15086 and 15087), and therefore will be distributed for a 45-day public review period. The City is implementing Option 2, as described in Section 1.4.3, with respect to comments received on this Recirculated Draft PEIR. Reviewers are directed to only submit comments on the revised EIR chapters included in this Recirculated Draft PEIR. The comments in the original Final PEIR adequately address comments received on portions of the Draft PEIR that have not been recirculated.

This Recirculated Draft PEIR includes the following chapters and sections:

- **Executive Summary.** This chapter describes the purpose and process of a Recirculated EIR and the sections of the PEIR that are being recirculated. It also provides the background and chronology for the GPU process to date. The project description (GPU) has been updated to reflect the changes in the other recirculated chapters as well as the revisions to the Draft PEIR (mostly updated policies and implementation actions) that are included in the Final PEIR. The Executive Summary also reflects updates to impacts, mitigation measures, and significance conclusions.
- **Introduction.** This chapter reproduces the purposes of the environmental impact report and summary of comments received during the scoping meeting and responses to the Notice of Preparation. It has been supplemented to include a description of the city's EJ communities and how they are identified, and a detailed description of the City's EJ outreach efforts.
- **Project Description.** This chapter has been updated to integrate the changes and refinements to the GPU since the original project description. Changes include updated policies and implementation actions as well

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as corrections to existing and proposed land use statistics as included in the Final PEIR. This section also includes the Mobility Element changes as included in the Final PEIR.

- **Environmental Setting.** This section has been updated to describe the requirements for the GPU to include an Environmental Justice element or address EJ requirements in various elements, and also to provide details on the city's EJ communities as defined by CalEnviroScreen criteria. This information provides the context to evaluate EJ-related impacts in this Recirculated Draft PEIR (air quality, hazards, recreation).
- **Air Quality.** The City of Santa Ana received several comments to the Draft PEIR centered around the increase of air pollutant loads to EJ communities that are already exposed to high levels of contamination. In response to these concerns, the City has chosen to recirculate Section 5.2, *Air Quality*, of the Draft PEIR. The existing conditions have been supplemented to provide additional context for issues related to environmental justice. Additionally, this section has been updated to include EJ policies and implementation actions related to air quality and an expanded impact discussion that addresses EJ-related disparities.
- **Hazards and Hazardous Materials.** Numerous comments on the Draft PEIR were related to hazardous materials exposure in EJ communities that are already burdened with elevated contamination levels, particularly high concentrations of lead in some soils. The City has therefore chosen to recirculate Section 5.8, *Hazards and Hazardous Materials*, of the Draft PEIR. The existing conditions discussion has been updated with additional information related to environmental justice, and the section has been supplemented with EJ policies and implementation actions related to hazardous material. Furthermore, the section elaborates on impacts related to hazardous materials in EJ communities.
- **Recreation.** This section provides a more detailed geographic description of open space and recreation facilities for both existing and proposed conditions under implementation of the GPU and a comparison of these conditions with applicable standards. The section also includes GPU policies and implementation actions added subsequent to the Draft PEIR and included in the Final PEIR as well as any that have evolved as part of extended community outreach and participation. Impacts to recreation are reclassified as significant.
- **Alternatives.** This chapter has been supplemented to include an additional project alternative to reduce project-related impacts to recreation and open space. The potential environmental impacts of the new alternative, Reduced Park Demand, are compared to the proposed project, and the overall comparison of project alternatives is updated to reflect all the alternatives.
- **Appendices.** The following appendices are included in this Draft Recirculated PEIR:
 - Appendix added since the original PEIR appendices:
 - Appendix A-b: Environmental Justice Background Analysis
 - Appendices Updated and/or Referenced in this Draft Recirculated PEIR:
 - Appendix A-a NOP, NOP Comment Letters, and Scoping Meeting Sign-In Sheet and Comments

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- Appendix B-a Proposed General Plan Update Policies
- Appendix B-b Santa Ana General Plan Buildout Methodology
- Appendix C Air Quality and Greenhouse Gas Emissions Modeling
- Appendix D Biological and Natural Resource Inventory and Assessment
- Appendix J-b Service Provider Questionnaire Responses
- Appendix K Transportation Impact Study

1.5 SUMMARY OF PROPOSED PROJECT AND MODIFICATIONS

The following sections describe the proposed General Plan Update and summarize proposed revisions to policies and implementation actions subsequent to the original Draft PEIR. No land use changes or changes to the focus areas as defined in the original Draft PEIR are proposed. Sections 1.5.1 through 1.5.3 have not been modified from the original Draft PEIR. Section 1.5.4, *Proposed Policy and Implementation Action Revisions*, summarizes the revisions and additions to policies and implementation actions. The comprehensive list of the updated policies and implementation actions is provided in Appendix B-a. The appendix shows the policies and implementation actions in tracked changes to facilitate comparison to the information in the original Draft PEIR.

1.5.1 Project Location

Santa Ana is in the western central portion of Orange County, approximately 30 miles southwest of the city of Los Angeles and 10 miles northeast of Newport Beach (see Figure 3-1, *Regional Location*). Orange County is surrounded by the counties of Los Angeles, San Bernardino, Riverside, and San Diego and is one of six counties making up the Southern California region.

As shown in Figure 3-2, *Citywide Aerial*, Santa Ana is bordered by Orange and unincorporated areas of Orange County to the north, Tustin to the east, Irvine and Costa Mesa to the south, and Fountain Valley and Garden Grove to the west. In November 2019, the City annexed the 17th Street Island, a 24.78-acre area in the northeast portion of the city. The 17th Street Island is bounded by State Route 55 to the east, 17th Street to the south, and North Tustin Avenue to the west (see Figure 3-3, *17th Street Island and Sphere of Influence*). The city also includes a portion of the Santa Ana River Drainage Channel in its sphere of influence (SOI). The city and its SOI are defined and referred to herein as the plan area.

Regional access to the city is provided by the Garden Grove Freeway (SR-22) and the Orange Freeway (SR-57) on the north, the Santa Ana Freeway (I-5) on the northeast, the Costa Mesa Freeway (SR-55) on the east, and the San Diego Freeway (I-405) on the south.

1.5.2 Project Summary

The GPU is the comprehensive update of the Santa Ana General Plan. The purpose of the General Plan Update is to comprehensively update the 1982 plan to reflect current conditions, establish a shared vision of the community's aspirations, and create the policy direction to guide Santa Ana's long-term planning and growth over the next two decades. The General Plan Update will include the City's future development goals and will

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provide policy statements to achieve those goals. Implementation actions related to each goal or policy will be included as a separate Implementation Plan to ensure successful monitoring of progress as a community.

Focus Areas

The GPU focuses on five areas within Santa Ana that are better suited for future development or overall improvement (see Figure 3-11 *Focus Areas and Special Planning Areas*). These focus areas are:

- South Main Street
- Grand Avenue/17th Street
- West Santa Ana Boulevard
- 55 Freeway/Dyer Road
- South Bristol Street

Refer to Chapter 3, *Project Description*, for additional information regarding the GPU.

1.5.3 GPU Elements

The updated General Plan is organized into three sections: Services and Infrastructure (I), Natural Environment (II), and Built Environment (III). The proposed GPU addresses the eight topics required by state law as well as five optional topics. 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. The 12 proposed elements of the GPU will replace 16 existing elements. The GPU will incorporate the current 2014–2021 Housing Element. 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 GPU, with goals and policies incorporated into multiple elements. The 12 elements of the proposed GPU are:

Mandatory Topics

- Land Use Element
- Mobility Element
- Housing Element
- Open Space Element
- Conservation Element
- Safety Element
- Noise Element

Optional Topics

- Public Services Element
- Urban Design Element
- Community Element
- Economic Prosperity Element
- Historic Preservation Element

The GPU will guide growth and development (e.g., infill development, redevelopment, and revitalization/restoration) in the plan area by designating land uses in the proposed land use map (see Figure 3-7, *Proposed General Plan Land Uses*) and through implementation of updated goals and policies of the GPU. Table 1-2 outlines the proposed land use designations under the GPU. The proposed land use map and GPU goals and policies are detailed in Section 3.3.3, *General Plan Update*.

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Table 1-2 Proposed Land Use Designations and Statistics

Land Use Designation	Acres	% of Total
Grand Avenue/17th Street	171.5	—
District Center	23.7	13.8
General Commercial	19.9	11.6
Industrial/Flex	7.1	4.1
Open Space	1.1	0.6
Urban Neighborhood	119.7	69.8
55 Freeway/Dyer Road	354.5	—
District Center	158.0	44.6
General Commercial	68.0	19.2
Industrial/Flex	127.4	35.9
Open Space	1.1	0.3
South Bristol Street	199.9	—
District Center	108.3	54.2
Open Space	6.0	3.0
Urban Neighborhood	85.7	42.9
South Main Street	312.2	—
Industrial/Flex	29.0	9.3
Institutional	19.2	66.46.1
Low Density Residential	162.3	845.852.0
Urban Neighborhood	101.7	62.732.6
West Santa Ana Boulevard	481.6	—
Corridor Residential	10.0	2.1
General Commercial	21.5	4.5
Industrial/Flex	87.9	18.3
Institutional	45.5	9.4
Low Density Residential	108.1	22.4
Low-Medium Density Residential	6.8	1.4
Medium Density Residential	27.0	5.6
Open Space	133.6	27.7
Professional and Administrative Office	6.2	1.3
Urban Neighborhood	35.0	7.3
Balance of City	11,598.8	—
District Center	124.2	1.1
General Commercial	424.2	3.7
Industrial	2,159.6	18.6
Institutional	886.7	7.6
Low Density Residential	6,173.3	53.2
Low-Medium Density Residential	429.0	3.7
Medium Density Residential	335.3	2.9
One Broadway Plaza District Center	4.1	0.0
Open Space	793.8	6.8
Professional and Administrative Office	260.4	2.2
Urban Neighborhood	4.1	0.0
Not Specified	4.1	0.0
Total	13,118.5	100%

Source: Figures aggregated and projected by PlaceWorks, 2020.

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Buildout Scenarios

Per CEQA requirements, the Draft PEIR has to analyze potential environmental impacts and identify feasible mitigation measures for significant impacts for the entire plan area. However, buildout in accordance with the proposed land uses for the entire plan area may not occur for 70 to 80 years. This extended time period does not allow for quantifiable, meaningful analysis. Future conditions, including potential technological advances that would modify impacts, are highly speculative. Moreover, quantified analysis for many impacts rely on models and projections from responsible and regulatory agencies that do not extend beyond 20 years (e.g., urban water management plan for water supply). Therefore, the Draft PEIR analyzes potential impacts assuming full buildout in the year 2045. The full buildout scenario is analyzed in comparison to existing conditions. Table 1-3 details buildout statistics. Similarly, the PEIR provides conclusions regarding impact significance for this scenario for both the proposed GPU and project alternatives.

Table 1-3 Buildout Statistical Summary

PLANNING AREA	BUILDOUT		
	Housing Units	Bldg. Sq. Ft. ¹	Jobs
FOCUS AREAS	23,955	15,684,285	35,044
55 Freeway/Dyer Road	9,952	6,142,283	13,302
Grand Avenue/17th Street	2,283	703,894	1,622
South Bristol Street	5,492	5,082,641	11,192
South Main Street	2,308	946,662	2,151
West Santa Ana Boulevard	3,920	2,808,805	6,777
SPECIFIC PLAN / SPECIAL ZONING	20,524	16,958,445	39,702
Adaptive Reuse Overlay Zone ²	1,260	976,935	2,567
Bristol Street Corridor Specific Plan	135	143,139	282
Harbor Mixed Use Transit Corridor Specific Plan	4,622	1,967,982	1,578
MainPlace Specific Plan	1,900	2,426,923	5,380
Metro East Mixed-Use Overlay Zone	5,551	4,685,947	12,258
Midtown Specific Plan	607	1,818,253	4,615
Transit Zoning Code	6,449	4,939,266	13,022
ALL OTHER AREAS OF THE CITY ³	70,574	40,325,086	95,670
CITYWIDE TOTAL	115,053	72,967,816	170,416

Source: City of Santa Ana 2020.

¹ Only includes nonresidential building square footage.

² The figures shown on the row for the Adaptive Reuse Overlay represent 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.

³ The City has included an assumption for growth on a small portion (5 percent) of residential parcels through the construction of second units, which are distributed throughout the City and 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.

1.5.4 Proposed Policy and Implementation Action Revisions

The General Plan Update includes revisions to policies and implementation actions that were made after the original Draft PEIR was publicly released on August 3, 2020. Revisions related to air pollution include public investment in parks to address air quality and improving air quality in environmental justice areas. Revisions specifically emphasize the need for air quality measures in areas with the highest pollution burden. New

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implementation actions were added to promote studying health effects of environmental pollution, and community health effects from construction activities. Revisions related to hazardous materials specifically address hazardous soil contamination, environmental soil screening measures for lead contamination, and securing funding for soil testing and remediation. Revisions to policies and implementation actions that specifically address recreation and open space relate to park master-planning, distribution of parks, serving disadvantaged communities, timing for park development, facility maintenance, and community input and partnerships.

1.6 SUMMARY OF PROJECT ALTERNATIVES

In comparison to the original Draft PEIR, this section has been updated to summarize an additional project alternative, the *Reduced Park Demand* alternative.

The CEQA Guidelines (Section 15126.6[a]) state that an EIR must address “a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.” The alternatives in the original Draft PEIR were based, in part, on their potential ability to reduce or eliminate the impacts determined to be significant and unavoidable for implementation of the Santa Ana General Plan Update. (See Table 1-5, *Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation*, for additional detail.)

- Air Quality
- Cultural Resources
- Greenhouse Gas Emissions
- Noise
- Population and Housing

For this Recirculated Draft PEIR, Recreation was recategorized as a significant and unavoidable impact, and therefore added to this list.

As described in Chapter 7, *Alternatives*, three project alternatives were originally identified and analyzed for relative impacts compared to the proposed General Plan Update:

- No Project/Current General Plan Alternative
- Reduced Intensity Alternative
- 2020 RTP/SCS Consistency Alternative

A fourth alternative, Reduced Park Demand, has been added for this Recirculated Draft PEIR.

A statistical analysis of the alternatives is provided in Table 1-4, *Alternatives Statistical Summary*.

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Table 1-4 Alternatives Statistical Summary

	Dwelling Units	Population	Employment	Nonresidential Building SF
General Plan Update	115,053	431,629	170,416	72,967,816
No Project/Current General Plan	101,858	383,202	182,003	75,633,673
Reduced Intensity	109,607	411,804	161,232	68,758,470
2020 RTP/SCS Consistent	83,538	352,941	172,545	71,241,479
Reduced Park Demand	103,828	390,393	164,482	70,194,633

Alternative buildout statistics generated by PlaceWorks.

1.6.1 No Project/Current General Plan Alternative

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the impacts of the “No Project” Alternative. When the project is the revision of an existing land use or regulatory plan, policy, or ongoing operation, the No Project alternative is the continuation of the plan, policy, or operation into the future. Therefore, this alternative assumes that the existing General Plan (with various adoption dates for different elements between 1982 and 2014) would remain in effect. This existing General Plan also reflects amendments, including new Specific Plans and special zoning areas that have been adopted up through the Notice of Preparation for this GPU.

1.6.2 Reduced Intensity Alternative

Under the GPU, the only areas that include revisions to land use designations to accommodate new growth are within the five focus areas. Most remaining growth, as detailed in Table 3-8 of the Draft PEIR, would occur within previously approved Specific Plans and special zoning areas. A nominal amount of growth is assumed in other areas of the city and would not require land use amendments. The Reduced Intensity alternative would substantially reduce development capacity in two focus areas—55 Freeway/Dyer Road and South Bristol Street—that accommodate approximately 65 percent of the housing unit growth and 72 percent of the nonresidential use (by building square footage) growth projected for the combined focus areas under the GPU. Section 3.3.2.5, *General Plan Buildout Scenario*, provides a discussion of factors considered in determining assumed buildout densities for the GPU. For the focus areas, the forecast buildout is based on development at approximately 80 percent of the maximum allowed development for each respective land use designation. For this alternative, development of the 55 Freeway/Dyer Road and South Bristol Street focus areas would be reduced to approximately 50 percent of the maximum allowed per the land use designations. This alternative would reduce housing units by a total of 5,383 and would reduce total building area by approximately 4.2 million square feet, distributed between these two focus areas. Overall, this alternative would reduce the housing growth accommodated by the GPU land use changes by approximately 18 percent and reduce nonresidential building square footage by approximately 27 percent.

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1.6.3 2020 RTP Consistent Alternative

This alternative was developed to evaluate an update to the General Plan that would be consistent with the population and housing projections used to develop the Southern California Association of Regional Governments' (SCAG) RTP/SCS, now referred to as Connect SoCal (adopted May 7, 2020). As evaluated in Section 5.13, *Population and Housing*, the proposed GPU would result in a significant population and housing impact because development under the GPU would substantially exceed the projections used in Connect SoCal. SCAG uses locally prepared population and housing projections to develop the regional plan. For the City of Santa Ana, those projections were provided by the Orange County Council of Governments (OCCOG), as prepared by the Center for Demographic Research (CDR). The population/housing figures reflected for Santa Ana in the regional plan for 2045 are: population, 360,100; total housing units, 80,100; and total jobs, 176,400. Projections for the RTP/SCS (Connect SoCal) use land use designations as approved in adopted general plans. The employment projections are similar for the GPU and RTP/SCS scenarios, but the RTP/SCS projections for population and housing units are substantially lower than GPU projections (18 percent and 27 percent lower, respectively). The RTP/SCS alternative, therefore, represents the least development-intensive project alternative evaluated for this Draft PEIR.

1.6.4 Reduced Park Demand Alternative

This alternative was developed by determining which areas of the city are more deficient in park and open space and modifying the proposed project to reduce proposed residential development in these areas to reduce park demand from the proposed GPU. Overall, this alternative reduces residential growth by 11,225 units, eliminating or reducing residential land uses and intensity in the five focus areas. New residential growth under this alternative would largely be within currently planned areas or areas that are generally near a substantial number of existing park facilities. Some residential growth would be introduced into two focus areas at substantially lower intensities to reduce the potential impacts on park facilities.

- **South Main Street.** Land use designations under the current, adopted General Plan would not be modified. This focus area would remain as a commercial corridor (GC) instead of being redesignated as Urban Neighborhood (UN) and District Center (DC). In comparison to the GPU, this would reduce intensity so that there are no additional units constructed beyond existing conditions. There are several EJ communities within this focus area that are served by parks, but the existing parks are very small.
- **South Bristol Focus Area.** In comparison to the proposed GPU, the District Center (DC) areas would be changed to Urban Neighborhood (UN) to reduce intensity by 2,273 units on sites that are more than a half mile from existing parks (generally west of Bristol Street and south of Alton Parkway).
- **Grand Avenue/17th Street.** Land use designation under the current, adopted General Plan would remain. The focus area would reflect a lower density residential (LR-7) and commercial corridor (GC) to reduce intensity and eliminate residential growth beyond existing development, much of which is more than a half mile from existing parks.

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- **West Santa Ana Boulevard.** The lower density residential (LR-7) under the existing General Plan would remain instead of the proposed GPU update to the Urban Neighborhood (UN) designation. This would reduce intensity so that no additional units beyond existing conditions would be constructed. This area is characterized by a significant presence of EJ communities with areas that are farther than a half mile from existing parks.
- **55 Freeway/Dyer Road.** The proposed GPU District Center (DC) area would be changed to Urban Neighborhood (UN) to reduce intensity by 5,381 units because the entire focus area is more than a half mile from existing parks in Santa Ana; reduced intensity would also result in fewer potential impacts on adjacent parkland in the City of Tustin.

1.7 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the GPU, the major issues to be resolved include decisions by the lead agency as to:

1. Whether the Draft PEIR and Recirculated Draft PEIR adequately describe the environmental impacts of the project.
2. Whether the benefits of the project override the environmental impacts that cannot be feasibly avoided or mitigated to a level of insignificance.
3. Whether the proposed land use changes are compatible with the character of the existing area.
4. Whether the identified goals, policies, or mitigation measures should be adopted or modified.
5. Whether other mitigation measures should be applied to the project besides those identified in the Draft PEIR and Recirculated DPEIR.
6. Whether any alternatives to the project would substantially lessen any of the significant impacts of the GPU and achieve most of the basic project objectives.

1.8 AREAS OF CONTROVERSY

In accordance with Section 15123(b)(2) of the CEQA Guidelines, the EIR summary must identify areas of controversy known to the lead agency, including issues raised by agencies and the public. As presented in the next chapter, Tables 2-1 and 2-2 describe the project concerns raised in response to the Notice of Preparation (NOP) and at the public scoping meeting, respectively. Repeated comments were voiced and/or received about traffic impacts to Santa Ana's circulation network, especially as a result of the proposed increase in high density residential units; land use issues, increased densities, and overcrowding, specifically in association with the 55 Freeway/Dyer Road focus area; air quality impacts for city residents, with an emphasis on environmental justice; and adequacy of public services and utilities, mainly water and wastewater facilities, roadways, and parks

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and open space. Furthermore, agency letters in response to the NOP included requests to address topical concerns such as air quality, biological resources, transportation, and airport hazards.

Additional project controversy was expressed in comments received on the Draft PEIR and at the Planning Commission public hearing on November 9, 2020. Comments received in writing and during the public workshop and Planning Commission hearing focused on some key issues. Opposition included comments on specific components of the GPU, primarily the scale and density of future development that would be accommodated and the lack of adequate park/recreation space. Numerous comments asserted that the process was rushed, and inadequate time was provided for the public to participate in developing the GPU and in reviewing and commenting on the EIR. Numerous comments were received regarding the potential for disproportionate impacts to communities already subject to high health risks related to industrial uses, lead hazards, and lack of parks and open space.

1.9 SUMMARY OF ENVIRONMENTAL IMPACTS

Table 1-5 summarizes the conclusions of the environmental analysis in this Recirculated Draft PEIR. Impacts are identified as significant or less than significant, and mitigation measures are identified for all significant impacts. The level of significance after application of the mitigation measures is also presented. In comparison to the original Draft PEIR, the only change to significance determination was to a potential GPU-related impact to recreation. This impact was reclassified from the less than significant conclusion in the original Draft PEIR to a significant, unavoidable impact in this Recirculated Draft PEIR. Section 5.15, *Recreation*, supplements the analysis from the original Draft PEIR and details the updated GPU policies and implementation actions proposed to address this significant project impact. No feasible mitigation measures beyond the proposed policies were found to further mitigate this significant impact. Refinements to mitigation measures subsequent to the original Draft PEIR have been integrated into the table. These changes are shown in ~~strike-out~~ and underlined text.

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.1 AESTHETICS			
Impact 5.1-1: The proposed project would alter the visual appearance of the General Plan Update area.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.1-2: The proposed General Plan Update will not alter scenic resources within a state scenic highway.	No impact	No mitigation measures are required.	No impact
Impact 5.1-3: The proposed project would generate additional light and glare.	Less than significant	No mitigation measures are required.	Less than significant
5.2 AIR QUALITY			
Impact 5.2-1: The additional population growth forecast for the General Plan update and the associated emissions would not be consistent with the assumptions of the air quality management plan.	Potentially significant	<p>AQ-1 Prior to discretionary approval by the City of Santa Ana for development projects subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Santa Ana for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD's adopted thresholds of significance, the City of Santa Ana shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City. Mitigation measures to reduce construction-related emissions could include, but are not limited to:</p> <ul style="list-style-type: none"> ▪ Require fugitive-dust control measures that exceed South Coast AQMD's Rule 403, such as: <ul style="list-style-type: none"> • Use of nontoxic soil stabilizers to reduce wind erosion. 	Significant and unavoidable

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<ul style="list-style-type: none"> • Apply water every four hours to active soil-disturbing activities. • Tarp and/or maintain a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials. <ul style="list-style-type: none"> ▪ Use construction equipment rated by the United States Environmental Protection Agency as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emission limits, applicable for engines between 50 and 750 horsepower. ▪ Ensure that construction equipment is properly serviced and maintained to the manufacturer's standards. ▪ Limit nonessential idling of construction equipment to no more than five consecutive minutes. ▪ Limit on-site vehicle travel speeds on unpaved roads to 15 miles per hour. ▪ Install wheel washers for all exiting trucks or wash off all trucks and equipment leaving the project area. Use Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast AQMD's website. <p>AQ-2 Prior to discretionary approval by the City of Santa Ana for development projects subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation phase-related air quality impacts to the City of Santa Ana for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD's adopted thresholds of significance, the City of Santa Ana shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible</p>	

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>mitigation measures to reduce long-term emissions could include, but are not limited to the following:</p> <ul style="list-style-type: none"> For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions. Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use. Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 § 2485). Provide changing/shower facilities as specified in Section A5.106.4.3 of the CALGreen Code (Nonresidential Voluntary Measures). Provide bicycle parking facilities per Section A4.106.9 (Residential Voluntary Measures) of the CALGreen Code and <u>Sec. 41-1307.1 of the Santa Ana Municipal Code</u>. Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of the CALGreen Code (Nonresidential Voluntary Measures). Provide facilities to support electric charging stations per Section A5.106.5.3 (Nonresidential Voluntary Measures) and Section A5.106.8.2 (Residential Voluntary Measures) of the CALGreen Code. Applicant-provided appliances (e.g., dishwashers, refrigerators, clothes washers, and dryers) shall be Energy Star–certified appliances or appliances of equivalent energy efficiency. Installation of Energy Star–certified or equivalent appliances shall be verified by Building & Safety during plan check. 	

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<ul style="list-style-type: none"> Applicants for future development projects along existing and planned transit routes shall coordinate with the City of Santa Ana and Orange County Transit Authority to ensure that bus pad and shelter improvements are incorporated, as appropriate. 	
Impact 5.2-2: Construction activities associated with future development that would be accommodated under the General Plan update could generate short-term emissions in exceedance of the South Coast Air Quality Management District's threshold criteria.	Potentially significant	Mitigation Measure AQ-1	Significant and unavoidable
Impact 5.2-3: Implementation of the General Plan update would generate long-term emissions in exceedance of South Coast AQMD's threshold criteria.	Potentially significant	Mitigation Measure AQ-2	Significant and unavoidable
Impact 5.2-4: Operation of industrial and warehousing land uses accommodated under the General Plan Update could expose sensitive receptors to substantial toxic air contaminant concentrations.	Potentially significant	<p>AQ-3 Prior to discretionary approval by the City of Santa Ana, project applicants for new industrial or warehousing development projects that 1) have the potential to generate 100 or more diesel truck trips per day or have 40 or more trucks with operating diesel-powered transport refrigeration units, and 2) are within 1,000 feet of a sensitive land use (e.g., residential, schools, hospitals, or nursing homes), as measured from the property line of the project to the property line of the nearest sensitive use, shall submit a health risk assessment (HRA) to the City of Santa Ana for review and approval. The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment and the South Coast Air Quality Management District. If the HRA shows that the incremental cancer risk and/or noncancer hazard index exceed the respective thresholds, as established by the South Coast AQMD at the time a project is considered, the project applicant will be required to identify and demonstrate that best available control technologies for toxics (T-BACTs), including appropriate enforcement mechanisms, are capable of reducing potential cancer and noncancer risks to an acceptable level. T-BACTs may</p>	Significant and unavoidable

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		include, but are not limited to, restricting idling on-site, electrifying warehousing docks to reduce diesel particulate matter, or requiring use of newer equipment and/or vehicles. T-BACTs identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.	
Impact 5.2-5: Development and operation of land uses accommodated by the General Plan Update could generate emissions that exceed the localized significance thresholds and expose sensitive receptors to substantial concentrations of criteria air pollutants.	Potentially significant	Mitigation Measures AQ-1 and AQ-2.	Significant and unavoidable
Impact 5.2-6: Industrial land uses accommodated under the General Plan update could create other emissions, such as those leading to objectionable odors, that would adversely affect a substantial number of people.	Potentially significant	<p>AQ-4</p> <p>Prior to discretionary approval by the City of Santa Ana, if it is determined that a development project has the potential to emit nuisance odors beyond the property line, an odor management plan shall be prepared by the project applicant and submitted to the City of Santa Ana for review and approval. Facilities that have the potential to generate nuisance odors include, but are not limited to:</p> <ul style="list-style-type: none"> ▪ Wastewater treatment plants ▪ Composting, green waste, or recycling facilities ▪ Fiberglass manufacturing facilities ▪ Painting/coating operations ▪ Large-capacity coffee roasters ▪ Food-processing facilities <p>The odor management plan shall demonstrate compliance with the South Coast Air Quality Management District's Rule 402 for nuisance odors. The Odor Management Plan shall identify the best available control technologies for toxics (T-BACTs) that will be utilized to reduce potential odors to acceptable levels, including appropriate enforcement mechanisms. T-BACTs may include but are</p>	Less than significant

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		not limited to scrubbers (i.e., air pollution control devices) at the industrial facility. T-BACTs identified in the odor management plan shall be identified as mitigation measures in the environmental document prepared for the development project and/or incorporated into the project's site plan.	
5.3 BIOLOGICAL RESOURCES			
Impact 5.3-1: Implementation of the General Plan Update could result in adverse impacts to candidate, sensitive, or special-status species	Potentially significant	BIO-1 For development or redevelopment projects that would disturb vegetated land and major streams and are 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, habitats, and jurisdictional waters. The report shall recommend mitigation measures, as appropriate, to avoid or limit potential biological resource impacts to less than significant.	Less than significant
Impact 5.3-2: Development pursuant to the General Plan Update would not impact riparian habitat or other sensitive natural communities.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.3-3: Development pursuant to the General Plan Update would not impact wetlands and jurisdictional waterways.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.3-4: The General Plan Update could affect wildlife movement and impact migratory birds.	Potentially significant	Mitigation Measure BIO-1.	Less than significant
Impact 5.3-5: The proposed project would not conflict with an adopted NCCP/HCP or local policies or ordinances protecting biological resources.	Less than significant	No mitigation measures are required.	Less than significant

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.4 CULTURAL RESOURCES			
Impact 5.4-1: Buildout consistent with the General Plan Update could impact an identified historic resource.	Potentially significant	CUL-1 Identification of Historical Resources and Potential Project Impacts. For structures 45 years or older, a Historical Resources Assessment (HRA) shall be prepared by an architectural historian or historian meeting the Secretary of the Interior's Professional Qualification Standards. The HRA shall include: definition of a study area or area of potential effect, which will encompass the affected property and may include surrounding properties or historic district(s); an intensive level survey of the study area to identify and evaluate under federal, State, and local criteria significance historical resources that might be directly or indirectly affected by the proposed project; and an assessment of project impacts. The HRA shall satisfy federal and State guidelines for the identification, evaluation, and recordation of historical resources. An HRA is not required if an existing historic resources survey and evaluation of the property is available; however, if the existing survey and evaluation is more than five years old, it shall be updated.	Significant and unavoidable
		CUL-2 Use of the Secretary of the Interior's Standards. The Secretary of the Interior's Standards for the Treatment of Historic Properties shall be used to the maximum extent practicable to ensure that projects involving the relocation, conversion, rehabilitation, or alteration of a historical resource and its setting or related new construction will not impair the significance of the historical resource. Use of the Standards shall be overseen by an architectural historian or historic architect meeting the Secretary of the Interior's Professional Qualification Standards. Evidence of compliance with the Standards shall be provided to the City in the form of a report identifying and photographing character-defining features and spaces and specifying how the proposed treatment of character-defining features and spaces and related construction activities will conform to the Standards. The Qualified Professional shall monitor the construction and provide a report to the	

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>City at the conclusion of the project. Use of the Secretary's Standards shall reduce the project impacts on historical resources to less than significant.</p> <p>CUL-3 Documentation, Education, and Memorialization. If the City determines that significant impacts to historical resources cannot be avoided, the City shall require, at a minimum, that the affected historical resources be thoroughly documented before issuance of any permits and may also require additional public education efforts and/or memorialization of the historical resource. Though demolition or alteration of a historical resource such that its significance is materially impaired cannot be mitigated to a less than significant level, recordation of the resource will reduce significant adverse impacts to historical resources to the maximum extent feasible. Such recordation should be prepared under the supervision of an architectural historian, historian, or historic architect meeting the Secretary of the Interior's Professional Qualification Standards and should take the form of Historic American Buildings Survey (HABS) documentation. At a minimum, this recordation should include an architectural and historical narrative; archival photographic documentation; and supplementary information, such as building plans and elevations and/or historic photographs. The documentation package should be reproduced on archival paper and should be made available to researchers and the public through accession by appropriate institutions such as the Santa Ana Library History Room, the South Central Coastal Information Center at California State University, Fullerton, and/or the HABS collection housed in the Library of Congress. Depending on the significance of the adversely affected historical resource, the City, at its discretion, may also require public education about the historical resource in the form of an exhibit, web page, brochure, or other format and/or memorialization of the historical resource on or near the proposed project site. If memorialized, such memorialization shall be a permanent installation, such as a mural, display, or other vehicle that recalls the location, appearance, and historical significance of the affected historical resource, and shall be</p>	

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		designed in conjunction with a qualified architectural historian, historian, or historic architect.	
Impact 5.4-2: Development in accordance with the General Plan Update could impact archaeological resources	Potentially significant	<p>CUL-4 For projects with ground disturbance—e.g., grading, excavation, trenching, boring, or demolition that extend below the current grade—prior to issuance of any permits required to conduct ground-disturbing activities, the City shall require an Archaeological Resources Assessment be conducted under the supervision of an archaeologist that meets the Secretary of the Interior's Professionally Qualified Standards in either prehistoric or historic archaeology.</p> <p>Assessments shall include a California Historical Resources Information System records search at the South Central Coastal Information Center and of the Sacred Land Files maintained by the Native American Heritage Commission. The records searches will determine if the proposed project area has been previously surveyed for archaeological resources, identify and characterize the results of previous cultural resource surveys, and disclose any cultural resources that have been recorded and/or evaluated. If unpaved surfaces are present within the project area, and the entire project area has not been previously surveyed within the past 10 years, a Phase I pedestrian survey shall be undertaken in proposed project areas to locate any surface cultural materials that may be present.</p> <p>CUL-5 If potentially significant archaeological resources are identified, and impacts cannot be avoided, a Phase II Testing and Evaluation investigation shall be performed by an archaeologist who meets the Secretary of the Interior's Standards to determine significance prior to any ground-disturbing activities. If resources are determined significant or unique through Phase II testing, and site avoidance is not possible, appropriate site-specific mitigation measures shall be undertaken. These might include a Phase III data recovery program implemented by a qualified archaeologist and performed in accordance with the Office of Historical Preservation's "Archaeological Resource Management Reports</p>	Less than significant

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>(ARMR): Recommended Contents and Format" (OHP 1990) and "Guidelines for Archaeological Research Designs" (OHP 1991).</p> <p>CUL-6</p> <p>If the archaeological assessment did not identify archaeological resources but found the area to be highly sensitive for archaeological resources, and a Native American monitor approved by a California Native American Tribe identified by the Native American Heritage Commission as culturally affiliated with the project area shall monitor all ground-disturbing construction and pre-construction activities in areas of high sensitivity. The archaeologist shall inform all construction personnel prior to construction activities of the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. The Native American monitor shall be invited to participate in this training. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the resources are evaluated for significance by an archaeologist who meets the Secretary's Standards. This will include tribal consultation and coordination with the Native American monitor in the case of a prehistoric archaeological resource or tribal resource. If the discovery proves to be significant, the long-term disposition of any collected materials should be determined in consultation with the affiliated tribe(s), where relevant; this could include curation with a recognized scientific or educational repository, transfer to the tribe, or respectful reinterment in an area designated by the tribe. a qualified archaeologist shall monitor all ground-disturbing construction and pre-construction activities in areas with previously undisturbed soil. The archaeologist shall inform all construction personnel prior to construction activities of the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of</p>	

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the resources are evaluated for significance by an archaeologist who meets the Secretary's Standards, and tribal consultation shall be conducted in the case of a tribal resource. If the discovery proves to be significant, the long-term disposition of any collected materials should be determined in consultation with the affiliated tribe(s), where relevant; this could include curation with a recognized scientific or educational repository, transfer to the tribe, or respectful reinterment in an area designated by the tribe.</p> <p>CUL-7 If an Archaeological Resources Assessment does not identify potentially significant archaeological resources but the site has moderate sensitivity for archaeological resources (Mitigation Measure CUL-4), an archaeologist who meets the Secretary's Standards shall be retained on call. The archaeologist shall inform all construction personnel prior to construction activities about the proper procedures in the event of an archaeological discovery. The pre-construction training shall be held in conjunction with the project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the on-call archaeologist is contacted. The resource shall be evaluated for significance and tribal consultation shall be conducted, in the case of a tribal resource. If the discovery proves to be significant, the long-term disposition of any collected materials should be determined in consultation with the affiliated tribe(s), where relevant.</p>	

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.4-3: Development in accordance with the General Plan Update could potentially disturb human remains.	Less than significant	No mitigation measures are required.	Less than significant
5.5 ENERGY			
Impact 5.5-1: Implementation of the General Plan Update would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.5-2: The proposed General Plan Update would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than significant	No mitigation measures are required.	Less than significant
5.6 GEOLOGY AND SOILS			
Impact 5.6-1: Plan Area residents or occupants, visitors, etc. would be subject to potential seismic-related hazards.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.6-2: Unstable geologic unit or soils conditions, including soil erosion, could result from development of the project.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.6-3: Future development in the Plan Area would require connection to the City's sewer system.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.6-4: Future development in the Plan Area that would be accommodated by the General Plan Update could impact known and unknown paleontological resources.	Potentially significant	GEO-1 High Sensitivity. Projects involving ground disturbances in previously undisturbed areas mapped as having "high" paleontological sensitivity shall be monitored by a qualified paleontological monitor on a full-time basis, under the supervision of the Qualified Paleontologist. Monitoring shall include inspection of exposed sedimentary units during active excavations within sensitive geologic sediments. The monitor shall have authority to temporarily divert activity away from exposed fossils to evaluate the significance of the find and, if the fossils are	Less than significant

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>determined to be significant, professionally and efficiently recover the fossil specimens and collect associated data. The paleontological monitor shall use field data forms to record pertinent location and geologic data, measure stratigraphic sections (if applicable), and collect appropriate sediment samples from any fossil localities.</p> <p>GEO-2 Low-to-High Sensitivity. Prior to issuance of a grading permit for projects involving ground disturbance in previously undisturbed areas mapped with "low-to-high" paleontological sensitivity (see Figure 5.6-3), the project applicant shall consult with a geologist or paleontologist to confirm whether the grading would occur at depths that could encounter highly sensitive sediments for paleontological resources. If confirmed that underlying sediments may have high sensitivity, construction activity shall be monitored by a qualified paleontologist. The paleontologist shall have the authority to halt construction during construction activity as outlined in Mitigation Measure GEO-3.</p> <p>GEO-3 All Projects. In the event of any fossil discovery, regardless of depth or geologic formation, construction work shall halt within a 50-foot radius of the find until its significance can be determined by a Qualified Paleontologist. Significant fossils shall be recovered, prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility in accordance with the standards of the Society of Vertebrate Paleontology (2010). The most likely repository is the Natural History Museum of Los Angeles County (NHMLA). The repository shall be identified, and a curatorial arrangement shall be signed, prior to collection of the fossils.</p>	

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.7 GREENHOUSE GAS EMISSIONS			
Impact 5.7-1: Implementation of the proposed General Plan Update would result in a decrease in GHG emissions in horizon year 2045 from existing baseline but may not meet the long-term GHG reduction goal under Executive Order S-03-05.	Potentially significant	<p>GHG-1 The City of Santa Ana shall update the Climate Action Plan (CAP) every five years to ensure the City is monitoring the plan's progress toward achieving the City's greenhouse gas (GHG) reduction target and to require amendment if the plan is not achieving the specified level. The update shall consider a trajectory consistent with the GHG emissions reduction goal established under Executive Order S-03-05 for year 2050 and the latest applicable statewide legislative GHG emission reduction that may be in effect at the time of the CAP update (e.g., Senate Bill 32 for year 2030). The CAP update shall include the following:</p> <ul style="list-style-type: none"> ▪ GHG inventories of existing and forecast year GHG levels. ▪ Tools and strategies for reducing GHG emissions to ensure a trajectory with the long-term GHG reduction goal of Executive Order S-03-05. ▪ Plan implementation guidance that includes, at minimum, the following components consistent with the proposed CAP: <ul style="list-style-type: none"> ▪ Administration and Staffing ▪ Finance and Budgeting ▪ Timelines for Measure Implementation ▪ Community Outreach and Education ▪ Monitoring, Reporting, and Adaptive Management ▪ <u>Tracking Tools</u> <p><u>Furthermore, the following measures will be considered when the City updates the Climate Action Plan:</u></p> <ul style="list-style-type: none"> ▪ Measures to protect the most vulnerable populations ▪ Measure to increase carbon sinks ▪ Standards for electric vehicle parking ▪ Standards for construction projects 	Significant and unavoidable

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Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.7-2: The General Plan Update would not conflict with the plans adopted for the purpose of reducing GHG emissions.	Less than significant	No mitigation measures are required.	Less than significant
5.8 HAZARDS AND HAZARDOUS MATERIALS			
Impact 5.8.1: Project construction and operations would involve the transport, use, and/or disposal of hazardous materials.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.8-2: The plan area includes 555 sites included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 that could create a significant hazard to the public or the environment.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.8-3: Santa Ana is in the vicinity of an airport or within the jurisdiction of an airport land use plan.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.8-4: Buildout of the General Plan Update could affect the implementation of an emergency responder or evacuation plan.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.8-5: Santa Ana is not in a designated fire hazard zone, and implementation of the General Plan Update will not expose structures and/or residences to wildland fire danger.	Less than significant	No mitigation measures are required.	Less than significant
5.9 HYDROLOGY AND WATER QUALITY			
Impact 5.9-1: Projects pursuant to the General Plan Update would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	Less than significant	No mitigation measures are required.	Less than significant

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.9-2: Development pursuant to the General Plan Update would increase the demand on groundwater use but would not impede sustainable groundwater management of the basin.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.9-3: Development pursuant to the General Plan Update will increase the amount of pervious surfaces in the plan area, but could substantially increase the rate or amount of surface runoff in some focus areas in a manner which would result in flooding off-site or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.9-4: In flood hazard, tsunami, or seiche zones, development pursuant to the General Plan Update would not risk release of pollutants due to project inundation or impede or redirect flood flows.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.9-5: Development pursuant to the General Plan Update would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	Less than significant	No mitigation measures are required.	Less than significant
5.10 LAND USE AND PLANNING			
Impact 5.10-1: Implementation of the General Plan Update would not divide an established community.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.10-2: The General Plan Update would be consistent with the Airport Environs Land Use Plan for the John Wayne Airport.	Less than significant	No mitigation measures are required.	Less than significant

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.10-3: Implementation of the General Plan Update would be consistent with the goals of the Southern California Association of Governments' RTP/SCS.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.10-4: Implementation of the General Plan Update would be consistent with the OCTA Congestion Management Plan.	Less than significant	No mitigation measures are required.	Less than significant
5.11 MINERAL RESOURCES			
Impact 5.11-1: Project implementation would not result in the loss of availability of a known mineral resource.	Less than significant	No mitigation measures are required.	Less than significant
5.12 NOISE			
Impact 5.12-1: Construction activities associated with buildout of the plan area would result in temporary noise increases at sensitive receptors.	Potentially significant	<p>N-1 Construction contractors shall implement the following measures for construction activities conducted in the City of Santa Ana. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans submitted to the City: The City of Santa Ana Planning and Building Agency shall verify that grading, demolition, and/or construction plans submitted to the City include these notations prior to issuance of demolition, grading and/or building permits.</p> <ul style="list-style-type: none"> Construction activity is limited to the hours: Between 7 AM to 8 PM Monday through Saturday, as prescribed in Municipal Code Section 18-314(e). Construction is prohibited on Sundays. During the entire active construction period, equipment and trucks used for project construction shall use the best-available noise control techniques (e.g., improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds), wherever feasible. Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered wherever possible. Where the use of pneumatic tools 	Significant and unavoidable

1. Executive Summary

Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools.</p> <ul style="list-style-type: none"> ▪ Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise-sensitive uses. ▪ Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors. ▪ Construction traffic shall be limited—to the extent feasible—to approved haul routes established by the City Planning and Building Agency. ▪ At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours, as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the City. ▪ Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes. ▪ During the entire active construction period and to the extent feasible, the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level, or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws. ▪ Erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line-of-sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall 	

1. Executive Summary

Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		be constructed with a solid material that has a density of at least 4 pounds per square foot with no gaps from the ground to the top of the barrier.	
Impact 5.12-2: Buildout of the plan area would cause a substantial traffic noise increase on local roadways and could locate sensitive receptors in areas that exceed established noise standards.	Potentially significant	No feasible mitigation measures were identified.	Significant and unavoidable
Impact 5.12-3: Buildout of the individual land uses and projects for implementation of the GPU may expose sensitive uses to excessive levels of groundborne vibration.	Potentially significant	<p>N-2 Prior to issuance of a building permit for a project requiring pile driving during construction within 135 feet of fragile structures, such as historical resources, 100 feet of non-engineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity [PPV] for fragile or historical resources, 0.2 in/sec PPV for non-engineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses such as drilling piles as opposed to pile driving and static rollers as opposed to vibratory rollers shall be used. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded.</p> <p>N-3 New residential projects (or other noise sensitive uses) located within 200 feet of existing railroad lines shall be required to conduct a groundborne vibration and noise evaluation consistent with Federal Transit Administration (FTA) approved methodologies.</p> <p>N-4 During the project-level California Environmental Quality Act (CEQA) process for industrial developments under the General Plan Update or other projects that</p>	Less than significant

1. Executive Summary

Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		could generate substantial vibration levels near sensitive uses, a noise and vibration analysis shall be conducted to assess and mitigate potential noise and vibration impacts related to the operations of that individual development. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer and shall follow the latest CEQA guidelines, practices, and precedents.	
Impact 5.12-4: The proximity of the plan area to an airport or airstrip would not result in exposure of future residents and/or workers to excessive airport-related noise.	Less than significant	No mitigation measures are required.	Less than significant
5.13 POPULATION AND HOUSING			
Impact 5.13-1: The GPU would directly induce substantial unplanned population growth.	Potentially significant	No feasible mitigation measure available.	Significant and unavoidable
Impact 5.13-2: The GPU would provide more housing opportunities than currently exist. Therefore, implementation of the GPU would not displace people and/or housing.	No impact	No mitigation measures are required.	No impact
5.14 PUBLIC SERVICES			
FIRE PROTECTION AND EMERGENCY SERVICES			
Impact 5.14-1: The General Plan Update would introduce new structures, residents, and workers into the OCFA service boundaries, thereby increasing the requirement for fire protection facilities and personnel.	Less than significant	No mitigation measures are required.	Less than significant

1. Executive Summary

Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
POLICE PROTECTION			
Impact 5.14-2: The General Plan Update would introduce new structures, residents, and workers into the Santa Ana Police Department service boundaries, thereby increasing the requirement for police protection facilities and personnel.	Less than significant	No mitigation measures are required.	Less than significant
SCHOOL SERVICES			
Impact 5.14-3: The General Plan Update would generate additional students who would impact the school enrollment capacities of the Santa Ana Unified School District, Garden Grove Unified School District, and Orange Unified School District.	Less than significant	No mitigation measures are required.	Less than significant
LIBRARY SERVICES			
Impact 5.14-4: The General Plan Update would allow for up to 22,361 additional residents in the General Plan Update plan area, increasing the service needs for the Main Library and the Newhope Library Learning Center.	Less than significant	No mitigation measures are required.	Less than significant
5.15 RECREATION			
Impact 5.15-1: The General Plan update would generate additional residents that would increase the use of existing park and recreational facilities such that substantial physical deterioration of the facility could occur or be accelerated.	Potentially significant	No feasible mitigation measures were identified.	Significant and Unavoidable
Impact 5.15-2: Project implementation would result in environmental impacts to provide new and/or expanded recreational facilities.	Potentially significant	No feasible mitigation measures were identified.	Significant and Unavoidable

1. Executive Summary

Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.16 TRANSPORTATION			
Impact 5.16-1: The General Plan Update is consistent with adopted programs, plans, and policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.16-2: General Plan Update implementation would result in a reduction of vehicle miles traveled per service population (VMT/SP) in comparison to existing City conditions, and would achieve a VMT/SP at least 15 percent lower than the countywide VMT/SP.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.16-3: Circulation improvements associated with future development that would be accommodated by the General Plan Update would be designed to adequately address potentially hazardous conditions (sharp curves, etc.), potential conflicting uses, and emergency access.	Less than significant	No mitigation measures are required.	Less than significant
5.17 TRIBAL CULTURAL RESOURCES			
Impact 5.17-1: The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).	Potentially significant	Mitigation Measures CUL-4 through CUL-7.	Less than significant
Impact 5.17-2: The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency to be significant pursuant to criteria in Public Resources Code Section 5024.1(c).	Potentially significant	Mitigation Measures CUL-4 through CUL-7.	Less than significant

1. Executive Summary

Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.18 UTILITIES AND SERVICE SYSTEMS			
WASTEWATER TREATMENT AND COLLECTION			
Impact 5.18-1: Development pursuant to the GPU would require or result in the relocation or construction of new or expanded wastewater facilities.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.18-2: OCSD and OCWD have adequate capacity to serve development pursuant to the GPU in addition to the providers existing commitments.	Less than significant	No mitigation measures are required.	Less than significant
WATER SUPPLY AND DISTRIBUTION			
Impact 5.18-3: Development pursuant to the GPU would require or result in the relocation or construction of new or expanded water facilities.	Less than significant	No mitigation measures are required.	Less than significant
Impact 5.18-4: Water supply would be adequate to meet development pursuant to the GPU.	Less than significant	No mitigation measures are required.	Less than significant
STORM DRAINAGE			
Impact 5.18-5: Existing and/or proposed stormwater drainage facilities would be able to accommodate proposed development pursuant to the GPU.	Less than significant	No mitigation measures are required.	Less than significant
SOLID WASTE			
Impact 5.18-6: Existing and/or proposed solid waste facilities would be able to accommodate development pursuant to the GPU and comply with related solid waste regulations.	Less than significant	No mitigation measures are required.	Less than significant

1. Executive Summary

Table 1-5 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
OTHER UTILITIES			
Impact 5.18-7: Development pursuant to the GPU would require or result in the relocation or construction of new or expanded electric power and natural gas.	Less than significant	No mitigation measures are required.	Less than significant

2. Introduction

This section has been supplemented since the original Draft Program Environmental Impact Report (PEIR) to:

- Describe the relationship of the Draft PEIR to the Recirculated Draft PEIR.
- Expand the discussion of public participation to include the Community Outreach program from January to May 2021.
- Update the conclusions regarding environmental impact significance of implementing the GPU.
- Refer to the environmental process and explain the documentation for the ultimate Final PEIR.

2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

2.1.1 Draft Program Environmental Impact Report

The California Environmental Quality Act (CEQA) requires that all state and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority prior to taking action on those projects. The Draft PEIR was prepared to satisfy CEQA and the State CEQA Guidelines. The PEIR is the public document designed to provide decision makers and the public with an analysis of the environmental effects of the General Plan Update (GPU), to indicate possible ways to reduce or avoid environmental damage, and to identify alternatives to the project. The PEIR must also disclose significant environmental impacts that cannot be avoided; growth-inducing impacts; effects not found to be significant; and significant cumulative impacts of all past, present, and reasonably foreseeable future projects.

Because approval of the proposed Santa Ana General Plan Update is a discretionary action by a public agency, the project is subject to the CEQA review process, and the City of Santa Ana, as the first public agency to act on the project, becomes the lead agency for the project. Pursuant to CEQA Section 21067, the lead agency means “the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment.” As the CEQA lead agency, the City of Santa Ana has the principal responsibility for approval of the GPU; determining the method of CEQA compliance; preparing and certifying the PEIR that describes potential environmental impacts of the GPU; providing a Statement of Overriding Considerations for all environmental impacts that cannot be mitigated to a less than significant level; and adopting a Mitigation Monitoring Plan to ensure that all required mitigation measures are implemented during the course of the project.

2. Introduction

The Draft PEIR was prepared in accordance with requirements of the:

- California Environmental Quality Act of 1970, as amended (Public Resources Code Section 21000 et seq.)
- State Guidelines for the Implementation of the CEQA of 1970 (herein referenced as CEQA Guidelines), as amended (California Code of Regulations Sections 15000 et seq.)

The overall purpose of the Draft PEIR is to inform the lead agency, responsible agencies, decision makers, and the general public of the environmental effects of implementation of the General Plan update. The Draft PEIR addresses the potential environmental effects of the project, including effects that may be significant and adverse; evaluates a number of alternatives to the project; and identifies mitigation measures to reduce or avoid adverse effects. The intent of the Draft PEIR is to provide sufficient information on the potential environmental impacts of the General Plan update to allow the City of Santa Ana to make an informed decision regarding approval of the project. Specific discretionary actions to be reviewed by the City are described in Section 3.4, *Intended Uses of the EIR*.

2.1.2 Purpose of Draft Recirculated PEIR

This Draft Recirculated PEIR has been prepared in accordance with CEQA Guidelines Section 15088.5. Section 1.4, *Recirculated PEIR*, described the conditions requiring a Recirculated EIR, the reasons a Recirculated Draft PEIR has been prepared for the GPU, and the options for processing the Recirculated Draft PEIR.

2.2 NOTICE OF PREPARATION

The City of Santa Ana determined that a Program EIR would be required for this project and issued a Notice of Preparation (NOP) on February 26, 2020 (see Volume II, Appendix A-a), to the State Clearinghouse, responsible agencies, and interested parties. Comments received during the public review period, which extended from February 26, 2020, to March 27, 2020, are in Appendix A-a.

The NOP process helps determine the scope of the environmental issues to be addressed in the Draft PEIR. Based on this process, certain environmental categories were identified as having the potential to result in significant impacts. Issues considered Potentially Significant were addressed in Chapter 5, *Environmental Analysis*, of the Draft PEIR, but issues identified as Less Than Significant or No Impact were not. Refer to Chapter 8, *Impacts Found Not to Be Significant*, in the Draft PEIR for a discussion of how these initial determinations were made.

Ten agencies/interested parties responded to the NOP. The Draft PEIR took into consideration those responses. Table 2-1 summarizes the issues identified by the commenting agencies, along with a reference to the section(s) of the Draft PEIR where the issues are addressed.

2. Introduction

Table 2-1 NOP Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
Agencies				
The Metropolitan Water District of Southern California (Metropolitan) Sean Carlson, Team Manager Environmental Planning Section; Jolene Ditmar, Assistant Environmental Specialist I	3/16/20	<ul style="list-style-type: none"> Utilities and Services Systems 	<ul style="list-style-type: none"> Provides an introduction that outlines the project and Metropolitan's service area and mission. States that it owns and operates the Orange County Feeder, East Orange County Feeder 2, and Santa Ana Cross Feeder pipelines in the plan area and provides information on these pipelines. Concerned about indirect effects to Metropolitan's facilities. States that future development and land use conditions associated with the project must not restrict any of Metropolitan's day-to-day operations, access, or repair of the facilities. States that Metropolitan must be allowed to maintain its rights-of-way and requires unobstructed access to its facilities. Requires that any design plans for any activities in the area of Metropolitan's pipelines or facilities be submitted for review and written approval. Metropolitan will not permit procedures that could subject the pipeline to excessive vehicle, impact, or vibration loads. Metropolitan attached a map with locations of its infrastructure and the "Guidelines for Improvements and Construction Projects Proposed in the Area of Metropolitan's Facilities and Rights-of-Way" 	<ul style="list-style-type: none"> Section 5.18, <i>Utilities and Service Systems</i> The enforcement of unobstructed access to Metropolitan's facilities is outside the scope of this PEIR.
South Coast Air Quality Management District (AQMD) Lijin Sun, J.D., Program Supervisor CEQA IGR	3/17/20	<ul style="list-style-type: none"> Air Quality 	<ul style="list-style-type: none"> Requests that the Program EIR be submitted to the agency directly, including all appendices or technical documents and electronic versions of all air quality modeling and health risk assessment files. Recommends that the lead agency use the South Coast AQMD's <i>CEQA Air Quality Handbook</i> for its air quality analysis and its more recent guidance. Recommends the use of CalEEMod land use emissions software. States that the most significant air quality challenge in the Basin is to achieve additional specified reductions in NOx emission. Provides a link to the 2016 Air Quality Management Plan. Recommends the review of the "Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning" when making local planning and land use decisions. Requests that the lead agency compare emissions to the recommended regional significance thresholds and recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). Recommends that the lead agency perform a localized analysis by either using the LSTs developed by South Coast AQMD or performing dispersion modeling as necessary. 	<ul style="list-style-type: none"> The Draft PEIR including technical appendices will be submitted to the South Coast AQMD. The agency will have a 45-day comment period to review the document. Section 5.2, <i>Air Quality</i> Chapter 7, <i>Alternatives</i>

2. Introduction

Table 2-1 NOP Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
			<ul style="list-style-type: none"> States that when specific development is reasonably foreseeable as result of the goals, policies, and guidelines in the GPU, 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. Quantifying emissions should include both construction and operational activities and indirect sources. If the 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. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included. Recommends that the lead agency conduct a mobile source health risk assessment (HRA) in the Program EIR to disclose the potential health risks of sensitive receptors being exposed to toxic emissions within close proximity to freeways. Provides a list of four resources that are available when identifying possible mitigation measures. Discusses health risks reduction strategies particularly with respect to air filtration systems. States that the Program EIR shall include a discussion of alternatives and provide sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the GPU. States that if permits from South Coast AQMD are required, South Coast AQMD should be identified as a responsible agency. Provides a link to South Coast AQMD permits web page and contact information. Provides a brief discussion on data sources for AQMD rules and relevant air quality reports and data. 	<ul style="list-style-type: none"> A detailed mobile health risk assessment was not prepared because it is beyond the scope of this program EIR. Section 5.2, Air Quality, qualitatively discusses potential impacts of diesel particulate matter due to planned development. Also, individual projects would be required to undergo individual CEQA review, potentially including a detailed health risk assessment for air toxics.
Gabrieleno Band of Mission Indians – Kizh Nation Andrew Salas, Chairperson; Brandy Salas, Admin Specialist	3/20/20	<ul style="list-style-type: none"> Tribal Cultural Resources 	<ul style="list-style-type: none"> States the GPU location is within their ancestral tribal territory and requests a consultation with the lead agency to discuss the project and the surrounding location in further detail. 	<ul style="list-style-type: none"> Section 5.17, <i>Tribal Cultural Resources</i>
Airport Land Use Commission (ALUC) Lea U. Choum, Executive Officer; Julie Fitch, Land Use Manager John Wayne Airport Orange County	3/26/20	<ul style="list-style-type: none"> Building Heights Noise 	<ul style="list-style-type: none"> ALUC states that the City of Santa Ana is within the Airport Environs Land Use Plan (AELUP) notification area for John Wayne Airport (JWA). States that the EIR and General Plan update should address height restrictions and imaginary surfaces by discussing FAA Federal Aviation Regulation Part 77 as the criteria for determining height restrictions for projects within the airport planning area. The General Plan update should include height policy language and a mitigation measure in the EIR that states that no 	<ul style="list-style-type: none"> Section 5.8, <i>Hazards and Hazardous Materials</i> Section 5.10, <i>Land Use and Planning</i> Section 5.12, <i>Noise</i>

2. Introduction

Table 2-1 NOP Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
			<p>building will be allowed to penetrate the Federal Aviation Regulation Part 77 imaginary surfaces for JWA.</p> <ul style="list-style-type: none"> States that structures more than 200 feet above ground level require filing with the FAA and ALUC notification and must comply with applicable procedures and regulations. Recommends that the City consider a mitigation and condition of approval specifying the 200 feet above ground level height threshold. States that portions of Santa Ana fall within the 60 to 65 dB CNEL noise contours for JWA, including a portion of the 55 Freeway/Dryer Road planning area. Recommends that the PEIR and General Plan update include policies and mitigations for development within the noise contours, especially if mixed-use or residential development would be permitted. States that all residential units within the 65 dB CNEL contour are typically inconsistent in the area unless it can be shown conclusively that such units are sufficiently sound attenuated. Recommends that residential uses are not permitted within the 65dB CNEL contour. Strongly recommends that residential units within the 60dB CNEL contour be limited or excluded. Recommends that the PEIR and General Plan update identify if the development of heliports will be allowed. Proposals for new heliports must be submitted to ALUC. Recommends adding specified language to the General Plan update and inclusion as mitigation measure in the EIR to address consistency with the AELUP for heliports. Recommends that the City include a policy in the General Plan update 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. Requests that referrals for determinations be submitted to the ALUC after the City's Planning Commission hearing and before the City Council action. 	
California Department of Fish & Wildlife David Mayer, Acting Environmental Program Manager South Coast Region;	3/26/20	<ul style="list-style-type: none"> Biological Resources 	<ul style="list-style-type: none"> Provides an introduction that describes its role as a trustee agency and provides a project description summary that describes special status species and species of special concern that have potential to occur. CDFW agrees that a Program Environmental Impact Report is appropriate for the project. 	<ul style="list-style-type: none"> Section 5.3, <i>Biological Resources</i>

2. Introduction

Table 2-1 NOP Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
Jessie Lane, Environmental Scientist			<ul style="list-style-type: none"> ▪ CDFW describes potential impacts to the Santa Ana River, and states that the focus area along West Santa Ana Boulevard intersects with the Santa Ana River corridor and adjacent open space areas. States that development within the focus area may have effects on riparian habitat and open space. ▪ CDFW provides recommendations to minimize significant impacts. Historically the Santa Ana River supported southern California steelhead. Recommends that the PEIR include an analysis of proposed major stream crossings in the context of fish passage. ▪ CDFW opposes any development or conversion that would reduce wetland acreage or wetland habitat value unless project mitigation ensures “no net loss” of either wetland habitat values or acreage. States that all wetlands and watercourses should be retained and provided with substantial setbacks. 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 the wildlife corridor. ▪ CDFW considers adverse impacts to a species protected by the California Endangered Species Act (CESA) to be significant without mitigation. CDFW recommends appropriate take authorization under CESA prior to implementing the project. Appropriate authorization from CDFW may include an incidental take permit. ▪ CDFW identifies mitigation for project-related biological impacts. CDFW states that the PEIR should include measures to fully avoid and otherwise protect Rare Natural Communities from project-related impacts. For proposed preservation and/or restoration, the PEIR should include measures to perpetually protect the targeted habitat values. ▪ CDFW requests that any special status species and natural communities detected during surveys are reported to the California Natural Diversity Database. CDFW further states that the project would necessitate an assessment of filing fees. 	
City of Tustin Elizabeth A. Binsack, Community Development Director; Scott Reekstin, Principal Planner; Krys Saldivar, Public Works Manager; Vera Tiscareno, Executive Assistant	3/26/20	<ul style="list-style-type: none"> ▪ Land Use and Planning ▪ Recreation ▪ Alternatives ▪ Public Services ▪ Population and Housing ▪ Noise ▪ Transportation 	<ul style="list-style-type: none"> ▪ Concerned with the significant changes in land use along Red Hill Avenue and Dyer Road, the Bowery project, or those that have occurred recently with the approval and construction of the Heritage project at 2001 E. Dyer Rd. States that this could result in significant and cumulative impacts to traffic and parks. ▪ States that the EIR should include detailed overall projections of the anticipated change to land uses. ▪ States that it is unclear how the development potential identified in Table 1 of the NOP was calculated. No technical analyses or supporting documentation was 	<ul style="list-style-type: none"> ▪ Chapter 3, <i>Project Description</i> ▪ Chapter 4, <i>Environmental Setting</i> ▪ Section 5.10, <i>Land Use and Planning</i> ▪ Section 5.12,

2. Introduction

Table 2-1 NOP Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
			<p>provided in the NOP.</p> <ul style="list-style-type: none"> States that there will be capacity issues that need to be addressed in accommodating the proposed development. States that no project alternatives were identified in the NOP. Wants to know how the development potential in Table 1 of the NOP was concluded to be the preferred option. Requests that the PEIR identify project alternatives and provide the technical analyses that identify that the proposed development can be accommodated with the appropriate facilities and levels of service. States that there appears to have been no technical evaluation of the proposed General Plan update provided to the public. States that community outreach has identified parks and open space as an issue and the project alternatives presented through community outreach do not identify any open space within the 55 Freeway/Dyer Road Focus Area. Further states that it is unclear if the Santa Ana General Plan update would include additional parkland or open space and states that no additional open space is proposed in the 55 Freeway/Dyer Road Focus Area. States that the City of Santa Ana should require land for park and recreational purposes to meet the City's minimum standard. Further provides a discussion of parkland need in the focus area. States that the City of Santa Ana parkland goal falls short of the "widely held minimum standard" of three acres per 1,000 residents under the Quimby Act. Provides a table of parkland goals of other cities in Orange County. States that there is a fragmented and absent sidewalk network and no parkland facilities within the 55 Freeway/Dyer Road Focus Area, and further states that the 55 Freeway creates a barrier to those properties proposed for residential uses. States that Veterans Sports Park at Tustin Legacy will be three times larger and about half the distance from the 55 Freeway/Dyer Road Focus Area than the closest park in Santa Ana and will attract park goers. Requests that the analysis in the EIR should consider the quality, amenities, and attractiveness of nearby parks when estimating park usage. States that if sufficient parkland is not provided in Santa Ana, then it may negatively impact and overburden parkland facilities in Tustin, and impacts must be mitigated. Requests that analysis in the PEIR of proposed compliance with the City of Santa Ana park standards should focus on the potential to physically deteriorate 	<p>Noise</p> <ul style="list-style-type: none"> Section 5.13, <i>Population and Housing</i> Section 5.14, <i>Public Services</i> Section 5.15, <i>Recreation</i> Section 5.16, <i>Transportation</i> Section 5.18, <i>Utilities and Service Systems</i> Chapter 7, <i>Alternatives</i> Appendices The City is committed to working closely with cities located adjacent to General Plan Focus Areas when preparing the City of Santa Ana's Parks and Recreation Master Plan to ensure that the Dyer/55 Focus Area and other growth areas of the City provide additional recreation, parks, and core services essential in making complete communities. In addition, the City will identify additional

2. Introduction

Table 2-1 NOP Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
			<p>existing and future recreational facilities in the City of Tustin.</p> <ul style="list-style-type: none"> Concerned about the lack of commitment to open space and parkland given the 55 Freeway/Dyer Road Focus Area's adjacency to the City of Tustin and Tustin Legacy. Requests that a comprehensive study of parkland demand be conducted to evaluate the impacts of the General Plan buildout on Tustin facilities. Recommends that the minimum park facilities be accommodated within the 55 Freeway/Dyer Road Focus Area, and that thresholds tied to development and upzoning should be required to ensure development of parkland facilities within the Focus Area. Requests that the PEIR include a study that analyzes how far residents in a suburban community are willing to travel to reach a community park and analyze the distance from other similar Santa Ana residential neighborhoods to their nearest community park as a comparison. Provides an overview of the 55 Freeway/Dyer Road Focus Area and two alternatives. States that it is unclear where the housing units noted in Table 1 for the 55 Freeway/Dyer Road Focus Area will be located and states that it appear to run contrary to the Focus Area goal of protecting the industrial and office employment base. Requests an accurate representation of the vision for the area along with technical analyses to justify that development can be accommodated. States that a residential unit cap may be needed similar to the Irvine Business Complex. States that the NOP did not mention affordable housing. Requests that potential density bonus units should be identified and evaluated for their impacts when evaluating buildout capacity. States that the General Plan update should identify how land uses such as residential and industrial will co-exist directly adjacent to one another. States that facilities improvements required to "enhance livability and promote healthy lifestyles" should be identified and a course of action provided for implementation. States that the 55 Freeway/Dyer Road Focus Area is within the John Wayne Airport flight path and 65 dBA and 60 dBA CNEL contours. States that areas falling within the 65 dBA CNEL noise contours should be clearly identified in the PEIR and restricted to not allow residential development. States that mitigation measures need to be identified that discuss how Policy 2.2, Stationary Related Noise, of the Noise Element from the General Plan Policy Framework will be achieved within the focus area. 	<p>funding sources from new development projects to procure land or in-lieu fees for installation of parks in the immediate vicinity of proposed development in order to minimize the potential for impacts on adjacent communities with regard to parks and open space utilization. The inclusion of publicly accessible open space is also part of the City of Santa Ana's development standards for residential/ mixed use development projects to address open space and recreation needs.</p> <ul style="list-style-type: none"> Please refer to Section 3.3.2.5 of Chapter 3, <i>Project Description</i>, for a detailed discussion on density bonus. The Draft PEIR is based on VMT analysis per

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Table 2-1 NOP Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
			<ul style="list-style-type: none"> States that a Traffic Impact Analysis (TIA) is required. States that the TIA should include identified Tustin arterial roadways and intersections and identifies roadways and intersections that anticipate greatest impacts. States that the City of Tustin is not supportive of any additional traffic signals or median breaks on Red Hill Avenue. States that any development along Red Hill Avenue to serve future development will need to only allow right-turn in and right-turn out movements. States that any significant development or land use intensification in the 55 Freeway/Dyer Road Focus Area would likely require improvements along southbound Red Hill Avenue. States that any analysis of Tustin roads and intersections would need to comply with the most current City of Tustin methodology. States that analysis should consider cumulative traffic impacts and mitigation measures. Requests that the City of Tustin staff is given the opportunity to participate in the development of the TIA and review of the TIA prior to public release. Asks that all future CEQA notices be provided to the list of identified persons. 	<ul style="list-style-type: none"> the CEQA guidelines and City's adopted VMT thresholds. Intersection analysis is included in full the in Traffic Impact Study included as an appendix to the Draft PEIR. The Draft PEIR including technical appendices will be submitted to the provided list of contacts.
City of Orange Chad Ortlieb, Senior Planner	3/26/20	<ul style="list-style-type: none"> Infrastructure Noise 	<ul style="list-style-type: none"> States that the City of Orange has interest in ensuring that the Draft PEIR addresses potential adverse impacts to Orange residents and infrastructure. Would appreciate the opportunity to consult on technical studies, including potential noise and transportation impacts. 	<ul style="list-style-type: none"> The Draft PEIR including technical appendices will be submitted to the City of Orange planning department. The agency will have a 45-day comment period to review the document.
Orange County Transportation Authority (OCTA) Dan Phu, Manager Environmental Programs; Hannah Allington, Planning Intern	3/26/20	<ul style="list-style-type: none"> Transportation 	<ul style="list-style-type: none"> OCTA requests that the City coordinate with OCTA to maintain consistency between the Circulation Element and the Orange County Master Plan of Arterial Highways. States 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 potential traffic impacts. 	<ul style="list-style-type: none"> Section 5.10, <i>Land Use and Planning</i> Section 5.17, <i>Transportation</i>

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Table 2-1 NOP Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
Southern California Association of Governments Anita Au, Associate Regional Planner Ping Chang, Manager Compliance and Performance Monitoring	3/27/20	<ul style="list-style-type: none"> Land Use and Planning Population and Housing 	<ul style="list-style-type: none"> SCAG provides an overview of its role in reviewing regionally significant projects pursuant to CEQA. SCAG states that it has reviewed the NOP and provides contact information to send the environmental documentation when ready. SCAG requests that the EIR provide a consistency analysis with the RTP/SCS, lists RTP/SCS goals, and provides a format for the consistency analysis. SCAG discusses demographics and growth forecasts and provides a table of these forecasts for the SCAG region and City of Santa Ana for the years 2020, 2035 and 2040. SCAG recommends the review of the Final Program EIR for the 2016 RTP/SCS for guidance on mitigation measures. 	<ul style="list-style-type: none"> Section 5.10, <i>Land Use and Planning</i> Section 5.13, <i>Population and Housing</i>
Orange County Sanitation District (OCSD) Adam Nazarov, Engineering Supervisor; Daniel Lee, Engineer; Gloria Ramos, Administrative Assistant	03/31/20	<ul style="list-style-type: none"> Utilities and Service Systems 	<ul style="list-style-type: none"> OCSD recommends that a sewer study be performed in the future to assure there is adequate sewer capacity OCSD states that new or modified connection to OCSD sewer lines requires coordination with OCSD and may require a permit. 	<ul style="list-style-type: none"> Section 5.18, <i>Utilities and Service Systems</i>
Organizations				
Heninger Park President Ginelle Hardy	3/6/20	<ul style="list-style-type: none"> Focus Area #1 Distribution Material 	<ul style="list-style-type: none"> States that South Main Street Focus Area #1 would potentially affect Heninger Park properties and homes on Sycamore. States that Focus Area #1 includes S. Broadway in Heninger Park. States that the Heninger Park neighborhood meeting would be an opportunity to present the General Plan update and EIR. Asks City Planner for ideas on how to disperse the information and provide printed informational flyers, tables, and maps. 	<ul style="list-style-type: none"> Section 5.4, <i>Cultural Resources</i> This topic is not related to the scope of the Draft PEIR.
Recupero and Associates, Inc. Mike Johnston	3/17/20	<ul style="list-style-type: none"> GPU Schedule 	<ul style="list-style-type: none"> Asks about the timeline for the General Plan update and when it may be reviewed and approved by the City Council. 	<ul style="list-style-type: none"> This topic is not related to the scope of the Draft PEIR.
The Hoffman Company Justin Esayian, Senior Vice President	3/25/20	<ul style="list-style-type: none"> Mailing list Scheduling and timing 	<ul style="list-style-type: none"> Asks to be added to the communication group to receive updates on the General Plan update progress. Asks when the General Plan update will be finalized. Asks if the public EIR scoping meeting on March 5 occurred and, if not, asks for information on plans to reschedule it. 	<ul style="list-style-type: none"> Will receive future notices related to the GPU PEIR.
Rise Up Willowick Cynthia Guerra, Rise Up Willowick Member	3/27/20	<ul style="list-style-type: none"> Land Use and Planning Open Space 	<ul style="list-style-type: none"> Provides a discussion of Rise Up Willowick's mission. States that a focus area for growth and development encompasses the Willowick Golf Course, a critical area of advocacy for the Coalition. States that land 	<ul style="list-style-type: none"> Section 5.10, <i>Land Use and Planning</i> Section 5.14,

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Table 2-1 NOP Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
			<p>development needs to understand and meet needs of current residents.</p> <ul style="list-style-type: none"> ▪ Surveyed residents and conducted community engagement for input on vision for Willowick, and their vision includes: (1) parks and open space; (2) affordable housing; and (3) community spaces. Further discusses median income and open space investment. ▪ Concerned about impacts of the General Plan update on open space. Concerned about the lack of assessment proposed in the EIR on the impact of open space in the city; the impact of incentivizing development in five focus areas at the expense of open space. ▪ States that Willowick is the last remaining large-scale open space site in Santa Ana, and EIR needs to address the impacts of depleting the resource. ▪ Provides recommendations for completing the EIR, including: work to accomplish the core values proposed in the General Plan update; include residents in development processes; work with City of Garden Grove for affordable housing and open space in Willowick; and City should add "Open-Space and Parkland" environmental impact category for EIR analyses. 	<p><i>Public Services</i></p> <ul style="list-style-type: none"> ▪ Section 5.15, <i>Recreation</i>
<p>Public Law Center Ugochi Nicholson, Directing Attorney, Housing and Homelessness Prevention Unit</p>	3/27/20	<ul style="list-style-type: none"> ▪ Population and Housing 	<ul style="list-style-type: none"> ▪ Requests that projects that the City has approved and will seek to approve will not detrimentally affect the environment. ▪ Requests that the City ensure that the projects that it approves will affirmatively further fair housing and land use opportunities for its most vulnerable residents. ▪ Provides an overview of the Public Law Center's work. ▪ Asks 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. ▪ States that there is a great need for housing for those who have very-low and extremely-low incomes and provides statistics for the City and Santa Ana Unified School District to demonstrate the need. ▪ States that evictions and displacement impose a high burden on school-aged children and their families. ▪ Requests 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. 	<ul style="list-style-type: none"> ▪ Section 5.13, <i>Population and Housing</i> ▪ Fair housing is not related to the scope of the Draft PEIR.
<p>IMG Construction Management Oscar Uranga, Principal</p>	4/7/20	<ul style="list-style-type: none"> ▪ Urban Neighborhood 	<ul style="list-style-type: none"> ▪ Asks about the proposed changes to the "Urban Neighborhood" land use designation. 	<ul style="list-style-type: none"> ▪ Chapter 3, <i>Project Description</i>

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Table 2-1 NOP Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
Individuals				
Pat Coleman	3/27/20	<ul style="list-style-type: none"> ▪ Cultural Resources ▪ Transportation ▪ Geology and Soils 	<ul style="list-style-type: none"> ▪ Requests that older city parks are included when assessing for historical significance and gives the example of Santiago Park. States that the original design and hardscape of early parks are worth preserving whenever possible. ▪ Requests that access management is added to level of service (LOS) evaluations for road design and modifications. States that City currently uses LOS to evaluate road modifications, which does not adequately cover safety, especially pedestrian safety. ▪ Requests that the recommendations and requirements of the Seismic Hazard Mapping Act of 1990 and the Special Publication 117A are considered for inclusion in the Safety Element. States the City's approach to evaluating seismic safety for new development is uneven, even though much of city is in a liquefaction zone. Cites an excerpt from SP 117A. ▪ Requests that a geology section is included in all CEQA studies for projects within the liquefaction zone. States that leaving the study for the permitting process keeps mitigation measures of significant impact out of public view. Provides an example of a project. ▪ States that the SHMA requires that the certified geological study and its professional certified review be submitted to the appropriate state agency. States that this creates a reviewable public record and allows all professionals to own their recommendations. 	<ul style="list-style-type: none"> ▪ Section 5.4, <i>Cultural Resources</i> ▪ This topic is not related to the scope of the Draft EIR. ▪ Section 5.6, <i>Geology and Soils</i>
Lisa Ganz	3/16/20	<ul style="list-style-type: none"> ▪ Land Use and Planning ▪ Density ▪ Open Space/Parks ▪ Transportation ▪ Public Services 	<ul style="list-style-type: none"> ▪ Concerned about adding more high-density housing in the City and states that the "Shared Vision" Plan should focus on quality of life initiatives, including open space/park, less congestion, and quality services. ▪ Housing element should be a part of the analysis, and Mandatory Topics should be looked at in its entirety. ▪ States that EIR needs to be thorough and explains discontent with the environmental analysis prepared for the MainPlace Mall Renovation. ▪ Opposes the plan to turn Grand and 17th into an Urban Neighborhood. Expresses concern regarding congestion and requests that zoning be maintained and incentivize new retail. ▪ States that 55/Dyer development will add more congestion to the crowded 55 freeway. ▪ States that the city needs better streets/timed lights, more open space, retail, reasonable housing that fits historic neighborhoods. 	<ul style="list-style-type: none"> ▪ Section 5.10, <i>Land Use and Planning</i> ▪ Section 5.13, <i>Population and Housing</i> ▪ Section 5.14, <i>Public Services</i> ▪ Section 5.15, <i>Recreation</i> ▪ Section 5.16, <i>Transportation</i>

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2.3 SCOPING MEETING

Prior to preparation of the Draft PEIR, a public scoping meeting was held on March 5, 2020, to determine the concerns of responsible and trustee agencies and the community regarding the GPU. The scoping meeting was held at the City of Santa Ana and was attended by a number of community members and interested parties (see Appendix A-a for scoping meeting sign-in sheet). Table 2-2 summarizes the issues identified at the scoping meeting and references the section(s) of the Draft PEIR where the issues are addressed.

Table 2-2 Scoping Meeting Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
Oral Comments at Scoping Meeting (Individuals)				
Albert Castillo	3/5/20	<ul style="list-style-type: none"> Land Use Density Transportation Utilities and Service Systems Open Space 	<ul style="list-style-type: none"> Concerned that the General Plan buildout is too high and would add too many people to the city. Asked how the buildout will be accommodated within the city. Concerned about street closures, aging infrastructure, and traffic resulting from buildout and addition of new people. Stated that a cemetery on the Land Use Map is currently identified as green space and it should not be. Said that the city needs more open space. Asked how the General Plan update would benefit him and the existing community. 	<ul style="list-style-type: none"> Section 5-13 <i>Population and Housing</i> Section 5.16, <i>Transportation</i> Section 5.18, <i>Utilities and Service Systems</i> Section 5.15, <i>Recreation</i>
Irma Jauregui	3/5/20	<ul style="list-style-type: none"> Land Use Density Open Space and Parks Quality of Life 	<ul style="list-style-type: none"> Asked if it is possible to lower buildout or population. Asked if the buildout numbers are a starting point or final. Asked if the City can add more parks/open space. States that city needs more open space and parks and that obesity is an issue in Santa Ana. Asked that terms be defined and that a glossary be provided. Asked if the EIR will address the impact to the quality of life of existing residents. Stated that the General Plan buildout is being done at the expense of the quality of life of existing residents. Wanted to make sure that existing residents are being cared for. 	<ul style="list-style-type: none"> Section 5.1, <i>Aesthetics</i> Section 5.2, <i>Air Quality</i> Section 5.12, <i>Noise</i> Section 5.13, <i>Population and Housing</i> Section 5.14, <i>Public Services</i> Section 5.15, <i>Recreation</i> Section 5.17, <i>Transportation</i> Section 5.18, <i>Utilities and Service Systems</i>
Diane Fradkin	3/5/20	<ul style="list-style-type: none"> Transportation Phasing Outreach 	<ul style="list-style-type: none"> Asked about how streets get reclassified, and what does it mean when a street gets reclassified. Asked if reclassifying streets results in physical changes. Asked about the phasing of development with infrastructure improvements. Asked if downtown streets would become one-way streets. Stated that she has participated in prior General Plan update outreach events and it does not seem that the 	<ul style="list-style-type: none"> Section 5.16, <i>Transportation</i>

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Table 2-2 Scoping Meeting Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
			comments and concerns brought up during those events were incorporated into the land use map or influenced the direction of the plan.	
Cynthia Guerra	3/5/20	<ul style="list-style-type: none"> Open Space Population Growth Focus Areas Zone Changes Air Quality Environmental Justice 	<ul style="list-style-type: none"> Asked if the Willowick property was targeted for growth, and if so, what parcels. Concerned about the inclusion of the Willowick property into the Focus Area and asked if the Willowick property could be removed from the Focus Area. Asked if it would be easier to develop the Willowick property if it remains in the Focus Area. Concerned about population growth and proposed zone change for Willowick parcels. Stated that the City should talk to the community and explain why certain areas are in Focus Areas. Stated that there is nothing left in Santa Ana for open space. Concerned that the increase in population would impact open space and air quality. Asked how the EIR will account for that. Asked what specific Willowick parcels are being considered for development. Stated environmental justice concerns and that some communities in Santa Ana are disproportionately affected. 	<ul style="list-style-type: none"> Section 5.2, <i>Air Quality</i> Section 5.10, <i>Land Use and Planning</i> Section 5.13, <i>Population and Housing</i> Section 5.15, <i>Recreation</i> The topic of environmental justice will be incorporated throughout the General Plan update, with goals and policies incorporated into multiple elements.
John Trapmans [Speaker name not confirmed.]	3/5/20	<ul style="list-style-type: none"> Define terms 	<ul style="list-style-type: none"> Asked about how terms in the GPU are defined and how they contribute to density, including "urban neighborhood." Wanted more information about the GPU in order to provide commentary. 	<ul style="list-style-type: none"> Chapter 3, <i>Project Description</i>
Dale Helvig	3/5/20	<ul style="list-style-type: none"> Land Use Density 	<ul style="list-style-type: none"> Asked if the City was going to buy more land in order to accommodate the anticipated growth. Stated that the General Plan update will increase density in the city. Asked if the General Plan update was available online. 	<ul style="list-style-type: none"> Section 5.10, <i>Land Use and Planning</i> Section 5.13, <i>Population and Housing</i>
Ginelle Hardy	3/5/20	<ul style="list-style-type: none"> Cultural Resources 	<ul style="list-style-type: none"> Asked how the City was going to analyze historic resources. Asked if a historic resources report is available. Asked if South Main is being recategorized. Concerned about historic buildings that are being removed or demolished. 	<ul style="list-style-type: none"> Section 5.4, <i>Cultural Resources</i>

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Table 2-2 Scoping Meeting Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
			<ul style="list-style-type: none"> Asked how EIR will address historic areas and individual resources. Stated that the Pacific Electric Park and bicycle trails were missing from the Land Use Map. 	
Tay Aston	3/5/20	<ul style="list-style-type: none"> Define terms Parking 	<ul style="list-style-type: none"> Asked what District Center meant. Asked about parking analyses. 	<ul style="list-style-type: none"> Chapter 3, <i>Project Description</i> Parking is not a CEQA issue.
[Speaker name not recorded.]	3/5/20	<ul style="list-style-type: none"> Environmental Justice Transportation 	<ul style="list-style-type: none"> Concerned about the passage of large diesel vehicles and paint trucks and their impact on residents. States that this should be one of the biggest focuses of the General Plan update. 	<ul style="list-style-type: none"> Section 5.2, <i>Air Quality</i>
Sam Romero	3/5/20	<ul style="list-style-type: none"> Air Quality 	<ul style="list-style-type: none"> Added to the prior speaker's comment and said that the trucks create air quality concerns. 	<ul style="list-style-type: none"> Section 5.2, <i>Air Quality</i>
Chris Schmidt	3/5/20	<ul style="list-style-type: none"> Transportation Public Services Zoning 	<ul style="list-style-type: none"> Concerned about the traffic study and circulation. Stated that a lot of the streets in the city are already operating at the lowest rating, so adding more vehicles to an already bad rating would not be adequately accounted for. Asked if fire and police services were going to be analyzed. Asked if the General Plan update would prevent or stop a person from redesignating a zone. 	<ul style="list-style-type: none"> Traffic and congestion are no longer CEQA issues. Section 5.10, <i>Land Use and Planning</i> Section 5.14, <i>Public Services</i> Section 5.16, <i>Transportation</i>
[Speaker name not recorded.]	3/5/20	<ul style="list-style-type: none"> Land Use and Planning Transportation Population and Housing 	<ul style="list-style-type: none"> Concerned about the City's ability to accommodate high density housing and vehicles. Stated that people will still need to drive. Stated that there is an imbalance between business growth and residential growth and there needs to be more of a balance. Asked how the General Plan update would increase business opportunities in the city. 	<ul style="list-style-type: none"> Traffic and congestion are no longer CEQA issues. Section 5.10, <i>Land Use and Planning</i> Section 5.13, <i>Population and Housing</i> Section 5.16, <i>Transportation</i>
Patricia Coleman	3/5/20	<ul style="list-style-type: none"> Aesthetics Land Use and Planning Process 	<ul style="list-style-type: none"> Asked for more information on what is being proposed to change and what the city will look like in the future. Asked if there would be additional opportunities to address concerns in the future if the concerns were not brought up during the scoping meeting. 	<ul style="list-style-type: none"> Section 5.1, <i>Aesthetics</i> Section 5.10, <i>Land Use and Planning</i> The public will have an opportunity to comment on the Draft PEIR during the 45-day public comment period.

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Table 2-2 Scoping Meeting Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
[Speaker name not recorded.]	3/5/20	<ul style="list-style-type: none"> Environmental Consultant 	<ul style="list-style-type: none"> Concerned that the environmental consultants would be biased in the preparation of the environmental analyses. Said that a neutral organization needs to prepare the EIR and plans and analyze impacts. Asked for environmental consultant's promise to prepare an unbiased analysis. 	<ul style="list-style-type: none"> N/A
[Speaker name not recorded.]	3/5/20	<ul style="list-style-type: none"> Communication 	<ul style="list-style-type: none"> Said that the City can do a better job communicating to the public about the General Plan update and in general. 	<ul style="list-style-type: none"> Once complete, the DEIR will be available for a 45-day public review period and will be posted on the City's website.
[Speaker name not recorded.]	3/5/20	<ul style="list-style-type: none"> Population and Housing Land Use and Planning Recreation 	<ul style="list-style-type: none"> Said that the City of Santa Ana thinks that it needs more housing but residents do not agree with that. Concerned about increase in density. Asked that the EIR study the effects of electric vehicles going forward. Said that the city needs more jobs, more green space, and not more housing. 	<ul style="list-style-type: none"> Section 5.10, <i>Land Use and Planning</i> Section 5.13, <i>Population and Housing</i> Section 5.15, <i>Recreation</i>
[Speaker name not recorded.]	3/5/20	<ul style="list-style-type: none"> Outreach/Communication 	<ul style="list-style-type: none"> Said that surveys given at community meetings could be better. 	<ul style="list-style-type: none"> N/A
Comment Cards and E-mailed Comments (Individuals)				
Pedro Aranda (Zapateria Aranda)	3/5/20	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Provides a sketch. 	<ul style="list-style-type: none"> N/A
Tay Aston	3/5/20	<ul style="list-style-type: none"> Parking Open Space Define Terms 	<ul style="list-style-type: none"> States that increasing housing should also entail on-site parking for multiple drivers living in the units. The current requirement is insufficient and will have a negative effect on the use and safety of surrounding neighborhoods. Requests that open space be increased. States that adding multiunit residences without providing open space is a concrete jungle in the making. Requests that terms be defined, e.g., District Center; Low-, Mid-, etc. residential, environmental justice. 	<ul style="list-style-type: none"> Parking is not a CEQA issue. Section 5.15, <i>Recreation</i> Chapter 3, <i>Project Description</i>
Diane Fradkin	3/5/20	<ul style="list-style-type: none"> Transportation Noise Air Quality Greenhouse Gas Emissions Density Utilities and Service Systems 	<ul style="list-style-type: none"> States that regarding the Urban Neighborhood (UN) designation for the Medical Arts property, the property is a very constricted parcel, with the western boundary being railroad tracks. States that there is a proposal to do a grade separation for the railroad crossing at 17th and Lincoln that will greatly restrict access from the Medical Arts property onto 17th Street. States that the UN designation will add too much traffic, noise, air quality issues, and greenhouse gas to an already congested 17th Street and Grand. States this UN designation needs a parks/open space component. States that she attended a General Plan update meeting last summer and took a survey for the Medical Arts property, and majority of attendees of the meeting did not want to see more high density at this location. States that this will impact existing residents in a negative way. Way 	<ul style="list-style-type: none"> Section 5.2, <i>Air Quality</i> Section 5.7, <i>Greenhouse Gas Emissions</i> Section 5.10, <i>Land Use and Planning</i> Section 5.12, <i>Noise</i> Section 5.16, <i>Transportation</i> Section 5.18, <i>Utilities and Service Systems</i>

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Table 2-2 Scoping Meeting Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
			<p>too dense for an already dense area.</p> <ul style="list-style-type: none"> Concerned that existing infrastructure (streets, sewer, water, storm drain) cannot handle the proposed density, unless projects will add new roadways and water/sewer/storm drain. Requests clarification on the circulation plan regarding roadway classifications (and changes to roadway classifications), physical changes to roadways, and phasing of roadway improvements with construction. 	<ul style="list-style-type: none"> Section 5.15, <i>Recreation</i>
Soledad Valentin	3/5/20	<ul style="list-style-type: none"> Maintenance Utilities and Service Systems 	<ul style="list-style-type: none"> States that at the corner of First and Standard there are cars that do not function and asks that the cars be moved to a more adequate location for them and for their owners. Asks that primary roads are kept clean and that businesses clean outside and keep it clean. Asks that when there is building construction that there be a focus on water, electricity, and gas pipelines and for them to be brand new. 	<ul style="list-style-type: none"> These topics are not related to the scope of the Draft PEIR.
Diane Fradkin	3/6/20	<ul style="list-style-type: none"> Land Use and Planning; Density and overcrowding; Infrastructure; Roadway access; and Alternatives 	<ul style="list-style-type: none"> Concerned about the use of "Urban Neighborhood" in the Grand and 17th Street area. Stated that her experience door knocking across Santa Ana is that Santa Ana residents do not want more high density residential. Stated that residents are concerned overcrowding will cause more stress to an overstressed and older infrastructure and want "responsible development." Concerned about density and overcrowding. Requests several alternatives to for the Grand and 17th Street section in the EIR and gives two examples. An alternative that include more single-family residential, town homes, low-rise garden-style apartments, parks, retail, and office. Another alternative that includes a Costco with gas sales, office, and residential (single-family, townhomes, and low-rise garden-style multifamily with park component). Requests the General Plan update to account for medical office uses in the Grand and 17th section. Suggests that land use and design accounts for grade separation at 17th and Lincoln for the railroad tracks. States that this will likely inhibit access along 17th Street and focus more access along Grand Avenue. 	<ul style="list-style-type: none"> Section 5.10, <i>Land Use and Planning</i> Section 5.13, <i>Population and Housing</i> Section 5.14, <i>Public Services</i> Section 5.15, <i>Recreation</i> Section 5.16, <i>Transportation</i> Section 5.18, <i>Utilities and Service Systems</i> Chapter 7, <i>Alternatives</i>
John Fradkin	3/6/20	<ul style="list-style-type: none"> Housing Density Land Use and Planning Define terms 	<ul style="list-style-type: none"> Concerned about adding more housing to a built-out city. States that current residents want businesses, local jobs, parks, and open space. States that EIR should take into account that automotive industry is shifting to electric vehicles, which reduces greenhouse gases, and states that this makes transit-oriented development less relevant. Requests that zoning terms be defined early on. States that the "Urban Neighborhood" mixed-use zoned areas should provide for horizontal mixed-use building, not vertical buildings. 	<ul style="list-style-type: none"> Section 5.10, <i>Land Use and Planning</i> Section 5.13, <i>Population and Housing</i> Chapter 3, <i>Project Description</i>

2. Introduction

Table 2-2 Scoping Meeting Comment Summary

Commenting Agency/Person	Date	Comment Type	Comment Summary	Issue Addressed In:
Lisa Ganz	3/6/20	▪ Link to General Plan Information	▪ Requests a link to the General Plan update information.	▪ N/A
Jessie Lopez	3/6/20	▪ Future Meetings	▪ Asked if there will be another meeting.	▪ N/A

As noted in Table 2-2, several scoping comments were voiced and/or received about traffic impacts to Santa Ana's circulation network, especially related to the proposed increase in high density residential units; land use issues, increased densities, and overcrowding, specifically in association with the 55 Freeway/Dyer Road focus area; air quality impacts for city residents with an emphasis on environmental justice; and adequacy of public services and utilities, mainly water and wastewater facilities, roadways, and parks and open space.

The City acknowledges the comments and concerns of adjacent cities related to the level of growth projected in Santa Ana. The City will work closely with cities adjacent to General Plan Focus Areas when preparing the Santa Ana Parks and Recreation Master Plan to ensure that the Dyer/55 Focus Area and other growth areas of the city provide additional recreation, parks, and core services essential for making complete communities. In addition, the City shall identify additional funding sources from new development projects to procure land or in-lieu fees for installation of parks in the immediate vicinity of proposed development in order to minimize the potential for impacts to adjacent communities with regard to parks and open space utilization. The inclusion of publicly accessible open space is also part of the City of Santa Ana's development standards for residential/mixed-use development projects to address open space and recreation needs.

2.4 ENVIRONMENTAL JUSTICE OUTREACH

In 2016, the California Legislature passed Senate Bill 1000 (SB 1000), Planning for Healthy Communities Act, to incorporate environmental justice into the local land use planning process. SB 1000's definition of a disadvantaged community includes 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 to a small region.

The California Communities Environmental Health Screening Tool, or CalEnviroScreen, was developed by the Office of Environmental Health Hazards Assessment on behalf of CalEPA. CalEnviroScreen is a method for identifying communities that are disproportionately burdened by pollution and/or have a disproportionately vulnerable population. Areas defined as EJ communities are shown in Figure 2-1, *EJ Communities, Neighborhoods, and Focus Areas* (also refer to Section 4.3.3, *Environmental Justice Communities*).

The City's GPU EJ community outreach program included a wide variety of tools to notify and engage the community throughout the preparation of the GPU.



- 1 South Main Street
- 2 Grand Ave/17th Street
- 3 West Santa Ana Boulevard
- 4 55 Freeway/Dyer Road
- 5 South Bristol Street



2. Introduction

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2. Introduction

2.4.1 EJ Outreach Prior to Draft PEIR Public Review

At the start of the General Plan update process, in late 2015, the City sought to meaningfully engage community residents, looking for best practices and community partnerships to reach all residents, especially those that have not traditionally engaged in the public decision-making process. The General Plan Outreach Program included a series of 40 community workshops starting in 2015; informational "pop-ups" at community events; presentations to focus groups; and the convening of a General Plan Advisory Group composed of 17 members of the community, including seniors, youth, community-serving organizations, Community Linkages Neighborhood Leaders, and City commissioners. Translation services were offered during the meetings, and videos of workshops were archived and made available for those unable to attend in person.

A variety of community issues, including environmental justice issues, were identified through these outreach activities. With this community input, the Draft General Plan Policy Framework was created in December 2018, and Community "Core Values" were created to reflect the voice of the collective Santa Ana community and to express its environmental justice principles. Because these core values touch all aspects of the GPU and general plan elements, it was determined early in the process to weave environmental justice components as policies into the fabric of the various elements, elevating their importance and prominence in each element.

To continue a community dialogue on environmental justice and obtain community feedback, the City mailed over 32,000 environmental justice informational flyers in late May 2020 to property owners, occupants, and residents in EJ communities as defined by CalEnviroScreen (see Figure 2-1, *EJ Communities, Neighborhoods, and Focus Areas*). Subsequently, on July 31 and August 1, 2020, the City held two virtual meetings to obtain input on the general plan elements and environmental justice issues. Over 22,000 mailers were sent inviting residents, businesses, and property owners within and 500 feet around the five land use focus areas to participate in these community meetings.

Based on feedback from the July 31 and August 1 community meetings, on August 31, 2020, the City held a Community Outreach Roundtable with approximately 20 participants for improving outreach efforts for the General Plan Update, including in EJ neighborhoods. The roundtable convened again on October 14, 2020, to gather additional feedback on the City's GPU EJ policies.

On September 15, 2020, City staff held a meeting with the Madison Park Neighborhood Association and University of California, Irvine (UCI) to discuss EJ issues. City staff also held an Anti-displacement Roundtable with the THRIVE local organization on October 13, 2020. And City staff held two additional meetings in September and October 2020 with Orange County Environmental Justice (OCEJ), UCI Public Health educators, and the Orange County Healthcare Agency regarding lead contamination studies and policies.

On October 19, 2020, neighborhood leaders from the 30 neighborhoods in EJ disadvantaged communities were invited to learn more about environmental justice policies and programs. City staff provided an overview of SB 1000 legislation to neighborhood leaders, followed by open question-and-answer discussions. The City also attended the Community Forum on October 23, 2020, that was convened by OCEJ, Santa Ana Active Streets, Madison Park Neighborhood Association, Rise Up Willowick, and the Kennedy Commission to address concerns including environmental justice.

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2.4.2 2021 EJ Community Outreach

A Spring 2021 EJ Community Outreach campaign was conducted between January and May of 2021. The campaign began with two GPU environmental justice roundtable meetings that included residents and community-serving organizations to provide feedback on the campaign's outreach tools and approach. The primary outreach tools for the campaign included multilingual EJ meeting flyers and surveys and 10 virtual meetings (shown in Table 2-3).

Table 2-3 Neighborhood Cluster Meetings

Name	Date	Attendees
Neighborhood Cluster Meeting 1 Artesia Pilar and Flower Park	03/30/2021	Artesia Pilar Neighborhood Association, Flower Park Neighborhood Association, Santa Ana College, Orange County Labor Federation, City Councilmembers and Mayor, Latino Health Access, Santa Ana Police Department
Neighborhood Cluster Meeting 2 Delhi and Santa Ana Memorial Park	04/05/2021	Delhi Neighborhood Association, Santa Ana Memorial Park Neighborhood Association, City Councilmembers and Mayor, Santa Ana Police Department, Delhi Center, Orange County Environmental Justice, UCI, Santa Ana Unified, Smart Union
Neighborhood Cluster Meeting 3 Heninger Park and Pacific Park	04/21/2021	Heninger Park Neighborhood Association, Pacific Park Neighborhood Association, City Mayor, Orange County Catholic Worker, Republic Services, Santa Ana Unified, Holy Family Catholic School
Neighborhood Cluster Meeting 4 Lacy, Logan, and Downtown	04/27/2021	Lacy Neighborhood Association, Logan Neighborhood Association, Downtown Neighborhood Association, America On Track, Delhi Center, Elite Fitness Downtown, Republic Services, Santa Ana Unified, Morrissey Associates Inc, City Mayor
Neighborhood Cluster Meeting 5 Saddleback View and Lyon Street	04/29/2021	Saddleback View Neighborhood Association, City Councilmember, City Manager's Office, Santa Ana College, Republic Services, Santa Ana Police Department
Neighborhood Cluster Meeting 6 Centennial Park and Sandpointe	05/03/2021	Centennial Park Neighborhood Association, Sandpointe Neighborhood Association, Valley Adams Neighborhood Association, City Mayor and City Councilmembers, SoCalGas, Heritage Museum of OC
Neighborhood Cluster Meeting 7 French Park, French Court, Willard, Washington Square, and Santa Ana Triangle	05/06/2021	French Park Neighborhood Association, Willard Neighborhood Association, Casa De Santiago Neighborhood Association, City Mayor, Republic Services, Santa Ana Unified
Neighborhood Cluster Meeting 8 Central City, Pico-Lowell, Bella Vista, Casa Bonita, and Valley Adams	05/11/2021	Casa Bonita Neighborhood Association, New Horizons Neighborhood Association, Casa De Santiago Neighborhood Association, America On Track, City Manager's Office
Neighborhood Cluster Meeting 9 Madison Park, Cornerstone Village and Cedar Evergreen	05/17/2021	Madison Park Neighborhood Association, Cedar Evergreen Neighborhood Association, City Councilmembers, Cambodian Family Center, Samueli Academy, UCI
Neighborhood Cluster Meeting 10 Riverview West, Santa Anita, West Floral Park, Floral Park, Artesia Pilar and Flower Park	05/26/2021	Flower Park Neighborhood Association, City Councilmembers, Rise Up Willowick, and Riverview West Neighborhood Association

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Meeting flyers were mailed to every address within the environmental justice communities in Santa Ana. A total of 40,459 residences/occupants and property owners received a flyer letting them know of the upcoming virtual environmental justice meeting taking place for their neighborhood, as well as encouraging participation in the EJ survey. The meeting flyers were provided in English, Spanish, and Vietnamese and mailed to the community a minimum of two weeks before the virtual meeting date. The EJ survey was also available in English, Spanish, and Vietnamese.

Over 40 residents, community organizations, and faith-based organizations assisted in distributing the flyers and surveys. Each neighborhood leader received an “EJ outreach kit” that consisted of meeting flyers, surveys, meeting yard sign, survey drop box, survey yard sign, and business cards with a QR code to the GPU website and EJ survey. Through this effort, approximately 2,500 meeting flyers, 1,400 hard copy surveys, and 450 business cards were distributed to neighborhood leaders to share with their neighborhoods. In total, 746 surveys were collected, including 670 surveys submitted online and 76 submitted as a hard copy.

Social media outreach consisted of Constant Contact email campaigns, Nextdoor notifications, PeachJar, Facebook, Instagram, Nixle, city manager’s newsletter (*COSAS*), and Voiceshot. A Constant Contact email campaign was sent out for all 10 EJ meetings that included the designated neighborhood associations. In total, 7,879 emails were sent to residents, community organizations, and faith-based organizations. Nextdoor notifications were sent to subscribers in each neighborhood association. A PeachJar email campaign was distributed to 44 schools that were in environmental justice neighborhoods, both within the Santa Ana Unified School District and Garden Grove Unified School District. Emails were sent to parents, and meeting flyers were posted on the school web page. In total, 17,404 emails were sent to parents and guardians. A total of 7 Facebook posts were made regarding the environmental justice meetings. The followers on the City’s Facebook page total approximately 23,000. Five Instagram posts were sent to the City’s 19,000 followers. The city manager’s newsletter included information about the EJ meetings. The newsletter is sent out every other week as an email campaign to approximately 10,000 contacts. Voice messages regarding Neighborhood Cluster Meetings 6 and 8 (as shown in Table 2-3) were sent to 1,475 contacts. Residents received a live message or a voicemail.

The 10 virtual community meetings were held on Zoom. Each meeting had different neighborhood associations that are part of an environmental justice community. The meetings provided Spanish and Vietnamese simultaneous interpretation. Instructions on how to access the interpretation feature was provided during the meeting in both Spanish and Vietnamese. The PowerPoint presentation was translated to Spanish and Vietnamese, and a web link was provided so attendees could access the presentations in their preferred language. The meeting name, date, and attendees are shown in Table 2-3.

Furthermore, the General Plan Update identifies policies and implementation actions to promote ongoing community outreach and engagement to ensure the community’s voice is included in future policy decisions. These are shown in Appendix A-b. The appendix lists EJ-relevant policies and implementation actions in six categories, including “Enhancing Civil Engagement.”

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2.5 SCOPE OF THE DRAFT PEIR AND RECIRCULATED PEIR

The scope of the Draft PEIR was determined based on the City's NOP, the scoping meeting, and comments received in response to the NOP and at the scoping meeting. The Recirculated PEIR process does not require a new NOP or scoping meeting. The scope of the Recirculated PEIR is based on the conditions that required its preparation. The conditions as described in Section 1.4, *Recirculated PEIR*, include the City's decision to reclassify the GPU's potential recreation impacts as significant. The City also recognized the opportunity to more thoroughly disclose existing conditions and potential GPU impacts on disadvantaged communities.

Pursuant to Sections 15126.2 and 15126.4 of the CEQA Guidelines, the PEIR should identify any potentially significant adverse impacts and recommend mitigation that would reduce or eliminate these impacts to levels of insignificance.

The information in Chapter 3, *Project Description*, establishes the basis for analyzing future, project-related environmental impacts. However, further environmental review by the City may be required as more detailed information and plans are submitted on a project-by-project basis.

2.5.1 Impacts Found Not to Be Significant

As detailed in Chapter 8, *Impacts Found Not to Be Significant*, the City of Santa Ana determined that the following environmental impact categories were not significantly affected by or did not affect the GPU.

- Agriculture and Forestry Resources
- Wildfire

2.5.2 Potentially Significant Adverse Impacts

Eighteen environmental factors have been identified with potentially significant impacts if the GPU is implemented:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing

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- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

2.5.3 Unavoidable Significant Adverse Impacts

2.5.3.1 DRAFT PEIR

The Draft PEIR identified five environmental topics with significant and unavoidable adverse impacts, as defined by CEQA, that would result from implementation of the GPU. Unavoidable adverse impacts may be considered significant on a project-specific basis, cumulatively significant, and/or potentially significant. If the City of Santa Ana, as the lead agency, determines that unavoidable significant adverse impacts will result from the GPU, the City must prepare a “Statement of Overriding Considerations” before it can approve the project. A Statement of Overriding Considerations states that the decision-making body has balanced the benefits of the GPU against its unavoidable significant environmental effects and has determined that the benefits of the project outweigh the adverse effects, and therefore the adverse effects are considered acceptable. The impacts that were found in the Draft PEIR to be significant and unavoidable are:

Air Quality

- **Impact 5.2-1** The General Plan update would be inconsistent with the South Coast Air Quality Management Plan (AQMP) because buildout under the plan would exceed the population estimates assumed for the AQMP and would cumulatively contribute to the nonattainment designations of the South Coast Air Basin (SoCAB).
- **Impact 5.2-2** Construction activities associated with buildout of the General Plan update would generate short-term emissions that exceed the South Coast Air Quality Management District’s (AQMD) significance thresholds and cumulatively contribute to the nonattainment designations of the SoCAB.
- **Impact 5.2-3** Buildout in accordance with the General Plan update would generate long-term emissions that would exceed South Coast AQMD’s regional significance thresholds and cumulatively contribute to the nonattainment designations of the SoCAB.
- **Impact 5.2-4** Buildout of the General Plan update could expose sensitive receptors to substantial concentrations of toxic air contaminants.
- **Impact 5.2-5** Construction and operation emissions generated by individual development projects have the potential to exceed South Coast AQMD’s Local Significance Thresholds.

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Cultural Resources

- **Impact 5.4-1** The proposed General Plan update would allow development in areas that have historic resources identified by previous cultural resource surveys. Development in these areas would, therefore, potentially cause the disturbance of historic resources in the plan area.

Greenhouse Gas Emissions

- **Impact 5.7-1** Implementation of the proposed General Plan update would result in a decrease in GHG emissions in horizon year 2045 from existing baseline but may not meet the long-term GHG reduction goal under Executive Order S-03-05.

Noise

- **Impact 5.12-1** Due to the potential for proximity of construction activities to sensitive uses, the number of construction projects occurring simultaneously, and the potential longevity of construction activities, construction noise could result in a temporary substantial increase in noise levels above ambient conditions.
- **Impact 5.12-2** Buildout of the individual land uses and projects for implementation of the General Plan update would expose existing residences to project-generated traffic noise.

Population and Housing

- **Impact 5.13-1** At buildout, the General Plan update would result in an increase in population and housing units that exceeds the Orange County COG projections by approximately 20 and 38 percent, respectively. There are no feasible mitigation measures, and impacts would be significant and unavoidable.

These impacts are individually analyzed in Section 5.2, *Air Quality*; Section 5.4, *Cultural Resources*; Section 5.7, *Greenhouse Gas Emissions*; Section 5.12, *Noise*; and Section 5.13, *Population and Housing*, and summarized in Chapter 6 of the Draft PEIR.

2.5.3.2 RECIRCULATED DRAFT PEIR

This Recirculated Draft PEIR identifies one additional environmental topic with significant and unavoidable adverse impacts, as defined by CEQA, that would result from implementation of the GPU: Recreation.

- **Impact 5.15-1:** The General Plan update would generate additional residents that would increase the use of existing park and recreational facilities such that substantial physical deterioration of the facility could occur or be accelerated.

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- **Impact 5.15-2:** Population increases resulting from project implementation would increase recreation demands that would require construction or expansion of recreation facilities that would have potential to result in physical impacts to the environment.

2.6 INCORPORATION BY REFERENCE

All documents cited or referenced are incorporated into the Draft PEIR in accordance with CEQA Guidelines Sections 15148 and 15150, including but not limited to:

- City of Santa Ana General Plan (existing 16 elements)
- City of Santa Ana Municipal Code

In each instance where a document is incorporated by reference for purposes of the report, the Draft PEIR shall briefly summarize the incorporated document or briefly summarize the incorporated data if the document cannot be summarized. In addition, the Draft PEIR shall explain the relationship between the incorporated part of the referenced document and the Draft PEIR.

The Draft PEIR and Recirculated PEIR also rely on previously adopted regional and statewide plans and programs, agency standards, and background studies in its analyses, such as the South Coast Air Quality Management District's air quality management plans and *CEQA Air Quality Handbook*. Chapter 12, *Bibliography*, provides a complete list of references used in preparing the Draft PEIR. All of the documents that are incorporated by reference are available for review at:

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

2.7 FINAL PEIR CERTIFICATION

2.7.1 Recirculated Draft PEIR Public Review and Comments

The Draft PEIR was circulated for public review for a period of 65 days. Interested agencies and members of the public were invited to provide written comments on the Draft PEIR to the City of Santa Ana at the address shown below and on the title page of the document. Upon completion of the 65-day review period, the City reviewed all written comments received and prepared a written response for each comment. A Final PEIR incorporated all of the comments received, responses to the comments, and any changes to the Draft PEIR that resulted from the comments received. The Final PEIR was presented to the City for potential certification as the environmental document for the GPU. All persons who commented on the Draft PEIR were notified of the availability of the Final PEIR, the date of the Santa Ana Planning Commission public hearing (see Table 1-1 *General Plan Update Chronology*), and potential certification of the Final PEIR.

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The Draft PEIR is available to the general public for review at these locations:

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

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

The Draft PEIR is also available on the City's website at <https://www.santa-ana.org/general-plan>.

All comments received from agencies and individuals on the Draft PEIR were accepted during the 65-day public review period. All comments on the Draft PEIR were sent to:

City of Santa Ana Planning and Building Agency
PO Box 1988 (M-20)
Santa Ana, CA 92702

All public agencies that submitted comments during the 65-day public review period on the Draft PEIR received written responses to their comments at least 10 days prior to final action on the GPU. A public hearing to consider the Final PEIR was held on November 9, 2020. The Planning Commission voted not to certify the Final PEIR and to continue work on the GPU to a future date to allow additional time for outreach to Santa Ana's environmental justice communities.

2.7.2 Recirculated DPEIR Public Review and Comments

A Recirculated EIR requires the same noticing and consultation as the original Draft EIR (CEQA Guidelines Sections 15086 and 15087). Sections 1.4.3 and 1.4.4, respectively, describe the CEQA options for recirculation and response to comments, and the process that the City has selected for this Recirculated Draft PEIR. As described, the public will be clearly directed to only comment on the updated, recirculated portions of the Draft PEIR. Responses will be prepared to address the new comments.

2.8 MITIGATION MONITORING

Public Resources Code Section 21081.6 requires that agencies adopt a monitoring and reporting program for any project for which it has made findings pursuant to Public Resources Code 21081 or adopted a Negative Declaration pursuant to 21080(c). Such a program is intended to ensure the implementation of all mitigation measures adopted through the preparation of an EIR or Negative Declaration.

The Mitigation Monitoring and Reporting Program for the GPU will be completed in conjunction with the Final Recirculated PEIR and prior to consideration of the GPU by the City Planning Commission and City Council.

3. Project Description

As described in the previous chapters, there have been no land use changes recommended in the General Plan Update (GPU) since the Draft PEIR was released in August 2020 or since the Planning Commission public hearing in November 2020. This chapter, *Project Description*, is included in this Recirculated Draft PEIR to provide an easy reference for the details about existing and proposed land use as well as to summarize the proposed policy and implementation actions as refined and supplemented in the proposed GPU.

3.1 PROJECT LOCATION

The City of Santa Ana is in the western central portion of Orange County, approximately 30 miles southwest of the city of Los Angeles and 10 miles northeast of the city of Newport Beach (see Figure 3-1, *Regional Location*). As shown in Figure 3-2, *Citywide Aerial*, the city is bordered by the city of Orange and unincorporated areas of Orange County 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. In November 2019, the City annexed the 17th Street Island, a 24.78-acre area in the northeast portion of the city. The 17th Street Island is bounded by State Route 55 to the east, 17th Street to the south, and North Tustin Avenue to the west (see Figure 3-3, *17th Street Island and Sphere of Influence*). The city also includes a portion of the Santa Ana River Drainage Channel within its sphere of influence (SOI). The city and its SOI are defined and referred to herein as the plan area.

3.2 STATEMENT OF OBJECTIVES

The updated General Plan is based on a vision statement and core values established as part of an extensive, multiyear community outreach effort. The City has identified the following core values to guide the GPU:

- **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.** Residents value taking all necessary steps to ensure equitable outcomes, expanding access to the tools and resources that residents need, and balancing 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 levels of the planning process.
- **Culture.** The Santa Ana 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.

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- **Education.** Santa Ana values the creation of lifelong learners, the importance of opening up educational opportunities to all residents, and investing in educational programs that advance residents' economic well-being.

These core values were used as the basis to define more specific project objectives to aid decision makers in their review of the GPU and associated environmental impacts. The objectives include:

1. Promote infill development while respecting and protecting established neighborhoods.
2. Optimize high density residential and mixed-use development that maximizes potential use of mass transit.
3. Provide locations for new housing development that maximizes affordable housing opportunities to achieve both City and regional housing goals.
4. Facilitate new development at intensities sufficient to generate community benefits and attract economic activity.
5. Provide housing and employment opportunities at an urban level of intensity at the city's edge.
6. Introduce mixed-use urban villages and encourage experiential commercial uses that are more walkable, bike-friendly, and transit-oriented.
7. Develop opportunities for live/work, artist spaces, and small-scale manufacturing.

3.3 PROJECT CHARACTERISTICS

“Project,” as defined by the CEQA Guidelines, means:

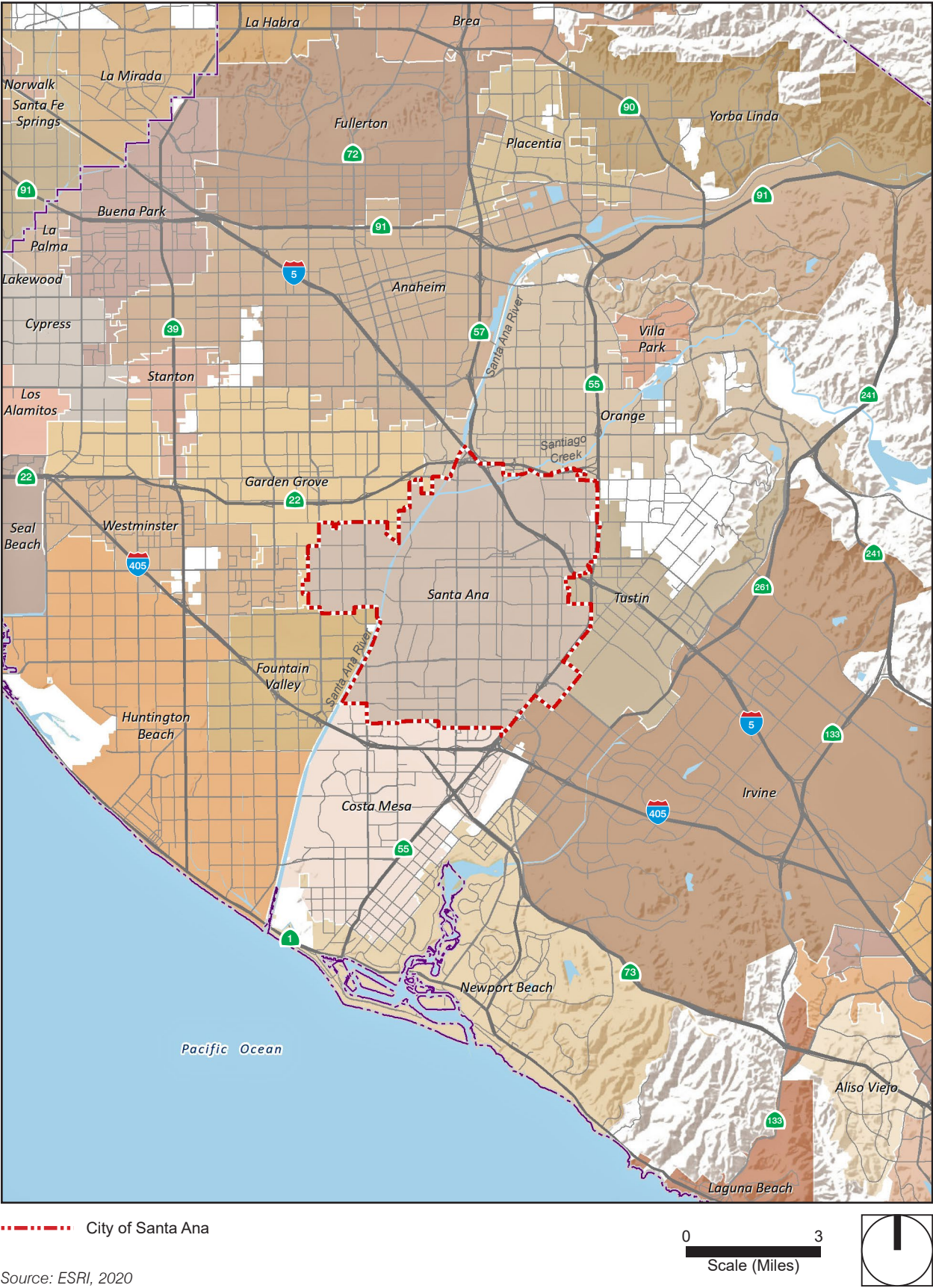
... the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: (1)...enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100–65700. (14 Cal. Code of Reg. Section 15378[a])

3.3.1 Current General Plan

The current General Plan for Santa Ana consists of 16 elements adopted in different years from 1982 to 2014. The current General Plan elements and their respective goals, policies, and actions are:

- **Airport Environs Element:** A long-range policy guide to safeguard the general welfare of the inhabitants of Santa Ana in the vicinity of John Wayne Airport (JWA). Additionally, it provides guidance for the purpose of ensuring navigable airspace is not impacted by future development in the city. This element was adopted February 11, 2009.

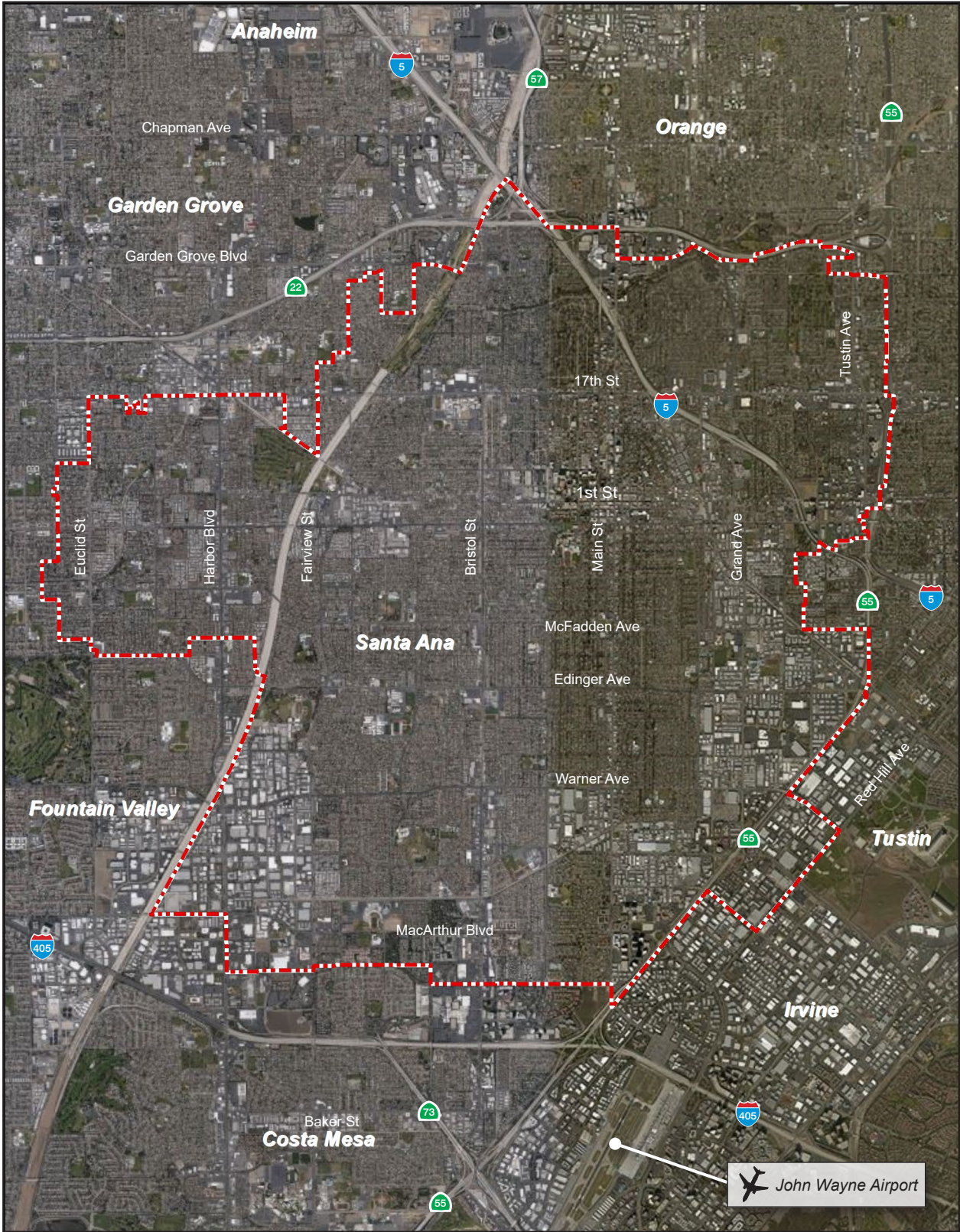
Figure 3-1 - Regional Location



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Figure 3-2 - Citywide Aerial



----- City of Santa Ana

0 1
Scale (Miles)

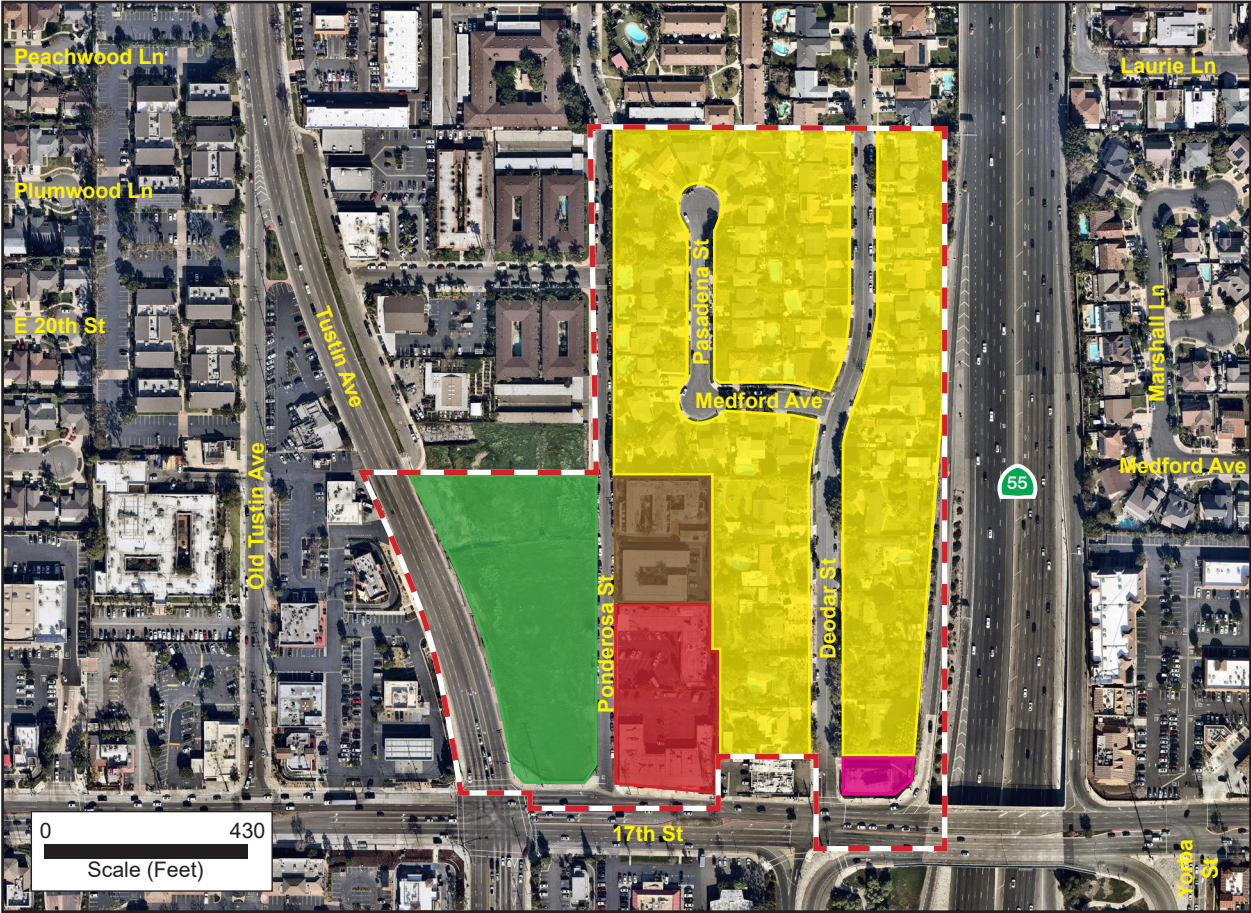


Source: ESRI, 2020

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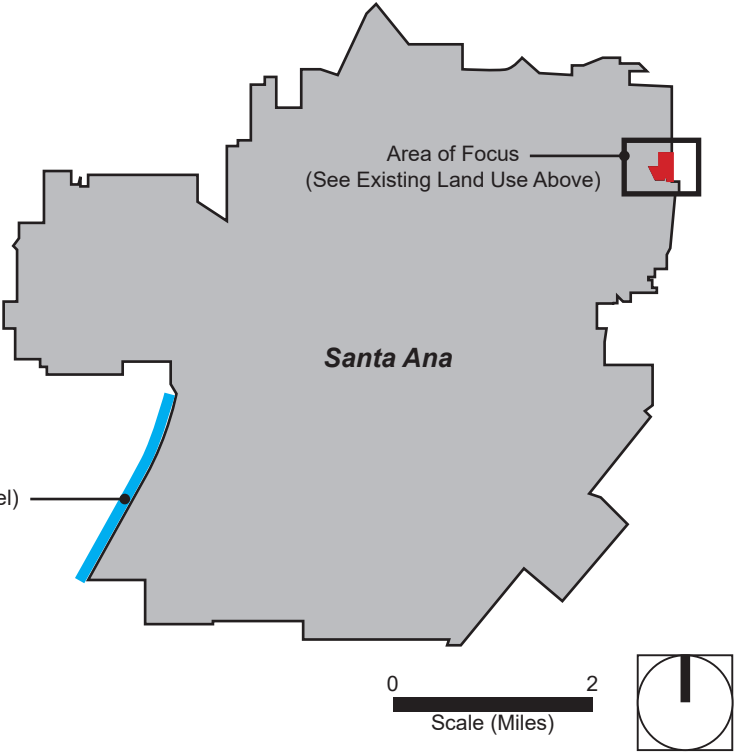
Figure 3-3 - 17th Street Island and Sphere of Influence
17th Street Island Annexed to City November 2019



Existing Land Use (2019)

- Single-Family
- Multi-Family
- General Commerical
- Office
- Vacant

Santa Ana River (Drainage Channel)
Santa Ana Sphere of Influence



Source: OC LAFCO, 2016

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- **Circulation Element:** The City's primary guide for transportation planning. This element, adopted February 2, 1998, is concerned with accommodating the transportation needs of those living, working, and visiting in the city. Its objective is to articulate the City's vision and plans for the ongoing development and maintenance of a comprehensive transportation network.
- **Conservation Element:** The conservation element is concerned with the protection, use, and development of natural and cultural resources. It emphasizes scarce resources and those needing special attention or management, and aims to prevent their exploitation, neglect, or destruction. This element was adopted September 20, 1982.
- **Economic Development Element:** This element, adopted July 6, 1998, has five objectives to encourage and promote economic vitality citywide:
 - Implement a comprehensive economic development strategy to ensure that Santa Ana is a city with a vibrant business climate that is accessible, user friendly, and welcoming to all residents and visitors.
 - Create new opportunities for business/job growth and encourage private development through new General Plan and zoning ordinance policies.
 - Promote a solutions-based customer focus in all efforts to facilitate development and investment in the community.
 - Continue to pursue objectives that shape downtown Santa Ana into a thriving, culturally diverse, shopping, dining, and entertainment destination.
 - Leverage private investment that results in tax base expansion and job creation citywide.
- **Education Element:** This element addresses the physical planning issues related to the provision of education services, such as the location of facilities and the projection of student enrollment as it relates to the need for additional schools. This element was adopted January 19, 1988.
- **Energy Element:** The purpose of the energy element is to provide policies and programs for reducing energy consumption and increasing use of new energy sources. The energy element was adopted September 20, 1982.
- **Growth Management Element:** This element, adopted on July 1, 1991, mandates that growth and development in Santa Ana be based upon the City's ability to provide an adequate circulation system pursuant to the Revised Traffic Improvement and Growth Management Ordinance.
- **Housing Element:** California law requires that cities develop housing programs to meet their fair share of housing needs in the region (Government Code Sections 65580 et seq.). A key part of this goal is addressing the regional housing needs assessment and State law requirements to plan, facilitate, and encourage housing production commensurate with their assigned need. The City of Santa Ana has been assigned a planning goal of accommodating 3,087 housing units for the housing element planning period of 2021 to 2029 in the Southern California Association of Governments' 6th Cycle Regional Housing

3. Project Description

Needs Assessment. To comply with State law, Santa Ana prepares a housing element every five years with goals, policies, and programs to facilitate the development, improvement, and preservation of housing. The latest housing element was adopted in February 2014.

- **Land Use Element:** A long-range guide for land use and development in the city. It indicates the type, location, and intensity of the development and land uses permitted. The primary objective of this element is to assist in the management of future growth, to improve the city's overall physical appearance, to minimize potential land use conflicts, and to facilitate growth and development reflecting the community's vision. The land use element was adopted February 2, 1998.
- **Noise Element:** The focus of the noise element is on remedial measures to deal with existing noise problems; prevention of new noise problems through proper arrangement of noise-sensitive land uses in relationship to circulation systems; and establishment of appropriate noise emission or insulation standards for various land uses. This element was adopted September 20, 1982.
- **Open Space, Parks, and Recreation Element:** This element, adopted September 20, 1982, identifies the City's priorities for retention and treatment of this important resource of open space land.
- **Public Facilities Element:** The basic needs of society for health, education, welfare, and safety are met by a city's public facilities, utilities, and services. The types of facilities and services, and the physical and structural relationships between them, express the city's institutionalized response to the desires and needs of the citizenry. Therefore, facility, utility, and service policies in this element are points of departure for an ongoing process of facility provision and service delivery. The public facilities plan addresses education, library, medical, cultural, government, and public utilities. This element was adopted September 20, 1982.
- **Public Safety Element:** Aims to lessen risks associated with activities over which the City has some jurisdiction by eliminating avoidable risks or reducing risks to acceptable levels. These goals can be implemented through assessment of acceptable levels of risk for fire, flood, civil disorder, incidence of crime, and other natural and man-induced potential safety hazards in the city; identification of ways risk can be reduced or avoided; and establishment of policies that result in acceptable levels of risk. This element was adopted September 20, 1982.
- **Scenic Corridors Element:** Scenic corridors are linear features of the city through which people and vehicles move. They include streets, highways, and waterways, with their associated pedestrian ways and bike trails. This element, adopted September 20, 1982, identifies Santa Ana's scenic corridors and designates them for special treatment and improvements.
- **Seismic Safety Element:** Primarily a vehicle for identifying seismic hazards that must be considered in planning the location, type, and density of development throughout Santa Ana. The element, adopted September 20, 1982, identifies, and appraises seismic hazards, including susceptibility to surface ruptures, ground shaking, and ground failures. The goal is to reduce deaths, injuries, damage to property, and economic and social dislocation resulting from earthquakes and other geologic hazards.

3. Project Description

- **Urban Design Element:** Establishes a long-range vision regarding the city's urban form, and in coordination with other elements, orchestrates a safe, functional, and aesthetically pleasing urban environment and curtails obsolete, dysfunctional, and chaotic development. This element, adopted July 6, 1998, specifically addresses outdoor space and building form and establishes programs and measures to improve the physical setting in which community life takes place.

3.3.1.1 EXISTING LAND USE

As shown in Figure 3-4, *Existing Land Use*, the plan area comprises several existing land uses, with residential, commercial, and industrial making up the majority of land uses. Table 3-1, *Existing Land Use Statistical Summary*, provides a statistical summary of the existing land uses within the Focus Areas and the remaining land uses citywide. The City owns and/or operates 44 parks with a total acreage of approximately 353 acres. Additionally, the Santa Ana River and Santiago Creek are part of a regional system of open space corridors promoted by Orange County. This corridor represents 116 acres of open space in the city.

The City identified five focus areas suited for new growth and development under the GPU: Grand Avenue/17th Street, 55 Freeway/Dyer Road, South Bristol Street, South Main Street, and West Santa Ana Boulevard. These five areas are along major travel corridors, the future OC Streetcar line, and/or linked to the city's downtown area. The Focus Areas are described in Section 3.3.2.3.

Table 3-1 Existing Land Use Statistical Summary

Land Use Designation	Acres	% of Total
Grand Avenue/17th Street	171.5	100%
Auto Repair/Service	4.0	2.3
General Commercial	63.5	37.0
General Industrial	4.0	2.3
General Office	41.2	24.0
Government/Public Facility	9.3	5.4
Hotel/Motel	0.8	0.5
Mixed Use	0.2	0.1
Multi-Family Residential	22.4	13.1
Religious Institution	12.8	7.5
Single Family Residential	6.5	3.8
Special Use Facility	0.2	0.1
Transportation/ROW	1.1	0.6
Vacant	3.5	2.1
Wholesaling and Warehousing	1.8	1.1
55 Freeway/Dyer Road	354.5	100%
Auto Repair/Service	0.7	0.2
Mixed Use	18.7	5.3
General Commercial	58.2	16.4
General Industrial	80.1	22.6
General Office	50.3	14.2
Hotel/Motel	35.4	10.0
Light Industrial	103.1	29.1
Transportation/ROW	5.2	1.5
Vacant	2.8	0.8
South Bristol Street	199.9	100%
Auto Repair/Service	4.4	2.2

3. Project Description

Table 3-1 Existing Land Use Statistical Summary

Land Use Designation	Acres	% of Total
General Commercial	161.3	80.7
General Office	10.4	5.2
Government/Public Facility	0.2	0.1
Hotel/Motel	2.6	1.3
Improved Flood Waterway	3.9	1.9
Multi-Family Residential	16.7	8.3
Vacant	0.5	0.2
South Main Street	312.2	100%
Auto Repair/Service	9.5	3.0
General Commercial	93.8	30.0
General Industrial	12.2	3.9
General Office	9.8	3.1
Government/Public Facility	2.4	0.8
Hotel/Motel	1.0	0.3
Light Industrial	2.1	0.7
Mixed Use	3.5	1.1
Multi-Family Residential	47.1	15.1
Parking Facility	0.7	0.2
Religious Institution	5.4	1.7
School (add College)	13.6	4.4
Single Family Residential	108.6	34.8
Special Use Facility	0.3	0.1
Transportation/ROW	0.2	0.1
Utility	0.3	0.1
West Santa Ana Boulevard	481.6	100%
Auto Repair/Service	5.2	1.1
General Commercial	60.8	12.6
General Industrial	25.2	5.2
General Office	8.9	1.8
Golf Course	101.3	21.0
Government/Public Facility	18.1	3.8
Light Industrial	29.7	6.2
Live/Work	0.4	0.1
Mixed Use	0.6	0.1
Mobile Homes and Trailer Parks	16.5	3.4
Multi-Family Residential	73.2	15.2
Open Storage	4.5	0.9
Parks and Recreation	7.3	1.5
Religious Institution	5.1	1.1
School (add College)	26.7	5.5
Single Family Residential	68.0	14.1
Special Use Facility	2.4	0.5
Transportation/ROW	16.4	3.4
Vacant	2.5	0.5
Wholesaling and Warehousing	2.1	0.4
Not Specified	6.7	1.4
Balance of City	11,598.8	100%
Auto Repair/Service	38.3	0.3
Cemetery	102.2	0.9
General Commercial	577.8	5.0
General Industrial	933.3	8.0

3. Project Description

Table 3-1 Existing Land Use Statistical Summary

Land Use Designation	Acres	% of Total
General Office	364.1	3.1
Golf Course	115.7	1.0
Government/Public Facility	167.8	1.4
Heavy Industrial	99.5	0.9
Hospital	9.6	0.1
Hotel/Motel	12.9	0.1
Improved Flood Waterways	16.1	0.1
Light Industrial	420.0	3.6
Live/Work	3.2	0.0
Mixed Use	26.0	0.2
Mobile Homes and Trailer Parks	340.0	2.9
Multi-Family Residential	1,434.2	12.4
Museum	2.0	0.0
Open Storage	0.9	0.0
Other	0.0	0.0
Parking Facility	6.9	0.1
Parks and Recreation	338.4	2.9
Personal Storage	2.3	0.0
Religious Institution	209.7	1.8
School	779.1	6.7
Single Family Residential	4,873.7	42.0
Special Use Facility	15.2	0.1
Transportation/ROW	62.6	0.5
Vacant	213.0	1.8
Wholesaling and Warehousing	171.9	1.5
Not Specified	262.3	2.3
TOTAL	13,118.5	—

Source: Numbers aggregated and projected by PlaceWorks, 2020.

City Boundary

The majority of the city is urbanized, with residential and nonresidential development, mobility, and public facilities all contributing to Santa Ana's existing built environment. The city's incorporated boundaries encompass approximately 27.4 square miles. Residential land uses occupy approximately 50 percent of the land within the current city boundaries, accounting for 6,667 acres.¹ Other predominant land uses include commercial (1,798 acres)² and industrial (1,904 acres).³ Figures 3-5a and 3-5b, *City Photos*, include a photo collage of the city and photographs of different prominent features around the plan area.

¹ This number does not include Live-Work and Mixed-Use land uses.

² This land use includes Auto Repair/Storage, General Commercial, General Office, Hotel/Motel, Live/Work Mixed Use, Parking Facility, Open Storage, and Personal Storage.

³ Includes Industrial and Wholesaling and Warehousing.

3. Project Description

Sphere of Influence

The City annexed the 17th Street Island in November 2019 (see Figure 3-3). This area includes approximately 53 single-family detached units and 20 other dwelling units, for a total of 275 residents (OC LAFCO 2018). The island is north of East 17th Street and adjacent to the SR-55, the Costa Mesa Freeway.

The city still includes a two-mile portion of the Santa Ana River Drainage Channel in its SOI along the city's westerly border with Fountain Valley (see Figure 3-3).

3.3.1.2 CURRENT GENERAL PLAN LAND USE DESIGNATIONS

Figure 3-6, *Current General Plan Land Use Plan*, shows the 11 land use designations of the current General Plan, and Table 3-2 gives a general description of each designation along with allowable uses.

Table 3-2 Land Use Designation Descriptions

Land Use Designation	General Character	Allowable Land Use
Low Density Residential	Designation applies to areas that are developed with lower density residential land uses. The allowable maximum development intensity is 7 units per acre.	Single family homes
Low-Medium Density Residential	Designation applies to areas developed with residential uses at permitted densities of up to 11 units per acre.	Mobile home parks, a mixture of duplexes and single-family residences, or small lot subdivisions.
Medium Density Residential	Designation applies to areas developed with residential uses at densities of up to 15 units per acre.	Multifamily development projects.
Professional and Administrative Office (PAO)	Designation applies to areas where professional and/or administrative offices are dominant, or where such development is being encouraged in this land use designation. The floor area ratio (FAR) intensity standard applicable to this land use designation ranges from 0.5 to 1.0.	The types of uses typically located in the PAO district include the following: <ul style="list-style-type: none"> Professional and administrative offices/office parks. Service activities such as copy centers, courier services, travel agencies, and restaurants when such uses are an integral component of a planned office development. Professional uses such as accountants, attorneys, doctors, engineers, and insurance brokers.
General Commercial	Applies to commercial corridors in Santa Ana, along Main Street, Seventeenth Street, Harbor Boulevard, and other major arterial roadways in the city. The intensity standard applicable to this designation is a floor area ratio of 0.5 to 1.0.	Uses typically located in this district are: <ul style="list-style-type: none"> Business and professional offices. Retail and service establishments. Recreational, cultural, and entertainment uses. Vocational schools.
District Center	Includes the major activity areas in the city. The intensity standard for the District Center ranges from 1.0 to 3.0.	District Centers in Santa Ana include the following: <ul style="list-style-type: none"> The MainPlace/City Place District Center which allows for regional shopping, office complexes, and high intensity housing and mixed-use development.

3. Project Description

Table 3-2 Land Use Designation Descriptions

Land Use Designation	General Character	Allowable Land Use
		<ul style="list-style-type: none"> • The Museum District which allows for office/cultural uses. • The Downtown District which serves as one of the Country's major employment and governmental operations centers complemented with a mix of residential, commercial, and services uses. • The South Coast Metro District which serves as a regional retail shopping area which includes a range of commercial services and office projects. • The MacArthur Place District Center which contains an office/hotel complex and mixed-use project • The Metro East District which includes a balance of office, residential, and service uses. • The Transit Village District which allows for employment centers, residential and service uses. • The Harbor Mixed Use Transit Corridor Specific Plan includes higher intensity housing and mixed-use development.
One Broadway Plaza District Center	Has an FAR of 2.9, which exceeds the typical District Center intensity limit.	Allows for professional office complexes and mixed-use development.
Urban Neighborhood	This land use designation applies to primarily residential areas with pedestrian oriented commercial uses, schools and small parks. An FAR of 0.5 to 3.0 is allowed.	Allows for a mix of residential uses and housing types, such as mid- to low-rise multiple family, townhouses, and single-family dwellings; with some opportunities for live work, neighborhood-serving retail and service, public spaces and use, and other amenities.
Institutional	Only public properties of approximately five acres or more are designated Institutional. The maximum applicable floor area ratio standard for this designation is 0.5.	The Institutional designation includes the Civic Center, other governmental facilities, City facilities, and public institutions such as schools, etc.
Industrial	The Industrial designation applies to areas developed with manufacturing and industrial uses. The maximum floor area ratio for this designation is 0.45.	<p>Typical uses found in this district include:</p> <ul style="list-style-type: none"> • Light and heavy product manufacturing and assembly. • Commercial uses which are ancillary to industrial uses in the district.
Open Space	Typical FAR is 0.2.	The Open Space designation is applied to parks, water channels, cemeteries, and other open space uses.

Source: City of Santa Ana, 1998, Land Use Element.

Notes: FAR is defined as the relationship between the total amount of usable floor area that a building has, or has been permitted to have, and the total area of the lot on which the building stands.

Table 3-3, *Current General Plan Land Use Designations and Statistics*, presents a breakdown of current General Plan land use designations and statistics in the plan area.

3. Project Description

Table 3-3 Current General Plan Land Use Designations and Statistics

Land Use Designation	Acres	% of Total
Grand Avenue/17th Street	171.5	100%
General Commercial	113.3	66.1
Institutional	7.7	4.5
Low Density Residential	34.5	20.1
Open Space	1.1	0.6
Professional and Administrative Office	14.8	8.6
55 Freeway/Dyer Road	354.5	100%
District Center	1.8	0.5
General Commercial	66.9	18.9
Industrial	9.2	2.6
Open Space	3.5	1.0
Professional and Administrative Office	273.2	77.1
South Bristol Street	199.9	100%
District Center	90.9	45.5
General Commercial	92.6	46.3
Medium Density Residential	13.0	6.5
Open Space	3.4	1.7
South Main Street	312.2	100%
District Center	1.7	0.5
General Commercial	124.8	40.0
Industrial	7.1	2.3
Institutional	9.6	3.1
Low Density Residential	169.1	54.2
West Santa Ana Boulevard	481.6	100%
General Commercial	26.7	5.5
Industrial	85.4	17.7
Institutional	46.2	9.6
Low Density Residential	146.9	30.5
Medium Density Residential	27.0	5.6
Open Space	133.6	27.7
Professional and Administrative Office	13.5	2.8
Urban Neighborhood	2.4	0.5
Balance of City	11,598.8	100%
District Center	124.2	1.1
General Commercial	424.2	3.7
Industrial	2,159.6	18.6
Institutional	886.7	7.6
Low Density Residential	6,173.3	53.2
Low-Medium Density Residential	429.0	3.7
Medium Density Residential	335.3	2.9
One Broadway Plaza District Center	4.1	0.1

3. Project Description

Table 3-3 Current General Plan Land Use Designations and Statistics

Land Use Designation	Acres	% of Total
Open Space	793.8	6.8
Professional and Administrative Office	260.4	2.2
Urban Neighborhood	4.1	0.1
Not Specified	4.1	0.1
TOTAL	13,118.5	—

Source: Figures aggregated and projected by PlaceWorks, 2020.

3.3.2 Description of the Project

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 was to complete a comprehensive update of the existing General Plan. The GPU 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 General Plan update will identify areas of opportunity and provide options to enhance development potential in key areas of the city. It will also bring the city into compliance with recent State laws, reflect current conditions, and incorporate input from the general public, City staff, and other stakeholders.

The proposed GPU is organized into three sections: I, Services and Infrastructure; II, Natural Environment; and III, Built Environment. The proposed GPU addresses the eight topics required by state law as well as five optional topics. 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. The 12 proposed elements of the GPU will replace the 16 elements of the current General Plan. The update will incorporate the current 2014–2021 housing element, and no substantive changes are anticipated. 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 update, with goals and policies incorporated into multiple elements. Volume II, Appendix B-a includes all the proposed goals and policies for each of the elements in the GPU. The 12 elements of the proposed GPU are:

Mandatory Topics

- Land Use Element
- Mobility Element
- Housing Element
- Open Space Element
- Conservation Element
- Safety Element
- Noise Element

Optional Topics

- Public Services Element
- Urban Design Element
- Community Element
- Economic Prosperity Element
- Historic Preservation Element

3. Project Description

The proposed General Plan Update is comprehensive both in its geography and subject matter. It addresses the entire territory within the plan area's boundary and the full spectrum of issues associated with management of the plan area. The GPU also includes forecasts of long-term conditions and outlines development goals and policies; exhibits and diagrams; and the objectives, principles, standards, and plan proposals throughout its various elements. The GPU can be found online at <https://www.santa-ana.org/general-plan>. The General Plan Policy Framework can be accessed at <https://www.santa-ana.org/sites/default/files/pb/generalplan/documents/GeneralPlanPolicyFrameworkMaster.DRAFT.cmo2.pdf>.

Coordination and consistency are essential between the elements of the GPU, but in particular with the land use element. The mobility element, which identifies proposed improvements to the transportation system, may impact surrounding land uses and future development. The urban design element sets forth policies and programs to improve the city's design and urban form. The conservation element protects and maintains the city's natural, cultural, and other resources, with a focus on preserving aesthetics and the environmental quality of the city.

Both the land use element and the mobility element are described in more depth below. Focus areas and specific plan/special zoning areas are also described.

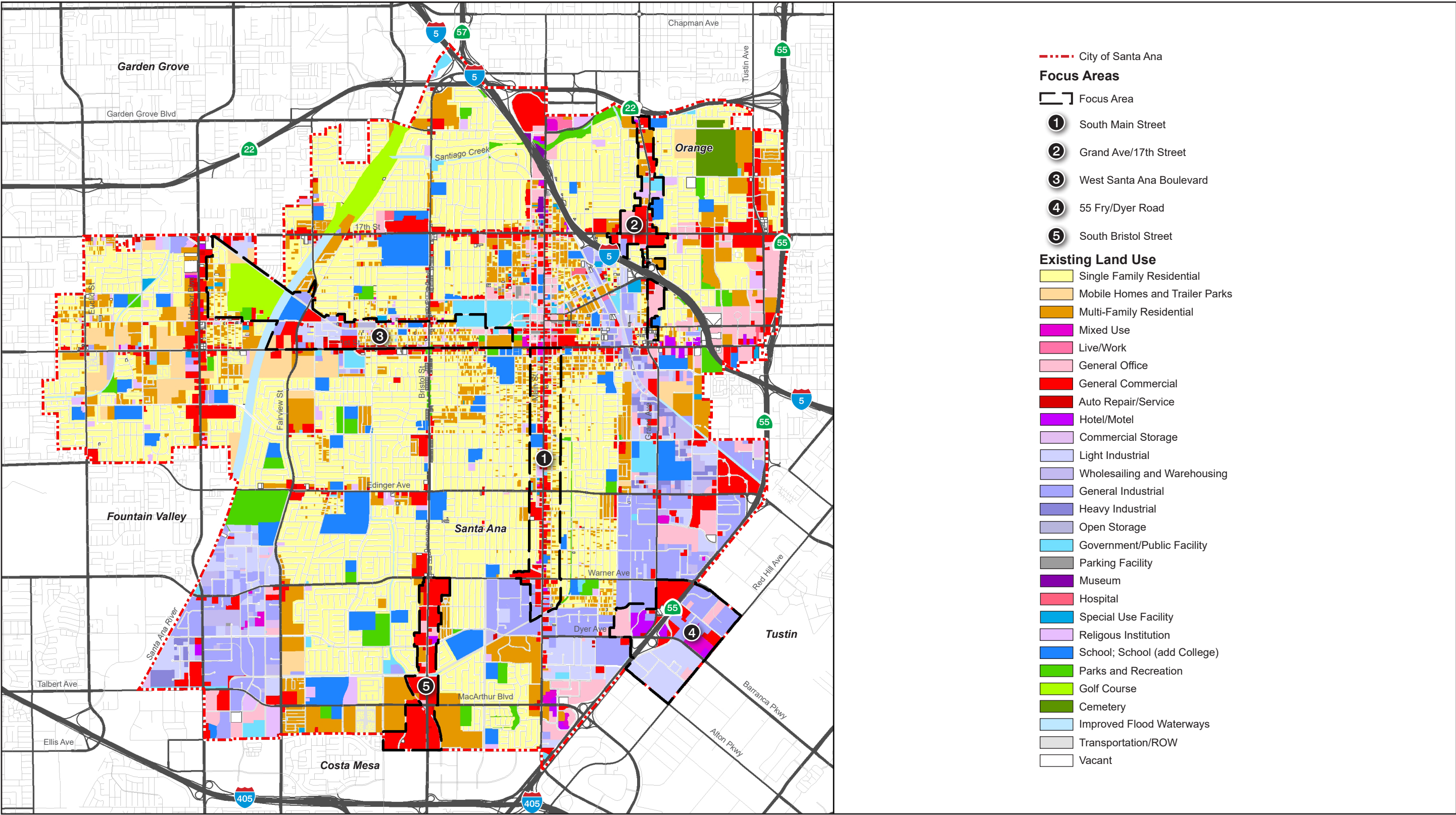
3.3.2.1 UPDATED LAND USE ELEMENT

The updated land use element will guide growth and development (e.g., infill development, redevelopment, use and revitalization/restoration) within the plan area by designating land uses, as shown on the proposed land use map (see Figure 3-7, *Proposed General Plan Land Uses*). Figure 3-7 shows the 13 proposed land use designations of the GPU, and Table 3-4 gives a general description of the land use designations that are added to the GPU and were not in the current General Plan. Land use designations define the type and nature of development that would be allowed in a given location of the plan area. The land use designations and patterns shown on Figure 3-7 are intended to provide the basis for more detailed zoning designations and development intensities, requirements, and standards established in the City's development code.

Table 3-4 Land Use Designation Descriptions

Land Use Designation	General Character	Allowable Land Use
Corridor Residential	Typical density is 30 du/ac.	Medium urban density housing such as attached townhomes and apartments along corridors or adjacent to areas designated as General Commercial, Urban Neighborhood, or District Center
Industrial/Flex	The Industrial/Flex land use designation will promote large-scale office industrial flex spaces, multi-level corporate offices, and research and development uses. Typical FAR is 1.5.	Office/industrial flex spaces, small scale R&D, retail, live/work, and clean manufacturing.

Figure 3-4 - Existing Land Use



Source: City of Santa Ana, 2020

3. Project Description

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Figure 3-5a - City Photographs



Photo 1. View of I-5 with the Santa Ana Mountains to the northwest.



Photo 2. View of the Santa Ana downtown area.



Photo 3. View of the Orange County Courthouse in downtown Santa Ana.



Photo 4. View of the Bowers Museum in the Museum District.



Photo 5. View of the Howe Waffle House Museum in downtown Santa Ana.



Photo 6. View of the courtyard at the Santa Ana Regional Transit Center.

3. Project Description

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Figure 3-5b - City Photographs



Photo 7. View of single-family land uses in Grand Avenue/17th Street focus area.



Photo 8. View of bike lanes on Bristol Street Corridor.



Photo 9. View of the entrance to the Mainplace Mall.



Photo 10. View of historic home in Floral Park.



Photo 11. View of historic home in Wilshire Square.

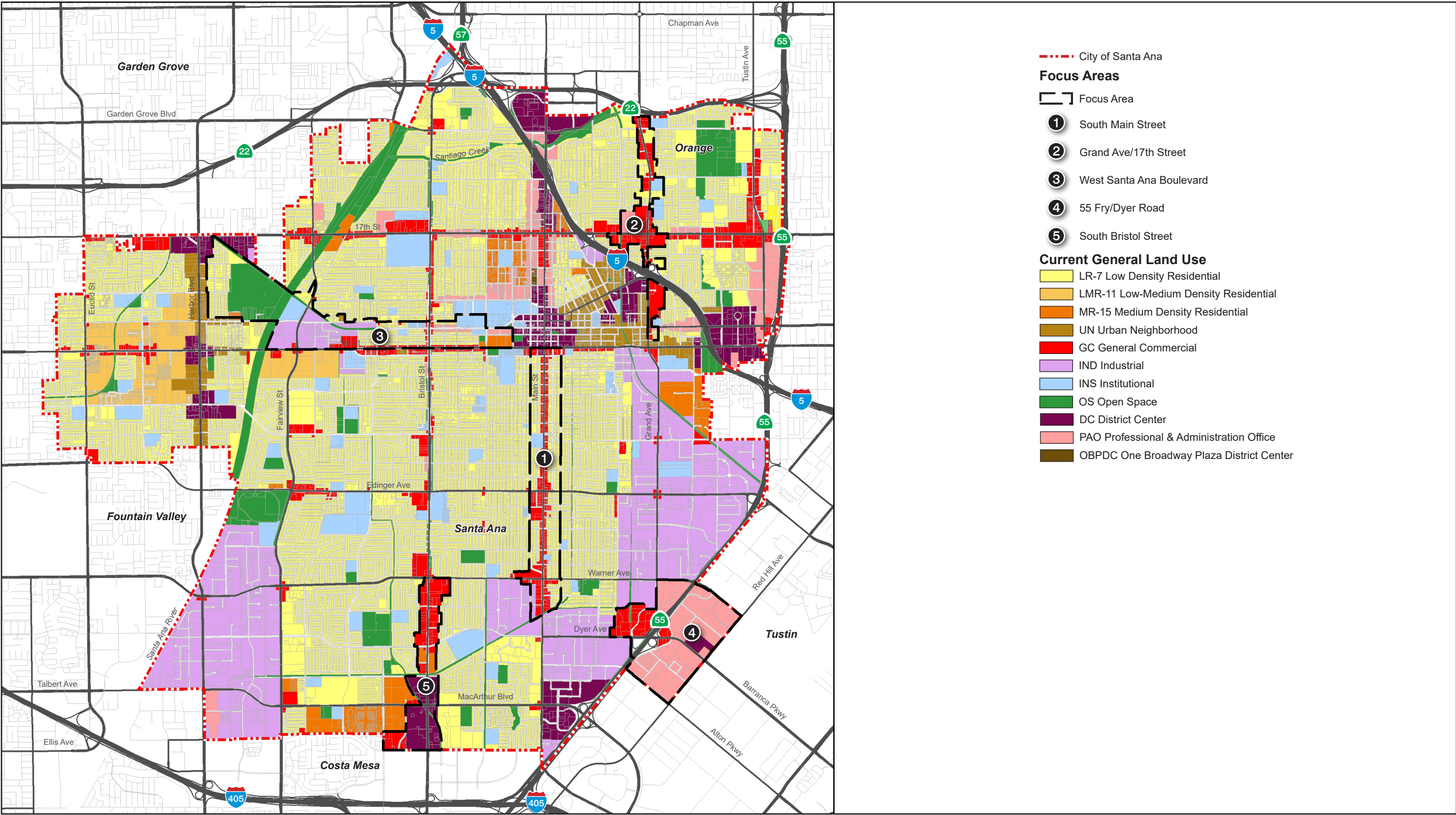


Photo 12. View of typical urban neighborhood.

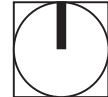
3. Project Description

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Figure 3-6 - Current General Plan Land Use Plan



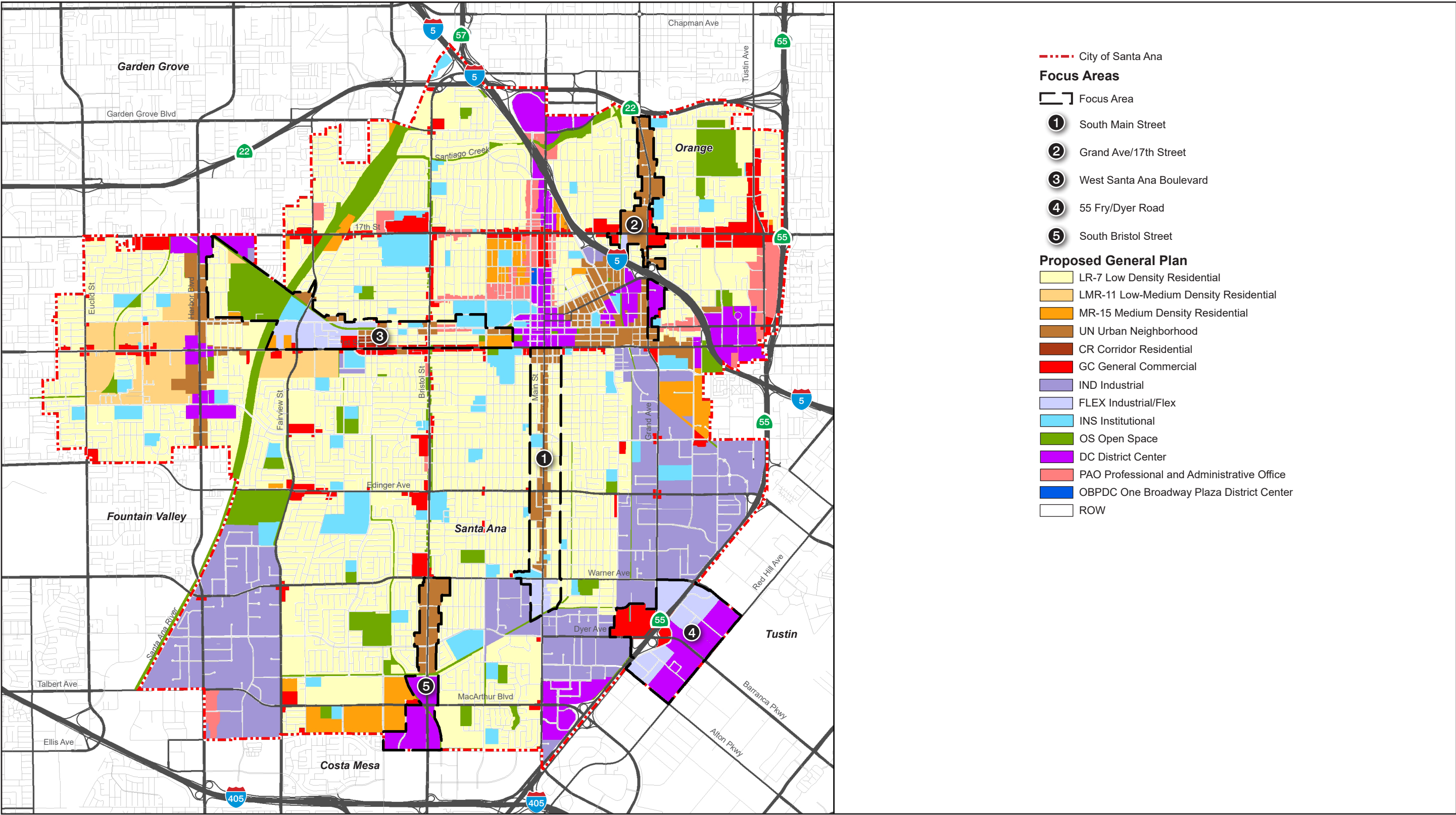
Source: City of Santa Ana, 2020



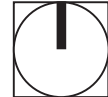
3. Project Description

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Figure 3-7 - Proposed General Plan Land Use Plan



Source: City of Santa Ana, 2017



3. Project Description

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3. Project Description

Table 3-5, *Proposed Land Use Designations and Statistics*, outlines the proposed land use designations and summarizes the acreage and total percentage of each land use designation within the entire plan area.

Table 3-5 Proposed Land Use Designations and Statistics

Land Use Designation	Acres	% of Total
Grand Avenue/17th Street	171.5	100%
District Center	23.7	13.8
General Commercial	19.9	11.6
Industrial/Flex	7.1	4.1
Open Space	1.1	0.6
Urban Neighborhood	119.7	69.8
55 Freeway/Dyer Road	354.5	100%
District Center	158.0	44.6
General Commercial	68.0	19.2
Industrial/Flex	127.4	35.9
Open Space	1.1	0.3
South Bristol Street	199.9	100%
District Center	108.3	54.2
Open Space	6.0	3.0
Urban Neighborhood	85.7	42.9
South Main Street	312.2	100%
Industrial/Flex	29.0	9.3
Institutional	19.2	6.1
Low Density Residential	162.3	52.0
Urban Neighborhood	101.7	32.6
West Santa Ana Boulevard	481.6	100%
Corridor Residential	10.0	2.1
General Commercial	21.5	4.5
Industrial/Flex	87.9	18.3
Institutional	45.5	9.4
Low Density Residential	108.1	22.4
Low-Medium Density Residential	6.8	1.4
Medium Density Residential	27.0	5.6
Open Space	133.6	27.7
Professional and Administrative Office	6.2	1.3
Urban Neighborhood	35.0	7.3
Balance of City	11,598.8	100%
District Center	124.2	1.1
General Commercial	424.2	3.7
Industrial	2,159.6	18.6
Institutional	886.7	7.6
Low Density Residential	6,173.3	53.2
Low-Medium Density Residential	429.0	3.7
Medium Density Residential	335.3	2.9
One Broadway Plaza District Center	4.1	0.0
Open Space	793.8	6.8
Professional and Administrative Office	260.4	2.2
Urban Neighborhood	4.1	0.0
Not Specified	4.1	0.0
TOTAL	13,118.5	—

Source: Figures aggregated and projected by PlaceWorks, 2020.

3. Project Description

It is important to note that the updated land use element is a regulatory document that defines the framework for future growth and development in the plan area but does not directly result in development in and of itself. Before any project can be developed in the plan area, it must be analyzed for conformance with the General Plan Update, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits.

3.3.2.2 UPDATED MOBILITY ELEMENT

The mobility element update is integrally related to federal, state, and regional transportation programs as well as local plans and regulations. The City's role in transportation planning has become increasingly important, because recent legislation in the areas of growth management, congestion management, and air quality require more active local coordination to meet regional objectives. Furthermore, the mobility element update is intended to guide future development of the city's transportation system in a manner consistent with the updated land use element.

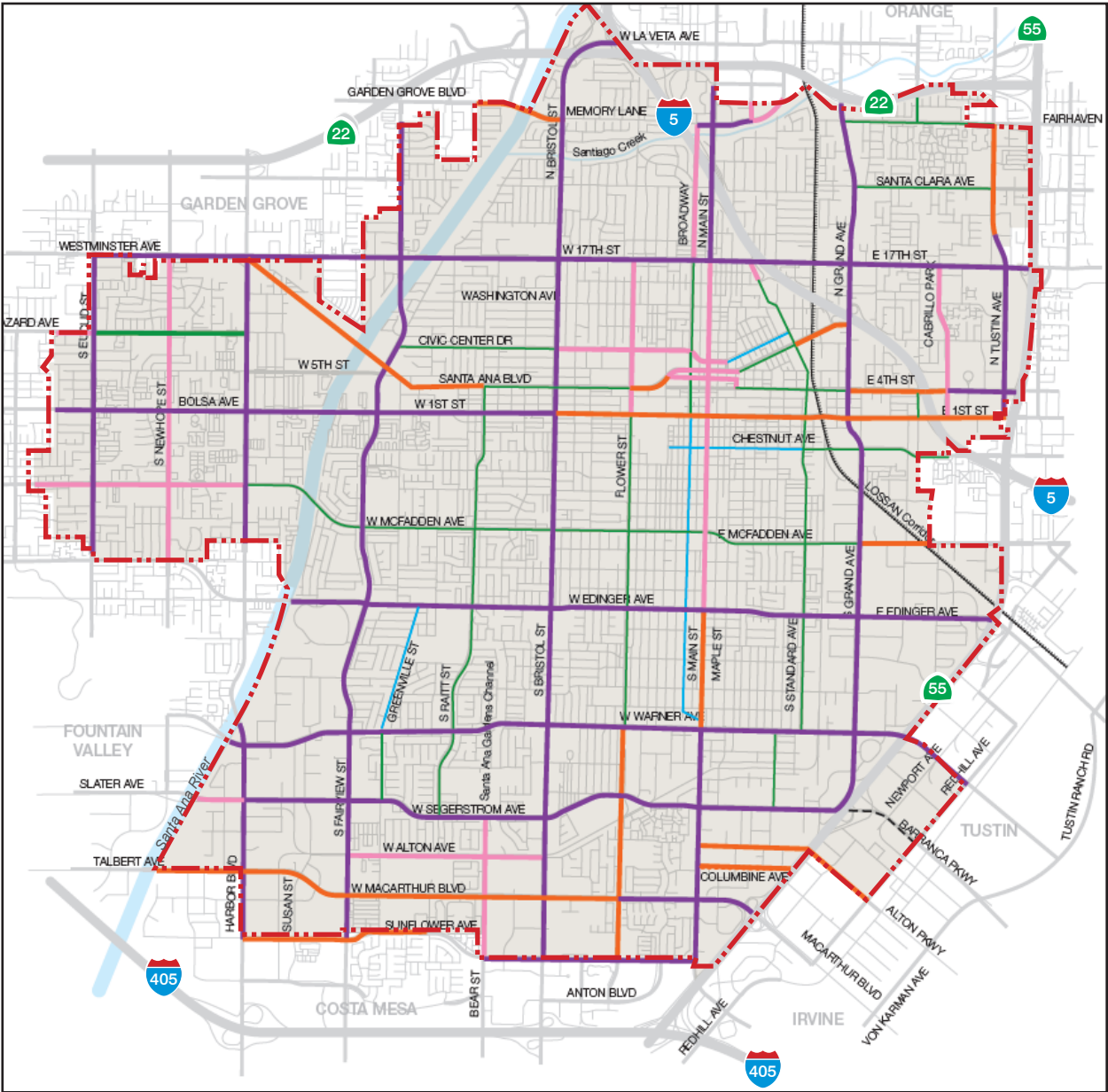
The *Master Plan of Streets and Highways (MPSH)* (Figure 3-8) details proposed street classifications to reflect buildout of the city's roadway system. The street classifications include Freeway, Major Arterial, Primary Arterial, Secondary Arterial, Divided Collector Arterial, and Collector Arterial. As part of the implementation of complete streets principles,⁴ a series of modifications to the city's roadway network has been identified and includes both the reclassification of roadways and assignment of new MPSH roadway classifications to selected existing streets.

As illustrated on Figure 3-9, *Proposed Arterial Roadway Reclassifications*, a number of proposed roadway reclassifications, adoptions, and removals from the MPSH are as follows:

- Reclassified as Divided Collector Arterial:
 - Santa Clara Avenue west of Tustin Avenue (currently Secondary Arterial)
 - Flower Street between Warner Avenue and 1st Street (currently Secondary Arterial)
 - Chestnut Avenue between Standard Avenue and eastern city limit (currently Secondary/Primary Arterial)
 - Raitt Street between Segerstrom Avenue and Santa Ana Boulevard (currently Secondary Arterial)
 - Civic Center Drive between Fairview Street and Bristol Street (currently Secondary Arterial)
 - Penn Way between I-5 on/off ramps and Washington Avenue (currently Secondary Arterial)
 - Santiago Street between 15th Street and 6th Street (currently Secondary Arterial)
 - Standard Avenue between 6th Street and Warner Avenue (currently Secondary Arterial)
 - Santa Ana Boulevard between French Street and Santiago Street (currently Primary Arterial)
 - Santa Ana Boulevard between Raitt Street and Flower Street (currently Major Arterial)
 - Cambridge Street between Fairhaven Avenue and SR-22 freeway (currently Local Arterial)

⁴ Complete streets are transportation facilities that are planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility.

Figure 3-8 - Master Plan of Streets and Highways (MPSH)



- City of Santa Ana
- Principal
- Freeway
- Major Arterial
- Primary Arterial
- Secondary Arterial
- Divided Collector
- Collector

0 1
Scale (Miles)

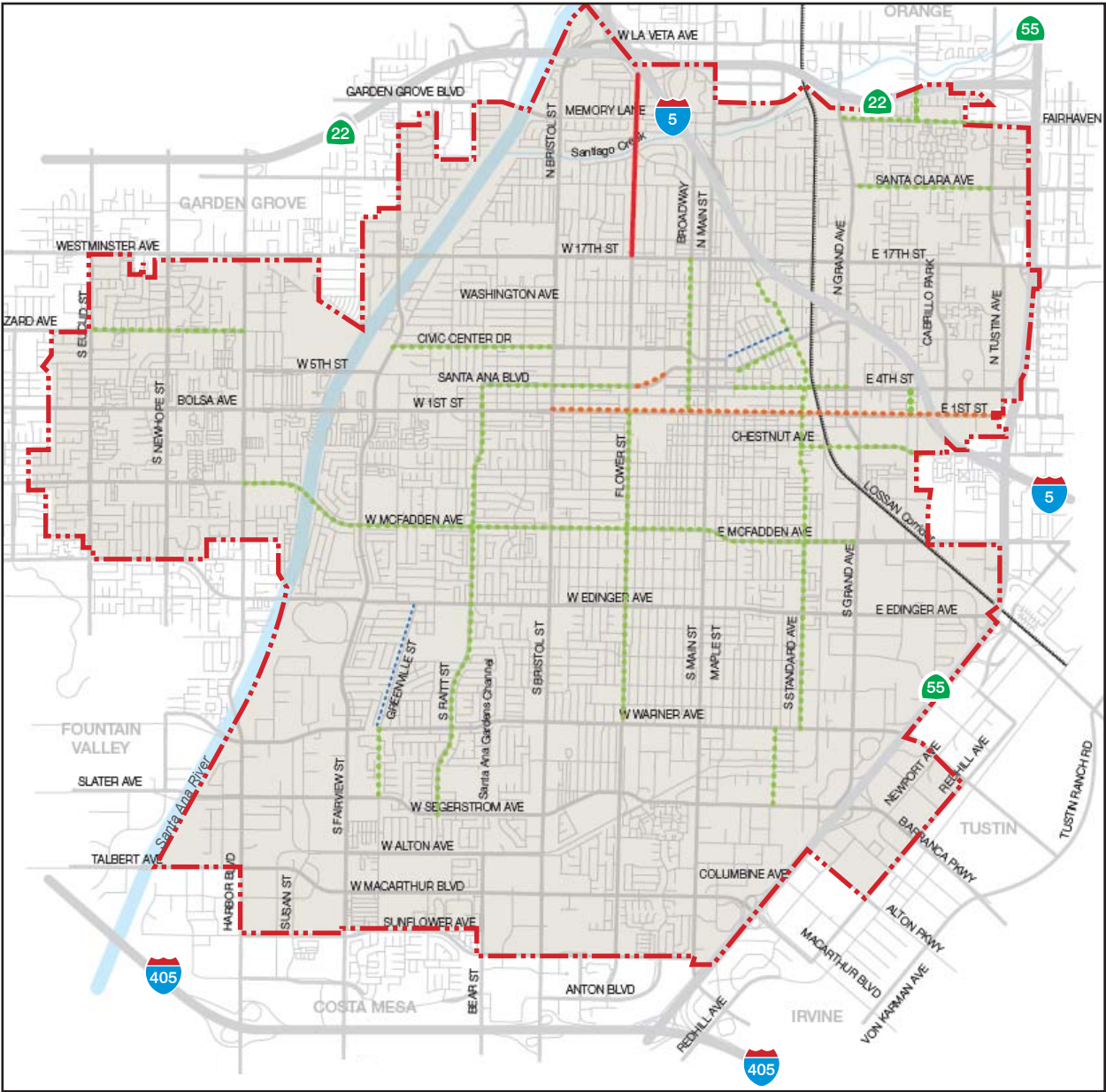


Source: IBI, 2020

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Figure 3-9 - Proposed Arterial Roadway Reclassifications



- City of Santa Ana
- Freeway
- Primary Arterial
- Divided Collector Arterial
- Collector
- Local Street/Delete from MPSH Network

0 1
Scale (Miles)



Source: IBI, 2020

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- Hazard Avenue between Euclid Street and Harbor Boulevard (currently Secondary Arterial)
- Halladay Avenue between Warner Avenue and Dyer Road (currently Secondary Arterial)
- McFadden Avenue between Harbor Boulevard and Grand Avenue (currently Secondary Arterial)
- Broadway between 1st Street and 17th Street (currently Secondary Arterial)
- 4th Street between French Street and Grand Avenue (currently Primary/Secondary Arterial)
- Fairhaven Avenue from Grand Avenue to Tustin Avenue (currently Secondary Arterial)
- Greenville Street between Edinger Avenue and Warner Avenue (currently Secondary Arterial)
- Reclassified as Primary Arterial:
 - Santa Ana Boulevard between Flower Street and Ross Street (currently a Major Arterial)
 - 1st Street between Bristol Street and Tustin Avenue (currently Major Arterial)
 - Tustin Avenue between 4th Street and the closest southern City limit (currently Major Arterial)
 - Cabrillo Park between 4th Street and 1st Street (currently Secondary Arterial)
 - MacArthur Boulevard from Hyland Avenue to the western city limit (currently Major Arterial)
- Reclassified as Secondary Arterial
 - Memory Lane from Lawson Way to Parker Street (currently Major Arterial)
 - Broadway from 17th Street to Santa Clara Avenue (currently Local Commercial)
 - Santa Ana Boulevard between French Street and Ross Street (currently Primary Arterial)
 - Segerstrom Avenue from Harbor Boulevard to the western city limit (currently Major Arterial)
 - North Mai Street from 17th Street to Washington Avenue (currently Major Arterial)
- Add the following to the MPSH as Principal Arterial:
 - Dyer Road between 55 Freeway and Red Hill Avenue
- Add the following to the MPSH as Divided Collector Arterial:
 - Greenville Street between Segerstrom Avenue and Warner Avenue
 - Cambridge Street from Fairhaven Avenue to the northern city limit
- Add the following to the MPSH as Secondary Arterial
 - 5th Street from French Street to Ross Street
 - Lawson Way from Memory Lane to the northern city limit
 - French Street from 4th street to 5th street
 - 5th Street from Sullivan Street to Fairview Street
 - Mabury Street between 4th Street and 1st Street
 - North Main Street from Washington Avenue to 10th Street
- Add the following to the MPSH as Primary Arterial:
 - Edinger Avenue from Newhope Street to the closest western city limit

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- Santa Ana Boulevard from Raitt Street to Westminster Avenue
- Sunflower Avenue from Fairview Street to Harbor Blvd
- Add the following to the MPSH as Collector Streets:
 - Civic Center Drive between Spurgeon Street and Santiago Street (currently Local Street)
 - Broadway from Anahurt Street to Main Street (currently Local Road)
- Remove the following from the MPSH
 - Memory Lane from the City Center Drive to SR-22
 - Wright Street from 14th Street to Fruit Street
 - 4th Street from French Street to Ross Street
 - Washington Avenue from Broadway to Main Street
 - 10th Street from Broadway to Main Street
 - Columbine Avenue from Main Street to SR-55
 - Halladay Street from Dyer Road to Alton Parkway

Table 3-6 Street Classifications in Santa Ana

Street Classification	Description
Freeway	Freeways are multilane, limited-access, high-volume, high-speed roadways constructed for regional and interregional vehicular travel. Access to these facilities is restricted to interchange ramps at selected roadways along their route. Freeways are under the jurisdiction of the California Department of Transportation (Caltrans).
Major Arterial	Generally consists of six travel lanes and is also divided. Typically, the right-of-way width for this type of roadway is 120 feet. A major arterial is designed to accommodate between 33,900 and 50,600 vehicle trips daily.
Primary Arterial	Generally consists of a four-lane, divided roadway. Typically, the right-of-way width is 100 feet. A primary arterial is designed to accommodate between 22,500 and 33,800 vehicle trips daily.
Secondary Arterial	Generally a four-lane, undivided roadway. The typical right-of-way width for this category of roadway is 80 feet. A secondary arterial is typically designed to accommodate between 15,000 and 22,500 vehicle trips daily.
Divided Collector Arterial	Generally a two-lane roadway with a continuous center two-way left-turn lane. The typical right-of-way width is 80 feet, for the purpose of allocating right-of-way to bicycle and pedestrian use. A divided collector arterial is designed to accommodate up to 22,000 vehicle trips per day.
Collector Street	A two-lane, undivided roadway carrying less than 10,000 vehicle trips per day. The right-of way width for this roadway classification is 60 feet. Collector Streets are also two-lane undivided roadways with a right-of-way width of 56 feet.

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The mobility element update incorporates the proposed Santa Ana-Garden Grove Fixed Guideway project, which will introduce new transit service to the city. Santa Ana is working with Garden Grove and Orange County Transit Authority to build a fixed guideway system called the OC Streetcar. Expected to begin operations in 2022, the OC Streetcar will link the Santa Ana Regional Transportation Center to a new multimodal hub at Harbor Boulevard/Westminster Avenue in Garden Grove (see Figure 3-10, *Master Plan of Transit*). OC Streetcar will serve historic downtown Santa Ana and Civic Center. Along its four-mile route, OC Streetcar will connect with 18 Orange County Transit Authority bus routes and increase transportation options along Santa Ana Boulevard, 4th Street, the Pacific Electric right-of-way, and Harbor Boulevard.

3.3.2.3 FOCUS AREAS

The five focus areas of the plan area are shown on Figure 3-11, *Focus Areas and Special Planning Areas*, and described below. Figures 3-12 through 3-16 show the existing and proposed land uses for each focus area.

South Main Street Focus Area

The South Main Street focus area introduces the opportunity for greater flexibility and a more dynamic mix of land uses and urban design along the properties fronting Main Street. The intent is to transition an auto-dominated corridor into a transit- and pedestrian-friendly corridor through infill development without disrupting the surrounding lower-density neighborhoods. The objectives of this focus area are:

- Facilitate redevelopment and property improvements along Main Street.
- Create a more active and dynamic streetscape.
- Protect established residential neighborhoods.
- Support transit, pedestrian, and nonmotorized travel.

The majority of properties fronting Main Street will be designated Urban Neighborhood, allowing for future development to include commercial uses, low- and medium-density housing, or a combination of both in a vertically mixed-use format. South of Warner Avenue, the Industrial/Flex designation will offer new options for small-scale manufacturing, live-work, and retail opportunities.

The balance of the focus area will remain designated for Low Density Residential or Institutional to reflect the existing development patterns and land uses. New buildings and spaces will be sensitive to the surrounding low-density neighborhoods while still emphasizing the creation of active and attractive urban spaces.

Grand Avenue / 17th Street Focus Area

The Grand Avenue / 17th Street focus area will foster the development of an urban mixed-use corridor connecting into the city's downtown and transit core. The intent is to create opportunities for a new mix of land uses and design to transition Grand Avenue from a series of auto-oriented shopping plazas to a series of dynamic urban spaces. The objectives of this focus area are:

- Create mixed-use corridors and urban villages.
- Promote infill development while respecting established neighborhoods.

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- Foster community spaces and neighborhood-serving amenities.
- Develop opportunities for live-work, artist spaces, and small-scale manufacturing.
- Maintain compatible nodes of commercial activity.

The majority of land in this focus area is planned for Urban Neighborhood or District Center land use designations, which will allow a blend of residential and commercial uses to develop simultaneously, as market conditions allow. An intense mixed-use area is envisioned adjacent to the Santa Ana Regional Transportation Center, along the east side of Grand Avenue south of I-5. This part of the focus area will support larger, more visually dynamic buildings and urban spaces that complement and benefit from the adjacent regional transit center.

North of I-5, the buildings and spaces will be sensitive to the surrounding low-density neighborhoods but will still emphasize the creation of active and attractive urban spaces. A mix of residential, retail, and office will be interspersed along the frontage of Grand Avenue, with a concentrated node of commercial and mixed-use residential uses at Grand Avenue and 17th Street. A small portion of the focus area is designated for Industrial/Flex and General Commercial to support small-scale manufacturing, live-work, and retail opportunities along 17th Street near the Regional Transportation Center.

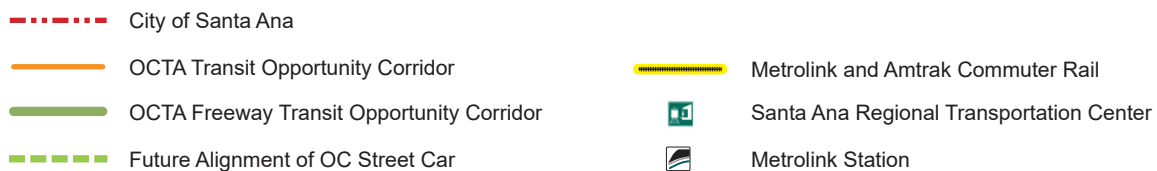
West Santa Ana Boulevard Focus Area

The West Santa Ana Boulevard focus area connects the Harbor Mixed Use Transit Corridor Specific Plan area and Downtown Santa Ana, and the OC Streetcar Project improvements will create the physical transit link in 2022. The intent is to transition a group of auto-oriented neighborhoods, businesses, and institutions into a series of transit-oriented neighborhoods that support and benefit from future streetcar stops. The objectives of this focus area are:

- Develop housing and mixed-use opportunities near streetcar stations.
- Promote infill development while respecting established neighborhoods.
- Buffer industrial land uses and residential neighborhoods.
- Create opportunities for clean industrial/maker-type spaces.

The Urban Neighborhood land use designation will allow for more mixed-use and transit-oriented development near future streetcar stops. Near the Raitt streetcar stop, the Corridor Residential land use designation will facilitate additional opportunities for higher density residential development. Similarly, the existing industrial portion of the focus area will be designated for Industrial/Flex to promote small-scale manufacturing, live-work, and retail opportunities.

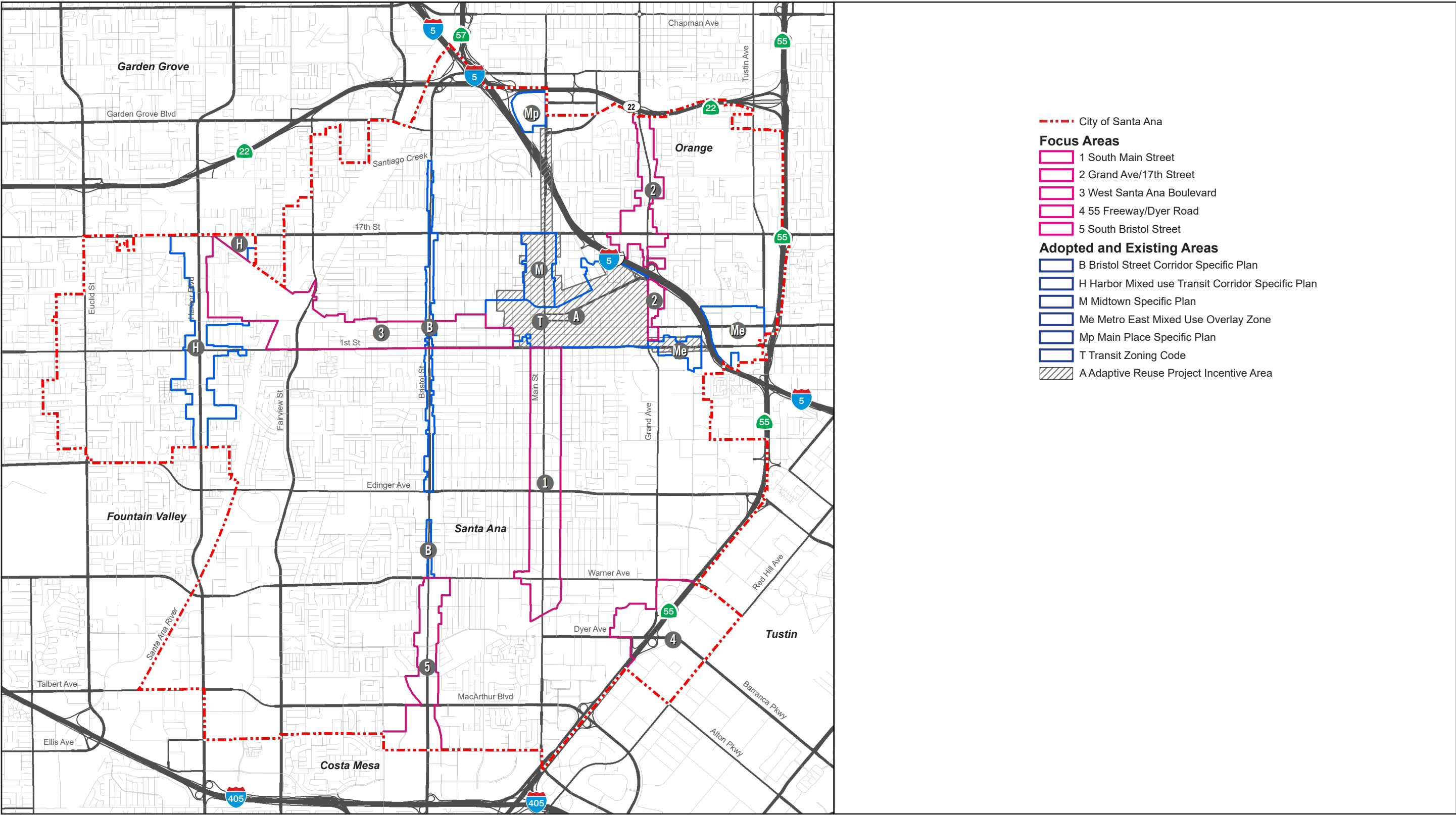
Both the Urban Neighborhood and Corridor Residential designations will serve as transitions between the low-density residential neighborhoods and the areas planned for industrial uses or streetcar stops. Much of the focus area will remain planned for low-density residential, general commercial, open space, and key institutional uses. New buildings and spaces will be sensitive to the surrounding low-density neighborhoods but will still incorporate building and street designs consistent with transit-oriented urban form and active and attractive urban spaces.



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Figure 3-11 - Focus Areas and Special Planning Areas



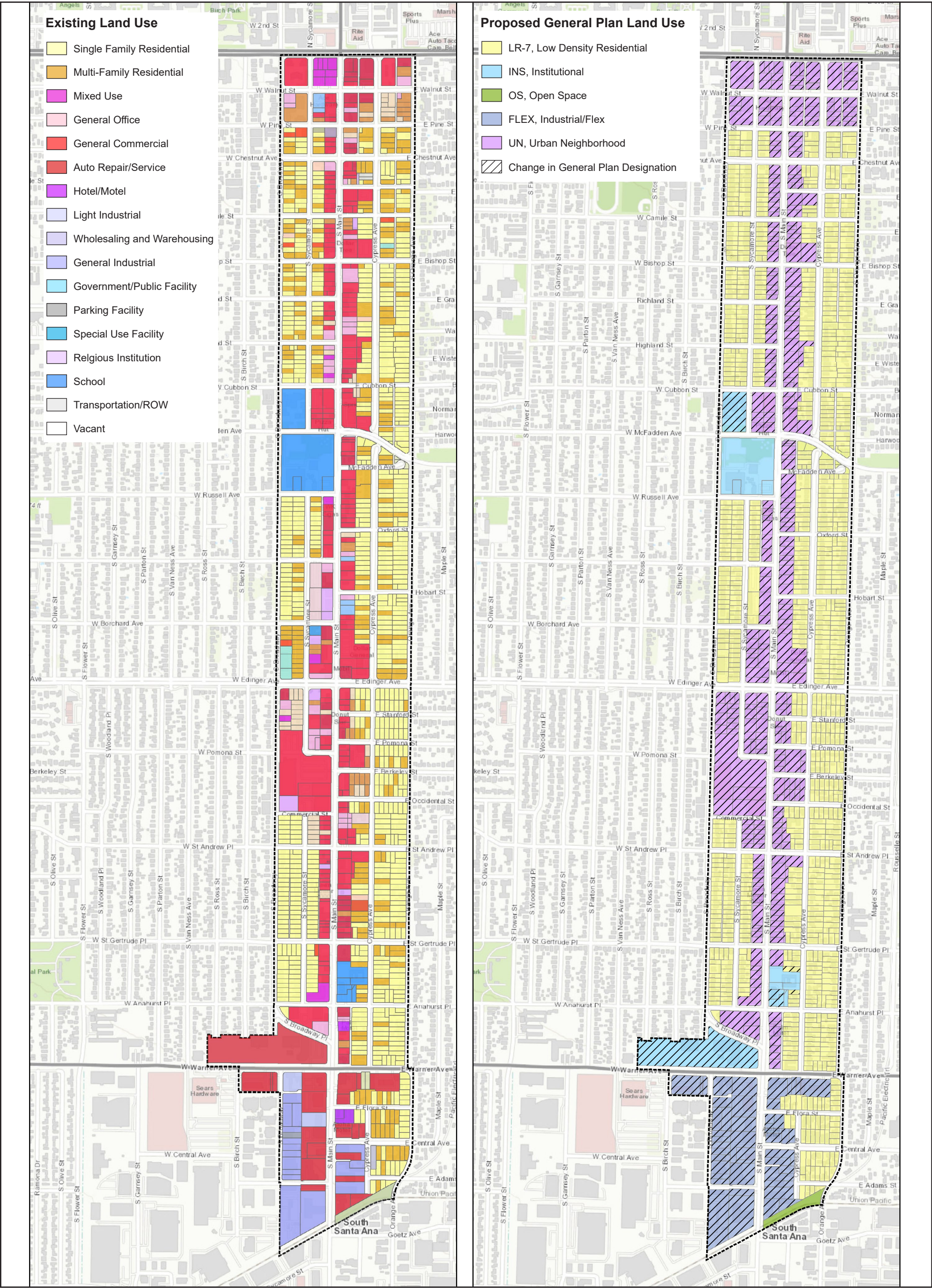
Source: City of Santa Ana, 2019



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Figure 3-12 - South Main Street Focus Area Existing vs. Proposed Land Use



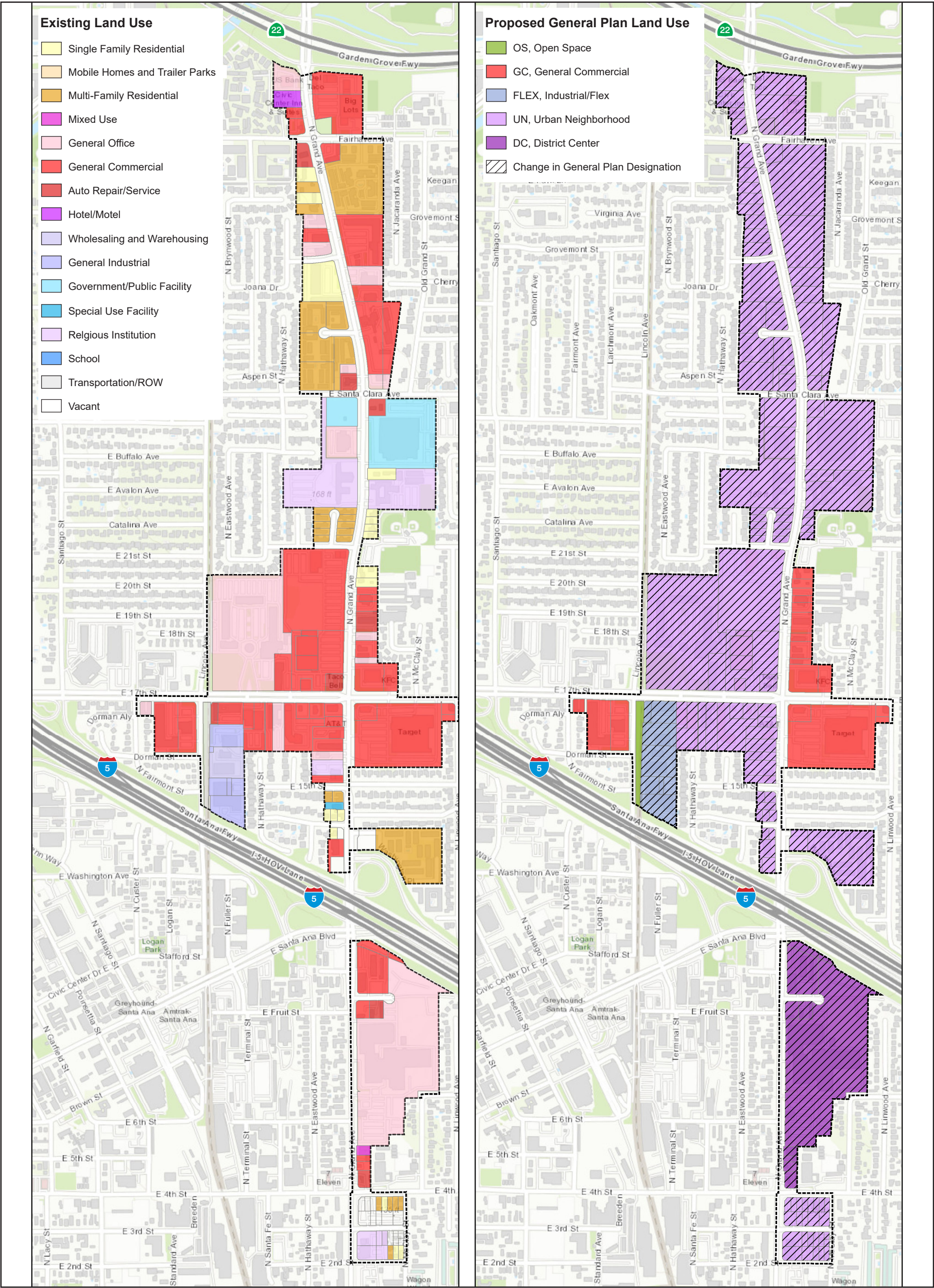
Source: PlaceWorks, 2020



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Figure 3-13 - Grand Avenue/17th Street Focus Area Existing vs. Proposed Land Use



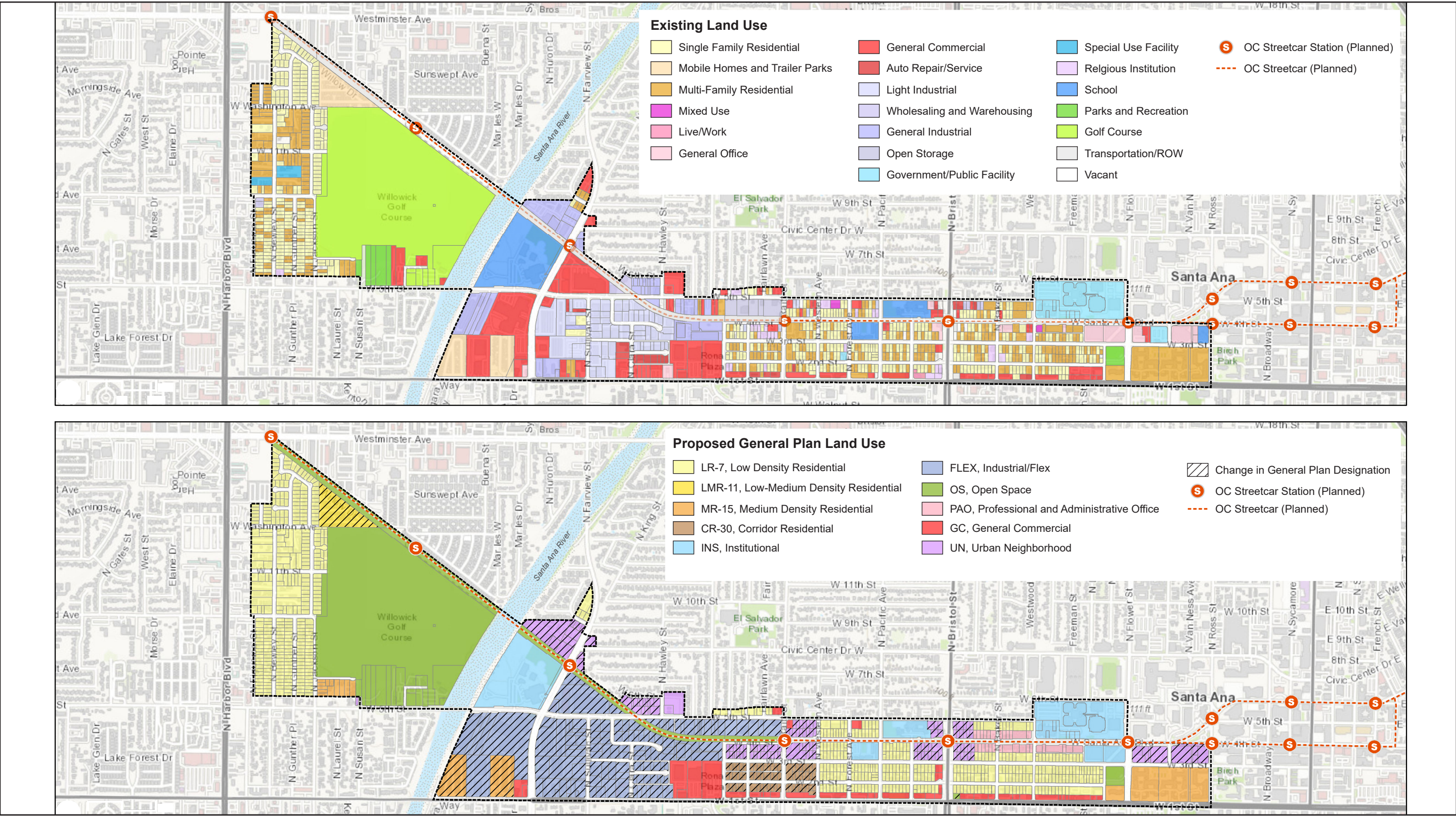
Source: PlaceWorks, 2020



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Figure 3-14 - West Santa Ana Boulevard Focus Area Existing vs. Proposed Land Use



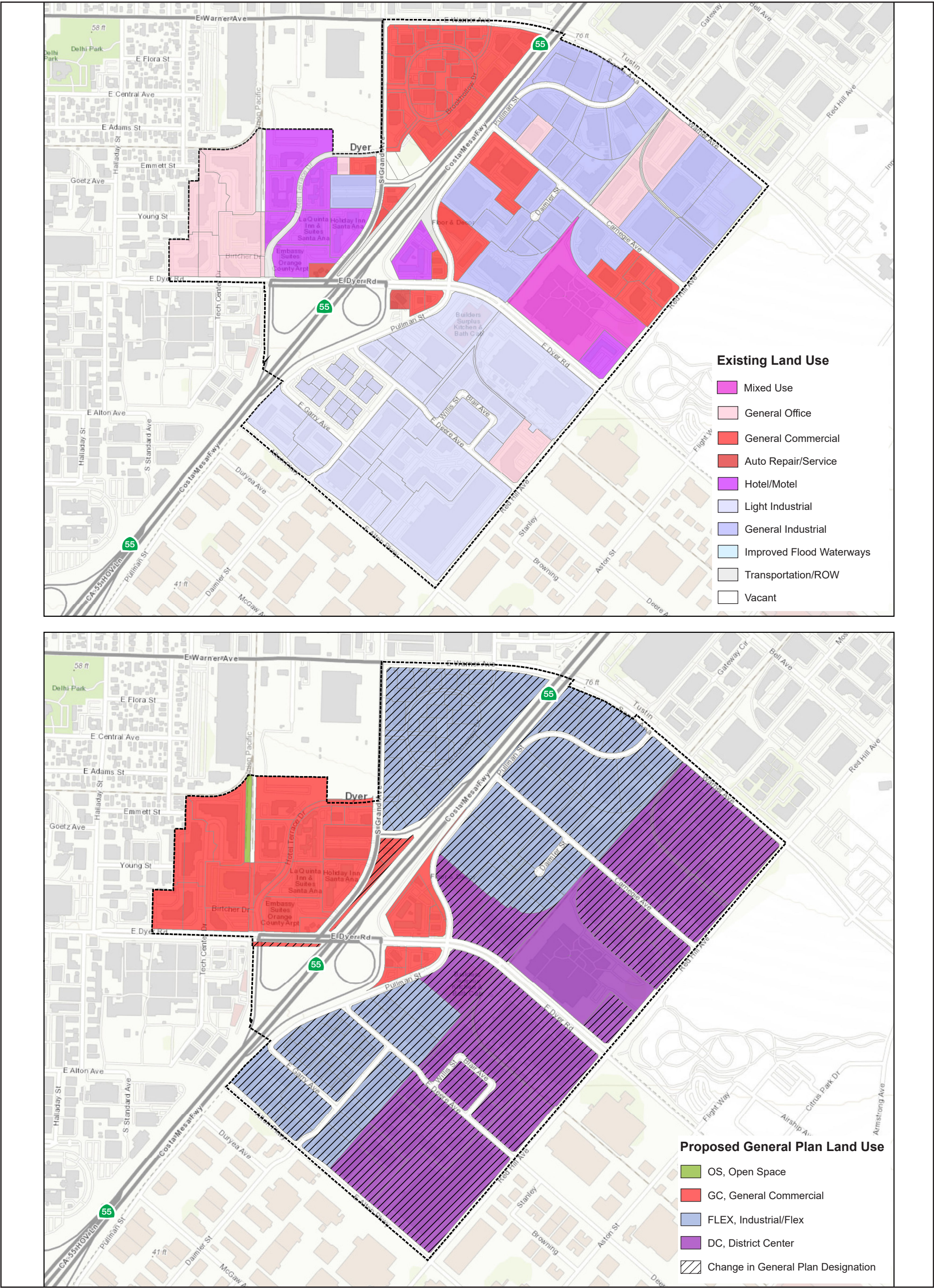
Source: PlaceWorks, 2020



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Figure 3-15 - 55 Freeway/Dyer Road Focus Area Existing vs. Proposed Land Use

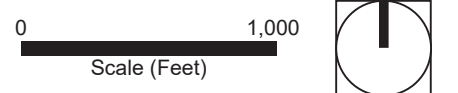


Source: PlaceWorks, 2020



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55 Freeway / Dyer Road Focus Area

The 55 Freeway / Dyer Road focus area will transition from almost exclusively professional office to support a range of commercial, industrial/flex, and mixed-use development. The intent is to create opportunities for a truly urban lifestyle with easy access to Downtown Santa Ana, multiple transit options, and the new investments and amenities in adjacent communities. The objectives of this focus area are:

- Provide housing opportunities at an urban level of intensity at the city's edge.
- Enhance opportunities for corporate offices.
- Attract economic activity into the city from surrounding communities.
- Protect industrial and office employment base.
- Maintain hotel and commercial uses.

The overall scale and experience of the focus area along the freeway and city boundary will reflect an urban intensity and design, with inspiring building forms and public spaces. At the southeastern edge, the District Center land use designation will facilitate large residential mixed-use developments in structures that incorporate high-density housing, hotels, and complementary expansions of commercial uses. Adjacent to SR-55, the Industrial/Flex land use designation will promote large-scale office-industrial flex spaces, multilevel corporate offices, and research and development uses.

The node surrounding the freeway interchange will remain as currently planned for General Commercial uses, with new improvements introducing development and spaces that complement the existing examples and elements.

South Bristol Street Focus Area

The South Bristol Street focus area is Santa Ana's southern gateway and part of the South Coast Metro area. Between Sunflower and Alton Avenues, the District Center land use designation will create opportunities to transform auto-oriented shopping plazas to walkable, bike-friendly, and transit-friendly urban villages that incorporate a mix of high-intensity office and residential living with experiential commercial uses. The objectives of this focus area are:

- Capitalize on the success of the South Coast Metro area.
- Introduce mixed-use urban villages and encourage experiential commercial uses that are more walkable, bike friendly, and transit oriented.
- Provide for mixed-use opportunities while protecting adjacent, established, low-density neighborhoods.

Between MacArthur Boulevard and Alton Avenue, the form and intensity will scale down but remain distinctly urban in nature. The redevelopment of the auto-oriented commercial plazas will result in the construction of landmark buildings and structures set in and around spaces accessible to future occupants and the general public. The corridor north of Alton Avenue is planned with the Urban Neighborhood land use designation, allowing for commercial and residential projects, frequently in a mixed-use format, to develop in accordance

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with market fluctuations. The buildings and spaces in this part of the focus area will be sensitive to the surrounding low-density neighborhoods but will still emphasize the creation of active and attractive urban spaces.

3.3.2.4 SPECIFIC PLAN/SPECIAL ZONING

There are seven planning areas that represent specific plans and other special zoning areas that were previously adopted: Adaptive Reuse Project Incentive Area (2014), Bristol Street Corridor Specific Plan (1991/2018), Harbor Mixed Use Transit 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 most recent adoption/amendment date for each document is noted in parentheses. The special planning areas are shown in Figure 3-11.

Adaptive Reuse Project Incentive Area

The Adaptive Reuse Ordinance, Section 41-1651 of the Santa Ana Municipal Code, provides alternative building and fire standards for the conversion of eligible buildings, or portions thereof, from nonresidential uses to dwelling units, guest rooms or joint living, and work quarters. Eligible structures are buildings within the Adaptive Reuse project incentive area that were constructed in accordance with building and zoning codes in effect prior to July 1, 1974, or which have been determined to be a historically significant. The Project Incentive Area includes properties in the Midtown Specific Plan area; the Transit Zoning Code area; the Metro East Mixed-Use Overlay Zone; the North Main Street Corridor on both sides of Main Street, from 17th Street to the northernmost MainPlace Drive; and the East 1st Street Corridor on both sides of 1st Street from Grand Avenue to Elk Lane. Residential uses are allowed in the Project Incentive Area irrespective of the underlying zoning as part of an approved Adaptive Reuse Project (Santa Ana 2014a).

Bristol Street Corridor Specific Plan

The Bristol Street Corridor Specific Plan was adopted in May 1991 and amended in March 2018. The plan provides the framework for development of a 3.9-mile section of the Bristol Street corridor in central Santa Ana. The planning area extends along both sides of Bristol Street between Warner Avenue and Memory Lane. Property within the planning area corresponds to parcels identified by the former redevelopment agency as being subject to eminent domain procedures as a result of right-of-way acquisition requirements of the Bristol Street Widening Project. The specific plan primarily aims to reduce and prevent blight conditions, promote new and continuing private-sector investment, expand the community's supply of housing, and redevelop areas that are stagnant or underutilized (Santa Ana 2018a).

Harbor Mixed Use Transit Corridor Specific Plan

The Harbor Mixed Use Transit Corridor Specific Plan covers the 2.5-mile segment of Harbor Boulevard on the west side of Santa Ana. The approximately 305-acre planning area includes parcels adjacent to Harbor Boulevard between Westminster Avenue and Lilac Avenue as well as parcels along Westminster Avenue, 1st Street, and 5th Street. The Harbor Mixed Use Transit Corridor Specific Plan creates the zoning necessary to take advantage of the regional and local transit investments made along and around Harbor Boulevard. The

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plan expands development options to include residential alongside or integrated into a mix of nonresidential uses (Santa Ana 2014b).

MainPlace Specific Plan

The purpose of the MainPlace Specific Plan is to transform MainPlace mall into a family-oriented retail, entertainment, and dining destination. The plan creates a mixed-use urban village with a revitalized mall at its central core. The Specific Plan area is on the north edge of Santa Ana, between Main Street on the east and SR-22 and I-5 to the north and west. The property is identified in the current General Plan land use element as District Center. The District Center designation includes the major activity areas of the city, designed to serve as anchors to the city's commercial corridors and to accommodate major development activity. No General Plan amendment is required for the specific plan, and the MainPlace Specific Plan is the zoning for the property and defines the allowable uses within its boundaries (Kimley Horn 2019).

Metro East Mixed-Use Overlay Zone

The Metro East Mixed Use (MEMU) Overlay Zone consists of an original MEMU Overlay Zone and an expansion component. The original MEMU Overlay Zone is largely developed with commercial and office uses and comprises approximately 200 acres immediately east of the I-5 and immediately west of SR-55. It is bounded by I-5 on the west and south, Tustin Avenue on the east, and East Sixth Street on the north. The MEMU expansion area added 33.52 acres or approximately 48 parcels to the original MEMU Overlay Zone area. The additional project area extends west primarily along First Street and is generally bounded by the I-5 to the east, Grand Avenue to the west, East Chestnut Avenue to the south, and Fourth Street to the north.

The overall objectives of the MEMU Overlay Zone are to encourage a more active commercial and residential community, provide an expanded economic base, maximize property sales tax revenues, improve the jobs/housing balance in the city, and provide for a range of housing options identified in the 2014 housing element (Santa Ana 2018b).

Midtown Specific Plan

The Midtown Specific Plan area is generally bounded by 17th Street to the north, Civic Center Drive to the south, North Ross Street to the west, and North Spurgeon Street to the east. The Midtown area is readily accessible from the Santa Ana Freeway (I-5). Midtown is envisioned as an integrated district of civic, business, cultural, and retail activity with a small residential component (Santa Ana 1996).

Transit Zoning Code Specific Development

The City adopted a Transit Zoning Code to provide zoning for the integration of new infill development into existing neighborhoods; to allow for the reuse of existing structures; to provide for a range of housing options, including affordable housing; and to provide a transit-supportive, pedestrian-oriented development framework to support the addition of new transit infrastructure. The code encompasses an area in the central urban core of Santa Ana that comprises over 100 blocks and 450 acres. The area is west of I-5 and bounded by First Street

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on the south, Flower Street on the west, Grand Avenue on the east, and Civic Center Drive on the north (Santa Ana 2010).

3.3.2.5 GENERAL PLAN BUILDOUT SCENARIO

In general, many areas currently designated for General Commercial and Professional Office will expand opportunities for residential development by a proposed change in General Plan land use designation to Urban Neighborhood or District Center. Industrial Flex will be introduced in each of the five focus areas and replace Industrial land use designations that currently exist to allow for cleaner industrial and commercial uses with live-work opportunities.

Furthermore, state law allows a graduated density bonus for the inclusion of affordable housing units. For an increasing amount of affordable units (by percentage), a project is allowed an increasing ability to exceed the permitted density (up to a cap of 35 percent). Recent updates to state housing law (Assembly Bill 1763, effective January 1, 2020) enable projects that are 100 percent affordable (either 100 percent lower income or 80 percent lower and 20 percent limited moderate) to obtain a density bonus of 80 percent, or no limit if within one-half mile of a major transit stop. However, not every proposed project pursuant to the GPU would include affordable units, and not every project that includes affordable units would need a density bonus. Proposed projects pursuant to the GPU 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 for the GPU was based on past development trends, current development trends, and a forecast 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 density levels assumed for forecasting buildout. Generally, projects beyond 50 to 70 units per acre require Type I construction (steel and concrete structure), which is dramatically more expensive than Type V construction (wood structure). Accordingly, affordable projects are rarely greater than 70 units per acre except 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 Freeway/Dyer Road, Grand Avenue/17th Street, and South Bristol Street. For the remaining two focus areas, a residential assumption at 30 units per acre was used over a broad area to account for development at or above the maximum density of 30 units per acre. The maximum is 20 units per acre for projects proposed exclusively residential in the South Main Focus Area. The maximum is 30 units per acre for a relatively small part of the West Santa Ana Boulevard Focus Area. The City's buildout projections are therefore considered to include and account for the application of density bonus provisions of state law to future projects.

Furthermore, the potential for development in specific plan and special zoning areas (see Section 3.3.2.1) is based on the forecast buildout at the time of the respective zoning document's adoption, minus the amount of new development built between the adoption date and 2019.

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

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is expected on a small portion (5 percent) of single-family and multifamily lots through the construction of second units.

Table 3-7 shows existing and buildout population numbers, and Table 3-8 provides a statistical summary of existing conditions and buildout numbers for housing units, nonresidential square footage, and jobs. For the focus areas, the forecast buildout is based on development at approximately 80 percent of the maximum allowed development for each respective land use designation, as detailed in Appendix B-b, *Santa Ana Buildout Methodology*. Figure 3-7 displays the draft General Plan Land Use Map, and Figure 3-8 illustrates the boundaries of the five focus areas and special planning areas. Table 3-9 shows the breakdown of single-family and multifamily housing units for existing conditions and buildout of the GPU.

Table 3-7 General Plan Update Existing and Buildout Population

Planning Area	Existing Population	Buildout Population	Percentage Growth
FOCUS AREAS	36,777	77,650	111
55 Freeway/Dyer Road	9,034	31,050	244
Grand Avenue/17th Street	2,079	7,129	243
South Bristol Street	8,390	19,176	129
South Main Street	6,970	7,643	10
West Santa Ana Boulevard	10,304	12,652	23
ALL OTHER AREAS OF THE CITY	297,997	353,979	19
CITYWIDE TOTAL¹	334,774	431,629	29

Source: Figures aggregated and projected by PlaceWorks, 2020. Methodology included in Appendix B-b, *Santa Ana Buildout Methodology*, of this Draft PEIR.

¹ Total population includes all individuals living in households, institutional group quarters, and noninstitutional group quarters.

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Table 3-8 Existing Conditions, Potential Growth, and Buildout Conditions: Housing Units, Nonresidential Square Footage, and Jobs

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	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 Project Incentive Area 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 Mixed Use Transit Corridor Specific Plan	1,324	1,767,937	3,286	3,298	200,045	-1,708	4,622	1,967,982	1,578
MainPlace Specific Plan	0	1,108,080	2,216	1,900	1,318,843	3,164	1,900	2,426,923	5,380
Metro East Mixed-Use 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 CITY⁵	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

Source: Figures aggregated and projected by PlaceWorks, 2020. Methodology included in Appendix B-b, *Santa Ana Buildout Methodology*, of the Draft PEIR.

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 areas is based on the forecast 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 Project Incentive Area represent parcels that are exclusively in the Adaptive Reuse Project Incentive Area boundary. Figures for parcels that are within the boundaries of both the Adaptive Reuse Project Incentive Area 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 (5 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; 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; and the commercial and retail along 1st Street south of the West Santa Ana Boulevard focus area.

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Table 3-9 Existing and Buildout Dwelling Unit Breakdown

	Existing Dwelling Units	GPU Buildout Dwelling Units	Change
Single Family Units	56,782	56,192	(590)
Multifamily Units ¹	22,010	58,861	36,851
TOTAL UNIT	78,792	115,053	36,261

Source: Figures aggregated and projected by PlaceWorks, 2020.

¹Multifamily homes include townhomes, garden apartments, and mixed use units.

3.3.1 Changes to the General Plan Update

The General Plan Update includes revisions to policies and implementation actions that were made after the original Draft PEIR was publicly released on August 3, 2020. No land use changes or changes to the focus areas as defined in the original Draft PEIR are proposed. The comprehensive list of the updated policies and implementation actions is provided in Appendix B-a. The appendix shows the policies and implementation actions in tracked changes to facilitate comparison to the original Draft PEIR. The following text summarizes changes to GPU policies and implementation actions. Note that no substantial changes were made to the Public Services, Economic Prosperity, Noise, Safety, and Historic Preservation elements.

Community Element

Revisions to policies include greater emphasis on recreational programming and address hazardous soil contamination. The GPU also includes a new policy for establishing a City Public Health Department. Revisions to implementation actions include addressing park-deficient areas and emphasizing low birth weight of infants as a health metric. A new implementation action was added to address environmental soil screening measures for lead contamination. Revisions to both policies and implementation actions extend the focus beyond environmental justice areas to other underserved areas in the city.

Mobility Element

Revisions to implementation actions include greater emphasis on parks, safe routes to school, and transit.

Conservation Element

Revisions to policies include an emphasis on scenic preservation and improving air quality in environmental justice areas. A new policy was added to promote public investment in parks to address air quality and climate impacts. Revisions to implementation actions include a greater emphasis on addressing areas with the highest pollution burden.

Open Space Element

Revisions include a greater emphasis on public health, inclusivity, park maintenance and sustainability, as well as an integrated system of parks and recreation. New policies related to public health include providing recreation variety, addressing air quality, and supporting community and individual well-being and mental health.

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New policies related to a more integrated park system ensure park distribution within a 10-minute walk or biking distance from residences and a mix of park and open space types. A new policy related to inclusivity includes equitable distribution of parks and open space with a focus on park deficient areas. Revisions to policies also include a greater emphasis on safe routes to schools, trail connectivity, maintenance resources, asset management, landscaping, and protection of natural, cultural, and historic resources. New implementation actions include convening an interagency forum and an annual open space summit, as well as implementing an asset management, green infrastructure, and urban forestry plan.

Land Use Element

Revisions to policies and implementation actions were made to emphasize soil contamination issues and securing funding for soil testing and remediation. New implementation actions were added to promote studying health effects of fireworks, environmental pollution, and community health effects from construction improvements. Clarifications regarding calculating the density and intensity of mixed-use projects were added, and the overall vision for the Industrial-Flex land use designation was refined. Minor typographical errors were also corrected.

Urban Design Element

A new policy was added to ensure that focus intersections⁵ incorporate consistent architectural designs, enhanced landscaping, and coordinated signage. New implementation actions include promoting energy efficient practices through LEED projects, identifying streetscape improvements, creating public realm plans, and funding a maintenance district for public realm improvements.

3.4 INTENDED USES OF THE EIR

This is a Program EIR (PEIR) that examines the potential environmental impacts of the proposed General Plan update. This PEIR also addresses various actions by the City and others to adopt and implement the General Plan Update. It is the intent of the PEIR to enable the City of Santa Ana, other responsible agencies, and interested parties to evaluate the environmental impacts of the GPU, thereby enabling them to make informed decisions with respect to the requested entitlements. The anticipated approvals required for this project and related uses of the PEIR are:

Lead Agency	Action
City of Santa Ana Council	<ul style="list-style-type: none"> • Adoption of the Santa Ana General Plan Update • Certification of PEIR • Adoption of Findings of Fact and Statement of Overriding Considerations (if required) • Adoption of the Mitigation Monitoring Program • Adoption of any ordinances, guidelines, programs, actions, or other mechanisms that implement the Santa Ana General Plan Update

⁵ Focus intersections create focal points at major intersections to enhance community identity and open space.

3. Project Description

3.5 REFERENCES

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- . 2018b, June. Metro East Mixed-Use Overlay District Expansion and Plan Development Projects Draft Environmental Impact Report. https://www.santa-ana.org/sites/default/files/Documents/_MEMU_SEIR_June2018_0.pdf.

3. Project Description

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4. Environmental Setting

4.1 INTRODUCTION

This section provides a “description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, ... from both a local and a regional perspective” (Guidelines § 15125[a]), pursuant to provisions of the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The environmental setting provides the baseline physical conditions from which the lead agency will determine the significance of environmental impacts resulting from the General Plan Update (GPU).

4.2 REGIONAL ENVIRONMENTAL SETTING

4.2.1 Regional Location

The City of Santa Ana is in the western central portion of Orange County, approximately 30 miles southwest of the city of Los Angeles and 10 miles northeast of the city of Newport Beach (see Figure 3-1, *Regional Location*). As shown in Figure 3-2, *Citywide Aerial*, the city is bordered by the city of Orange and unincorporated areas of Orange County 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. The city also includes a portion of the Santa Ana River Drainage Channel within its sphere of influence (SOI) (see Figure 3-3, *17th Street Island and Sphere of Influence*). The city and its SOI are defined in this draft program environmental impact report and referred to as the “plan area.”

4.2.2 Regional Planning Considerations

4.2.2.1 SOUTH COAST AIR BASIN AIR QUALITY MANAGEMENT PLAN

Santa Ana is in the South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District (AQMD). The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants for which ambient air quality standards (AAQS) have been developed are known as criteria air pollutants and include ozone (O₃), carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide, coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead. VOC and NO_x are criteria pollutant precursors and go on to form secondary criteria pollutants, such as O₃, through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants depending on whether they meet the AAQS for that pollutant. The SoCAB is designated nonattainment for O₃, PM_{2.5}, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for nitrogen dioxide (NO₂) and PM₁₀ under the California AAQS. The General Plan Update’s consistency with the applicable AAQS is discussed in Section 5.2, *Air Quality*.

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4.2.2.2 GREENHOUSE GAS EMISSIONS REDUCTION LEGISLATION

Current State of California guidance and goals for reductions in greenhouse gas (GHG) emissions are generally embodied in Executive Order S-03-05; Executive Order B-30-15; Executive Order B-55-18; Assembly Bill 32 (AB 32), the Global Warming Solutions Act (2008); Senate Bill 32 (SB 32), updating the emission limits set in AB 32; Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act; and Senate Bill 100 (SB 100), the 100 Percent Clean Energy Act of 2018.

Executive Order S-03-05, signed June 1, 2005, set the following GHG reduction targets for the State of California:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

AB 32 was passed by the state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the emissions reduction targets established in Executive Order S-3-05. SB 32 was passed September 8, 2016, and set an interim target consistent with AB 32. Executive Order B-30-15 also established an interim goal of a 40 percent reduction below 1990 levels by 2030.

In 2008, SB 375 was adopted to connect GHG emissions reductions targets for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles traveled and vehicle trips. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035.

In September 2016, Governor Brown signed SB 32 and Assembly Bill 197, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources. CARB issued an update to its Scoping Plan, which sets forth programs for meeting the SB 32 reduction target in 2017. In 2018, Governor Brown signed Executive Order B-55-18, which sets a more ambitious goal for emission reductions than Executive Order S-3-05. Executive Order B-55-18 sets a goal for the state to achieve carbon neutrality no later than 2045 and to achieve and maintain net negative emissions thereafter. SB 100 would help the state reach the goal set by Executive Order B-55-18 by requiring that the state's electricity suppliers have a source mix that consists of at least 60 percent renewable/zero carbon sources in 2030 and 100 percent renewable/zero carbon sources in 2045.

The General Plan Update's ability to meet these regional GHG emissions reduction target goals is analyzed in Section 5.7, *Greenhouse Gas Emissions*.

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Senate Bill 743

The legislature found that with the adoption of the SB 375, the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of GHG emissions, as required by the California Global Warming Solutions Act of 2006 (AB 32). Additionally, AB 1358 requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users.

On September 27, 2013, SB 743 was signed into law, starting a process that fundamentally changes transportation impact analysis as part of CEQA compliance. Changes include the elimination of auto delay, level of service (LOS), and similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts under CEQA. As part of the new CEQA Guidelines, the new criteria “shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses” (Public Resources Code Section 21099(b)(1)).

On December 28, 2018, the State Office of Planning and Research approved a comprehensive update to the state CEQA Guidelines which also included implementation metrics for VMT. The revised CEQA Guidelines established new criteria for determining the significance of transportation impacts and define alternative metrics to replace LOS. The new guidelines require that LOS be replaced with VMT-related metric(s) to evaluate the significance of transportation-related impacts under CEQA for development projects, land use plans, and transportation infrastructure projects beginning on January 1, 2020. On June 18, 2019, the Santa Ana City Council adopted VMT thresholds of significance for transportation impact analysis under CEQA. The General Plan Update information on VMT is analyzed in Section 5.16, *Transportation*.

4.2.2.3 SCAG REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized metropolitan planning organization for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted in April 2016 (SCAG 2016). Major themes in the 2016 RTP/SCS include integrating strategies for land use and transportation; striving for sustainability; protecting and preserving existing transportation infrastructure; increase capacity through improved systems managements; providing more transportation choices; leveraging technology; responding to demographic and housing market changes; supporting commerce, economic growth and opportunity; promoting the links between public health, environmental protection and economic opportunity; and incorporating the principles of social equity and environmental justice into the plan.

The SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce GHG emissions from transportation (excluding

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goods movement). The SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets identified by the California Air Resources Board. However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency. The General Plan Update's consistency with the applicable 2016-2040 RTP/SCS policies is analyzed in detail in Section 5.10, *Land Use and Planning*.

4.2.2.4 AIRPORT ENVIRONS LAND USE PLAN FOR JOHN WAYNE AIRPORT

In 1975, the Airport Land Use Commission (ALUC) of Orange County adopted an Airport Environs Land Use Plan (AELUP, amended April 17, 2008) that included John Wayne Airport (JWA); Fullerton Municipal Airport; and the Joint Forces Training Base, Los Alamitos. The AELUP is a land use compatibility plan that is intended to protect the public from adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities adversely affect navigable space. Each airport's AELUP identifies standards for development in the airport's planning area based on noise contours, accident potential zones, and building heights. ALUC is authorized under state law to assist local agencies in ensuring compatible land uses in the vicinity of airports. Primary areas of concern for ALUC are noise, safety hazards, and airport operational integrity. ALUC is not an implementing agency in the manner of local governments, nor does it issue permits for a project such as those required by local governments. However, pursuant to California Public Utilities Code Section 21676, local governments are required to submit all general plan amendments and zone changes that occur in the ALUC planning areas for consistency review by ALUC. If such an amendment or change is deemed inconsistent with the ALUC plan, a local government may override the ALUC decision by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes stated in Section 21670(a)(2) of the Public Utilities Code: "to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards in areas around public airports to the extent that these areas are not already devoted to incompatible uses." A large portion of Santa Ana falls within the airport influence area of JWA. Therefore, the General Plan Update's consistency with JWA's AELUP is discussed in Sections 5.8, *Hazards and Hazardous Materials*, 5.10, *Land Use and Planning*, and 5.12, *Noise*.

4.3 LOCAL ENVIRONMENTAL SETTING

4.3.1 Location and Land Use

4.3.1.1 LOCATION

At the local level, the plan area is generally bounded by State Route 22 on the north, State Route 55 on the east, and Interstate 405 on the south (see Figure 3-2, *Citywide Aerial*). The Santa Ana River runs northeast to southwest through the western part of the city. The current General Plan does not include the 17th Street Island SOI.

4.3.1.2 EXISTING LAND USES

The plan area encompasses approximately 14,329 acres (22.4 square miles). As shown in Figure 3-4, *Existing Land Uses*, the plan area comprises a number of existing land uses, with low density residential, commercial, and industrial making up the majority. Commercial and industrial uses are primarily found along SR-55, which is a

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major corridor, and in the southwest corner of the city. Table 3-1, *Existing Land Use Designations and Statistics*, provides a statistical summary of the existing land uses within the plan area.

City Boundaries

The majority of the city is urbanized, with residential and nonresidential development, and mobility and public facilities all contributing to Santa Ana's existing built environment. The city's incorporated boundaries encompass approximately 27.4 square miles. Residential land uses occupy almost 40 percent of the land within the current city boundaries, accounting for 5,226 acres.¹ Other predominant land uses include commercial (1,588 acres) and industrial (1,628 acres).

Sphere of Influence

The City annexed the 17th Street Island area in November 2019 (see Figure 3-3). This area was previously a part of the city's SOI. The city's current SOI includes a two-mile portion of the Santa Ana River Drainage Channel along its westerly border with Fountain Valley (see Figure 3-3).

Focus Areas

The City identified five focus areas suited for new growth and development under the GPU: South Main Street, Grand Avenue and 17th Street, West Santa Ana Boulevard, 55 Freeway and Dyer Road, and South Bristol Street. These five areas are along major travel corridors, the future OC Streetcar line, and/or linked to the city's downtown area.

South Main Street Focus Area

The South Main Street focus area follows a 2.3-mile segment of Main Street north from the Union Pacific Railroad tracks up to 1st Street and the edge of Downtown Santa Ana. The focus area includes properties east to Orange Avenue and west to Broadway. Throughout its length, the Main Street corridor has a consistent pattern of retail and service commercial fronting the right-of-way, with lower density residential neighborhoods filling in behind to the east and west boundaries. In the southwest corner, a row of warehouses constitutes the only current industrial uses in the focus area. The focus area also has four public schools—Manuel Esqueda Elementary School, Cesar E. Chavez High School, Lathrop Intermediate School, and Benjamin Franklin Elementary School.

Grand Avenue and 17th Street Focus Area

The Grand Avenue and 17th Street focus area is centered around the intersection of 17th Street and Grand Avenue in northeast Santa Ana. Encompassing approximately 172 acres, the focus area extends north along Grand Avenue to State Route 22 and south to 2nd Street. The area is currently primarily business oriented, with offices and commercial storefronts occupying more than 125 acres. A number of large apartment complexes also line the Grand Avenue corridor, constituting roughly one-fifth of the focus area. The United States Postal Service North Grand office and Edison substation, near the corners of Grand and Santa Clara Avenue, account for the remaining acreage.

¹ This number does not include Live/Work and Mixed Use land uses.

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West Santa Ana Boulevard Focus Area

The West Santa Ana Boulevard focus area encompasses more than 480 acres and is 2.7 miles long. The focus area is bounded by 5th Street/Orange County Transit Authority (OCTA) easement to the north, 1st Street to the south, Ross Street to the east, and Figueroa Street to the west. The area is primarily a mix of residential (174 acres), commercial (43 acres), and a variety of industrial (85 acres) uses, with large county and federal government complexes on the east end leading to the Downtown/Civic Center. Willowick Golf Course is also within the focus area and occupies approximately 134 acres adjacent to the Santa Ana River Channel.

55 Freeway and Dyer Road Focus Area

The 55 Freeway and Dyer Road focus area constitutes a significant portion (355 acres) of commercial and industrial activity on the eastern edge of Santa Ana. The area's boundaries extend north to Warner Avenue, south to Alton Parkway, west beyond Tech Center Drive, and east to Red Hill Avenue. Office parks and a variety of industrial facilities make up the majority of the focus area (253 acres), with hotels and other service-oriented commercial uses concentrated around the freeway (94 acres). The City recently approved the development of a large apartment complex (currently under construction) near the intersection of Dyer Road and Red Hill Avenue that will introduce residential uses to the area for the first time. The focus area also sits adjacent to the Tustin Legacy redevelopment in Tustin and Irvine Business Complex (IBC).

South Bristol Street Focus Area

The South Bristol Street focus area sits on the southern border of Santa Ana, directly adjacent to South Coast Plaza in Costa Mesa. Extending from Warner Avenue to Sunflower Avenue, the 1.5-mile-long corridor is currently almost entirely commercial focused, with more than 180 acres occupied by a variety of retail and service businesses. Commercial uses tend to be less intense north of Alton Avenue and gradually intensify toward South Coast Plaza. Although residential uses make up less than 10 percent of the focus area, the corridor is surrounded by neighborhoods on its east and west sides, with lower density neighborhoods in the north and more intense multifamily neighborhoods in the south.

Existing Surrounding Land Uses

The plan area is surrounded by developed urban areas, as shown in Figure 3-2, *Citywide Aerial*. It is bordered by residential, institutional (schools), and commercial uses to the north; residential, institutional (schools), industrial, and commercial uses to the east; residential and commercial uses to the south; and residential, commercial, and open space uses to the west. John Wayne Airport is to the southeast.

4.3.2 Environmental Resources and Infrastructure

4.3.2.1 AGRICULTURAL RESOURCES

As shown in Figure 3-4, *Existing Land Uses*, the plan area has no agricultural resources areas. According to the California Resource Agency's Department of Conservation the city does not have any significant agricultural resources (see Figure 8-1, *City of Santa Ana Agricultural Resources*). Because there are no agricultural resources

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within the plan area, the potential impacts of the General Plan Update on agricultural resources are analyzed in Chapter 8, *Impacts Found Not to Be Significant*.

4.3.2.2 BIOLOGICAL RESOURCES

Santa Ana is largely urbanized, but a few areas in the city have not been impacted by urbanization. The majority of the remaining open space areas have been set aside for parkland, flood control, or other types of utility easements. Most of this open space has undergone significant modification and no longer reflects the native habitats that existed in the area prior to European contact and subsequent settlement. Santiago Creek is not channelized, and some undisturbed habitats remain along this channel.

Plant life in Santa Ana is limited to nonnative, introduced, exotic, and ornamental species that are used for landscaping. Common trees in the city include shade trees, such as Peruvian pepper tree and Brazilian pepper. Grass associated with the City parks is primarily Kentucky bluegrass. Riparian habitat associated with Santiago Creek consists of willow species, mulefat, Fremont's cottonwood, elderberry, and western sycamore. Portions of the riparian community consist of white alder, tree tobacco, castor bean, and eucalyptus trees. Coast live oak trees are found adjacent to Santiago Creek in the northeastern portion of the city.

Animal life in the City include sparrows, starlings, doves, blackbirds, crows, lizards, snails, rats, opossums, insects, and other urban species. A number of common rodent species are likely to be found in the area and include the black rat, Norway rat, deer mouse, and house mouse. Common species of birds in the plan area include the starling, spotted dove, house sparrow, Brewer's blackbird, American crow, and house finch.

The potential impacts of the General Plan Update on biological resources are analyzed in Section 5.3, *Biological Resources*.

4.3.2.3 CULTURAL RESOURCES

Originally inhabited by indigenous Tongva tribes, the land that is now within the boundaries of Santa Ana fell under the jurisdiction of Mission San Juan Capistrano during the Mission Period under Spanish rule (1769–1821). The first European exploration of the area that would become Orange County began in 1769 when the Gaspar de Portola expedition passed through on its way from Mexico to Monterey. In 1776, Mission San Juan Capistrano was founded.

The surficial geology of Santa Ana is composed of alluvial sediments that range in age from the Holocene to early Pleistocene. Pleistocene sediments have a rich fossil history in southern California. The most common Pleistocene terrestrial mammal fossils include mammoth, horse, bison, camel, and small mammals, but other taxa have been reported, including lion, cheetah, wolf, antelope, peccary, mastodon, capybara, and giant ground sloth as well as birds, amphibians, and reptiles such as frogs, salamanders, snakes, and turtles. In addition to illuminating the striking differences between southern California in the Pleistocene and today, this abundant fossil record has been vital in studies of extinction, ecology, and climate change.

Santa Ana has notable historic resources. Residential historic resources are mainly concentrated in early residential neighborhoods such as the French Park Historic District, Heninger Park Historic District, Floral Park, and Wilshire Square, various Historically Sensitive Neighborhoods, and surrounding the Downtown Santa Ana

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Historic District. Historic commercial resources are concentrated in the Downtown Santa Ana Historic District (refer to Figures 5.4-1 and 5.4-2). Notable institutional resources include the Spurgeon Building, the Orange County Savings and Trust building, the Methodist Episcopal Church South, the Old Orange County Courthouse, the Old City Hall, and the Chamber of Commerce building. Furthermore, notable agricultural and industrial resources include the Maag Ranch and Maag Ranch House as well as the Pacific Electric Railway Depot, the Pacific Electric Sub-station No. 14, and the Southern Counties Gas Company (Chattel 2019).

Refer to Section 5.4, *Cultural Resources*, for additional information regarding archaeological and historical resources in the city and an analysis of General Plan Update impacts on these cultural resources. Paleontological resources are discussed in Section 5.6, *Geology and Soils*.

4.3.2.4 CLIMATE AND AIR QUALITY

As noted in Section 4.2.2.1, the plan area is in the SoCAB, which is designated nonattainment for O₃, PM_{2.5}, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for NO₂ and PM₁₀ under the California AAQS.

The climate in the SoCAB is mild and tempered by cool ocean breezes. Temperatures are normally mild (62° to 72° F), with rare extremes above 100°F or below freezing (32°F). Precipitation is typically 9 to 15 inches annually. The climate of Orange County is typified by warm temperatures and seasonal winds. The average monthly high temperatures range from about 52°F in the coastal areas in January to 72°F in the inland areas of the coastal plain in August. In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rains fall between November and April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Annual average humidity is 70 percent along the coast and 57 percent in the eastern portions of the SoCAB.

An air quality analysis was performed for the General Plan Update, and the results are discussed in Section 5.2, *Air Quality*. Additionally, GPU-related impacts from GHG emissions are discussed in Section 5.7, *Greenhouse Gas Emissions*.

4.3.2.5 GEOLOGY AND LANDFORM

Santa Ana is on the southern portion of the Downey Plain—a broad alluvial plain that covers the northwestern portion of Orange County (Yerkes et al. 1965)—and situated within the Peninsular Ranges Geomorphic Province. This geomorphic province encompasses an area that extends approximately 900 miles from the Transverse Ranges and the Los Angeles Basin to the southern tip of Baja California.

The Santa Ana Mountains rise to 5,700 feet above sea level to the northeast and east of the city, and the San Joaquin Hills are to the southeast. The Santa Ana River flows through the western part of the city on its way to the Pacific Ocean to the southwest. Santa Ana is generally flat with a gentle slope toward the southwest (USGS 2015a, 2015b, 2015c, 2015d).

The Peninsular Ranges Geomorphic Province is traversed by a group of subparallel fault zones trending roughly northwest. Major active fault systems—San Andreas, San Jacinto, Whittier-Elsinore, and Newport-Inglewood

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fault zones—form a regional tectonic framework consisting primarily of right-lateral, strike-slip movement (Jennings and Bryant 2010). Santa Ana is situated between two major active fault zones—the Whittier-Elsinore Fault Zone to the northeast and the Newport-Inglewood Fault to the southwest. Other potentially active faults near the city include the Elysian Park blind thrust, Chino-Central Avenue, San Joaquin Hills blind thrust, San Jose, Cucamonga, Sierra Madre, and Palos Verdes faults (CGS 2019; Cao et al. 2003).

Refer to Section 5.6, *Geology and Soils*, for additional information concerning the plan area’s existing geological conditions and an analysis of GPU impacts on geology and soils and paleontological resources.

4.3.2.6 HYDROLOGY

Regional Drainage

The plan area spans three separate watersheds, each of which serve the plan area as well as surrounding areas. The northwestern portion of the plan area drains to the Anaheim Bay–Huntington Harbor Watershed, the northern and southwestern portions drain to the Santa Ana River Watershed, and the southeastern and eastern portions of the plan area drain to the Newport Bay Watershed.

Local Surface Waters and Drainage

Storm drain lines throughout the plan area include both City and Orange County Flood Control District (OCFCD) drainage facilities to convey stormwater runoff. All underground lines are under jurisdiction of the City, and all the open flood control channels are maintained by OCFCD. One open trapezoidal channel than runs west from Harbor Boulevard to south of 1st Street is owned and maintained by the City. The City storm drain infrastructure feeds to a series of OCFCD regional drainage channels.

Groundwater

The Orange County (OC) Basin underlies the northern half of Orange County beneath broad lowlands. The OC Basin is managed by the Orange County Water District (OCWD), covers an area of approximately 350 square miles, and has a full volume of approximately 66 million acre-feet. The basin has been operated within its sustainable yield for more than 10 years without degrading water quality, reducing storage, or lowering groundwater levels.

Groundwater Quality

OCWD is responsible for managing the OC Basin. To maintain groundwater quality, OCWD has an extensive monitoring program to manage the OC Basin’s groundwater production, control groundwater contamination, and comply with all required laws and regulations. Salinity is a significant water quality problem in many parts of southern California, including Orange County. Salinity is a measure of the dissolved minerals in water, including both total dissolved solids and nitrates. The concentration of total dissolved solids in the OC Basin is expected to decrease over time due to the groundwater replenishment system operated by OCWD, the Municipal Water District of Orange County, and the Metropolitan Water District of Southern California.

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Flood Hazards

Parts of the plan area are within 100-year flood zones designated by the Federal Emergency Management Agency. Additionally, much of the central and western parts of the plan area are in the dam inundation area for Prado, Santiago Creek, and Villa Park dams. Small parts of the northern portion of the plan area, north of Fairhaven Memorial Park, are in the dam inundation area for Santiago Creek and Villa Park dams.

Section 5.9, *Hydrology and Water Quality*, analyzes the General Plan Update's impacts on storm drainage, water quality, flooding, and groundwater. Water resources are also discussed in Section 5.18, *Utilities and Service Systems*.

4.3.2.7 NOISE

The plan area is impacted by a multitude of existing noise sources, and the noise environment is variable depending on location. However, freeway, rail, and local roadway traffic noise tend to dominate the noise environment. Major mobile sources include vehicular and truck traffic along major corridors such as the Garden Grove Freeway (SR-22), the Orange Freeway (SR-57), the Santa Ana Freeway (1-5), the Costa Mesa Freeway (SR-55), and the San Diego Freeway (I-405). Air traffic from the nearby John Wayne Airport contributes to the noise environment in the plan area.

Refer to Section 5.12, *Noise*, for further information concerning existing noise conditions in the plan area and an analysis of the General Plan Update's impacts on the local and regional noise environment.

4.3.2.8 SCENIC FEATURES

Santa Ana does not have County-designated scenic highways, but the scenic corridors element of the existing General Plan has identified scenic corridors that serve as major view and vantage points. These scenic corridors include:

- Primary street corridors that are significant transportation and activity corridors in the city and are accessible from all freeways. They include the 1st/4th Street, Main Street/Broadway, and MacArthur Boulevard corridors.
- Secondary street corridors link neighborhoods, district centers, and mixed-use corridors. They include 17th Street, Edinger Avenue, and Bristol Street.
- Intercity corridors are major image makers for the city. They include Harbor Boulevard and Fairview Street.
- High-speed scenic corridors that operate at a regional scale to influence the city's image. They include the Newport, Santa Ana, and Garden Grove freeways.
- Watercourse corridors operate at a regional scale and are part of the county's open space network. They include the Santa Ana River and Santiago Creek.

These corridors provide views of Santa Ana and largely influence the public's aesthetic and visual experience of the city. Furthermore, Santa Ana's downtown area (generally bound by Washington Place to the north, Bristol

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Street to the west 1st Street to the south, and Bristol Street to the west) contains many of the oldest buildings in the city, including a number of national, state, and county historical landmarks.

Section 5.1, *Aesthetics*, further discusses the scenic vistas and community character of the plan area and the General Plan Update's potential to impact visual resources in the plan area.

4.3.2.9 PUBLIC SERVICES AND UTILITIES

The plan area is in an urbanized area with existing public services and utilities.

Public Services

Police protection is provided by the Santa Ana Police Department, which currently has six facilities throughout the city. Fire protection services are provided by the Orange County Fire Authority, a regional fire service agency that serves several cities in Orange County as well as all unincorporated areas. The OCFA Operations Division 6 serves Santa Ana (OCFA 2019).

The Santa Ana Unified School District, Garden Grove Unified School District, Tustin Unified School District, and Orange Unified School District provide service to the city. Additionally, there are a number of private and charter schools throughout the city.

Residents of the city are served by two libraries and four community centers. The Main Library is in downtown Santa Ana. Residents also have access to the Newhope Library Learning Center, Garfield Community Center, Roosevelt-Walker Community Center, Jerome Community Center, and the Delhi Center (Santa Ana 2019).

Utilities and Service Systems

The plan area obtains water from two primary sources: local groundwater from the OC Basin, which is managed by the OCWD, and imported water from Metropolitan Water District of Southern California. The city also receives recycled water from OCWD. Overall, the city has documented that it is 100 percent reliable for a normal year, a single dry year, and multiple dry-year events from 2020 through 2040 (Santa Ana 2016).

The City's water utility provides water service within a 27-square-mile service area. The service area includes the City of Santa Ana and a small neighborhood in Orange near Tustin Avenue and Fairhaven, by the northeast corner of Santa Ana. Irvine Ranch Water District (IRWD) water lines also serve portions of the city. IRWD operates the Dyer Road Well Field located in the City of Santa Ana, which is connected to IRWD's potable distribution system.

The City operates and maintains the sewer system, which serves the entire plan area as well as portions of Garden Grove and Orange. The city's sewer collection system consists of approximately 450 miles of sewer mains, including approximately 60 miles of Orange County Sanitary District (OCSA) regional trunk facilities. The system operates largely by gravity and discharges at several locations into OCSA gravity trunk sewers for conveyance to OCSA Treatment Plant #1. The plant has a capacity of about 76 million gallons per day.

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Waste Management of Orange County provides residential, commercial, and industrial trash collection; recycling services; and dumpster rentals. Residential and commercial solid waste is primarily transported to the Frank R. Bowerman, Olinda Alpha, Chiquita Canyon, and Azusa Land Reclamation sanitary landfills.

Electric power is provided by Southern California Edison. Natural gas is provided by the Southern California Gas Company. Internet, phone, and satellite TV services are currently provided by a variety of private companies, including AT&T, Spectrum, Windstream, and Mediacom.

The General Plan Update's impacts on the provision of public services are analyzed in Section 5.14, *Public Services*, and impacts to utilities and service systems are analyzed in Section 5.18, *Utilities and Service Systems*.

4.3.2.10 TRANSPORTATION, TRAFFIC, AND CIRCULATION

Regional and Local Circulation

Regional circulation to and through the plan area is provided by Interstate 5 (I-5) passing southeast-northwest through the plan area, State Route 55 (SR-55) along the city's eastern border, and SR-22 along the city's northern border (see Figure 3-1, *Regional Location*). As shown in Figure 3-1, other major highways in the region and in close proximity include I-405, which runs east-west to the city's south; SR-57, which runs north-south to the city's north; and SR-73, which runs southeast-northwest to the city's south. The circulation network serving the plan area is essentially a grid system of arterials generally oriented north-south and east-west. South Bristol Street, Fairview Street, South Main Street, and Grand Avenue are continuous arterials that span the entire length of the plan area south to north. 1st Street, 17th Street, Edinger Avenue, Warner Avenue, and MacArthur Boulevard span the city east to west. The plan area's arterial system links local roadways, extending local access to Costa Mesa, Irvine, Tustin, Fountain Valley, Garden Grove, and Orange. The arterials also link to SR-55, I-5, and SR-22 (see Figure 5.16-1, *Current Master Plan of Streets and Highways*).

Goods Movements

The interstate freeway system and California highways across and near Santa Ana provide routes for the movement of goods. These include I-5, SR-22, SR-55, SR-57, and I-405. Access to freeways is restricted to interchange ramps. Under the authority of Caltrans, these freeways and associated ramps are part of a statewide and national network of truck routes that carry a vast amount of goods through California.

Public Transit

OCTA is the leading transit provider in Orange County, offering a wide range of fixed-route bus service. OCTA has developed an extensive network of transit routes to connect residents and commuters of Santa Ana to key destinations (see Figure 5.16-2, *Current Transit Network*). The Southern California Regional Rail Authority also provides commuter and passenger rail service to Santa Ana. The Metrolink Orange County Line and the Inland Empire-Orange County commuter lines travel through Santa Ana, with scheduled stops at the Santa Ana Regional Transportation Center. Amtrak's Pacific Surfliner also provides passenger rail service through Santa Ana, connecting to communities throughout the Los Angeles and San Diego metropolitan regions.

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Santa Ana is working with Garden Grove and OCTA to build a fixed guideway system called the OC Streetcar. Expected to begin operations in 2021, the OC Streetcar will link the Santa Ana Regional Transportation Center to a new multimodal hub at Harbor Boulevard/Westminster Avenue in Garden Grove.

Pedestrian and Bicycle Circulation/Trails

Santa Ana's pedestrian system consists of pathways, sidewalks, and crossings. Existing pedestrian pathways include the Santa Ana River Trail. Sidewalks are provided on both sides of streets throughout most of the city. Pedestrian crossings are provided at most intersections, with a variety of crossing treatments. These treatments include parallel-striped crosswalks at signals, countdown signals, pedestrian-activated signals with audio/visual warnings, bulb-outs, and median refuges that reduce crossing distances.

Santa Ana's bikeway network includes four types of classifications. Class 1 bicycle paths are paved rights-of-way for the exclusive use of bicyclists and pedestrians. Class 1 bike paths include the Santa Ana River Trail and several segments of Alton Avenue/Maple Street, Santiago Creek Trail, Flower Street, Santa Ana Gardens Channel/Bear Street, and MacArthur Boulevard. Class 2 bicycle lanes are one-way routes denoted by a striped lane on a roadway to delineate the rights-of-way assigned to vehicles and bikes. Existing Class 2 bike lanes in Santa Ana are provided along Bristol Street, Greenville Street, Memory Lane, and Ross Street. Class 3 bicycle routes are bikeways where cyclists share the travel lane with motor vehicles. Although not always designated by signage, most streets in low-traffic-volume residential neighborhoods are classified Class 3 routes. Class 4 bicycle cycle tracks are local roads that have been enhanced with treatments that prioritize bicycle travel. Bristol Street has a Class 4 cycle track under construction. Figure 5.16-3, *Current Bikeway Network*, shows the current bikeways in Santa Ana.

Air Travel

As shown in Figure 3-2, *Citywide Aerial*, the John Wayne Airport is outside of the city's southeast boundary. JWA is an international, commercial-service airport owned and operated by the County of Orange. The service area includes more than three million people in 34 cities and unincorporated areas of Orange County. In 2018, there were 204,561 civil take-offs or landings and 706 military take-offs or landings, for a total of 205,267 take-offs or landings (FAA 2019).

A detailed discussion of the existing traffic conditions and the General Plan Update's impacts on the transportation and circulation system is provided in Section 5.16, *Transportation and Traffic*.

4.4 LOCAL PLANNING CONSIDERATIONS

4.4.1 General Plan

The current General Plan for the City of Santa Ana consists of 16 elements adopted in separate years—from 1982 to 2014:

- Airport Environs Element (adopted February 11, 2009)
- Circulation Element (adopted February 2, 1998)
- Conservation Element (adopted September 20, 1982)

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- Economic Development Element (adopted July 6, 1998)
- Education Element (adopted January 19, 1988)
- Energy Element (adopted September 20, 1982)
- Growth Management Element (adopted July 1, 1991)
- Housing Element (adopted February, 2014)
- Land Use Element (adopted February 2, 1998)
- Noise Element (adopted September 20, 1982)
- Open Space, Parks and Recreation Element (adopted September 20, 1982)
- Public Facilities Element (adopted September 20, 1982)
- Public Safety Element (adopted September 20, 1982)
- Scenic Corridors Element (adopted September 20, 1982)
- Seismic Safety Element (adopted September 20, 1982)
- Urban Design Element (adopted July 6, 1998)

Figure 3-6, *Current General Plan Land Use Plan*, shows the existing land use designations of the current General Plan. Table 3-2, *Current General Plan Land Use Designations and Statistics*, presents a breakdown of current General Plan land use designations. As shown in Figure 3-6 and Table 3-2, 11 land use designations currently regulate development in the city. The largest land use designation within the city boundaries are Low Density Residential and Industrial.

The GPU is an update to the existing General Plan. Each of the elements presents an overview of its scope, summary of conditions, and planning issues goals and policies. The goals and policies are applicable to all lands within the City of Santa Ana. In addition to the general goals and policies that apply to all lands, Santa Ana has distinct planning subareas that have custom goals and policies that ensure the preservation and enhancement of these special districts. As shown in Figure 3-11, *Focus Areas and Special Planning Areas*, these areas are:

- Adaptive Reuse Project Incentive Area
- Bristol Street Corridor Specific Plan
- Harbor Mixed Use Transit Corridor Specific Plan
- Midtown Specific Plan
- MainPlace Specific Plan
- Metro East Mixed-Use Overlay Zone
- Transit Zoning Code Specific Development

4.4.2 Zoning

The zoning designations of the areas within the city's incorporated boundaries (see Figure 3-2, *Citywide Aerial*) are defined by the City's zoning map. The zoning map contains the various zoning designations throughout the city, including residential, commercial, industrial, professional, open space, and the specific plan areas mentioned above (Santa Ana 2017). Chapter 41 (Zoning) of the Santa Ana Municipal Code provides the basis for current zoning in the city that carries out the policies of the existing General Plan.

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4.4.3 Environmental Justice Communities

In 2016, the California Legislature passed Senate Bill 1000 (SB 1000), Planning for Healthy Communities Act, to incorporate environmental justice into the local land use planning process. SB 1000's definition of a disadvantaged community includes areas that:

- Are disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation;
- And have concentrations of people with low income, high unemployment, low levels of homeownership, high rent burden, sensitive populations, or low levels of educational attainment.

Once such communities are identified, local governments can better understand their needs and target resources appropriately to improve conditions and outcomes. 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 populations in those communities.

CES generates a composite score that assesses disproportionate impacts on California communities. It uses 21 indicators organized across four categories—pollution exposure, environmental effects, sensitive populations, and socioeconomic factors. These categories are summed into two primary metrics—pollution burden and population characteristics—which CES multiplies to arrive at the CES composite score. 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. 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. Those ranked in the top 25 percent are a disadvantaged or environmental justice community.

As shown in Figure 2-1, *EJ Communities, Neighborhoods, and Focus Areas*, there are 23 census tracts within Santa Ana that are EJ communities. The figure also shows the overlap of the EJ communities with the city's neighborhood map. The following neighborhoods are partially or entirely within EJ communities:

- | | |
|-----------------------|----------------------|
| ■ Artesia Pilar | ■ Logan |
| ■ Bella Vista | ■ Lyon Street |
| ■ Casa Bonita | ■ Madison Park |
| ■ Cedar Evergreen | ■ Memorial Park |
| ■ Centennial Park | ■ Pacific Park |
| ■ Central City | ■ Pico Lowell |
| ■ Cornerstone Village | ■ Riverview West |
| ■ Delhi | ■ Sandpointe |
| ■ Downtown | ■ Santa Ana Triangle |
| ■ Floral Park | ■ Santa Anita |

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- Flower Park
- French Court
- French Park
- Heninger Park
- Lacy
- Valley Adams
- Washington Square
- West Floral Park
- Willard

Appendix A-b, *Environmental Justice Background and Analysis for the General Plan Update*, includes tables that provide a summary of CalEnviroScreen scores for each of the 23 census tracts. 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.

4.5 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Section 15355 of the CEQA Guidelines defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Cumulative impacts are the change caused by the incremental impact of an individual project compounded with the incremental impacts from closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively significant projects taking place over a period of time.

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed when the project’s incremental effect is considerable. It further states that this discussion of cumulative impacts shall reflect the severity of the impacts and the likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The CEQA Guidelines (Section 15130 [b][1]) state that the information utilized in an analysis of cumulative impacts should come from one of two sources:

- 1) A list of past, present and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or
- 2) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

The cumulative impacts analyses in this program environmental impact report (PEIR) use method No. 2. The GPU consists of a comprehensive update to the Santa Ana General Plan. Consistent with Section 15130(b)(1)(B) of the CEQA Guidelines, this Draft PEIR analyzes the environmental impacts of developments in accordance with buildout of the proposed land use plan. As a result, this Draft PEIR addresses the cumulative impacts of development within the plan area, which includes the city (incorporated area) and its sphere of influence (SOI) (see Figure 3-2, *Citywide Aerial*) and the greater Orange County area surrounding it, as appropriate. In most cases, the potential for cumulative impacts is contiguous with the City boundary. Potential cumulative impacts that have the potential for impacts beyond the City boundary (e.g., traffic, air quality, noise) have been addressed through cumulative growth in the City and region. Regional growth outside Santa Ana has accounted for traffic, air quality,

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and noise impacts through use of the Orange County Transportation Authority Model (OCTAM), which is a model that uses regional growth projections to calculate future traffic volumes. The growth projections adopted by the City and surrounding area are used for the cumulative impact analyses of this Draft PEIR. Please refer to Chapter 5, *Environmental Analysis*, of this Draft PEIR for a discussion of the cumulative impacts associated with development and growth in the City and region. A summary of the extent of cumulative impacts is also identified below:

- Aesthetics: Contiguous with the City and SOI boundary.
- Agricultural and Forestry Resources: Contiguous with the City and SOI boundary.
- Air Quality: Based on the regional boundaries of the South Coast Air Basin.
- Biological Resources: Contiguous with the City and SOI boundary.
- Cultural Resources: Contiguous with the City and SOI boundary.
- Energy: Based on energy use in the City and SOI boundary.
- Geological Resources: Contiguous with the City and SOI boundary.
- Greenhouse Gas Emissions: Based on the sectors in the Scoping Plan emissions in California (boundary).
- Hazards and Hazardous Materials: Contiguous with the City and SOI boundary.
- Hydrology and Water Quality: Hydrology and water quality impacts would be contiguous with the Anaheim Bay–Huntington Harbor, Santa Ana River, and Newport Bay Watersheds and the Orange County Groundwater Basin Groundwater Basin, and flood impacts would be contiguous with the City and SOI boundary.
- Land Use and Planning: Contiguous with the City and SOI boundary but considers regional land use planning based on SCAG and OCTA.
- Mineral Resources: Contiguous with the City and SOI boundary.
- Noise: Contiguous with the City and SOI boundary.
- Population and Housing: Contiguous with the City and SOI boundary.
- Public Services: Contiguous with the service area boundaries of the Orange County Fire Authority; Santa Ana Police Department; Santa Ana Unified School District, Tustin Unified School District; Garden Grove Unified School District; Orange Unified School District; and the Santa Ana Public Library System.
- Recreation: Contiguous with the City and SOI boundary.
- Transportation: Considers regional transportation improvements identified in OCTAM.SCAG.

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- Tribal Cultural Resources: Contiguous with the City and SOI boundary.
- Utilities and Service Systems: Water supply and distribution systems impacts would be contiguous with the service areas of the City, Orange County Water District, and Metropolitan Water District of Southern California; wastewater conveyance and treatment would be contiguous with the service areas of the City and the Orange County Sanitary District; storm drainage systems would be contiguous with the City and Orange County Flood Control District service areas; solid waste collection and disposal services would be contiguous with the Waste Management of Orange County service area; natural gas and electricity services would be contiguous with the Southern California Gas Company and Southern California Edison service areas, respectively.
- Wildfire: Contiguous with the service area boundaries of the Orange County Fire Authority and CAL FIRE.

Potential cumulative impacts related to traffic, air quality, and noise, which have the potential for impacts beyond the plan area, have been addressed through use of the Orange County Traffic Analysis Model (OCTAM), which was developed consistent with and based on the Orange County Council of Government's Regional Transportation Plan to forecast cumulative growth within the plan area and regionally. Regional growth outside of the plan area has accounted for traffic, air quality, and noise impacts through use of the OCTAM, which is a socioeconomic traffic model that uses regional growth projections to calculate future traffic volumes. The growth projections adopted by the City and surrounding area are used for the cumulative impact analyses of this Draft PEIR.

Please refer to Chapter 5, *Environmental Analysis*, for a discussion of the environmental impacts associated with cumulative development pursuant to implementation of the General Plan Update.

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5.2 AIR QUALITY

This section of the Recirculated Draft Program Environmental Impact Report (PEIR) evaluates the potential for the Santa Ana General Plan Update (GPU) to impact air quality in a local and regional context. The analysis in this section is based on land uses associated with the proposed General Plan Update, vehicle miles traveled (VMT) provided by IBI Group (see Volume III, Appendix K), electricity data provided by Southern California Edison (SCE), and natural gas use data provided by the Southern California Gas Company (SoCal Gas). The air quality model output sheets are included in Appendix C of this Recirculated Draft PEIR.

The City of Santa Ana received several comments on the Draft PEIR air quality impact analysis associated with disadvantaged communities that are disproportionately affected by poor air quality. This section provides additional background information on environmental justice (EJ) issues in the City of Santa Ana. Areas of concern identified by commenters on the Draft PEIR include:

- Potential for GPU implementation to increase the exposure of sensitive receptors to pollution (particularly EJ community residents).
- Land use incompatibility of existing residential uses with surrounding industrial uses and potentially new commercial/industrial uses in proximity.
- The potential for GPU implementation to increase toxic air contaminants (TAC) and further impact communities already exposed to high levels of pollutants.

In 2016, the California Legislature passed Senate Bill 1000 (SB 1000), Planning for Healthy Communities Act, to incorporate environmental justice into the local land use planning process. SB 1000 requires local governments to address pollution and other hazards that disproportionately impact low-income communities and communities of color in their jurisdictions. SB 1000 mandates that general plans address environmental justice but does not require California Environmental Quality Act (CEQA) analyses to address EJ issues.

Nevertheless, to address comments on the Draft PEIR, the City has chosen to recirculate Section 5.2 of the Draft PEIR. The Draft PEIR addressed air quality and health risk impacts of implementing the GPU to sensitive land uses. This recirculated section includes a supplemental discussion on air quality impacts to EJ communities related to development pursuant to the GPU. It also lists applicable EJ policies and implementation actions in the General Plan Update.

General Plan Guidelines prepared by the California Office of Planning and Research provide that newly adopted general plans may address EJ as a stand-alone element or incorporate the requirements into other general plan elements or plans. The City has chosen to address EJ topics throughout the General Plan Update. Section 5.2 of the Draft PEIR was therefore supplemented with air-quality-related EJ policies and implementation actions, as shown in Section 5.2.4.2, to demonstrate that the GPU complies with the requirements of SB 1000. These EJ policies and implementation actions also address EJ-related air quality impacts.

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SB 1000 states that environmental justice includes governmental entities engaging and providing technical assistance to communities most impacted by pollution to promote their meaningful participation in all phases of the environmental and land use decision-making process. A detailed discussion of the City's EJ community outreach is included in Section 2.4, *Environmental Justice Outreach*.

5.2.1 Environmental Setting

5.2.1.1 REGULATORY BACKGROUND

Ambient air quality standards (AAQS) have been adopted at the state and federal levels for criteria air pollutants. In addition, both the State and federal government regulate the release of TACs. Santa Ana is in the South Coast Air Basin (SoCAB) and is subject to the rules and regulations imposed by the South Coast Air Quality Management District (AQMD), the California AAQS adopted by California Air Resources Board (CARB), and National AAQS adopted by the United States Environmental Protection Agency (EPA). Federal, State, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the General Plan Update are summarized in this section.

Federal and State

Ambient Air Quality Standards

The Clean Air Act was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The Clean Air Act allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS.

The National and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants, which are shown in Table 5.2-1. These pollutants are ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (Pb). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

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Table 5.2-1 Ambient Air Quality Standards for Criteria Air Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
Ozone (O ₃) ³	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	20 µg/m ³	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m ³	150 µg/m ³	
Respirable Fine Particulate Matter (PM _{2.5}) ⁴	Annual Arithmetic Mean	12 µg/m ³	12 µg/m ³	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m ³	
Lead (Pb)	30-Day Average	1.5 µg/m ³	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m ³	
	Rolling 3-Month Average	*	0.15 µg/m ³	
Sulfates (SO ₄) ⁵	24 hours	25 µg/m ³	No Federal Standard	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.

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Table 5.2-1 Ambient Air Quality Standards for Criteria Air Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H ₂ S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hours	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.

Notes: ppm: parts per million; µg/m³: micrograms per cubic meter

* Standard has not been established for this pollutant/duration by this entity.

¹ California standards for O₃, CO (except 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

² National standards (other than O₃, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

³ On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

⁴ On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

⁵ On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions.

- **AB 1493: Pavley Fuel Efficiency Standards.** Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016. In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025.
- **SB 1078 and SB 107: Renewables Portfolio Standards.** A major component of California's Renewable Energy Program is the renewables portfolio standard established under Senate Bills 1078 (Sher) and 107 (Simitian). Under this standard, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010.
- **California Code of Regulations (CCR), Title 20: Appliance Energy Efficiency Standards.** The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the California Energy Commission on October 11, 2006, and approved by the California Office of Administrative Law on

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December 14, 2006. The regulations include standards for both federally regulated appliances and non-federally regulated appliances.

- **24 CCR, Part 6: Building and Energy Efficiency Standards.** Energy conservation standards for new residential and nonresidential buildings adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977.
- **24 CCR, Part 11: Green Building Standards Code.** Establishes planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.

Tanner Air Toxics Act and Air Toxics Hot Spot Information and Assessment Act

Public exposure to TACs is a significant environmental health issue in California. In 1983, the California legislature enacted a program to identify the health effects of TACs and reduce exposure to them. The California Health and Safety Code defines a TAC as “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health” (17 CCR § 93000). A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the federal Clean Air Act (42 US Code § 7412[b]) is a toxic air contaminant. Under State law, the California Environmental Protection Agency, acting through CARB, is authorized to identify a substance as a TAC if it is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics “Hot Spot” Information and Assessment Act of 1987). The Tanner Air Toxics Act set up a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an “airborne toxics control measure” for sources that emit that TAC. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate “toxics best available control technology” to minimize emissions. To date, CARB has established formal control measures for 11 TACs that are identified as having no safe threshold.

Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High-priority facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, are required to communicate the results to the public through notices and public meetings.

CARB has promulgated the following specific rules to limit TAC emissions:

- **13 CCR Chapter 10 § 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.** Generally restricts on-road diesel-powered commercial motor vehicles with a gross vehicle weight rating of greater than 10,000 pounds from idling more than five minutes.

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- **13 CCR Chapter 10 § 2480: Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools.** Generally restricts a school bus or transit bus from idling for more than five minutes when within 100 feet of a school.
- **13 CCR § 2477 and Article 8: Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate.** Regulations established to control emissions associated with diesel-powered TRUs.

Air Pollutants of Concern

Criteria Air Pollutants

The pollutants emitted into the ambient air by stationary and mobile sources are categorized as primary and/or secondary pollutants. Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (Pb) are primary air pollutants. Of these, CO, SO₂, NO₂, PM₁₀, and PM_{2.5} are “criteria air pollutants,” which means that AAQS have been established for them. VOC and NO_x are criteria pollutant precursors that form secondary criteria air pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O₃) and nitrogen dioxide (NO₂) are the principal secondary pollutants.

A description of each of the primary and secondary criteria air pollutants and its known health effects is presented below.

- **Carbon Monoxide** is a colorless, odorless gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (South Coast AQMD 2005; USEPA 2020). The SoCAB is designated under the California and National AAQS as being in attainment of CO criteria levels (CARB 2018).
- **Nitrogen Oxides** are a by-product of fuel combustion and contribute to the formation of ground-level O₃, PM₁₀, and PM_{2.5}. The two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO₂). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_x produced by combustion is NO, but NO reacts quickly with oxygen to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. NO₂ is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO₂ is only potentially irritating. NO₂ absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO₂ exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO₂ exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in

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people with asthma. Also, studies show a connection between elevated short-term NO₂ concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (South Coast AQMD 2005; USEPA 2020). The SoCAB is designated an attainment area for NO₂ under the National and California AAQS (CARB 2018). On February 21, 2019, CARB's Board approved the separation of the area that runs along the State Route 60 corridor through portions of Riverside, San Bernardino, and Los Angeles counties from the remainder of the SoCAB for state nonattainment designation purposes. The Board designated this corridor as nonattainment. The remainder of the SoCAB remains in attainment for NO₂ (CARB 2019a).

- **Sulfur Dioxide** is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO₂. When sulfur dioxide forms sulfates (SO₄) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_x). Thus, SO₂ is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO₂ may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO₂, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing) at lower concentrations and when combined with particulates, SO₂ may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics (South Coast AQMD 2005; USEPA 2020). The SoCAB is designated attainment under the California and National AAQS (CARB 2018).
- **Suspended Particulate Matter** consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM₁₀, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤10 millionths of a meter or 0.0004 inch). Inhalable fine particles, or PM_{2.5}, have an aerodynamic diameter of 2.5 microns or less (i.e., ≤2.5 millionths of a meter or 0.0001 inch). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM₁₀ and PM_{2.5} may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The EPA's scientific review concluded that PM_{2.5}, which penetrates deeply into the lungs, is more likely than PM₁₀ to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing) (South Coast AQMD 2005). There has been emerging evidence that ultrafine particulates, which are even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.1 millionths of a meter or <0.000004 inch), have human health implications, because their toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (South Coast AQMD 2013). However, the EPA or CARB has yet to adopt AAQS to regulate these particulates. Diesel particulate matter is classified by CARB as a carcinogen (CARB 1998). Particulate matter can also cause environmental effects

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such as visibility impairment,¹ environmental damage,² and aesthetic damage³ (South Coast AQMD 2005; USEPA 2020). The SoCAB is a nonattainment area for PM_{2.5} under California and National AAQS and a nonattainment area for PM₁₀ under the California AAQS (CARB 2018).⁴

- **Ozone**, or O₃, is a key ingredient of “smog” and is a gas that is formed when VOCs and NO_x, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O₃ is a secondary criteria air pollutant. O₃ concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O₃ poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O₃ can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O₃ also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O₃ also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O₃ harms sensitive vegetation during the growing season (South Coast AQMD 2005; USEPA 2020). The SoCAB is designated extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2018).
- **Volatile Organic Compounds** are composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources include evaporative emissions from paints and solvents, asphalt paving, and household consumer products such as aerosols (South Coast AQMD 2005). There are no AAQS for VOCs. However, because they contribute to the formation of O₃, South Coast AQMD has established a significance threshold. The health effects for ozone are described above.
- **Lead** is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (South Coast AQMD 2005; USEPA 2020). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA’s regulatory efforts to remove lead from gasoline, emissions of lead from the transportation

¹ PM_{2.5} is the main cause of reduced visibility (haze) in parts of the United States.

² Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

³ Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

⁴ CARB approved the South Coast AQMD’s request to redesignate the SoCAB from serious nonattainment for PM₁₀ to attainment for PM₁₀ under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM₁₀ standards from 2004 to 2007. The EPA approved the State of California’s request to redesignate the South Coast PM₁₀ nonattainment area to attainment of the PM₁₀ National AAQS, effective on July 26, 2013.

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sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the EPA and CARB adopted more strict lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new State and federal standards.⁵ As a result of these violations, the Los Angeles County portion of the SoCAB is designated as nonattainment under the National AAQS for lead (South Coast AQMD 2012; CARB 2018). There are no lead-emitting sources associated with the General Plan Update, and therefore, lead is not a pollutant of concern.

Table 5.2-2 summarizes the potential health effects associated with the criteria air pollutants.

Table 5.2-2 Criteria Air Pollutant Health Effects Summary

Pollutant	Health Effects	Examples of Sources
Carbon Monoxide (CO)	Chest pain in heart patients Headaches, nausea Reduced mental alertness Death at very high levels	Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves
Ozone (O ₃)	Cough, chest tightness Difficulty taking a deep breath Worsened asthma symptoms Lung inflammation	Atmospheric reaction of organic gases with nitrogen oxides in sunlight
Nitrogen Dioxide (NO ₂)	Increased response to allergens Aggravation of respiratory illness	Same as carbon monoxide sources
Particulate Matter (PM ₁₀ & PM _{2.5})	Hospitalizations for worsened heart diseases Emergency room visits for asthma Premature death	Cars and trucks (particularly diesels) Fireplaces and woodstoves Windblown dust from overlays, agriculture, and construction
Sulfur Dioxide (SO ₂)	Aggravation of respiratory disease (e.g., asthma and emphysema) Reduced lung function	Combustion of sulfur-containing fossil fuels, smelting of sulfur-bearing metal ores, and industrial processes
Lead (Pb)	Behavioral and learning disabilities in children Nervous system impairment	Contaminated soil

Source: CARB 2009; South Coast AQMD 2005.

⁵ Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (South Coast AQMD 2012).

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Toxic Air Contaminants

People exposed to TACs at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems (USEPA 2019b). By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. There are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most relevant to the General Plan Update being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified diesel particulate matter (DPM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particles are 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs. Long-term (chronic) inhalation of DPM is likely a lung cancer risk. Short-term (i.e., acute) exposure can cause irritation and inflammatory systems and may exacerbate existing allergies and asthma systems (USEPA 2002).

Air Quality Management Planning

South Coast AQMD is the agency responsible for improving air quality in the SoCAB and ensuring that the National and California AAQS are attained and maintained. South Coast AQMD is responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

2016 AQMP

On March 3, 2017, South Coast AQMD adopted the 2016 AQMP, which serves as an update to the 2012 AQMP. The 2016 AQMP addresses strategies and measures to attain the following National AAQS:

- 2008 National 8-hour ozone standard by 2031
- 2012 National annual PM_{2.5} standard by 2025⁶
- 2006 National 24-hour PM_{2.5} standard by 2019
- 1997 National 8-hour ozone standard by 2023
- 1979 National 1-hour ozone standard by year 2022

It is projected that total NO_x emissions in the SoCAB would need to be reduced to 150 tons per day (tpd) by year 2023 and to 100 tpd in year 2031 to meet the 1997 and 2008 federal 8-hour ozone standards. The strategy to meet the 1997 federal 8-hour ozone standard would also lead to attaining the 1979 federal 1-hour ozone

⁶ The 2016 AQMP requests a reclassification from moderate to serious nonattainment for the 2012 National PM_{2.5} standard.

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standard by year 2022 (South Coast AQMD 2017), which requires reducing NO_x emissions in the SoCAB to 250 tpd. This is approximately 45 percent additional reductions above existing regulations for the 2023 ozone standard and 55 percent additional reductions to existing regulations to meet the 2031 ozone standard.

Reducing NO_x emissions would also reduce PM_{2.5} concentrations in the SoCAB. However, because the goal is to meet the 2012 federal annual PM_{2.5} standard no later than year 2025, South Coast AQMD is seeking to reclassify the SoCAB from “moderate” to “serious” nonattainment under this federal standard. A “moderate” nonattainment would require meeting the 2012 federal standard by no later than 2021.

Overall, the 2016 AQMP is composed of stationary and mobile-source emission reductions from regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile-source strategies, and reductions from federal sources such as aircrafts, locomotives, and ocean-going vessels. Strategies outlined in the 2016 AQMP would be implemented in collaboration between CARB and the EPA (South Coast AQMD 2017).

Lead Implementation Plan

In 2008, the EPA designated the Los Angeles County portion of the SoCAB as a nonattainment area under the federal lead (Pb) classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in the City of Vernon and the City of Industry that exceeded the new standard in the 2007-to-2009 period. The remainder of the SoCAB, outside the Los Angeles County nonattainment area, remains in attainment of the new 2008 lead standard. On May 24, 2012, CARB approved the State Implementation Plan revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The State Implementation Plan revision was submitted to the EPA for approval.

South Coast AQMD Rules and Regulations

All projects are subject to South Coast AQMD rules and regulations in effect at the time of activity, including:

- **Rule 401, Visible Emissions.** This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in visible emissions. Specifically, the rule prohibits the discharge of any air contaminant into the atmosphere by a person from any single source of emission for a period or periods aggregating more than three minutes in any one hour that is as dark as or darker than designated No. 1 on the Ringelmann Chart, as published by the US Bureau of Mines.
- **Rule 402, Nuisance.** This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in a public nuisance. Specifically, this rule prohibits any person from discharging quantities of air contaminants or other material from any source such that it would result in an injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public. Additionally, the discharge of air contaminants would also be prohibited where it would endanger the comfort, repose, health, or safety of any number of persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

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- **Rule 403, Fugitive Dust.** This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust, and requires best available control measures to be applied to earth moving and grading activities. In general, the rule prohibits new developments from the installation of wood-burning devices.
- **Rule 445, Wood Burning Devices.** This rule is intended to reduce the emission of particulate matter from wood-burning devices and applies to manufacturers and sellers of wood-burning devices, commercial sellers of firewood, and property owners and tenants that operate a wood-burning device.
- **Rule 1113, Architectural Coatings.** This rule serves to limit the VOC content of architectural coatings used on projects in the South Coast AQMD. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects in the South Coast AQMD must comply with the current VOC standards set in this rule.
- **Rule 1403, Asbestos Emissions from Demolition/Renovation Activities.** The purpose of this rule is to specify work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

Air Quality and Disadvantaged Communities

Senate Bill 1000

SB 1000 adds an environmental justice element to the required elements of a general plan, or EJ-related goals, policies, and objectives integrated with other elements. In whichever form, the element identifies disadvantaged communities, as defined, in the area covered by the general plan if the city or county has a disadvantaged community. It must also identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities.

AB 617, Community Air Protection Program

Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017) requires local air districts to monitor and implement air pollution control strategies that reduce localized air pollution in communities that bear the greatest burdens. In response to AB 617, CARB has established the Community Air Protection Program.

Air districts are required to host workshops to help identify disadvantaged communities disproportionately affected by poor air quality. Once the criteria for identifying the highest priority locations have been identified and the communities have been selected, new community monitoring systems would be installed to track and

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monitor community-specific air pollution goals. In 2018 CARB prepared an air monitoring plan (Community Air Protection Blueprint) that evaluates the availability and effectiveness of air monitoring technologies and existing community air monitoring networks. Under AB 617, the Blueprint is required to be updated every five years.

CARB is also required to prepare a statewide strategy to reduce TACs and criteria pollutants in impacted communities; provide a statewide clearinghouse for best available retrofit control technology; adopt new rules requiring the latest best available retrofit control technology for all criteria pollutants for which an area has not achieved attainment of California AAQS; and provide uniform, statewide reporting of emissions inventories. Air districts are required to adopt a community emissions reduction program to achieve reductions for the communities impacted by air pollution that CARB identifies.

5.2.1.2 EXISTING CONDITIONS

South Coast Air Basin

The City of Santa Ana and its sphere of influence are in the SoCAB, which includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semipermanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (South Coast AQMD 2005).

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest to the project area that best represents the climatological conditions of the city is the Santa Ana Fire Station (ID 047888). The average low is reported at 43.1°F in January, and the average high is 84.7°F in August (WRCC 2020).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from November to May. The historical rainfall average for the city is 13.69 inches per year (WRCC 2020).

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of a shallow marine layer. This "ocean effect" is dominant except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds. Periods of heavy fog are frequent, especially along the coast. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (South Coast AQMD 1993).

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Wind

Wind patterns across the southern coastal region are characterized by westerly or southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east inhibit the eastward transport and diffusion of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (South Coast AQMD 2005).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the “mixing height.” The combination of winds and inversions are critical determinants in the highly degraded air quality in summer and the generally good air quality in the winter in the project area (South Coast AQMD 2005).

SoCAB Nonattainment Areas

The AQMP provides the framework for air quality basins to achieve attainment of the State and federal ambient air quality standards through the State Implementation Plan. Areas are classified as attainment or nonattainment areas for particular pollutants depending on whether they meet the ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- ***Unclassified.*** A pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- ***Attainment.*** A pollutant is in attainment if the AAQS for that pollutant was not violated at any site in the area during a three-year period.
- ***Nonattainment.*** A pollutant is in nonattainment if there was at least one violation of an AAQS for that pollutant in the area.
- ***Nonattainment/Transitional.*** A subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

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The attainment status for the SoCAB is shown in Table 5.2-3.

Table 5.2-3 Attainment Status of Criteria Air Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM ₁₀	Serious Nonattainment	Attainment
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO ₂	Nonattainment (SR-60 Near Road only) ¹	Attainment/Maintenance
SO ₂	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only) ²
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2018.

¹ On February 21, 2019, CARB's Board approved the separation of the area that runs along State Route 60 corridor through portions of Riverside, San Bernardino, and Los Angeles counties from the remainder of the SoCAB for State nonattainment designation purposes. The Board designated this corridor as nonattainment. The remainder of the SoCAB remains in attainment for NO₂ (CARB 2019a).

² In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new 2008 federal AAQS as a result of large industrial emitters. Remaining areas in the SoCAB are unclassified.

Multiple Air Toxics Exposure Study

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on existing ambient concentrations of TACs and the potential health risks from air toxics in the SoCAB. In April 2021 South Coast AQMD released the latest update to the MATES study, MATES V. The first MATES analysis, MATES I, began in 1986 but was limited due to the technology available at the time. Conducted in 1998, MATES II was the first MATES iteration to include a comprehensive monitoring program, an air toxics emissions inventory, and a modeling component. MATES III was conducted in 2004 to 2006, with MATES IV following in 2012 to 2013.

MATES V uses measurements taken during 2018 and 2019, with a comprehensive modeling analysis and emissions inventory based on 2018 data. The previous MATES studies quantified the cancer risks based on the inhalation pathway only. MATES V includes information on the chronic noncancer risks from inhalation and noninhalation pathways for the first time. Cancer risks and chronic noncancer risks from MATES II through IV measurements have been re-examined using current Office of Environmental Health Hazards Assessment and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time. Figure 5.2-1, *MATES V Inhalation Air Toxics Cancer Risk for Santa Ana*, shows the results of the inhalation cancer risk from the MATES IV study. The potential cancer risk is expressed as the incremental number of potential cancer cases that could be developed per million people, assuming that the population is exposed to the substance at a constant annual average concentration over a presumed 70-year lifetime.

The MATES V study showed that cancer risk in the SoCAB decreased to 454 in a million from 997 in a million in the MATES IV study. Overall, air toxics cancer risk in the SoCAB decreased by 54 percent since 2012 when MATES IV was conducted. MATES V showed the highest risk locations near the Los Angeles International Airport and Ports of Long Beach and Los Angeles. DPM continues to be the major contributor to air toxics cancer risk. Goods movement and transportation corridors have the highest cancer risk. Transportation sources

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account for 88 percent of carcinogenic air toxics emissions, and the remainder is from stationary sources, which include large industrial operations such as refineries and power plants as well as smaller businesses such as gas stations and chrome-plating facilities. (South Coast AQMD 2021).

Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the city are best documented by measurements taken by the South Coast AQMD. The city is wholly within Source Receptor Area (SRA) 17: Central Orange County.⁷ The Anaheim-Pampa Lane Monitoring Station best represents the ambient air quality in the city. Data from this station is summarized in Table 5.2-4. The data show that the area regularly exceeded the State and federal one-hour and eight-hour O₃ standards within the last five recorded years. Additionally, the area has regularly exceeded the State PM₁₀ and federal PM_{2.5} standards.

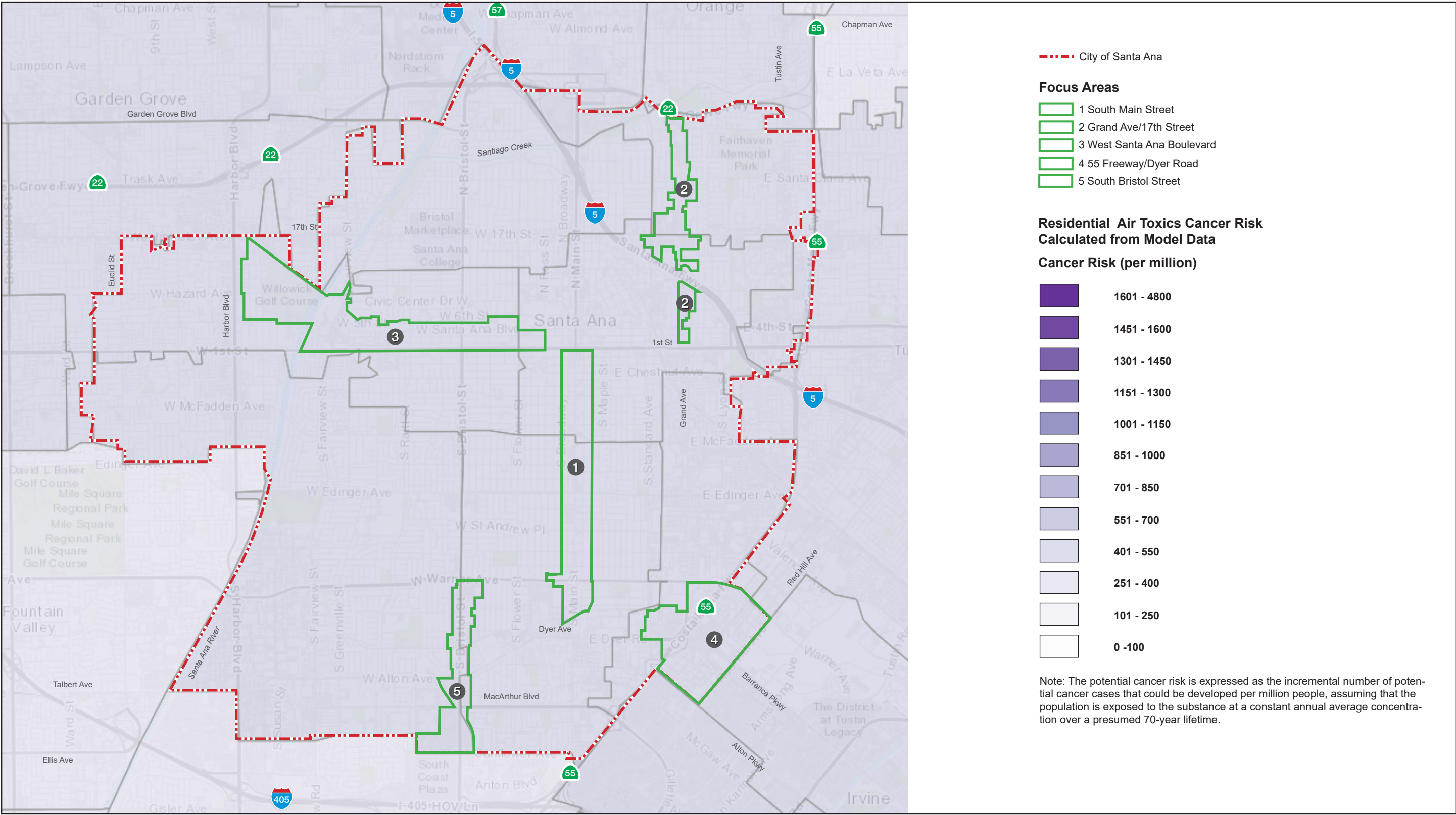
Table 5.2-4 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Thresholds Were Exceeded and Maximum Levels				
	2015	2016	2017	2018	2019
Ozone (O₃)					
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	1	2	0	1	1
State 8-hour ≥ 0.07 ppm (days exceed threshold)	2	0	4	1	1
Federal 8-Hour > 0.075 ppm (days exceed threshold)	1	0	1	0	1
Max. 1-Hour Conc. (ppm)	0.099	0.090	0.088	0.112	0.096
Max. 8-Hour Conc. (ppm)	0.079	0.069	0.080	0.071	0.082
Nitrogen Dioxide (NO₂)					
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0	0	0
Federal 1-Hour ≥ 0.100 ppm (days exceed threshold)	0	0	0	0	0
Max. 1-Hour Conc. (ppb)	59.1	64.3	81.2	66.0	59.4
Coarse Particulates (PM₁₀)					
State 24-Hour > 50 µg/m ³ (days exceed threshold)	2	3	5	2	4
Federal 24-Hour > 150 µg/m ³ (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m ³)	59.0	74.0	95.7	94.6	127.6
Fine Particulates (PM_{2.5})					
Federal 24-Hour > 35 µg/m ³ (days exceed threshold)	3	1	7	7	4
Max. 24-Hour Conc. (µg/m ³)	45.8	44.4	53.9	63.1	36.1

Source: CARB 2020.
Notes: Data from the Anaheim Pampa Lane Monitoring Station. Includes exceptional event data (e.g., wildfires).
ppm = parts per million; parts per billion, µg/m³ = micrograms per cubic meter

⁷ South Coast AQMD Rule 701 defines an SRA as: “A source area is that area in which contaminants are discharged and a receptor area is that area in which the contaminants accumulate and are measured. Any of the areas can be a source area, a receptor area, or both a source and receptor area.” There are 37 SRAs within the South Coast AQMD’s jurisdiction.

Figure 5.2-1 - MATES IV Inhalation Air Toxics Cancer Risk for Santa Ana



Source: ESRI, 2021

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There are no South Coast AQMD monitoring stations in Santa Ana. However, South Coast AQMD has embarked on a community air initiative pursuant to AB 617, and through this initiative, the South Coast AQMD is working with selected disadvantaged communities to implement a local air quality monitoring program. Santa Ana was not identified or nominated as one of the potential disadvantaged communities in the latest South Coast AQMD Year 2 Community Recommendations for AB 617 sent to CARB (South Coast AQMD 2019a). However, the City worked with the Madison Park Neighborhood through Charitable Ventures Orange County to obtain a grant from CARB to expand the engagement between Madison Park residents and create a plan for community-based monitoring of air pollution and its effects.

Existing Emissions

The city consists of commercial, retail, industrial, and institutional land uses and single- and multifamily residences. These uses currently generate criteria air pollutant emissions from natural gas use for energy, heating, and cooking; vehicle trips associated with each land use; and area sources such as landscaping equipment and consumer cleaning products.⁸ Table 5.2-5 shows the average daily emissions inventory currently associated with the existing land uses in the city. The inventory also includes emissions from off-road construction equipment associated with construction activities in the plan area.

Table 5.2-5 Santa Ana Criteria Air Pollutant Emissions Inventory

Sector	Existing Criteria Air Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Transportation ¹	831	5,596	25,067	90	1,362	602
Energy	144	1,277	845	8	100	100
Area – Consumer Products ²	4,212	0	0	0	0	0
Area –Light Equipment ³	154	415	6,330	1	38	31
Area – Construction Equipment	28	182	589	0	13	11.11
Total	5,369	7,470	32,832	99	1,513	744

Note:

¹ EMFAC2017 Version 1.0.2. Based on daily VMT provided by IBI Group. Transportation sector includes the full trip length for internal-internal trips and various trip lengths for external-internal/internal-external trips (see Appendix K). VMT per year based on a conversion of VMT x 347 days per year to account for less travel on weekend, consistent with CARB statewide GHG emissions inventory methodology (CARB 2008).

² Based on CalEEMod, Version 2016.3.2, methodology utilized to calculate VOC emissions from use of household consumer cleaning products.

³ OFFROAD2017 Version 1.0.1. Light commercial equipment emissions estimated based on employment for the City of Santa Ana as a percentage of Orange County. Construction emissions estimated based on housing permit data for Orange County and the City of Santa Ana from the US Census. Area sources exclude emissions from fireplaces.

Permitted Sources of Emissions

South Coast AQMD regulates stationary sources of emissions through source-specific rules that have been adopted to reduce criteria air pollutant emissions TACs. South Coast AQMD maintains the Facility Information Detail (FIND) database of regulated facilities that are required to have a permit to operate equipment that releases pollutants into the air in its region. Permitted sources include smaller sources such as gas stations and chrome-plating facilities as well as large sources such as refineries and power stations. Figure 5.2-2, *South Coast*

⁸ Emissions from permitted sources are excluded from the existing emissions inventory because the reductions associated with the Industrial sector are regulated separately by South Coast AQMD and are not under the jurisdiction of the City of Santa Ana.

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AQMD Permitted Facilities in Santa Ana, identifies permitted sources of emissions in Santa Ana that are regulated directly by South Coast AQMD. The number of permitted facilities in an area are depicted by blue circles of various sizes dependent on the number of facilities in the vicinity. Permitted sources of emissions are generally clustered in industrial areas of the city.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases.

Residential areas are also considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Other sensitive receptors include retirement facilities, hospitals, and schools. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial, commercial, retail, and office areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, because the majority of the workers tend to stay indoors most of the time. In addition, the workforce is generally the healthiest segment of the population.

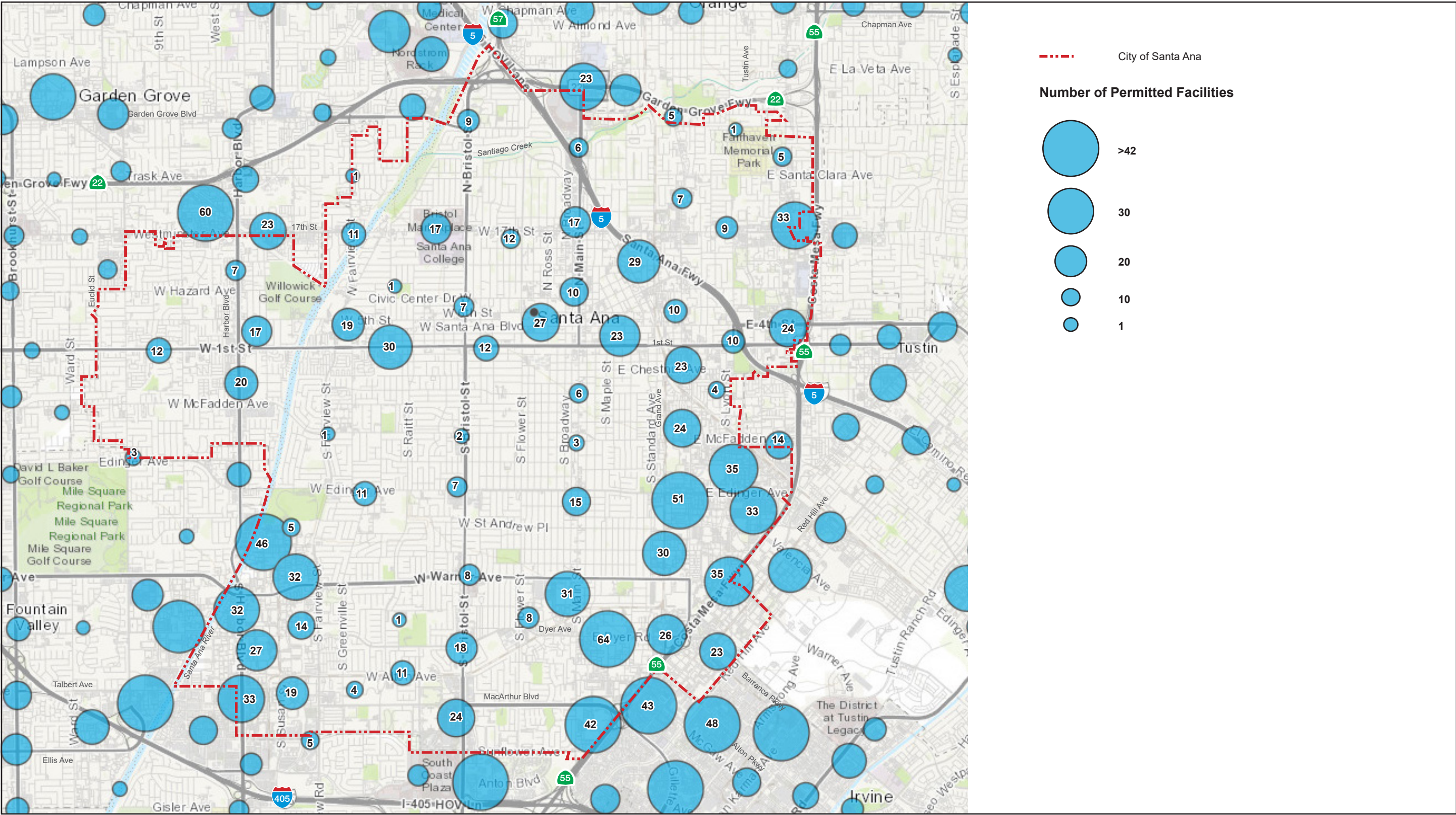
Environmental Justice Communities

Figure 2-1 of this Recirculated Draft PEIR, *EJ Communities, Neighborhoods, and Focus Areas*, shows the 23 census tracts and associated neighborhoods in Santa Ana that have been identified as EJ communities through the SB 1000 process. Appendix A-b, *Environmental Justice Background and Analysis for the General Plan Update*, includes tables that summarize the CalEnviroScreen (CES) scores for each of the 23 census tracts.⁹

An industrial corridor in the eastern part of the city extends north-south from the French Court neighborhood to the Delhi neighborhood. This corridor also runs through the French Park, Logan, Lacy, Lyon Street, Madison Park, Cornerstone Village, Cedar Evergreen, and Memorial Park neighborhoods (see Figure 5.2-3, *EJ Communities and Existing Industrial Land Use*). The EJ communities surrounding this industrial corridor include residences, recreational areas, and schools—such as the Century High School, James Madison Elementary School, and the Kennedy Elementary School—that may be exposed to air pollutants from mobile and stationary sources at the existing industrial facilities. Concerns cited by these communities include chemical smells and emissions from industrial facilities, elevated pediatric emergency room visits for asthma, and the lack of real-time data collection for PM, NO_x, SO₂, or ozone near the industrial corridor.

⁹ CES generates a composite score that assesses disproportionate impacts on California communities. It uses 21 indicators organized across four categories—pollution exposure, environmental effects, sensitive populations, and socioeconomic factors. These categories are summed into two primary metrics—pollution burden and population characteristics—which CES multiplies to arrive at the CES composite score.

Figure 5.2-2 - South Coast AQMD Permitted Facilities in Santa Ana



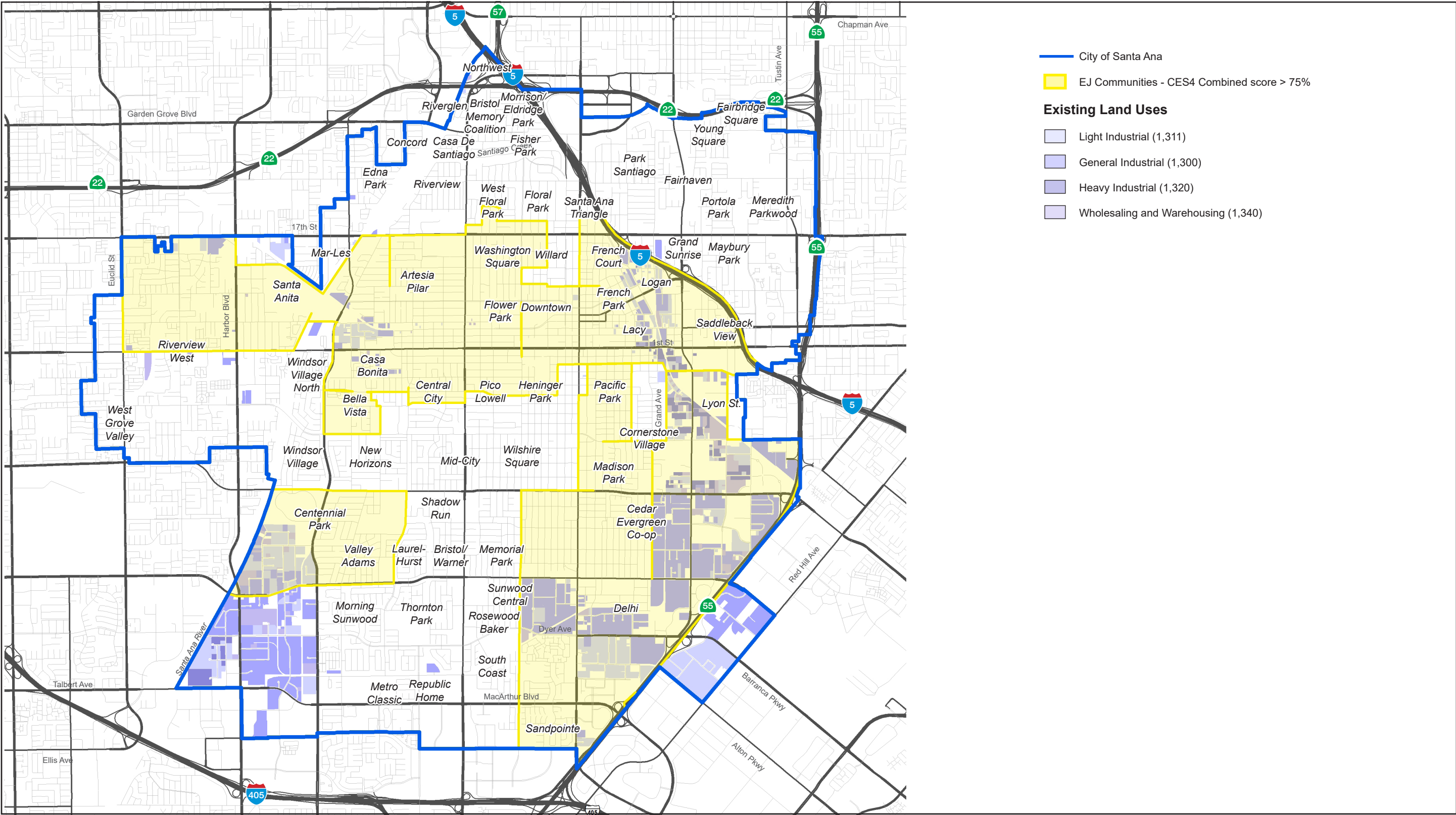
Source: SCAQMD Facilities, 2021

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Figure 5.2-3 - Communities and Existing Industrial Land Use



Source: ESRI, 2021



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CalEnviroScreen Air Quality Indicators

Section 4.4.3 of this Recirculated Draft PEIR, *Environmental Justice Communities*, provides a discussion of CES. In summary, CES is a mapping tool that helps identify the California communities most affected by many sources of pollution and where people are especially vulnerable to pollution's effects. People in environmental justice areas identified by CES 4.0 may be disproportionately affected by and vulnerable to poor air quality. CES's "pollution burden" map identifies communities that are exposed to pollution from human activities, such as air pollution (ozone, PM_{2.5}, DPM), water pollution (drinking water contaminants), and hazardous materials (pesticide use, children's lead exposure, toxic releases), and traffic density. Figure 5.2-4, *CalEnviroScreen 4.0, Pollution Burden in Santa Ana*, shows the pollution burden for Santa Ana relative to California. In CalEnviroScreen, the pollution burden scope considers the disproportionate effect of pollution on environmental justice communities, because the score weighs socioeconomic factors (educational attainment, poverty, etc.) and sensitivity of the population (asthma rates, cardiovascular disease, etc.).

And though the causes of asthma are poorly understood, it is well established that exposure to traffic and outdoor air pollutants can trigger asthma attacks. Children, the elderly, and low-income Californians suffer disproportionately from asthma (CalEPA 2017). Most census tracts in Santa Ana rank in the 40th and 50th percentiles for asthma (see Figure 5.2-5, *CalEnviroScreen 4.0, Asthma Percentiles in Santa Ana*).

5.2.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- AQ-1 Conflict with or obstruct implementation of the applicable air quality plan.
- AQ-2 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
- AQ-3 Expose sensitive receptors to substantial pollutant concentrations.
- AQ-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

5.2.2.1 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT THRESHOLDS

CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. The General Plan Update's air quality impacts follows the guidance and methodologies recommended in South Coast AQMD's *CEQA Air Quality Handbook* and the significance thresholds on South Coast AQMD's website (South Coast AQMD 1993).¹⁰

¹⁰ South Coast AQMD's Air Quality Significance Thresholds are current as of April 2019 and can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>.

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Regional Significance Thresholds

South Coast AQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the SoCAB, shown in Table 5.2-6. The table lists thresholds that are applicable for all projects uniformly, regardless of size or scope. There is growing evidence that although ultrafine particulate matter contributes a very small portion of the overall atmospheric mass concentration, it represents a greater proportion of the health risk from PM. However, the EPA and CARB have not adopted AAQS to regulate ultrafine particulate matter; therefore, South Coast AQMD has not developed thresholds for them.

Table 5.2-6 South Coast AQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Nitrogen Oxides (NO _x)	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO _x)	150 lbs/day	150 lbs/day
Particulates (PM ₁₀)	150 lbs/day	150 lbs/day
Particulates (PM _{2.5})	55 lbs/day	55 lbs/day

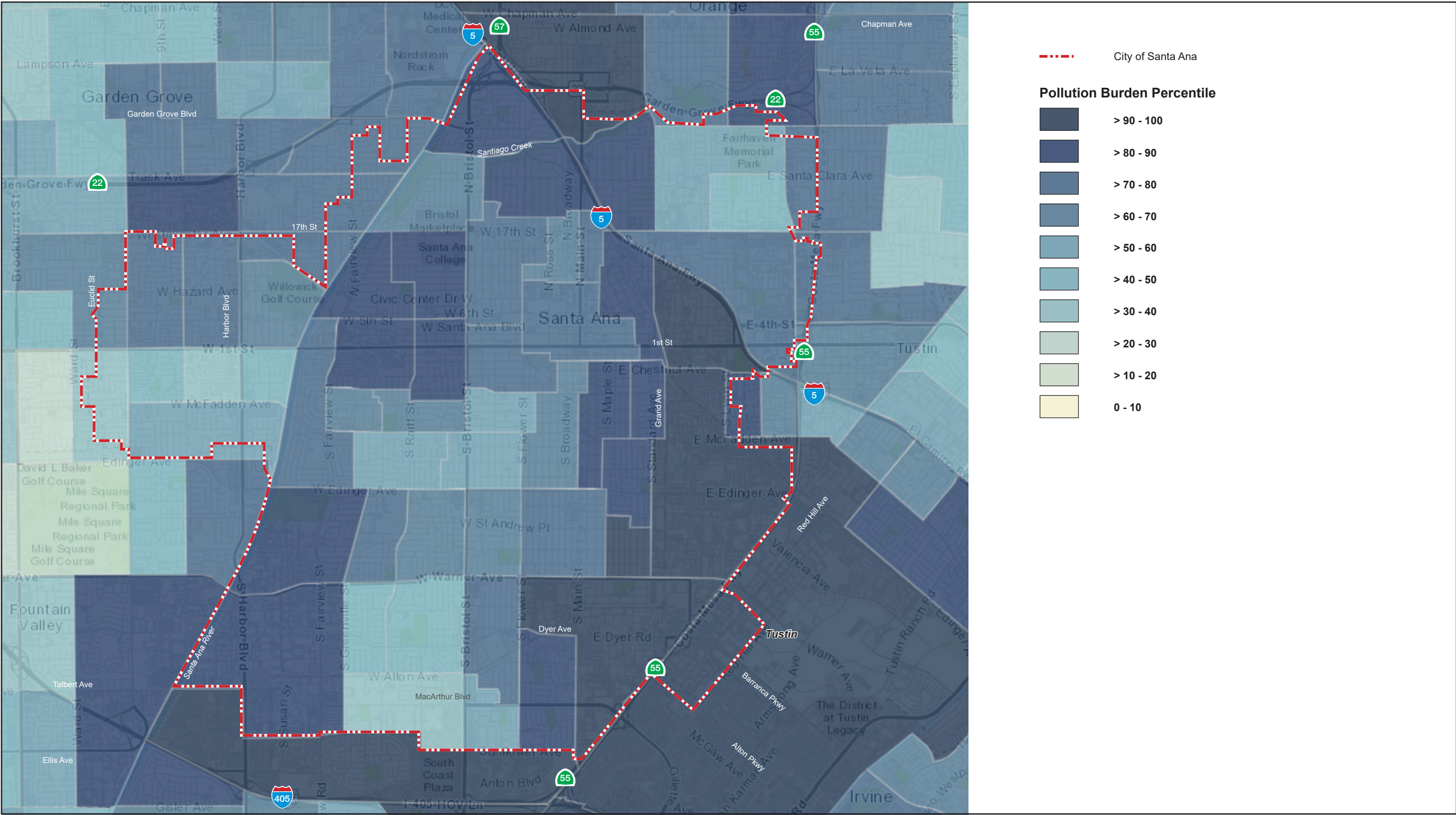
Source: South Coast AQMD 2019b.

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health effects. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems.

- Increases cancer risk (PM_{2.5}, TACs)
- Aggravates respiratory disease (O₃, PM_{2.5})
- Increases bronchitis (O₃, PM_{2.5})
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O₃)
- Reduces resistance to infections and increases fatigue (O₃)
- Reduces lung growth in children (PM_{2.5})
- Contributes to heart disease and heart attacks (PM_{2.5})
- Contributes to premature death (O₃, PM_{2.5})
- Contributes to lower birth weight in newborns (PM_{2.5}) (South Coast AQMD 2015a)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of PM_{2.5} is responsible for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists, in a landmark children's health study, found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (South Coast AQMD 2015b).

Figure 5.2-4 - CalEnviroScreen 4.0, Pollution Burden in Santa Ana



Source: CalEnviroScreen, 2021

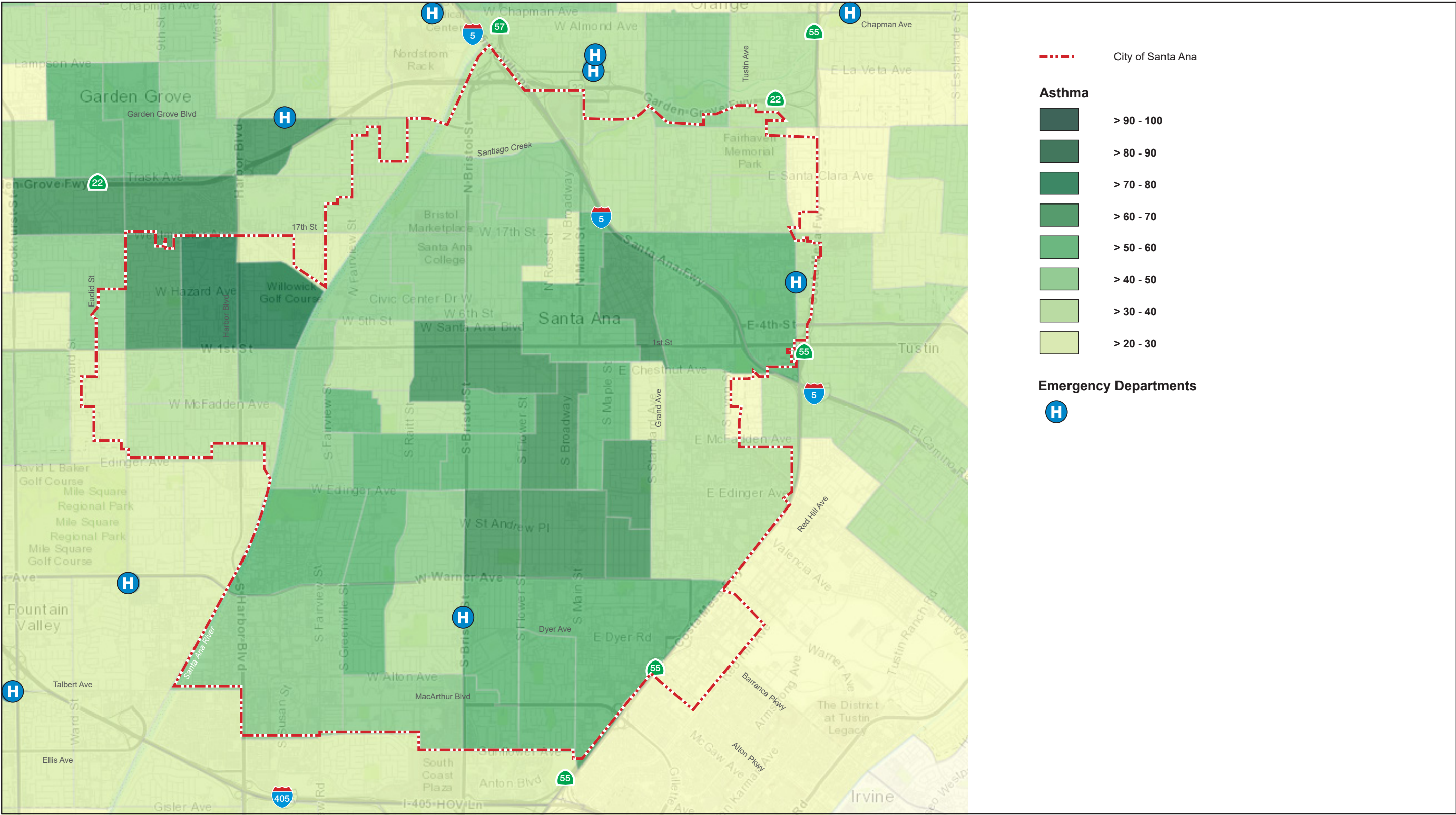


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Figure 5.2-5 - CalEnviroScreen 4.0, Asthma Percentile in Santa Ana



Source: CalEnviroScreen, 2021



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South Coast AQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals exposed to elevated concentrations of air pollutants in the SoCAB and has established thresholds that would be protective of these individuals. To achieve the health-based standards established by the EPA, South Coast AQMD prepares an AQMP that details regional programs to attain the AAQS.

Mass emissions in Table 5.2-6 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. The thresholds are based on the trigger levels for the federal New Source Review Program, which was created to ensure projects are consistent with attainment of health-based federal AAQS. Regional emissions from a single project do not single-handedly trigger a regional health impact, and it is speculative to identify how many more individuals in the air basin would be affected by the health effects listed above. Projects that do not exceed the South Coast AQMD regional significance thresholds in Table 5.2-6 would not violate any air quality standards or contribute substantially to an existing or projected air quality violation.

If projects exceed the emissions in Table 5.2-6, emissions would cumulatively contribute to the nonattainment status and would contribute in elevating the associated health effects. Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Health effects associated with particulate matter include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Reducing emissions would further contribute to reducing possible health effects related to criteria air pollutants. However, for projects that exceed the emissions in Table 5.2-6, it is speculative to determine how this would affect the number of days the region is in nonattainment—since mass emissions are not correlated with concentrations of emissions—or how many additional individuals in the air basin would be affected.

South Coast AQMD has not provided methodology to assess the specific correlation between mass emissions generated and the effect on health that is needed to address the issue raised in *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, Case No. S21978 (known as “Friant Ranch”). Ozone concentrations are dependent upon a variety of complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground-level ozone concentrations in relation to the National AAQS and California AAQS, it is not possible to link health risks to the magnitude of emissions exceeding the significance thresholds. However, if a project in the SoCAB exceeds the regional significance thresholds, the project could contribute to an increase in health effects in the basin until the attainment standard are met in the SoCAB.

CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the State one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older

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vehicles and introduction of cleaner fuels as well as implementation of control technology at industrial facilities, CO concentrations in the SoCAB and the state have steadily declined.

In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hotspot analysis conducted for the attainment by South Coast AQMD did not predict a violation of CO standards at the busiest intersections in Los Angeles during the peak morning and afternoon periods.¹¹ As identified in South Coast AQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide, peak carbon monoxide concentrations in the SoCAB in the years before redesignation were a result of unusual meteorological and topographical conditions and not of congestion at a particular intersection. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2017).¹²

Localized Significance Thresholds

South Coast AQMD identifies localized significance thresholds (LST), shown in Table 5.2-7. Emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at a project site could expose sensitive receptors to substantial concentrations of criteria air pollutants. Off-site mobile-source emissions are not included in the LST analysis. A project would generate a significant impact if it generates emissions that would violate the AAQS when added to the local background concentrations.

¹¹ The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

¹² The CO hotspot analysis refers to the modeling conducted by the Bay Area Air Quality Management District for its CEQA Guidelines because it is based on newer data and considers the improvement in mobile-source CO emissions. Although meteorological conditions in the Bay Area differ from those in the Southern California region, the modeling conducted by BAAQMD demonstrates that the net increase in peak hour traffic volumes at an intersection in a single hour would need to be substantial. This finding is consistent with the CO hotspot analysis South Coast AQMD prepared as part of its 2003 AQMP to provide support in seeking CO attainment for the SoCAB. Based on the analysis prepared by South Coast AQMD, no CO hotspots were predicted for the SoCAB. As noted in the preceding footnote, the analysis included some of Los Angeles' busiest intersections, with daily traffic volumes of 100,000 or more peak hour vehicle trips operating at LOS E and F.

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Table 5.2-7 South Coast AQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO ₂ Standard (CAAQS)	0.18 ppm
Annual NO ₂ Standard (CAAQS)	0.03 ppm
24-Hour PM ₁₀ Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM _{2.5} Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM ₁₀ Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³
24-Hour PM _{2.5} Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³
Annual Average PM ₁₀ Standard (South Coast AQMD) ¹	1.0 µg/m ³

Source: South Coast AQMD 2019b.

ppm: parts per million; µg/m³: micrograms per cubic meter

¹ Threshold is based on South Coast AQMD Rule 403. Since the SoCAB is in nonattainment for PM₁₀ and PM_{2.5}, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

Health Risk Thresholds

Whenever a project would require use of chemical compounds that have been identified in South Coast AQMD Rule 1401, placed on CARB's air toxics list pursuant to AB 1807, or placed on the EPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by the South Coast AQMD. Table 5.2-8, *South Coast AQMD Incremental Risk Thresholds for TACs*, lists the TAC incremental risk thresholds for operation of a project. The purpose of this environmental evaluation is to identify the significant effects of the General Plan Update on the environment, not the significant effects of the environment on the General Plan Update. See *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (Case No. S213478). CEQA does not require an analysis of the environmental effects of attracting development and people to an area. However, the environmental document must analyze the impacts of environmental hazards on future users when a proposed project exacerbates an existing environmental hazard or condition. Residential, commercial, and office uses do not use substantial quantities of TACs and typically do not exacerbate existing hazards, so these thresholds are typically applied to new industrial projects.

Table 5.2-8 South Coast AQMD Incremental Risk Thresholds for TACs

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0
Cancer Burden in areas ≥ 1 in 1 million	> 0.5 excess cancer cases

Source: South Coast AQMD 2019b.

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5.2.3 Regulatory Requirements and General Plan Policies

5.2.3.1 REGULATORY REQUIREMENTS

- RR AQ-1 New buildings are required to achieve the current California Building Energy Efficiency Standards (Title 24, Part 6) and California Green Building Standards Code (CALGreen) (Title 24, Part 11). The 2019 Building Energy Efficiency Standards became effective January 1, 2020. The Building and Energy Efficiency Standards and CALGreen are updated tri-annually with a goal to achieve net zero buildings energy for 2030.
- RR AQ-2 Construction activities will be conducted in compliance with California Code of Regulations, Title 13, Section 2449, which requires that nonessential idling of construction equipment is restricted to five minutes or less.
- RR AQ-3 Construction activities will be conducted in compliance with any applicable South Coast Air Quality Management District rules and regulations, including but not limited to:
- **Rule 403**, Fugitive Dust, for controlling fugitive dust and avoiding nuisance.
 - **Rule 402**, Nuisance, which states that a project shall not “discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.”
 - **Rule 1113**, which limits the volatile organic compound content of architectural coatings.
 - **Rule 1466**, Soil Disturbance. Projects that involve earth-moving activities of more than 50 cubic yards of soil with applicable toxic air contaminants are subject to this rule.

5.2.3.2 GENERAL PLAN UPDATE POLICIES AND IMPLEMENTATION ACTIONS

The following are relevant policies and implementation actions of the Santa Ana General Plan Update, which may reduce air quality impacts. Policy and implementation action revisions since the Draft PEIR are shown in tracked changes. Note that implementation actions were not listed at all in the Draft PEIR and have been added to more fully describe GPU components that will mitigate impacts. Note that only new implementation measures since the Draft PEIR public circulation have been highlighted. The tracked changes as shown below reflect the changes since the Draft PEIR as publicly circulated on August 3, 2020. The comprehensive, tracked changes listing of Policies and Implementation Actions in Appendix B-a shows the changes since October 2020, when the GPU was presented to the Planning Commission. With the changes as marked, both versions represent the most up-to-date GPU policies and implementation actions.

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Mobility-Element

- **Policy 1.7 Proactive Mitigation.** Proactively mitigate potential air quality, noise, congestion, safety, and other impacts from the transportation network on residents and business.
- **Policy 1.8 Environmental Sustainability.** Consider air and water quality, noise reduction, neighborhood character, and street-level aesthetics when making improvements to travelways.
- **Policy 3.3 Safe Routes to Schools and Parks.** Lead the development and implementation of safer routes to schools and parks by partnering with the school district, residents, property owners, and community stakeholders.
- **Policy 3.4 Regional Coordination.** Coordinate development of the City's active transportation and transit network with adjacent jurisdictions, OCTA, and other appropriate agencies.
- **Policy 3.5 Education and Encouragement.** Encourage active transportation choices through education, special events, and programs.
- **Policy 3.7 Complete Streets Design.** Enhance streets to facilitate safe walking, bicycling, and other nonmotorized forms of transportation through community participatory design.
- **Policy 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 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 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 4.5 Land Use Development Design.** Ensure that ~~the placement of buildings~~ building placement and design features, ~~and street environment~~ create a desirable and active streetscape.
- **Policy 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 4.7 Parking.** Explore and implement a flexible menu of parking options and other strategies to efficiently coordinate the response to parking demands.
- **Policy 4.9 Air Pollution Mitigation.** Consider land use, building, site planning, and technology solutions to mitigate exposure to transportation related air pollution.

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- **Policy 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 5.6 Clean Fuels and Vehicles.** Encourage the use of alternative fuel vehicles and mobility technologies through the installation of supporting infrastructure.
- ~~**Policy 5.9 Street Trees.** Support the greening of City streets through the establishment and maintenance of an urban forest to improve street aesthetics, filter pollution, and address GHG emissions.~~

Community Element

- **Policy 3.2 Healthy Neighborhoods.** Continue to support the creation of healthy neighborhoods by addressing public safety, land use conflicts, hazardous soil contamination, incompatible uses, and maintaining building code standards.
- **Policy 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 3.7 Active Lifestyles.** Support programs that ~~create safe routes to schools and other destinations~~ to promote sports, fitness, walking, biking and active lifestyles.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.

Conservation Element

- **Policy 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 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.

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- **Policy 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 1.4 Development Standards.** Support new development that meets or exceeds standards for energy-efficient building design and site planning.
- **Policy 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 1.6 New and Infill Residential Development.** Promote development that is mixed-use, pedestrian-friendly, transit oriented, and clustered around activity centers.
- **Policy 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 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 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 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 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 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 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.

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- **Policy 1.14 Transportation Demand Management.** Require and incentivize projects to incorporate Transportation Demand Management (TDM) techniques.
- **Policy 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 3.3 Development Patterns.** Promote energy efficient-development patterns by clustering mixed use developments and compatible uses adjacent to public transportation.
- **Policy 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.
- **Implementation Action 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.
- **Implementation Action 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 as identified in the CalEnviron Screen tool. If such designation is not awarded, seek grant funds for activities such as local air quality monitoring.
- **Implementation Action 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.
- **Implementation Action 1.4 Heath 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.
- **Implementation Action 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.
- **Implementation Action 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.

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- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 1.11 Public Education.** Augment existing outreach programs to improve public awareness of State, regional and local agencies' roles and resources to identify, monitor, and address air quality and other environmental hazards in the community.
- **Implementation Action 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.

Land Use Element

- **Policy 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 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 1.7 Active Transportation Infrastructure.** Invest in active transportation connectivity between activity centers and residential neighborhoods to encourage healthy lifestyles.
- **Policy 2.5 Benefits of Mixed Use.** Encourage infill mixed-use development at all ranges of affordability to reduce vehicle miles travelled, improve jobs/housing balance, and promote social interaction.
- **Policy 2.10 Smart Growth.** Focus high density residential in mixed-use villages, designated planning focus areas, Downtown Santa Ana, and along major travel corridors.
- **Policy 3.8 Sensitive Receptors.** Avoid the development of industry and-sensitive receptors in close proximity to each other land uses that could pose a hazard to human health and safety, due to the quantity,

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concentration, or physical or chemical characteristics of the hazardous materials ~~that they~~ utilized, or the hazardous waste ~~an operation may that they~~ generate or emit.

- **Policy 3.9 Improving Health Noxious, Hazardous, and Polluting Uses.** Improve the health of residents, ~~students, and workers by limiting the impacts of construction activities and by discontinuing 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 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 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.
- **Policy 4.1 Complementary Uses.** Promote complete neighborhoods by encouraging a mix of complementary uses, community services, and people places within a walkable area.
- **Policy 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 4.5 VMT Reduction.** Concentrate development along high-quality transit corridors to reduce vehicle miles traveled (VMT) and transportation related carbon emissions.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.

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Safety Element

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

Urban Design Element

- **Policy 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 3.10 Coordinated Street Improvement Plans.** Coordinate citywide landscape medians and street trees with land use plans and development projects.
- **Policy 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.

Open Space Element

- **Policy 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 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.

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- **Policy 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 ~~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.
- **Implementation Action 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.

5.2.4 Environmental Impacts

5.2.4.1 METHODOLOGY

The air quality evaluation was prepared in accordance with the requirements of CEQA to determine if significant air quality impacts are likely to occur in conjunction with future development that would be accommodated by the proposed General Plan Update. The purpose of CEQA is to evaluate and disclose the potential impacts of the GPU to the environment (existing conditions). It is not within the scope of the PEIR to provide mitigation to remedy existing conditions, including existing air pollution issues and existing land use incompatibilities between sensitive residential receptors and heavy industrial uses. The PEIR is required to address impacts of new growth under the GPU. It is, however, within the scope of the GPU and the City's long-term planning to address community health and related environmental hazards. The GPU policies and implementation actions intended to address these issues have been documented throughout this Recirculated Draft PEIR.

The published South Coast AQMD *CEQA Air Quality Handbook* and its updates on the South Coast AQMD website are intended to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts. It provides standards, methodologies, and procedures for conducting air quality analyses in EIRs that were used in this analysis. South Coast AQMD has published additional guidance for LSTs—*Localized Significance Threshold Methodology for CEQA Evaluations* (South Coast AQMD 2008a)—that is intended to provide guidance in evaluating localized effects from emissions generated by a project. Following is a summary by sector of the assumptions used for the city's criteria air pollutant emissions inventory and the General Plan Update analysis.

- **Transportation.** Transportation emissions forecasts were modeled using emissions data from CARB's EMFAC2017 web database (v. 1.0.7). Additionally, the SAFE Vehicle Part One Rule adjustment factors for NO, CO, PM₁₀, and PM_{2.5} were applied for light duty vehicles (i.e., LDA, LDT1, LDT2, and MDV) per CARB guidance for year 2045 emissions (CARB 2019b). Model runs were based on daily per-capita VMT

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data provided by IBI Group (see Appendix K) and calendar year 2020 (existing) and 2045 emission rates.¹³ The VMT is based on the “origin-destination” approach and assumes the full trip length for vehicle trips that occur entirely within the city (i.e., internal-internal trips). For external-internal/internal-external trips, the trip lengths are based on the destinations/attractions near the boundary assumed in the Orange County Transportation Authority traffic model in addition to the likely attractions/destinations beyond the immediate developments near the boundary limit.

- **Energy.** Emissions associated with natural gas use for residential and nonresidential land uses in the city were modeled based on data provided by SCE for years 2012 through 2018 and by SoCalGas for years 2014 to 2018. Forecasts are adjusted for increases in population and employment in the city.
- **Off-Road Equipment.** Calendar year 2020 emission rates for Orange County were obtained from CARB’s OFFROAD2017 web database (v. 1.0.1) and were used to estimate criteria air pollutant emissions from light commercial and construction equipment in the city. OFFROAD2017 is a database of equipment use and associated emissions for each county compiled by CARB. In order to determine the percentage of emissions attributable to the city, light commercial equipment is estimated based on employment for Santa Ana as a percentage of Orange County. Construction equipment use is estimated based on building permit data for Santa Ana and Orange County and from data compiled by the US Census. The light commercial equipment emissions forecast is adjusted for changes in employment in the city. It is assumed that construction emissions for the forecast year would be similar to historical levels. Annual emissions are derived by multiplying daily emissions by 365 days.
- **Area Sources.** Area sources are based on CalEEMod defaults for emissions generated from use of consumer products and cleaning supplies.

5.2.4.2 IMPACTS OF THE ENVIRONMENT ON A PROJECT

Buildout of the proposed land use plan under the General Plan Update could result in sensitive uses (e.g., residential) near sources of emissions (e.g., freeways, industrial uses). Sensitive land uses may be located close to I-5, SR-22, and SR-55 and may be exposed to elevated levels of DPM. Developing new sensitive land uses near sources of emissions could expose persons that inhabit these sensitive land uses to potential air quality–related impacts. However, the purpose of this environmental evaluation is to identify the significant effects of the proposed project on the environment, not the significant effects of the environment on the proposed project. See *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (Case No. S213478). Thus, CEQA does not require analysis of the potential environmental effects from siting sensitive receptors near existing sources, and this type of analysis is not provided in Section 5.2.4.3, *Impact Analysis*. Though it is generally not within the purview of CEQA to analyze impacts of the environment on a project, the General Plan Update includes the following policies to minimize air quality impacts and achieve

¹³ The Year 2045 inventory represents the projected emissions that the existing land uses would generate in the future, using year 2045 emission factors for on-road vehicles. To isolate the impacts related to the change in land uses proposed under the General Plan update, emissions related to the update will be based on the difference in emissions generated by the existing and proposed land uses under year 2045 conditions. This approach is taken because existing land uses would be subject to regulations that come into effect in the future that reduce mobile-source emissions. Thus, the level of emissions the existing land uses generate today would not be generated in perpetuity, but would be affected by these state regulations.

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appropriate health standards (notes that updates in these policies since the original Draft PEIR are shown in ~~strike-out~~ and underlined text):

Community Element

- **Policy 3.2 Healthy Neighborhoods.** Continue to support the creation of healthy neighborhoods by addressing public safety, land use conflicts, hazardous soil contamination, incompatible uses, and maintaining building code standards.

Conservation Element

- **Policy 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 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 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.

Land Use Element

- **Policy 3.8 Sensitive Receptors.** Avoid the development of industry and sensitive receptors in close proximity to each other land uses 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 utilized~~, or the hazardous waste an operation may that they generate or emit.
- **Policy 3.9 Noxious, Hazardous, and Polluting UsesImproving Health.** Improve the health of residents, students, and workers by limiting the impacts of construction activities and by discontinuing 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 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 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.

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Safety Element

- **Policy 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 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.

5.2.4.3 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.2-1: The additional population growth forecast for the General Plan Update and the associated emissions would not be consistent with the assumptions of the air quality management plan. [Threshold AQ-1]

The following describes potential air quality impacts of consistency with the AQMP from the implementation of the proposed General Plan Update.

The South Coast AQMD is directly responsible for reducing emissions from area, stationary, and mobile sources in the SoCAB to achieve the National and California AAQS and has responded to this requirement by preparing an AQMP. On March 3, 2017, the South Coast AQMD Governing Board adopted the 2016 AQMP, which is a regional and multiagency effort (South Coast AQMD, CARB, SCAG, and EPA). A consistency determination with the AQMP plays an important role in local agency project review by linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decision makers of the environmental efforts of the project under consideration early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals in the AQMP.

The two principal criteria for conformance with an AQMP are:

1. Whether the project would exceed the assumptions in the AQMP.
2. Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timeline attainment of air quality standards.

SCAG is South Coast AQMD's partner in the preparation of the AQMP, providing the latest economic and demographic forecasts and developing transportation measures. Regional population, housing, and employment projects developed by SCAG are based, in part, on a city's general plan land use designations.

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These projections form the foundation for the emissions inventory of the AQMP and are incorporated into the Connect SoCal Plan, which is the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) prepared by SCAG to determine priority transportation projects and vehicle miles traveled in the SCAG region (SCAG 2020a). Because the AQMP strategy is based on projections from local general plans, projects that are consistent with the local general plan are considered consistent with the air quality-related regional plan. Additionally, only large projects have the potential to substantially affect the demographic forecasts in the AQMP.

Criterion 1

Table 5.2-9, *Comparison of Population and Employment Forecast*, compares the population and employment growth forecast under the General Plan Update to the existing conditions and projections based on SCAG forecasts.

Table 5.2-9 Comparison of Population and Employment Forecast

Scenario	Existing Land Uses	SCAG 2045 Forecast ¹	Proposed General Plan 2045	Change from Existing	Increase Compared to the SCAG Forecast
Population ²	334,774	360,100	431,629	96,855	71,529
Employment ²	158,980	172,400	170,416	11,436	-1,984
Adjusted SP ³	460,686	496,641	566,598	105,912	69,958
VMT ⁴	11,407,124	N/A	11,518,959	111,835	N/A
VMT/SP	24.8	N/A	20.3	-4.4	N/A

Note: SP = Service Population (population plus employees)

¹ Source: SCAG 2020b.

² While, the traffic study uses both population and employment based on OCTAM 2016 baseline (interpolated for year 2020) and the 2045 forecasts, population and employment used for air quality is based on the land use statistics in Table 3-7 and Table 3-8.

³ Service population (SP) consists of the aggregate of total employees and population within the study area. When aggregating employees and residents for transportation efficiency, an employee reduction factor was applied to account for overlaps in the two (employees who are also residents). Reduction factors were applied to both the City of Santa Ana employees then aggregated to the resident population. Reduction factors are based on employment data within the SCAG Local Profiles Reports (2019) for the City of Santa Ana. The SCAG reports show that 20.8 percent of employees within the City are also residents of the City (IBI 2020).

⁴ Source: Appendix K – IBI Traffic Impact Analysis.

As shown in Table 5.2-9, the General Plan Update would result in a higher population and generate slightly fewer employees for the city compared to SCAG forecasts. It should be noted that the growth projected by SCAG is based on demographic trends in the region and on the current General Plan. These demographic trends are incorporated into the RTP/SCS to determine priority transportation projects and VMT in the SCAG region. The growth projections in SCAG's RTP/SCS and the associated emissions inventory in South Coast AQMD's AQMP do not include the additional growth forecast in the General Plan Update. Once the General Plan Update is adopted and the AQMP is revised, SCAG and South Coast AQMD will incorporate the updated growth projections into their regional planning projections, and the General Plan Update would become consistent with the AQMP. However, since the AQMP is based on the current General Plan, the proposed project (General Plan Update), which would accommodate increased growth and related emissions, would not be consistent with the AQMP under the first criterion.

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Criterion 2

The SoCAB is designated nonattainment for O₃ and PM_{2.5} under the California and National AAQS, nonattainment for lead (Los Angeles County only) under the National AAQS, and nonattainment for PM₁₀ under the California AAQS (CARB 2015). Because the General Plan Update involves long-term growth associated with buildout of the city, cumulative emissions generated from operation of individual development projects would exceed the South Coast AQMD regional and localized thresholds (see Impact 5.2-2 and Impact 5.2-3). Consequently, emissions generated by development projects in addition to existing sources in the city are considered to cumulatively contribute to the nonattainment designations of the SoCAB. Buildout of the proposed land use plan associated with the General Plan Update could contribute to an increase in frequency or severity of air quality violations and delay attainment of the AAQS or interim emission reductions in the AQMP, and emissions generated from buildout would result in a significant air quality impact. Therefore, the General Plan Update would not be consistent with the AQMP under the second criterion.

Summary

Buildout of the General Plan Update would exceed current population estimates for the city, and therefore the emissions associated with the additional population are not included in the current regional emissions inventory for the SoCAB. Additionally, air pollutant emissions associated with buildout of the General Plan Update would cumulatively contribute to the nonattainment designations in the SoCAB. Therefore, overall, the General Plan Update would be inconsistent with the AQMP.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.2-2: Construction activities associated with future development that would be accommodated under the General Plan Update could generate short-term emissions in exceedance of the South Coast Air Quality Management District's threshold criteria. [Threshold AQ-2]

Construction activities would temporarily increase PM₁₀, PM_{2.5}, VOC, NO_x, SO_x, and CO regional emissions within the SoCAB. The primary source of NO_x, CO, and SO_x emissions is the operation of construction equipment. The primary sources of particulate matter (PM₁₀ and PM_{2.5}) emissions are activities that disturb the soil, such as grading and excavation, road construction, and building demolition and construction. The primary sources of VOC emissions are the application of architectural coating and off-gas emissions associated with asphalt paving. A discussion of health impacts associated with air pollutant emissions generated by construction activities is included under "Air Pollutants of Concern" in Section 5.2.1.1, *Regulatory Framework*.

Construction activities associated with the General Plan Update would occur over the buildout horizon of the plan, causing short-term emissions of criteria air pollutants. However, information regarding specific development projects, soil types, and the locations of receptors would be needed in order to quantify the level of impact associated with construction activity. Due to the scale of development activity associated with buildout of General Plan Update, emissions would likely exceed the South Coast AQMD regional significance thresholds. In accordance with the South Coast AQMD methodology, emissions that exceed the regional significance thresholds would cumulatively contribute to the nonattainment designations of the SoCAB. The SoCAB is designated nonattainment for O₃ and particulate matter (PM₁₀ and PM_{2.5}). Emissions of VOC and

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NO_x are precursors to the formation of O₃. In addition, NO_x is a precursor to the formation of particulate matter (PM₁₀ and PM_{2.5}). Therefore, the General Plan Update would cumulatively contribute to the nonattainment designations of the SoCAB for O₃ and particulate matter (PM₁₀ and PM_{2.5}).

Air quality emissions related to construction must be addressed on a project-by-project basis. For the General Plan Update, which is a broad-based policy plan, it is not possible to determine whether the scale and phasing of individual projects would exceed the South Coast AQMD's short-term regional or localized construction emissions thresholds. In addition to regulatory measures—e.g., South Coast AQMD Rule 201 for a permit to operate, Rule 403 for fugitive dust control, Rule 1113 for architectural coatings, Rule 1403 for new source review, and CARB's Airborne Toxic Control Measures—mitigation imposed at the project level may include extension of construction schedules and/or use of special equipment.

Furthermore, the General Plan Update includes Policies 3.8 and 3.9 from the land use element, which would avoid development of sensitive receptors near land uses that may generate hazardous materials and discontinue operations of facilities that are close to these receptors, respectively.

While individual projects accommodated under the General Plan Update may not exceed the South Coast AQMD regional significance thresholds, the likely scale and extent of construction activities associated with the General Plan Update would likely continue to exceed the relevant South Coast AQMD thresholds for some projects. Therefore, construction-related regional air quality impacts of developments that would be accommodated by the General Plan Update would be potentially significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.2-3:	Implementation of the General Plan Update would generate long-term emissions in exceedance of South Coast AQMD's threshold criteria. [Threshold AQ-2]
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It is important to note that, per the requirements of CEQA, this analysis is based on a comparison between the General Plan Update's proposed land use plan and the existing, on-the-ground land uses—not the current General Plan land use plan (see Figures 3-6 and 3-7).

It is also important to note that the General Plan Update sets up the framework for growth and development and does not directly result in development. Before development can occur, it must be analyzed for conformance with the General Plan, zoning requirements, and other applicable local and State requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits.

The General Plan Update guides growth and development in the city by designating allowed land uses by parcel and through implementation of its goals and policies. New development would increase air pollutant emissions in the city and contribute to the overall emissions in the SoCAB. A discussion of health impacts associated with air pollutant emissions generated by operational activities is included under "Air Pollutants of Concern" in Section 5.2.1.1, *Regulatory Framework*.

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General Plan Update Criteria Air Pollutant Emissions Forecast

The emissions inventory for the city under the General Plan Update is shown in Table 5.2-10. As shown in the table, implementation of the General Plan Update would increase criteria air pollutant emissions compared to existing conditions. This increase is based on the difference between existing land uses and land uses associated with buildout of the General Plan Update as well as an estimate of population and employment in the city in year 2045. Buildout of the General Plan Update would generate long-term emissions that exceed the daily South Coast AQMD thresholds for VOC, NO_x, and CO. Emissions of VOC and NO_x are precursors to the formation of O₃. In addition, NO_x is a precursor to the formation of particulate matter (PM₁₀ and PM_{2.5}). Therefore, emissions of VOC and NO_x that exceed the South Coast AQMD regional significance thresholds would contribute to the O₃ and particulate matter (PM₁₀ and PM_{2.5}) nonattainment designation of the SoCAB.

Table 5.2-10 General Plan Update Horizon Year 2045 Regional Criteria Air Pollutant Emissions Forecast

Sector	Criteria Air Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Existing Land Uses at Buildout Year 2045						
Transportation ¹	355	2,232	13,143	59	1,296	532
Energy	144	1,277	845	8	100	100
Area – Consumer Products ²	4,212	0	0	0	0	0
Area –Light Commercial Equipment ³	154	415	6,330	0.96	38	31
Area – Construction Equipment	28	182	589	0	13	11
Existing Land Uses Total	4,893	4,106	20,907	69	1,447	673
Proposed Land Use Plan – Forecast Year 2045						
Transportation ¹	359	2,254	13,272	60	1,309	537
Energy	180	1,583	997	9.80	124	124
Area – Consumer Products ²	6,156	0	0	0	0	0
Area –Light Commercial Equipment ³	165	445	6,786	1	41	33
Area – Construction Equipment	28	182	589	0	13	11
Proposed Land Use Plan Total	6,888	4,463	21,643	71	1,487	705
Increase in Emissions	1,994	357	736	3	40	32
South Coast AQMD Regional Significance Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	No	No

Note: Emissions forecasts estimated based on changes in households (residential energy, area), employment (nonresidential energy, area), or service population (transportation).

¹ EMFAC2017 Version 1.0.2. Based on daily VMT provided by IBI Group. Transportation sector includes the full trip length for internal-internal trips and various trip lengths for external-internal/internal-external trips (see Appendix J). VMT per year based on a conversion of VMT x 347 days per year to account for less travel on weekend, consistent with CARB statewide GHG emissions inventory methodology (CARB 2008). The CARB adjustment factors to account for the SAFE Vehicle Rule Part One are incorporated for year 2045 emissions (CARB 2019b).

² Based on CalEEMod, Version 2016.3.2, methodology utilized to calculate VOC emissions from use of household consumer cleaning products.

³ OFFROAD2017 Version 1.0.1. Light commercial equipment emissions estimated based on employment for the City of Santa Ana as a percentage of Orange County. Construction emissions estimated based on housing permit data for Orange County and Santa Ana from the US Census. Area sources exclude emissions from fireplaces.

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General Plan Policies That May Reduce Air Quality Emissions

Implementation of the General Plan Update policies could contribute to reducing criteria air pollutant emissions. Policy 1.1 of the conservation element would require compliance with State and federal AAQS to protect residents from the health effects of air pollution. In addition, the conservation and ~~circulation~~ mobility elements include goals and policies that would aid in controlling emissions generated in the city. These policies focus on minimizing health and safety risks on sensitive receptors by controlling emissions from new development and reducing VMT by increasing public and active transit and through land use planning.

- **Conservation Element, Goal 1.** Protect air resources, improve regional and local air quality, and minimize the impacts of climate change. (Policies 1.1 through 1.14)
- **Mobility-Element, Goal 1.** A comprehensive and multimodal circulation system that facilitates the safe and efficient movement of people, enhances commerce, and promotes a sustainable community. (Policies 1.7 and 1.8)
- **Mobility Element, Goal 4.** Coordinated transportation planning efforts with land use and design strategies that encourage sustainable development and achieve broader community goals. (Policies 4.1, 4.3, 4.5, 4.6, and 4.9)
- **Mobility Element, Goal 5.** A transportation system that is attractive, safe, and state-of-the-art and supports community, environmental, and conservation goals. (Policies 5.4 and 5.6)

Furthermore, the Land Use Element Policies 1.6, 1.7, 2.5, 2.10 and 4.1 as well as the Urban Design Element Policies 1.6, 3.10, and 5.4 promote an increase in concepts and designs that would increase active transportation like walking and bicycling as well as use of public transit to mitigate air quality impacts. In addition, transportation demand management policies would contribute to reduced VMT.

However, future development projects that would be accommodated by the General Plan Update could exceed the South Coast AQMD regional emissions thresholds. Therefore, operational air quality impacts associated with future development of the General Plan Update would be significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.2-4:	Operation of industrial and warehousing land uses accommodated under the General Plan Update could expose sensitive receptors to substantial toxic air contaminant concentrations. [Threshold AQ-3]
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Development and operation of land uses accommodated under the proposed land use plan could generate new sources of TACs in the city from area/stationary sources and mobile sources.

Permitted Stationary Sources

The majority of additional nonresidential growth in the city would be from office and commercial uses. The GPU only designates land use changes within the focus areas. Permitted land uses outside the focus area

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boundaries would not be modified. Areas intended for conventional industrial uses would be minimal and would be offset by the reduction in industrial uses around the SR-55 freeway and Dyer Road. Existing light industrial, general industrial, and warehousing and wholesaling uses within the focus areas amount to approximately 260 acres (refer to Table 3-1, *Existing Land Use Statistical Summary*), and the GPU designates approximately 251 acres to Industrial/Flex use (refer to Table 3-5, *Proposed Land Use Designations and Statistics*). Therefore, the GPU results in a reduction by approximately 9 acres of industrial use within the focus areas. The Industrial/Flex designation is slated for areas that currently include industrial and warehousing/wholesaling facilities. Though existing land uses are “grandfathered” in and could remain, the GPU would not result in an increase in heavy industrial facilities in the Industrial/Flex zone. The Industrial/Flex designation allows for clean industrial uses that do not produce significant air pollutants, including office-industrial flex spaces, small-scale clean manufacturing, research and development, multilevel corporate offices, commercial retail, artist galleries, craft maker spaces, and live-work units. Live-work units are permitted within the Industrial Flex 1.5 land use designation and not permitted within the Industrial Flex 3.0 designation. New heavy industrial and commercial uses—such as machine shops, laundry and dry-cleaning plant operations, automotive repair and service, and chemical processing facilities—are not permitted uses in the Industrial/Flex areas. The GPU also results in no changes outside the focus areas and therefore results in an overall reduction of TACs from stationary sources.

However, various industrial and commercial processes (e.g., manufacturing, dry cleaning) allowed under the proposed land use plan would still be expected to release TACs. Industrial land uses, such as chemical processing facilities, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities, have the potential to be substantial stationary sources that would require a permit from South Coast AQMD. Emissions of TACs would be controlled by South Coast AQMD through permitting and would be subject to further study and health risk assessment prior to the issuance of any necessary air quality permits under South Coast AQMD Rule 1401. Though the General Plan Update includes policies in the conservation element to reduce exposure of sensitive receptors to pollution (e.g., Policy 1.5), emissions cannot be determined or modeled until specific development projects are proposed. Therefore, implementation of the General Plan Update may result in projects that emit TACs throughout the city and result in potentially significant localized air quality impacts.

Nonpermitted Sources

Mobile sources of TACs are not regulated by South Coast AQMD. New land uses in the city that are permitted under the GPU and use off-road equipment and trucks, including trucks with transport refrigeration units, could generate an increase in DPM that would contribute to cancer and noncancer health risk in the SoCAB. These types of facilities could also generate PM₁₀ and PM_{2.5}, which could cause an exceedance or contribute to the continuing exceedance of the federal and State AAQS. These new land uses could be near existing sensitive receptors. In addition, trucks would travel on regional transportation routes through the SoCAB, contributing to near-roadway DPM concentrations.

Implementation of Policy 2.3 of the safety element calls for coordination with relevant parties to enforce State and local laws to regulate storage and transport of hazardous materials, and limitations on truck routes through the city to avoid sensitive areas (e.g., residences and schools). This policy would help minimize exposure of sensitive receptors to substantial concentrations of TACs. Policy 1.1 of the conservation element (requirement

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to comply with State and federal AAQS to protect residents from the health effects of air pollution) and Policy 3.9 of the land use element (discontinue operation of noxious, hazardous, dangerous, and polluting uses that are in close proximity to sensitive receptors) would also contribute to minimizing exposure of sensitive receptors to substantial TAC concentrations.

As noted above, areas intended for conventional industrial uses would be minimal and would be offset by the reduction in industrial uses around the SR-55 freeway and Dyer Road. However, existing residences are close to existing and planned Industrial and Industrial/Flex areas in the city. As identified in the Figure 3-7, *Proposed Land Use Plan*, industrial areas are proximate to residential areas in several areas of the city, including:

- Main Street
- Fairview Road
- Flower Street
- Grand Avenue
- Warner Avenue

These areas are within 200 feet of sensitive receptors. Until specific future development projects are proposed, the associated emissions and concentrations cannot be determined or modeled. Therefore, health risk impacts from development of industrial and commercial land uses are considered potentially significant.

Sensitive Receptors in EJ Communities

As mentioned above, the GPU would result in a reduction by approximately nine acres of industrial use, with only Industrial/Flex designated in the focus areas. The GPU does not include any changes outside the focus areas.

Numerous policies and implementation actions in the GPU would reduce the exposure of sensitive receptors in EJ communities to TACs. The policies and implementation actions include:

- Safety Element Policy 2.3
- Land Use Element Policies 3.8, 3.9, 3.11, and 3.12 and Implementation Actions 3.3, 3.16, 3.23, and 3.24
- Conservation Element Policy 1.5 and Implementation Actions 1.2 through 1.12
- Community Element Policy 3.2 and Implementation Actions 1.3, 3.3, and 3.5

These policies and implementation actions aim to limit truck routes through the city to arterial streets away from sensitive land uses, discontinue the operation of polluting uses that are near sensitive receptors, avoid the development of sensitive receptors near land uses that pose a hazard to human health, and mitigate or apply special regulations on the siting of facilities that might significantly increase pollution near EJ communities. They also promote incentives for the removal of existing heavy industrial uses adjacent to sensitive uses; require health risk assessments for new residential uses within 500 feet of a freeway; and push to reduce truck idling, promote the replacement of older trucks, and support South Coast AQMD rules to reduce emissions from mobile sources. The policies and implementation actions also include collaboration efforts with South Coast AQMD and the Orange County Health Care Agency to reevaluate permit processes, outline objectives and

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strategies for monitoring air pollution, and monitor key health indicators to measure the success of the outcome of the GPU policies and implementation actions.

In the South Main Street Focus Area, the GPU redesignates a portion of the area south of Warner Avenue, which encompasses an EJ community, as Industrial Flex 1.5 (see Figure 5.2-6, *EJ Communities in the South Main Street Focus Area*). This area currently includes auto repair, wholesaling, warehousing, and general industrial uses. The GPU would not result in an increase in heavy industrial facilities in this area and would reduce the TAC burden by prohibiting new stationary sources. New live-work spaces introduced as part of the Industrial Flex 1.5 uses and the proposed institutional land use designation north of Warner Avenue may be near existing stationary sources of TACs within the Industrial/Flex designation.

Within the West Santa Ana Boulevard Focus Area, which is primarily within EJ community boundaries, existing industrial and warehousing uses are redesignated to Industrial Flex 1.5 and Urban Neighborhood (see Figure 5.2-7, *EJ Communities in the West Santa Ana Boulevard Focus Area*). This redesignation would reduce the TAC burden from existing stationary sources. However, new live-work uses within the Industrial/Flex designation may be exposed to TACs from any existing stationary facilities within this land use designation until heavy industrial uses are transitioned to clean industrial uses.

The western part of the 55 Freeway/Dyer Road Focus Area includes properties within EJ communities. The GPU would introduce Industrial Flex 3.0 land uses east of South Grand Avenue and north of the SR-55 (see Figure 5.2-8, *EJ Communities in the 55 Freeway/Dyer Road Focus Area*), which would not increase the existing TAC burden from stationary sources to EJ communities within and adjacent to the focus area.

The portion of the Grand Avenue/17th Street Focus Area south of I-5 encompasses an EJ community (see Figure 5.2-9, *EJ Communities in the Grand Avenue/17th Street Focus Area*). The GPU does not introduce any new industrial uses in the EJ communities south of the I-5. The South Bristol Street Focus Area does not include any EJ communities.

Though the GPU includes policies and implementation actions to reduce air pollutant emissions exposure within EJ communities, the GPU could result in specific development projects that could emit TACs. The emissions associated with these facilities cannot be determined or modeled until specific development projects are proposed. Therefore, implementation of the GPU may result in projects that emit TACs in the vicinity of EJ communities and result in potentially significant localized air quality impacts.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.2-5: Development and operation of land uses accommodated by the General Plan Update could generate emissions that exceed the localized significance thresholds and expose sensitive receptors to substantial concentrations of criteria air pollutants. [Threshold AQ-3]

New land uses consistent with the land use plan of the proposed General Plan Update would generate new sources of criteria air pollutants in the city from area/stationary sources and mobile sources.

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Localized Significance Thresholds

Implementation of the General Plan Update could expose sensitive receptors to elevated pollutant concentrations during construction activities if it would cause or contribute significantly to elevating those levels. Unlike mass of emissions shown in Table 5.2-10 and described in pounds per day, localized concentrations refer to an amount of pollutant in a volume of air (ppm or $\mu\text{g}/\text{m}^3$) and can be correlated to potential health effects. LSTs are the amount of project-related emissions at which localized concentrations (ppm or $\mu\text{g}/\text{m}^3$) would exceed the AAQS for criteria air pollutants for which the SoCAB is in nonattainment.

Operation LSTs

The types of land uses that could generate substantial amounts of stationary source emissions include industrial land uses, which are accommodated under the General Plan Update (see Figure 3-7, *Proposed General Plan Land Use Plan*). But implementation of General Plan Update policies could contribute to reducing criteria air pollutant emissions.

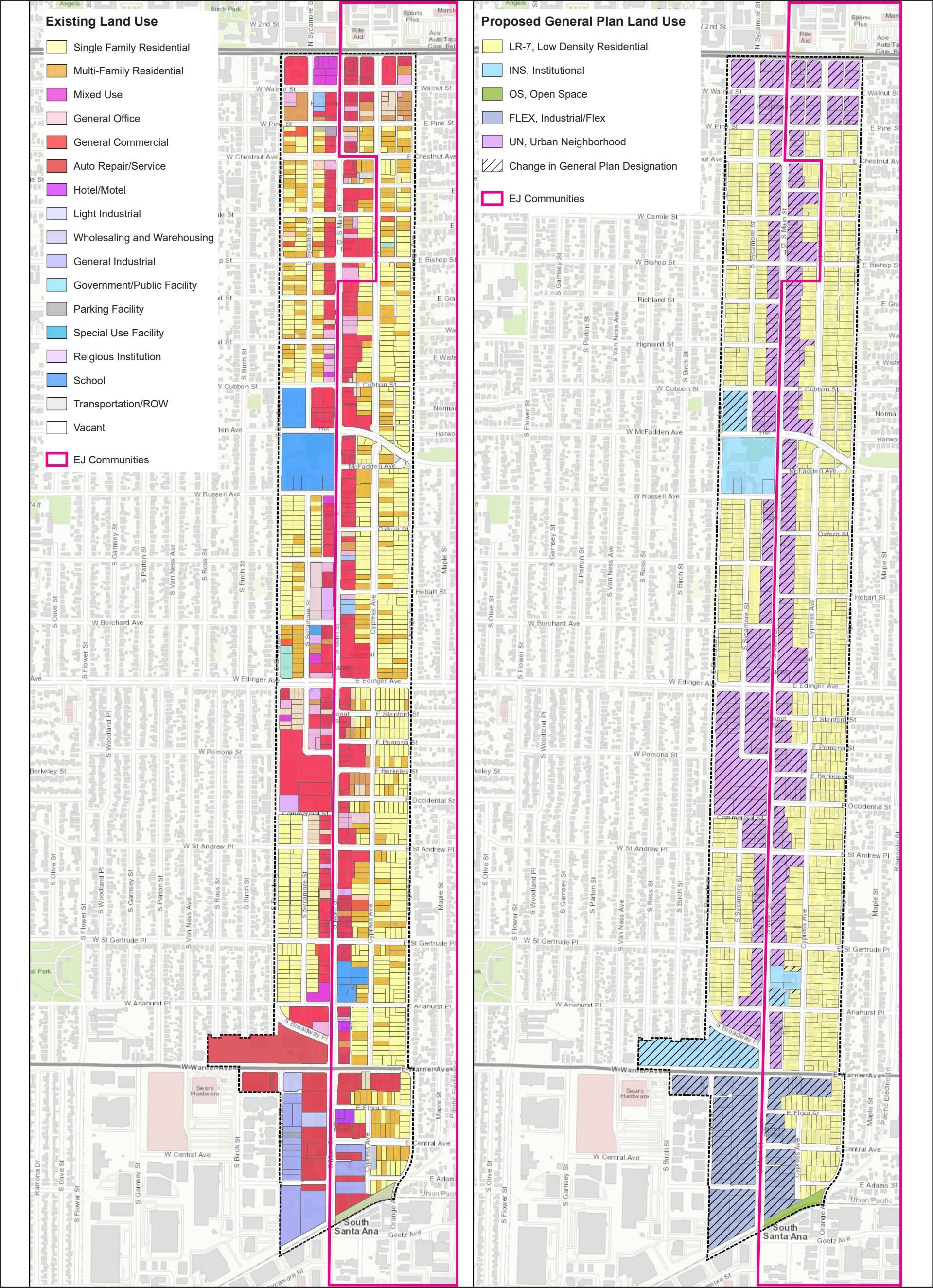
Goal 1 of the conservation element would aim to protect air resources, improve regional and local air quality, and minimize the impacts of climate change. In addition, Policy 1.1 of the conservation element would require compliance with State and federal AAQS to protect residents from the health effects of air pollution. Furthermore, as previously mentioned under Impact 5.2-3, the conservation, land use, and urban design elements include policies that would contribute to controlling emissions generated in the city and would promote concepts and designs that would increase walking, bicycling, and use of public transit in addition to transportation demand management policies, which would contribute to reduced VMT.

The aforementioned policies of the General Plan Update would reduce localized operation-related emissions, to the extent possible, from individual land use development projects accommodated in the proposed land use plan. However, per the LST methodology, information regarding specific development projects and the locations of receptors would be needed in order to quantify the levels of localized operation and construction-related impacts associated with future development projects. Thus, because the proposed General Plan Update is a broad-based policy plan and does not itself propose specific development projects, it is not possible to calculate individual project-related operation emissions at this time. Overall, because of the likely scale of future development and the industrial uses permitted the General Plan Update, some development projects could likely exceed the LSTs. Therefore, localized operation-related air quality impacts associated with implementation of the General Plan Update are considered potentially significant.

Construction LSTs

Buildout of the General Plan Update would occur over approximately 25 years or longer via several smaller projects, each with its own construction time frame and equipment. Because an LST analysis can only be conducted at a project level, quantification of LSTs is not applicable for the program-level environmental analysis of the General Plan Update. Because potential development and redevelopment could occur close to existing sensitive receptors, future development projects that would be accommodated by the General Plan Update have the potential to expose sensitive receptors to substantial pollutant concentrations. Construction equipment exhaust combined with fugitive particulate matter emissions have the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions and result in a significant impact.

Figure 5.2-6 - EJ Communities in the South Main Street Focus Area



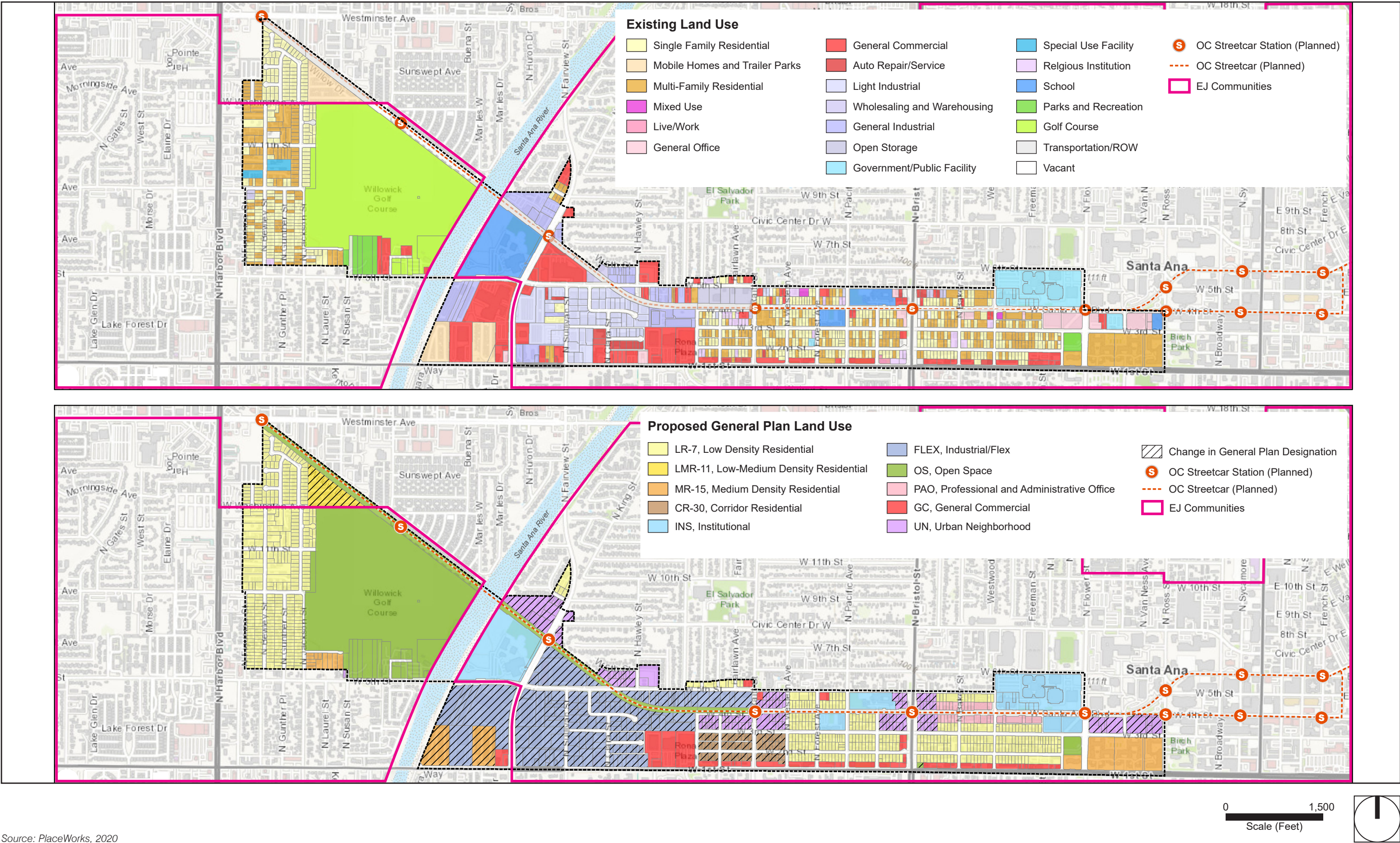
Source: PlaceWorks, 2020

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Figure 5.2-7 - EJ Communities in the West Santa Ana Boulevard Focus Area



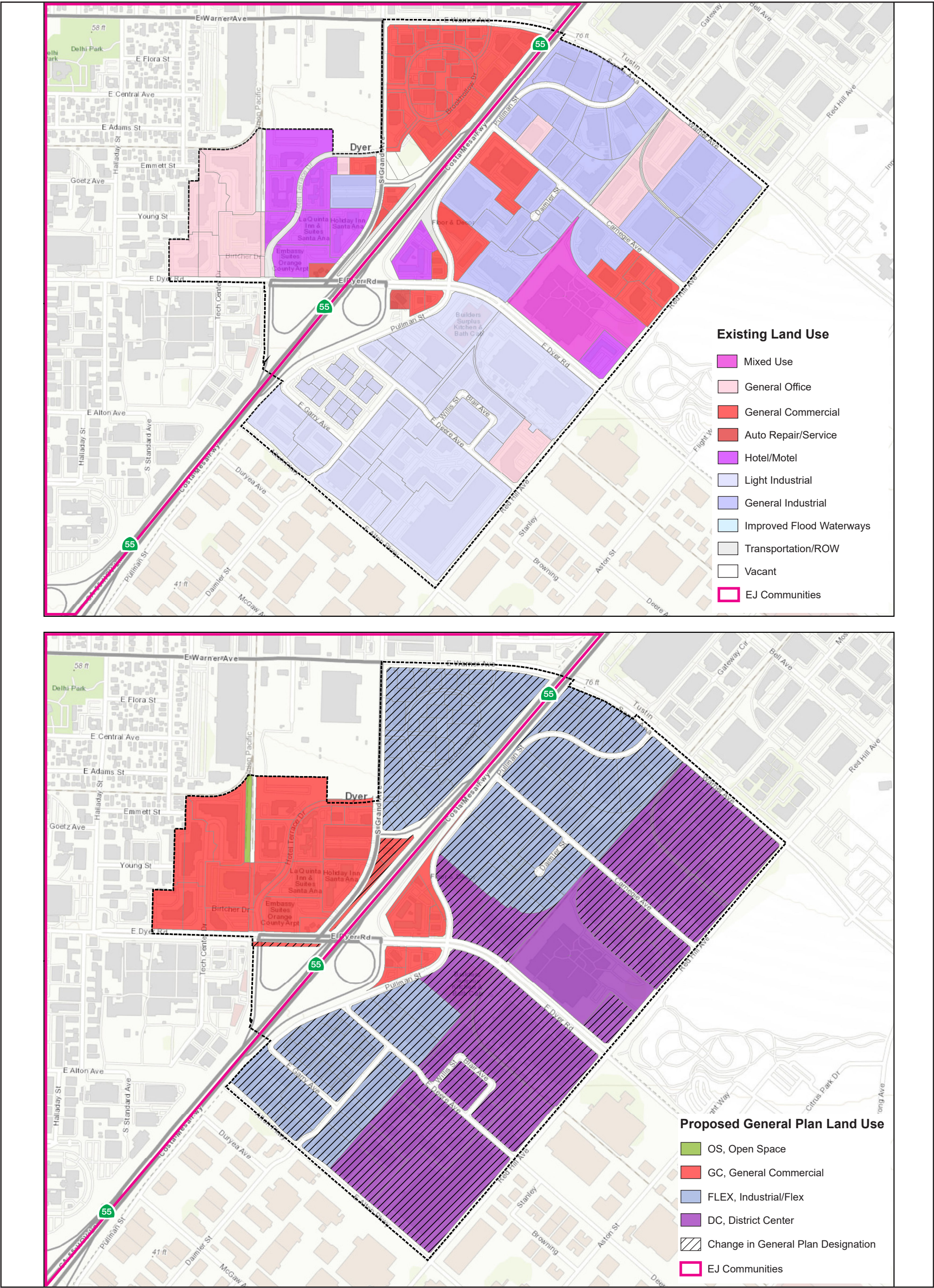
Source: PlaceWorks, 2020

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Figure 5.2-8 - EJ Communities in the 55 Freeway/Dyer Road Focus Area



Source: PlaceWorks, 2020

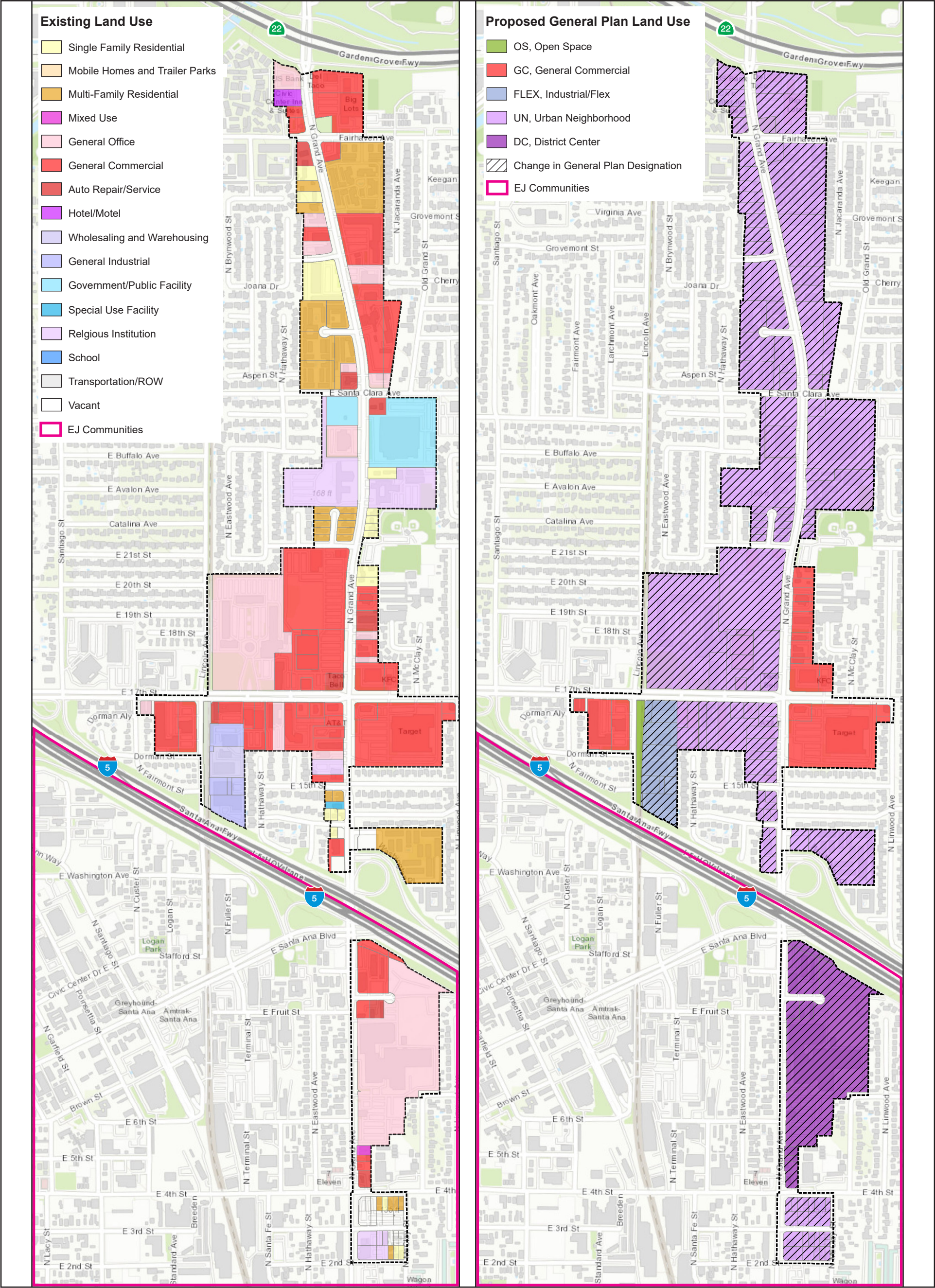


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Figure 5.2-9 - EJ Communities in the Grand Avenue/17th Street Focus Area



Source: PlaceWorks, 2020



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CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hotspot analysis conducted for the attainment by South Coast AQMD did not predict a violation of CO standards at the busiest intersections in Los Angeles during the peak morning and afternoon periods.¹⁴ As identified in South Coast AQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide, peak carbon monoxide concentrations in the SoCAB in the years before redesignation were a result of unusual meteorological and topographical conditions and not of congestion at a particular intersection (South Coast AQMD 1992, 2003).

Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2017). Buildout of the General Plan Update would not result in the increase in traffic volume required to generate a CO hotspot. Therefore, CO hotspots impacts would be less than significant.

Summary

Localized operation-related air quality impacts associated with implementation of the General Plan Update are considered potentially significant. Construction equipment exhaust combined with fugitive particulate matter emissions have the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions and would result in a significant impact. Because buildout of the General Plan Update would not result in the increase in traffic volume required to generate a CO hotspot, impacts would be less than significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.2-6: Industrial land uses accommodated under the General Plan Update could create other emissions, such as those leading to objectionable odors, that would adversely affect a substantial number of people. [Threshold AQ-4]

Growth within the city under the General Plan Update could generate new sources of odors. Nuisance odors from land uses in the SoCAB are regulated under South Coast AQMD Rule 402, Nuisance, which states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

¹⁴ The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

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Industrial and South Coast AQMD–Permitted Land Uses

Industrial land uses have the potential to generate objectionable odors. Examples of industrial projects are wastewater treatment plants, compost facilities, landfills, solid-waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch manufacturing plants, chemical manufacturing, and food manufacturing facilities.

Areas where these types of uses could be developed under the General Plan Update would be generally limited to the areas designated as industrial and are primarily found along State Route 55, which is a major corridor, and in the southwest corner of the city (see Figures 3-5 and 3-6). Industrial land uses associated with the General Plan Update would be required to comply with South Coast AQMD Rule 402, but additional measures may be necessary to prevent an odor nuisance. Therefore, industrial land uses associated with the General Plan Update may generate potentially significant odor impacts for a substantial number of people.

Residential and Other Land Uses

Residential and other nonresidential, nonindustrial land uses that would be accommodated by the General Plan Update could result in the generation of odors such as exhaust from landscaping equipment and from cooking. However, unlike industrial land uses, these are not considered potential generators of odor that could affect a substantial number of people. Furthermore, nuisance odors are regulated under South Coast AQMD Rule 402, which requires abatement of any nuisance generating a verified odor complaint. Therefore, impacts from potential odors generated from residential and other nonresidential land uses associated with the General Plan Update are considered less than significant.

Construction

During construction activities of development projects that would be accommodated by the General Plan Update, construction equipment exhaust and application of asphalt and architectural coatings would temporarily generate odors. However, any construction-related odor emissions would be temporary and intermittent. Additionally, noxious odors would be confined to the immediate vicinity of the construction equipment in use. By the time such emissions reached any sensitive receptor sites, they would be diluted to well below any level of air quality concern. Furthermore, short-term construction-related odors are expected to cease upon the drying or hardening of odor-producing materials. Therefore, impacts associated with construction-generated odors are considered less than significant.

Summary

Industrial land uses associated with the General Plan Update may generate potentially significant odor impacts for a substantial number of people. Impacts from potential odors generated from residential and other nonresidential land uses associated with the General Plan Update are considered less than significant. Impacts associated with construction-generated odors are considered less than significant.

Level of Significance Before Mitigation: Potentially significant.

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5.2.5 Level of Significance Before Mitigation

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.2-1** The additional population growth forecasted for the General Plan Update and the associated emissions would not be consistent with the assumptions of the Air Quality Management Plan.
- **Impact 5.2-2** Construction activities associated with future development that would be accommodated under the General Plan Update could generate short-term emissions in exceedance of South Coast AQMD's threshold criteria.
- **Impact 5.2-3** Implementation of the General Plan Update would generate long-term emissions in exceedance of South Coast AQMD's threshold criteria.
- **Impact 5.2-4** Operation of industrial and warehousing land uses accommodated under the General Plan Update could expose sensitive receptors to substantial toxic air contaminant concentrations.
- **Impact 5.2-5** Development and operation of land uses accommodated by the General Plan Update could generate emissions that exceed the LSTs and expose sensitive receptors to substantial criteria air pollutant concentrations.
- **Impact 5.2-6** Industrial land uses accommodated under the General Plan Update could create other emissions, such as those leading to objectionable odors, that would adversely affect a substantial number of people.

5.2.6 Mitigation Measures

Impact 5.2-1

When incorporated into future development projects for operation and construction phases, the mitigation measures outlined for Impacts 5.2-2 and 5.2-3, described below, would contribute to reduced criteria air pollutant emissions associated with buildout of the General Plan Update. Additionally, goals and policies in the General Plan Update would promote increased capacity for alternative transportation modes, implementation of transportation demand management strategies, and energy efficiency. However, no further mitigation measures are available that would reduce impacts to below South Coast AQMD significance thresholds due to the magnitude of growth and associated emissions that would be generated by the buildout of the General Plan Update.

Impact 5.2-2

AQ-1 Prior to discretionary approval by the City of Santa Ana for development projects subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project

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construction-related air quality impacts to the City of Santa Ana for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD's adopted thresholds of significance, the City of Santa Ana shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City. Mitigation measures to reduce construction-related emissions could include, but are not limited to:

- Require fugitive-dust control measures that exceed South Coast AQMD's Rule 403, such as:
 - Use of nontoxic soil stabilizers to reduce wind erosion.
 - Apply water every four hours to active soil-disturbing activities.
 - Tarp and/or maintain a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
- Use construction equipment rated by the United States Environmental Protection Agency as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emission limits, applicable for engines between 50 and 750 horsepower.
- Ensure that construction equipment is properly serviced and maintained to the manufacturer's standards.
- Limit nonessential idling of construction equipment to no more than five consecutive minutes.
- Limit on-site vehicle travel speeds on unpaved roads to 15 miles per hour.
- Install wheel washers for all exiting trucks or wash off all trucks and equipment leaving the project area.
- Use Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufacturers can be found on the South Coast AQMD's website.

Impact 5.2-3

AQ-2

Prior to discretionary approval by the City of Santa Ana for development projects subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation phase-related air quality impacts to the City of Santa Ana for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-

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related air pollutants are determined to have the potential to exceed the South Coast AQMD's adopted thresholds of significance, the City of Santa Ana shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include, but are not limited to the following:

- For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions.
- Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use.
- Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 § 2485).
- Provide changing/shower facilities as specified in Section A5.106.4.3 of the CALGreen Code (Nonresidential Voluntary Measures).
- Provide bicycle parking facilities per Section A4.106.9 (Residential Voluntary Measures) of the CALGreen Code and Sec. 41-1307.1 of the Santa Ana Municipal Code.
- Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of the CALGreen Code (Nonresidential Voluntary Measures).
- Provide facilities to support electric charging stations per Section A5.106.5.3 (Nonresidential Voluntary Measures) and Section A5.106.8.2 (Residential Voluntary Measures) of the CALGreen Code.
- Applicant-provided appliances (e.g., dishwashers, refrigerators, clothes washers, and dryers) shall be Energy Star-certified appliances or appliances of equivalent energy efficiency. Installation of Energy Star-certified or equivalent appliances shall be verified by Building & Safety during plan check.
- Applicants for future development projects along existing and planned transit routes shall coordinate with the City of Santa Ana and Orange County Transit Authority to ensure that bus pad and shelter improvements are incorporated, as appropriate.

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Impact 5.2-4

AQ-3 Prior to discretionary approval by the City of Santa Ana, project applicants for new industrial or warehousing development projects that 1) have the potential to generate 100 or more diesel truck trips per day or have 40 or more trucks with operating diesel-powered transport refrigeration units, and 2) are within 1,000 feet of a sensitive land use (e.g., residential, schools, hospitals, or nursing homes), as measured from the property line of the project to the property line of the nearest sensitive use, shall submit a health risk assessment (HRA) to the City of Santa Ana for review and approval. The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment and the South Coast Air Quality Management District. If the HRA shows that the incremental cancer risk and/or noncancer hazard index exceed the respective thresholds, as established by the South Coast AQMD at the time a project is considered, the project applicant will be required to identify and demonstrate that best available control technologies for toxics (T-BACTs), including appropriate enforcement mechanisms, are capable of reducing potential cancer and noncancer risks to an acceptable level. T-BACTs may include, but are not limited to, restricting idling on-site, electrifying warehousing docks to reduce diesel particulate matter, or requiring use of newer equipment and/or vehicles. T-BACTs identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.

Impact 5.2-5

Mitigation Measures AQ-1 and AQ-2 would also be applicable in reducing construction- and operation-related LST impacts.

Impact 5.2-6

AQ-4 Prior to discretionary approval by the City of Santa Ana, if it is determined that a development project has the potential to emit nuisance odors beyond the property line, an odor management plan shall be prepared by the project applicant and submitted to the City of Santa Ana for review and approval. Facilities that have the potential to generate nuisance odors include, but are not limited to:

- Wastewater treatment plants
- Composting, green waste, or recycling facilities
- Fiberglass manufacturing facilities
- Painting/coating operations
- Large-capacity coffee roasters
- Food-processing facilities

The odor management plan shall demonstrate compliance with the South Coast Air Quality Management District's Rule 402 for nuisance odors. The Odor Management Plan shall identify the best available control technologies for toxics (T-BACTs) that will be utilized to reduce potential odors to acceptable levels, including appropriate enforcement mechanisms. T-BACTs

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may include but are not limited to scrubbers (i.e., air pollution control devices) at the industrial facility. T-BACTs identified in the odor management plan shall be identified as mitigation measures in the environmental document prepared for the development project and/or incorporated into the project's site plan.

5.2.7 Level of Significance After Mitigation

Impact 5.2-1

The General Plan Update would be inconsistent with the South Coast AQMD's AQMP because buildout under the plan would exceed the population estimates assumed for the AQMP and would cumulatively contribute to the nonattainment designations of the SoCAB. Incorporation of Mitigation Measures AQ-2 into future development projects for the operation phase would contribute to reduced criteria air pollutant emissions associated with buildout of the General Plan Update. Additionally, goals and policies in the General Plan Update would promote increased capacity for alternative transportation modes and implementation of transportation demand management strategies. However, due to the magnitude and scale of the land uses that would be developed, no mitigation measures are available that would reduce operation and construction impacts below South Coast AQMD thresholds. In addition, the population and employment assumptions of the AQMP would continue to be exceeded until the AQMP is revised and incorporates the projections of the General Plan Update. Therefore, Impact 5.2-1 would remain **significant and unavoidable**.

Impact 5.2-2

Buildout of the General Plan Update would occur over a period of approximately 25 years or longer. Construction activities associated with buildout of the General Plan Update could generate short-term emissions that exceed the South Coast AQMD's significance thresholds during this time and cumulatively contribute to the nonattainment designations of the SoCAB. Implementation of Mitigation Measure AQ-1 would reduce criteria air pollutant emissions from construction-related activities to the extent feasible. However, construction time frames and equipment for site-specific development projects are not available at this time, and there is a potential for multiple development projects to be constructed at one time, resulting in significant construction-related emissions. Therefore, despite adherence to Mitigation Measure AQ-1, Impact 5.2-2 would remain **significant and unavoidable**.

Impact 5.2-3

Buildout in accordance with the General Plan Update would generate long-term emissions that would exceed South Coast AQMD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the SoCAB. Mitigation Measure AQ-2, in addition to the goals and policies of the General Plan Update, would reduce air pollutant emissions to the extent feasible. The measures and policies covering topics such as expansion of the pedestrian and bicycle networks, promotion of public and active transit, and support to increase building energy efficiency and energy conservation would also reduce criteria air pollutants in the city. Further, as shown in Table 5.2-11, compared to existing baseline year conditions, emissions of NO_x, CO, and SO_x are projected to decrease from current levels despite growth associated with the General Plan Update.

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However, Impact 5.2-3 would remain **significant and unavoidable** due to the magnitude of the overall land use development associated with the General Plan Update. Contributing to the nonattainment status would also contribute to elevating health effects associated with these criteria air pollutants. Reducing emissions would further contribute to reducing possible health effects related to criteria air pollutants.

It is speculative for this broad-based General Plan Update to determine how exceeding the regional thresholds would affect the number of days the region is in nonattainment, since mass emissions are not correlated with concentrations of emissions, or how many additional individuals in the air basin would suffer health effects. South Coast AQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of air quality in the SoCAB, and at the present time it has not provided methodology to assess the specific correlation between mass emissions generated and the effect on health in order to address the issue raised in the *Friant Ranch* case.

Ozone concentrations are dependent upon a variety of complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground-level ozone concentrations in relation to the National AAQS and California AAQS, it is not possible to link health risks to the magnitude of emissions exceeding the significance thresholds. To achieve the health-based standards established by the EPA, the air districts prepare air quality management plans that detail regional programs to attain the AAQS. However, because cumulative development within the city would exceed the regional significance thresholds, the proposed project could contribute to an increase in health effects in the basin until the attainment standards are met in the SoCAB.

Table 5.2-11 Net Change in Regional Criteria Air Pollutant Emissions from Existing Baseline

Sector	Criteria Air Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Existing Land Uses – Existing Baseline						
Transportation ¹	831	5,596	25,067	90	1,362	602
Energy	144	1,277	845	8	100	100
Area – Consumer Products ²	4,212	0	0	0	0	0
Area –Light Commercial Equipment, Portable Equipment ³	154	415	6,330	1	38	31
Area – Construction Equipment	28	182	589	0	13	11.11
Total	5,369	7,470	32,832	99	1,513	744
Proposed Land Use Plan – Forecast Year 2045						
Transportation ¹	359	597	13,336	60	1,309	537
Energy	180	1,583	997	9.80	124	124
Area – Consumer Products ²	6,156	0	0	0	0	0
Area –Light Commercial Equipment, Portable Equipment ³	165	445	6,786	1	41	33
Area – Construction Equipment	28	182	589	0	13	11
Existing Land Uses Total	6,888	2,806	21,708	71	1,487	705

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Table 5.2-11 Net Change in Regional Criteria Air Pollutant Emissions from Existing Baseline

Sector	Criteria Air Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Increase in Emissions	1,519	-4,664	-11,124	-28	-26	-39
South Coast AQMD Regional Significance Threshold	55	55	550	150	150	55
Significant?	Yes	No	No	No	No	No

Note Emissions forecasts estimated based on changes in households (residential energy, area), employment (nonresidential energy, area), or service population (transportation).

¹ EMFAC2017 Version 1.0.2. Based on daily VMT provided by IBI Group. Transportation sector includes the full trip length for internal-internal trips and various trip lengths for external-internal/internal-external trips (see Appendix J). VMT per year based on a conversion of VMT x 347 days per year to account for less travel on weekend, consistent with CARB statewide GHG emissions inventory methodology (CARB 2008). The CARB adjustment factors to account for the SAFE Vehicle Rule Part One are incorporated for year 2045 emissions (CARB 2019b).

² Based on CalEEMod, Version 2016.3.2, methodology utilized to calculate VOC emissions from use of household consumer cleaning products.

³ OFFROAD2017 Version 1.0.1. Light commercial equipment emissions estimated based on employment for the City of Santa Ana as a percentage of Orange County. Construction emissions estimated based on housing permit data for Orange County and the City of Santa Ana from the US Census. Area sources exclude emissions from fireplaces.

Impact 5.2-4

Buildout of the General Plan Update could expose sensitive receptors to substantial concentrations of toxic air contaminants. Buildout could result in new sources of criteria air pollutant emissions and/or TACs near existing or planned sensitive receptors. Review of development projects by South Coast AQMD for permitted sources of air toxics (e.g., industrial facilities, dry cleaners, and gasoline dispensing facilities) would ensure that health risks are minimized. Additionally, Mitigation Measure AQ-3 would ensure mobile sources of TACs not covered under South Coast AQMD permits are considered during subsequent project-level environmental review by the City of Santa Ana. Individual development projects would be required to achieve the incremental risk thresholds established by South Coast AQMD, and TACs would be less than significant.

However, implementation of the General Plan Update would generate TACs that could contribute to elevated levels in the air basin. While individual projects would achieve the project-level risk threshold of 10 per million, they would nonetheless contribute to the higher levels of risk in the SoCAB. Therefore, the General Plan Update's cumulative contribution to health risk is **significant and unavoidable**.

Impact 5.2-5

Mitigation Measures AQ-1 and AQ-2 (applied for Impacts 5.2-2 and 5.2-3, respectively) would reduce the regional construction and operation emissions associated with buildout of the General Plan Update and therefore also result in a reduction of localized construction- and operation-related criteria air pollutant emissions to the extent feasible. However, because existing sensitive receptors may be close to project-related construction activities and large emitters of on-site operation-related criteria air pollutant emissions, construction and operation emissions generated by individual development projects have the potential to exceed South Coast AQMD's LSTs. Impact 5.2-5 would remain **significant and unavoidable**.

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Impact 5.2-6

The Industrial and Industrial Flex land uses are not anticipated to produce odors,¹⁵ and Mitigation Measure AQ-4 would ensure that odor impacts are minimized and facilities would comply with South Coast AQMD Rule 402. Therefore, Impact 5.2-6 would be less than significant.

5.2.8 References

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¹⁵ These land uses assume that the following land uses would not be permitted: wastewater treatment plants, compost facilities, landfills, solid-waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch manufacturing plants, chemical manufacturing, and food manufacturing facilities.

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5.8 HAZARDS AND HAZARDOUS MATERIALS

This section evaluates the potential impacts of buildout of the Santa Ana General Plan update (GPU) on human health and the environment due to exposure to hazardous materials or conditions associated with the city and its sphere of influence (plan area). Potential impacts and appropriate mitigation measures are included as necessary.

The City of Santa Ana received several comments on the Draft PEIR centered around industrial corridors, land use compatibility, and lead contamination. The lack of focused environmental assessment in on disadvantaged communities, and the evidence of pollutant concentrations, including lead-contaminated soils, in environmental justice (EJ) communities were recurring comments on the Draft PEIR.

Senate Bill (SB) 1000 adds to the required elements of a general plan an environmental justice element, or related goals, policies, and objectives integrated in other elements, that identifies disadvantaged communities within the area covered by the general plan. SB 1000 mandates that general plans address environmental justice but does not require California Environmental Quality Act (CEQA) analyses to address EJ issues. However, in response to the concerns raised during the public review period for the Draft PEIR, the City has chosen to recirculate Section 5.8 of the Draft PEIR and to expand the discussion/analysis to address community concerns.

This Recirculated Draft PEIR is supplemented with hazardous-materials-related EJ policies and implementation actions, as shown in Section 5.8.4.2, to demonstrate that the GPU complies with the requirements of SB 1000. These EJ policies and implementation actions also aim to address EJ-related hazardous materials impacts. Since it is not the responsibility of the EIR to address existing environmental inequities of disadvantaged communities, the impact discussion in this recirculated section describes impacts to EJ communities related to development pursuant to the GPU. This expanded discussion is provided to disclose the City's commitment to the needs of EJ communities.

In addition, one of the basic purposes of environmental justice is to provide disadvantaged communities with a meaningful opportunity to engage in government decisions that affect them. A detailed discussion of the City's efforts to fully engage with the historically disadvantaged communities in its jurisdiction is in Section 2.4, *Environmental Justice Outreach*, of this Recirculated Draft PEIR.

5.8.1 Environmental Setting

5.8.1.1 REGULATORY BACKGROUND

Environmental Justice

Senate Bill 1000

SB 1000 adds to the required elements of a general plan an environmental justice element, or related goals, policies, and objectives integrated in other elements, that identifies disadvantaged communities, as defined, within the area covered by the general plan of a city or county that has a disadvantaged community. This bill

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also requires the environmental justice element, in whatever form, to identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities.

Hazardous Materials and Waste

Hazardous materials refer generally to hazardous substances that exhibit corrosive, poisonous, flammable, and/or reactive properties and have the potential to harm human health and/or the environment. Hazardous materials are used in products (household cleaners, industrial solvents, paint, pesticides, etc.) and in the manufacturing of products (e.g., electronics, newspapers, plastic products). Hazardous materials can include petroleum, natural gas, synthetic gas, acutely toxic chemicals, and other toxic chemicals that are used in agriculture, commercial, and industrial uses; businesses; hospitals; and households. Accidental releases of hazardous materials can happen from a variety of causes, including highway incidents, warehouse fires, train derailments, shipping accidents, and industrial incidents.

There are many federal, state, and local programs that regulate the use, storage, and transportation of hazardous materials and hazardous waste, and they are constantly changing. Federal and state statutes as well as local ordinances and plans regulate hazardous waste management. These regulations can reduce the danger that hazardous substances pose to people and businesses under normal daily circumstances and as a result of emergencies and disasters.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) of 1976 is the principal federal law that regulates the generation, management, and transportation of waste. Hazardous waste management includes the treatment, storage, or disposal of hazardous waste. Treatment is any process that changes the physical, chemical, or biological character of the waste to reduce its potential as an environmental threat. Treatment can include neutralizing the waste, recovering energy or material resources from the waste, rendering the waste less hazardous, or making the waste safer to transport, dispose of, or store.

The RCRA gave the US Environmental Protection Agency (EPA) the authority to control hazardous waste from “cradle to grave,” that is, from generation to transportation, treatment, storage, and disposal. The RCRA also sets up a framework for the management of nonhazardous wastes. The 1986 amendments to RCRA enabled the EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. It should be noted that RCRA focuses only on active and future facilities and does not address abandoned or historical sites. The federal Hazardous and Solid Waste Amendments are the 1984 amendments to RCRA that required phasing out land disposal of hazardous waste. Some of the other mandates of this strict law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) is a law developed to protect the water, air, and soil resources from the risks created by past chemical disposal practices. This law is also referred to as the Superfund Act and regulates sites on the National Priority List, which are

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called Superfund sites. This law provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment (US Code Title 42, Chapter 103). CERCLA establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party can be identified.

Superfund Amendments and Reauthorization Act

The Superfund Amendments and Reauthorization Act (SARA) reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. Title III of SARA also authorized the Emergency Planning and Community Right-to-Know Act.

Emergency Planning and Community Right to Know Act

The Emergency Planning and Community Right to Know Act (EPCRA) was enacted by Congress as the national legislation on community safety. The act required the establishment of state commissions, planning districts, and local committees to facilitate the preparation and implementation of emergency plan. Under its requirements, local emergency planning committees (LEPC) are responsible for developing a plan for preparing for and responding to a chemical emergency, including:

- An identification of local facilities and transportation routes where hazardous materials are present.
- The procedures for immediate response in case of an accident (this must include a community-wide evacuation plan).
- A plan for notifying the community that an incident has occurred.
- The names of response coordinators at local facilities.
- A plan for conducting drills to test the plan.

The emergency plan is reviewed by the State Emergency Response Commission and publicized throughout the community. The LEPC is required to review, test, and update the plan each year. The Orange County Health Care Agency, Environmental Health Division (OCHCA) is responsible for coordinating hazardous material and disaster preparedness planning and appropriate response efforts with city departments and local and state agencies. The goal is to improve public and private sector readiness and to mitigate local impacts resulting from natural or man-made emergencies.

Another purpose of the EPCRA is to inform communities and citizens of chemical hazards in their areas. Sections 311 and 312 of EPCRA require businesses to report to state and local agencies the location and quantities of chemicals stored on-site. Under section 313 of EPCRA, manufacturers are required to report chemical releases for more than 600 designated chemicals. In addition to chemical releases, regulated facilities are also required to report off-site transfers of waste for treatment or disposal at separate facilities, pollution

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prevention measures, and chemical recycling activities. The EPA maintains the Toxic Release Inventory database that documents the information that regulated facilities are required to report annually.

Toxic Substances Control Act

The Toxic Substances Control Act of 1976 was enacted by Congress to give the EPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. The EPA repeatedly screens these chemicals and can require reporting or testing of any that may pose an environmental or human health hazard. It can ban the manufacture and import of chemicals that pose an unreasonable risk. Also, the EPA has mechanisms in place to track the thousands of new chemicals that industry develops each year with either unknown or dangerous characteristics. It then can control these chemicals as necessary to protect human health and the environment. The act supplements other federal statutes, including the Clean Air Act and the Toxic Release Inventory under EPCRA.

Hazardous Materials in Structures: Asbestos-Containing Materials and Lead-Based Paint

Several regulations and guidelines pertain to abatement of and protection from exposure to asbestos-containing materials (ACM) and lead-based paint (LBP), including Construction Safety Orders 1529 (pertaining to ACM) and Section 1532.1 (pertaining to LBP) from Title 8 of the California Code of Regulations, and Part 61, Subpart M, of the Code of Federal Regulations (pertaining to ACM). In California, ACM and LBP abatement must be performed and monitored by contractors with appropriate certification from the California Department of Health Services. Asbestos is also regulated as a hazardous air pollutant under the Clean Air Act and a potential worker safety hazard under the authority of Cal/OSHA.

Requirements for limiting asbestos emissions from building demolition and renovation are specified in the South Coast Air Quality Management District's Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). California Government Code Sections 1529 and 1532.1 provide for exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead and ACMs.

Business Plan Act

Both the federal government¹ and the State of California² require all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials—termed a reporting quantity—to submit a hazardous materials business plan to the local certified Unified Program agency (CUPA).

A Business Plan must be submitted by businesses that handle a hazardous material or a mixture containing a hazardous material in quantities equal to or greater than:

- 500 pounds of a solid
- 55 gallons of a liquid

¹ Code of Federal Regulations, EPA, SARA, and Title III.

² California State Health and Safety Code, Division 20, Chapter 6.95, §§ 25500–25520; California Code of Regulations, Title 19, Chapter 2, Sub-chapter 3, Article 4, §§ 2729–2734.

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- 200 cubic feet of a compressed gas at standard temperature and pressure
- The federal Threshold Planning Quantity for Extremely Hazardous Substances
- Radioactive materials in quantities for which an emergency plan is required per Parts 30, 40, or 70 of the Code of Federal Regulations, Title 10, Chapter 1

The Business Plan must include the type and quantity of hazardous materials, a site map, risks of using these materials, spill prevention, emergency response, employee training, and emergency contacts.

Hazardous Materials Transportation

Section 31303 of the California Vehicle Code and the US Department of Transportation regulate hazardous materials transport. The California Highway Patrol and California Department of Transportation are the enforcement agencies. The California Office of Emergency Services provides emergency response services involving hazardous materials incidents.

Hazardous Materials Incident Response

Under Title III of SARA, the LEPC is responsible for developing an emergency plan for preparing for and responding to chemical emergencies. This emergency plan must include:

- An identification of local facilities and transportation routes where hazardous materials are present.
- The procedures for immediate response in case of an accident (this must include a community-wide evacuation plan).
- A plan for notifying the community that an incident has occurred.
- The names of response coordinators at local facilities.
- A plan for conducting exercises to test the plan.

The plan is reviewed by the state emergency response commission (SERC) and publicized throughout the community. The LEPC is required to review, test, and update the plan each year. The OCHCA is responsible for coordinating hazardous material coordination and inspection in Santa Ana.

Hazardous Material Spill/Release Notification Guidance

All significant spills, releases, or threatened releases of hazardous materials must be immediately reported. Federal and state emergency notification is required for all significant releases of hazardous materials. Requirements for immediate notification of all significant spills or threatened releases cover owners, operators, persons in charge, and employers. Notification is required regarding significant releases from facilities, vehicles, vessels, pipelines, and railroads. Many state statutes require emergency notification of a hazardous chemical release:

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- Health and Safety Codes Sections 25270.7, 25270.8, and 25507
- Vehicle Code Section 23112.5
- Public Utilities Code Section 7673, (PUC General Orders #22-B, 161)
- Government Code Sections 51018, 8670.25.5 (a)
- Water Code Sections 13271, 13272
- California Labor Code Section 6409.1 (b)10

In addition, all releases that result in injuries or workers harmfully exposed must be immediately reported to California Occupational Safety and Health Administration (California Labor Code Section 6409.1 [b]). For additional reporting requirements, also refer to the Safe Drinking Water and Toxic Enforcement Act of 1986, better known as Proposition 65, and Section 9030 of the California Labor Code.

The California Accidental Release Prevention (CalARP) program became effective on January 1, 1997, in response to Senate Bill 1889. CalARP replaced the California Risk Management and Prevention Program. Under the CalARP, the Governor's Office of Emergency Services must adopt implementing regulations and seek delegation of the program from the EPA. CalARP aims to be proactive and therefore requires businesses to prepare risk management plans, which are detailed engineering analyses of the potential accident factors present at a business, and the mitigation measures that can be implemented to reduce this accident potential. In most cases, local governments have the lead role for working directly with businesses in this program. The OCHCA is the CUPA designated as the administering agency for CalARP.

Responsible agencies that regulate hazardous materials and waste include:

United States EPA. The EPA is the primary federal agency that regulates hazardous materials and waste. In general, the EPA works to develop and enforce regulations that implement environmental laws enacted by Congress. The agency is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for issuing permits and for monitoring and enforcing compliance. EPA programs promote handling hazardous wastes safely, cleaning up contaminated land, and reducing trash. Under the authority of the RCRA and in cooperation with state and tribal partners, the Waste Management Division manages a hazardous waste program, an underground storage tank program, and a solid waste program that includes development of waste reduction strategies such as recycling.

California EPA. CalEPA was created in 1991 by Governor's Executive Order. Six boards, departments, and an office were placed under the CalEPA umbrella to create a cabinet-level voice for the protection of human health and the environment and to ensure the coordinated deployment of state resources. CalEPA oversees hazardous materials and hazardous waste compliance throughout California.

California Department of Toxic Substances Control. The DTSC is a department of CalEPA, which authorizes DTSC to carry out the RCRA program in California to protect people from exposure to hazardous wastes. The department regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California primarily under the authority of RCRA and in accordance with the California Hazardous Waste Control Law (California Health and Safety Code Division 20,

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Chapter 6.5) and the Hazardous Waste Control Regulations (Title 22, California Code of Regulations, Divisions 4 and 4.5). Permitting, inspection, compliance, and corrective action programs ensure that people who manage hazardous waste follow state and federal requirements and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. DTSC also maintains a Site Mitigation and Brownfields Reuse Program Database.

Under the DTSC, the Statewide Compliance Division (SCD) administers the technical implementation of the state's Unified Program, a consolidation of six environmental programs at the local level. This program was established under the amendments to the California Health and Safety Code made by Senate Bill 1082 in 1994. The six programs that make up the Unified Program are:

- Hazardous Materials Business Plan/Emergency Response Plan
- Hazardous Waste/Tiered Permitting
- Underground Storage Tanks
- Aboveground Storage Tanks Spill Prevention Control and Countermeasures
- California Accidental Release Prevention Program (CalARP)
- Uniform Fire Code Hazardous Materials Management Plan

The SCD also conducts triennial reviews of Unified Program agencies to ensure their programs are consistent statewide, conform to standards, and deliver quality environmental protection at the local level. SCD also carries out the inspections, enforcement, and complaint response at the state's hazardous waste generators, facilities, and transporters and oversees the hazardous waste generator and on-site waste treatment surveillance and enforcement program carried out by local Unified Programs.

Certified Unified Program Agency. A CUPA is a local agency that has been certified by CalEPA to implement the local Unified Program. The CUPA can be a county, city, or joint powers authority. A participating agency is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within the jurisdiction on behalf of the CUPA. A designated agency is a local agency that has not been certified by CalEPA but is the responsible local agency that would implement the six Unified Programs until it is certified.

The Unified Program is related to the SERC and LEPCs that were established under both federal (EPCRA) and state authority relative to the Hazardous Materials Business Plan/Emergency Response Plan. While the CUPA structure does not specifically incorporate the SERC and LEPCs, both SERC and CUPA have found it beneficial to establish strong communication and coordination on hazardous materials issues. The CUPA board now has a representative on the SERC, and members of LEPCs are also CUPA board members. Common issues include ensuring that hazardous materials, waste, and tank programs maintain strong coordination and communication for maximum consistency in program implementation. Shared data, joint resources, common forms, provision of emergency information, and regulatory review are other interests that are coordinated by the CUPA Board and SERC/LEPCs.

The OCHCA is designated by the state as the CUPA for the County of Orange. The OCHCA focuses on the management of specific environmental programs at the local government level to address the disposal, handling, processing, storage, and treatment of local hazardous materials and waste products. The CUPAs are

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also responsible for implementing the leak prevention element of the Underground Storage Tank (UST) Program.

Programs that regulate hazardous materials and waste include:

UST Program. Releases of petroleum and other products from USTs are the leading source of groundwater contamination in the United States. The RCRA Subtitle I established regulations governing the storage of petroleum products and hazardous substances in USTs and the prevention and cleanup of leaks. In EPA Region 9 (California, Arizona, Hawaii, Nevada, Pacific Islands, and over 140 tribal nations) the UST program operates primarily through state agency programs with EPA oversight. In California, the State Water Resources Control Board (SWRCB), under the umbrella of CalEPA, provides assistance to local agencies enforcing UST requirements. The purpose of the UST program is to protect public health and safety and the environment from releases of petroleum and other hazardous substances. The program consists of four elements: leak prevention, cleanup, enforcement, and tank tester licensing. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs, including groundwater analytical data, the surveyed locations of monitoring wells, and other data. The SWRCB's GeoTracker system currently has information submitted by responsible parties for over 10,000 leaking UST (LUST) sites statewide and has been extended to include all SWRCB groundwater cleanup programs, including the LUST, non-LUST (Spill, Leaks, Investigation, and Cleanup), Department of Defense, and landfill programs.

The OCHCA is charged with the responsibility of conducting compliance inspections of regulated facilities in Orange County. Regulated facilities are those that handle hazardous materials, generate or treat hazardous waste, and/or operate an underground storage tank. Non-petroleum USTs receive oversight from OCHCA through the Orange County UST Program (OCUST). All new installations of underground storage tanks require an inspection, along with the removal of the old tanks under strict chain-of-custody protocol.

Hazardous Waste Management. OCHCA implements the Hazardous Waste Generator Program and the Hazardous Waste Treatment/Tiered Permit Program throughout Orange County. The purpose of these programs is to ensure that all hazardous waste generated in Orange County businesses are properly handled, recycled, treated, stored and disposed. Environmental Health staff in these programs inspects facilities that generate hazardous waste, investigate reports of illegal hazardous waste disposal, and respond to emergency spills of hazardous chemicals. Environmental Health staff also participates in public education programs designed to inform industries and residents about the laws and regulations relating to safe disposal of hazardous waste.

Airports

Airport authorities and other agencies regulate aircraft activity. The City has no direct authority over airport development and operations. The State Aeronautics Act of the California Public Utilities Code (Sections 21001 et seq.) establishes statewide requirements for the airport land use compatibility planning and requires nearly every county to create an Airport Land Use Commission (ALUC) or other alternative. The Orange County ALUC is responsible for airport land use planning in the county.

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Federal Aviation Administration

The basic responsibilities of the Federal Aviation Administration (FAA), under the US Department of Transportation, are the regulation of civil aviation to promote safety, airspace and air traffic management, and the regulation of commercial space transportation. The Code of Federal Regulations contains standards for aircraft noise emission levels and for protecting navigable airspace near airports from intrusion by structures.

John Wayne Airport Environs Land Use Plan

The California ALUC Planning Handbook provides planning guidance to ALUCs and counties and cities with jurisdiction over airport area land uses. The purpose of the handbook is to support the State Aeronautics Act. The handbook allows jurisdictions flexibility in determining air safety zones that represent areas of assumed accident potential. To fulfill their purpose, ALUCs have two specific duties according to the Handbook:

- Prepare Compatibility Plans—Each commission is required to “prepare and adopt” an airport land use plan for each of the airports within its jurisdiction (Section 21674 (c) and 21675(a)).
- Review Local Agency Land Use Actions and Airport Plans—The commissions’ second duty is to “review the plans, regulations, and other actions of local agencies and airport operators....” (Section 21674(d))

The Orange County ALUC has adopted an airport environs land use plan (AELUP) for John Wayne Airport. The 2008 AELUP intends, for the 20-year planning future for John Wayne Airport, to safeguard the general welfare of the inhabitants within the vicinity of the airport and to ensure the continued operation of the airport. Specifically, the plan seeks to protect the public from the adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities adversely affect navigable airspace. The implementation of the plan forestalls urban encroachment on the airport (ALUC 2008). The compatibility plan for John Wayne Airport affects the City of Santa Ana, and building height restrictions specified in the AELUP apply in the city. The AELUP requirements for building heights are:

- a) Buildings and structures shall not penetrate Federal Aviation Regulation (FAR) Part 77, Obstruction—Imaginary Surfaces, for John Wayne Airport unless approved by the Airport Land Use Commission (ALUC).
- b) In compliance with FAR Part 77, applicants proposing buildings or structures that penetrate the 100:1 Notification Surface shall file a Form 7460-1, Notice of Proposed Construction or Alteration with the FAA. A copy of the FAA application shall be submitted to the ALUC and the applicant shall provide the City with FAA and ALUC responses.
- c) Development projects that include structures higher than two hundred (200) feet above existing grade shall be submitted to the ALUC for review. In addition, projects that exceed a height of two hundred (200) feet above existing grade shall file Form 7460-1 with the Federal Aviation Administration (FAA).

Table 5.8-1 below depicts land use compatibility from the AELUP which breaks out areas into safety zones.

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Table 5.8-1 Land Use Compatibility: John Wayne Airport Safety Zones

Safety Zone	Land Use Compatibility
1	<ul style="list-style-type: none"> • Airport ownership of property encouraged • Prohibit all new structures • Prohibit residential land uses • Avoid nonresidential uses except if very low intensity in character and confined to the sides and outer end of the area
2	<ul style="list-style-type: none"> • Prohibit residential uses except on large, agricultural parcels • Limit nonresidential uses to activities which attract few people (uses such as shopping centers, most eating establishments, theaters, meeting halls, multi-story office buildings, and labor-intensive manufacturing plants unacceptable) • Prohibit children's schools, day care centers, hospitals, nursing homes • Prohibit hazardous uses (e.g. aboveground bulk fuel storage)
3	<ul style="list-style-type: none"> • Limit residential uses to very low densities (if not deemed unacceptable because of noise) • Avoid nonresidential uses having moderate or higher usage intensities (e.g., major shopping centers, fast food restaurants, theaters, meeting halls, buildings with more than three aboveground habitable floors are generally unacceptable) • Prohibit children's schools, large day care centers, hospitals, nursing homes
4	<ul style="list-style-type: none"> • In undeveloped areas, limit residential uses to very low densities (if not deemed unacceptable because of noise); if alter- native uses are impractical, allow higher densities as infill in urban areas • Limit nonresidential uses as in Zone 3 • Prohibit children's schools, large day care centers, hospitals, nursing homes
5	<ul style="list-style-type: none"> • Avoid residential uses unless airport related (noise usually also a factor) • Allow all common aviation-related activities provided that height-limit criteria are met • Limit other nonresidential uses similarly to Zone 3, but with slightly higher usage intensities • Prohibit children's schools, large day care centers, hospitals, nursing homes
6	<ul style="list-style-type: none"> • Allow residential uses • Allow most nonresidential uses; prohibit outdoor stadiums and similar uses with very high intensities • Avoid children's schools, large day care centers, hospitals, nursing homes

Source: ALUC 2008.

Emergency Preparedness

Emergency Management is part of the Santa Ana Police Department's Homeland Security Division and works with all City departments, Orange County Fire Authority, Orange County's Emergency Management Division, Santa Ana Unified School District, the American Red Cross, other county departments and agencies, and surrounding cities to provide emergency preparedness and coordination when man-made and natural disasters occur.

The City of Santa Ana has prepared a draft emergency operations plan to ensure the most effective allocation of resources for the maximum benefit and protection of the civilian population in time of emergency. The objective of the draft emergency operations plan is to incorporate and coordinate all available City resources into an efficient organization capable of responding to any emergency. While no plan can completely prevent death and destruction, good plans carried out by knowledgeable and well-trained personnel will minimize losses. This plan establishes the emergency organization and assigns tasks and general procedures. It provides for

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coordination of planning efforts of the various emergency staff and service elements using the Standardized Emergency Management System and National Incident Management System with all levels of government.

The City of Santa Ana has a natural hazards mitigation plan (HMP). The HMP includes resources and information to assist city residents, public- and private-sector organizations, and others interested in participating in planning for natural hazards. The HMP provides a list of activities that may help Santa Ana reduce risk and prevent loss from future natural hazard events. The HMP identifies four primary hazard risk areas—earthquakes, flooding, climate change and epidemic/pandemic hazards.

5.8.1.2 EXISTING CONDITIONS

Environmental Justice Communities

Refer to Section 4.4.3 for a discussion of CalEnviroScreen (CES) and a description of how CalEPA identifies disadvantaged communities. Furthermore, Figure 2-1, *EJ Communities, Neighborhoods, and Focus Areas*, shows the 23 census tracts within Santa Ana that are EJ communities. The figure also shows Santa Ana neighborhoods that are entirely or partially within an EJ community census tract. Appendix A-b, *Environmental Justice Background and Analysis for the General Plan Update*, includes tables that provide a summary of CES scores for each of the 23 census tracts.

Lead Concentrations

Elevated lead (Pb) concentrations in soil were found in socioeconomically disadvantaged census tracts in Santa Ana. Lead in the soil is a persistent exposure source in community settings due in part to limited disturbances of soil and limited degradation of lead. Figure 5.8-1, *Cumulative Risk Index Scores for Lead in Soils*, depicts Santa Ana census tracts according to a cumulative risk index score. The cumulative risk index score considers social and economic factors in conjunction with average soil Pb concentrations.³ As shown in Figure 5.8-1, the cluster of census tracts in the central part of the city, just south of the I-5 freeway, had the highest cumulative risk scores. Higher concentrations near roadways may be explained by historical use of leaded gasoline in vehicles, making traffic emissions an important historical source of lead in the atmosphere and surrounding environment. Similarly, increased lead concentrations in residential areas may be explained by the historical use of lead-based paint. Lead paint was historically used on houses and other buildings. Disturbance of these painted surfaces through building renovations, demolitions, and weathering over time is therefore another likely contributor to soil lead in the city. Moreover, residents have expressed concern about several metal processing plants in Santa Ana (Masri 2020).

Land Use Compatibility

Another hazardous materials issue in EJ communities in Santa Ana is land use compatibility between industrial and residential, recreational, and institutional uses. Santa Ana includes an existing industrial land use corridor that runs in the eastern part of the city, from the French Court neighborhood to the Delhi neighborhood. This

³ The six social and economic factors that affect a community's health risk due to lead exposure include: median household income, percent of housing units occupied by renters, percent of population under age five, percent of residents reporting speaking limited or no English, percent of residents without health insurance coverage, and percent of residents with a college education or higher.

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corridor also runs through the French Park, Logan, Lacy, Lyon Street, Madison Park, Cornerstone Village, Cedar Evergreen, and Memorial Park neighborhoods (see Figure 5.2-3, *EJ Communities and Existing Industrial Land Use*). All these neighborhoods have residences, schools, and recreational areas near industrial facilities. Land compatibility concerns in EJ communities in the city are related to health impacts from toxic air releases, contamination from cleanup sites, groundwater threats from containers and tanks of hazardous chemicals, and the potential for pollutant releases from hazardous waste generators.

Toxic Releases and Cleanup Sites

People of color and low-income residents are more likely to live in areas with higher toxic chemical releases and are at greater risk for health-related issues. The EPA 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 to 100 percent. The entire city of Santa Ana ranks in the 90th to 100th percentile in terms of toxic releases, like many cities in Los Angeles and Orange counties (see Figure 5.8-2, *CalEnviroScreen 4.0, Toxic Release Facilities and Percentiles in Santa Ana*).

Another source of pollution from industrial uses are toxic cleanup sites. Chemicals in the buildings, soil, or water at cleanup sites can move into nearby communities through the air or water. Figure 5.8-3, *CalEnviroScreen 4.0, Cleanup Sites in Santa Ana*, shows that most cleanup sites are in EJ communities, with the majority in the south and east areas of the city along the existing industrial corridor previously mentioned. The cleanup site percentile for the neighborhoods in this industrial corridor rank in the 80th to 100th percentile when measured against other census tracts in California.

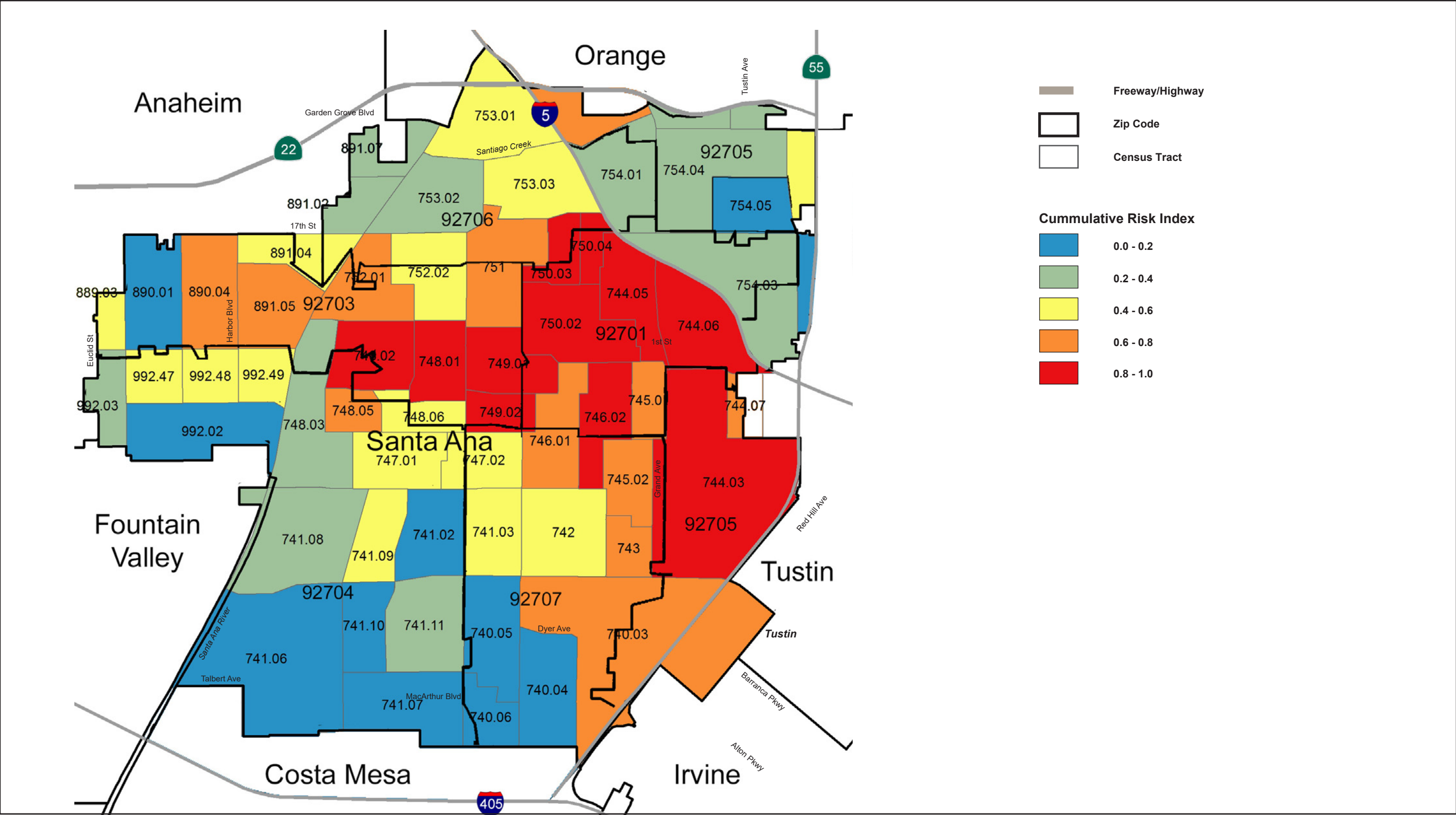
Hazardous Waste Generators

Contamination of air, water, and soil near waste generators and other facilities can harm the environment as well as people. The CES calculates a hazardous waste indicator by considering the number of DTSC-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. As shown in Figure 5.8-4, *CalEnviroScreen 4.0, Hazardous Waste Generators and Percentiles in Santa Ana*, hazardous waste exposure is significant in nearly all environmental justice communities in Santa Ana. The neighborhoods in the city's eastern industrial corridor rank in the top 80th to 100th percentile across the state. Groundwater threats in Santa Ana are significant in the east and southeast areas, which include the neighborhoods of Delhi, Cedar Evergreen, Cornerstone Village, Lyon Street, Madison Park, and Memorial Park. These areas are near or among light and heavy industrial uses.

Hazardous Materials Sites

Three environmental databases were searched for listings in the City of Santa Ana on January 14, 2019—GeoTracker, maintained by the State Water Resources Control Board; EnviroStor, maintained by the Department of Toxic Substances Control; and RCRAInfo, maintained by the EPA. Findings of the database searches are presented in Tables 5.8-2, 5.8-3, and 5.8-4.

Figure 5.8-1 - Cumulative Risk Index Scores for Lead in Soils



Note: 1 = Greater and 0 = Less Risk Related to PB Exposure.

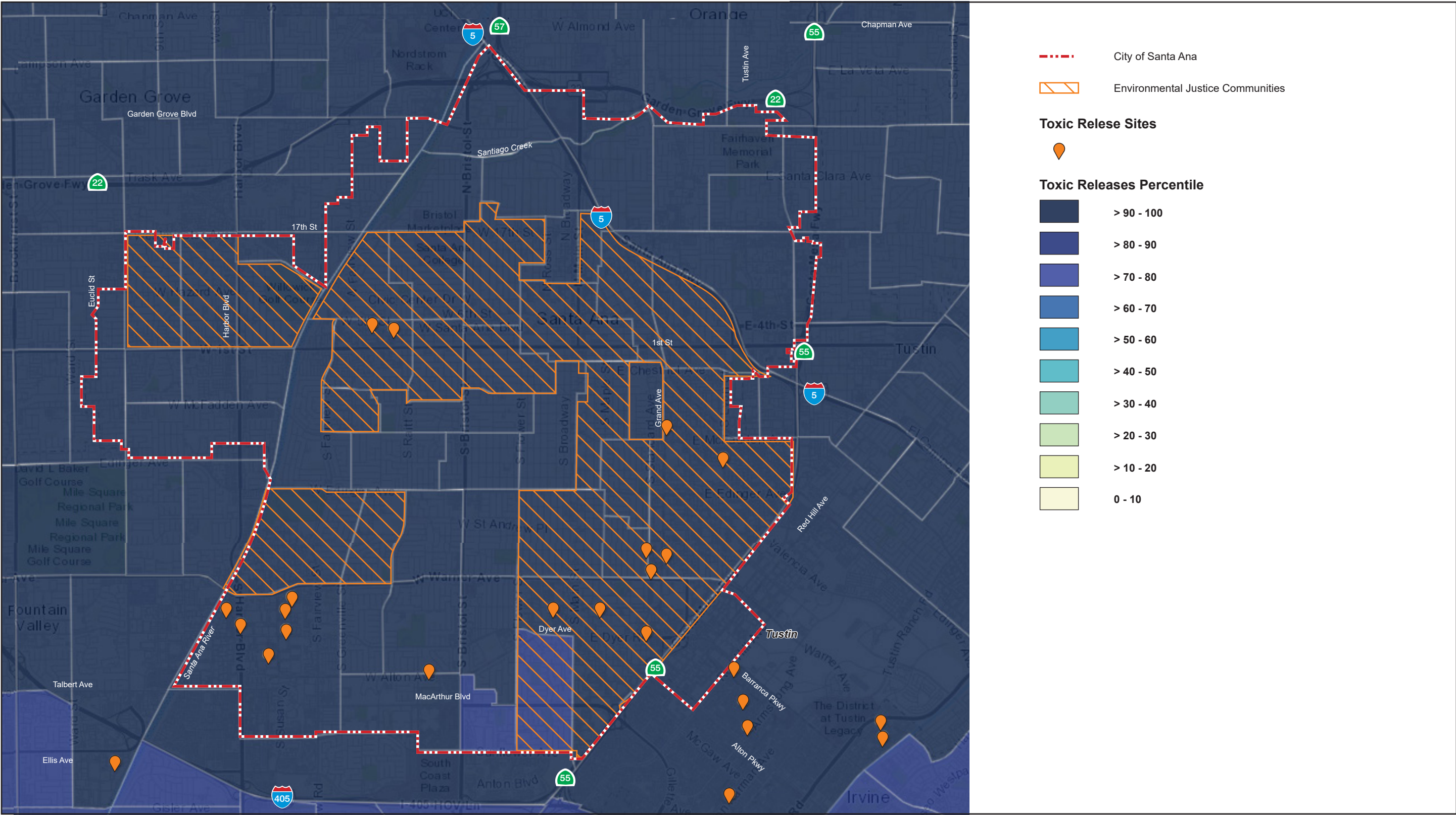
Source: Elsevier, 2020

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Figure 5.8-2 - CalEnviroScreen 4.0, Toxic Release Facilities and Percentiles in Santa Ana



Source: CalEnviroScreen, 2021

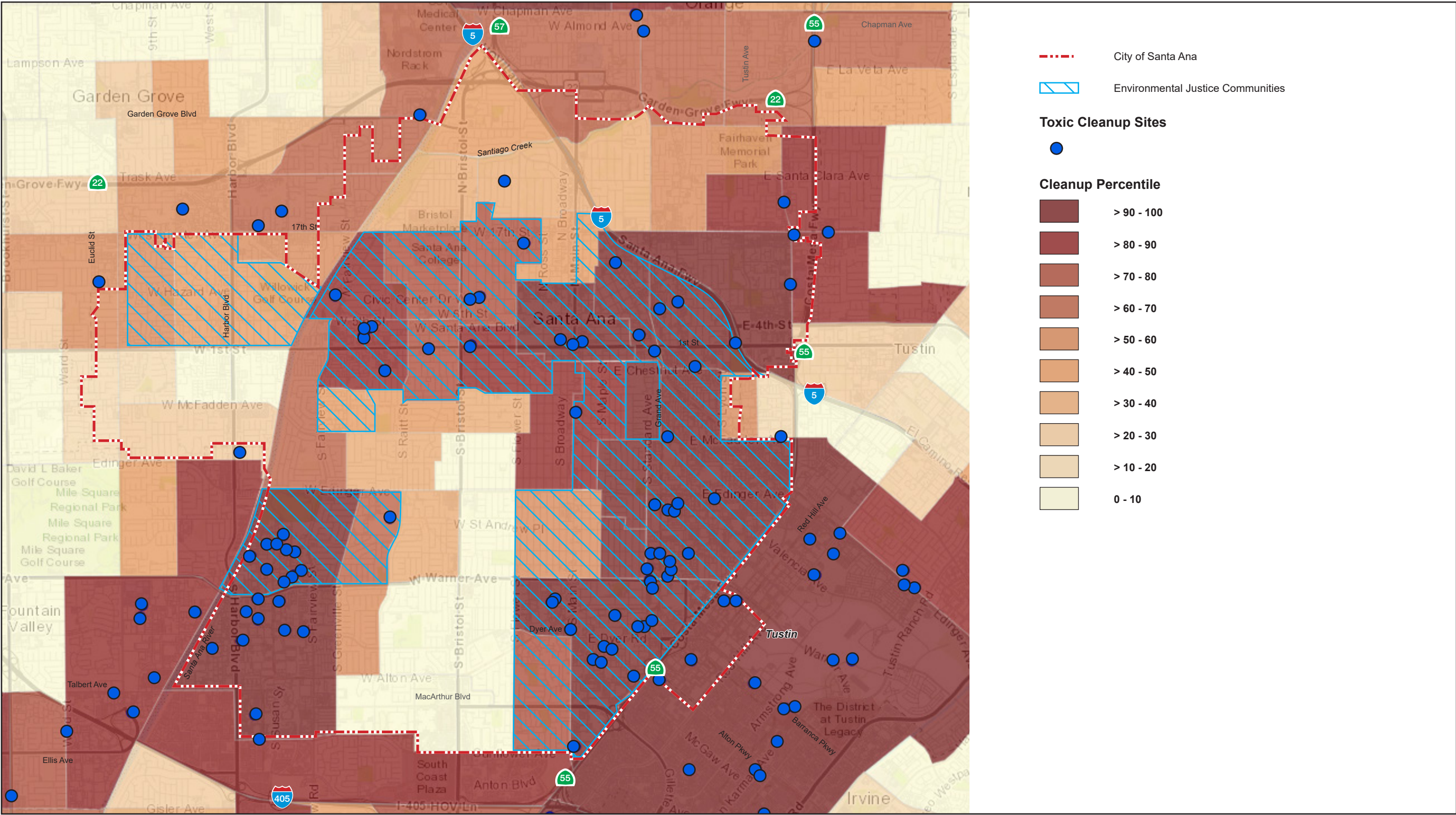


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Figure 5.8-3 - CalEnviroScreen 4.0, Cleanup Sites in Santa Ana



Source: CalEnviroScreen, 2021

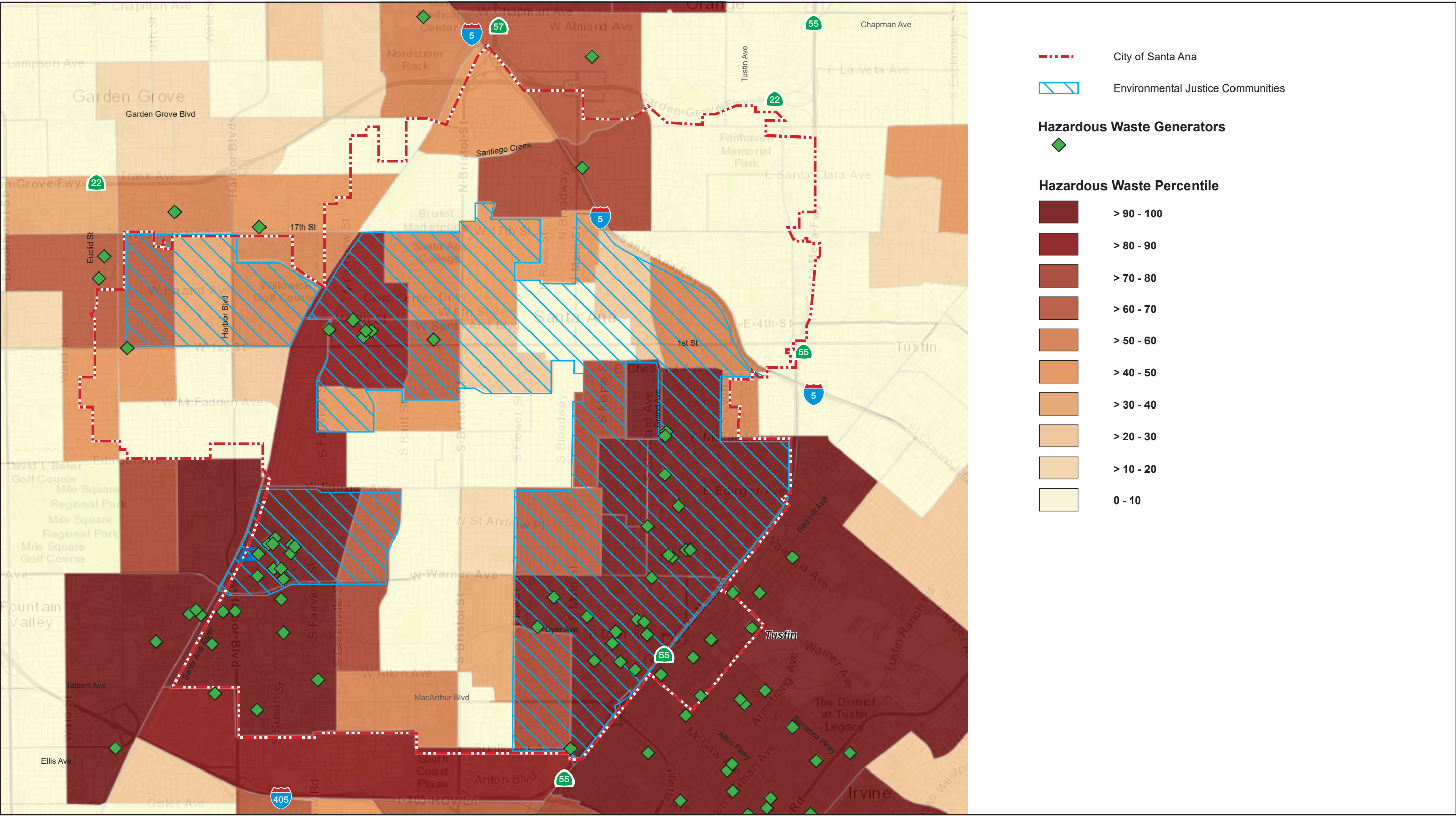


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Figure 5.8-4 - CalEnviroScreen 4.0, Hazardous Waste Generators and Percentiles in Santa Ana



Source: CalEnviroScreen, 2021

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5. Environmental Analysis
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Type of Site	Status	Number of Sites
Leaking Underground Storage Tank (LUST)	Completed – Case Closed	215
	Open – Eligible For Closure	5
	Open - Remediation	15
	Open – Site Assessment	8
	Open – Verification Monitoring	6
	Open – Assessment and interim Remedial Action	1
	Open – Inactive	1
	Subtotal, Open Cases	36
	Total	251
Cleanup Program Site	Completed– Case Closed	22
	Open – Remediation	13
	Open – Verification Monitoring	1
	Open – Inactive	6
	Open – Site Assessment	13
	Open – Eligible for Closure	1
	Open – Assessment and interim Remedial Action	1
	Subtotal, Open Cases	35
	Total	57
Permitted Underground Storage Tanks	NA	74
Total		382

Source: SWRCB 2019.
Note: NA = Not Applicable

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Table 5.8-3 EnviroStor Sites in Santa Ana

Type of Site	Status	Number of Sites
Corrective Action Sites	Active	4
	Refer: RWQCB	1
	Refer: SMBRP	1
	No Further Action	3
	Inactive – Needs Evaluation	1
	Total	10
Evaluation Sites	Refer: RWQCB	11
	Refer: 1248 Local Agency	14
	Inactive – Needs Evaluation	2
	No Action Required	2
	Total	29
Military Evaluation Sites	Inactive - Needs Evaluation	7
	Active	1
	Total	8
Tiered Permit	Active	2
	Certified O&M - Land Use Restrictions Only	1
	Inactive - Needs Evaluation	30
	No Action Required	10
	Refer: Local Agency	3
	Refer: Other Agency	2
	Total	48
State Response	Refer: RWQCB	1
	No Further Action	1
	Certified	1
	Active	4
	Total	7
Permits	Non-Operating	9
	Operating	1
	Total	10
School Investigation	Inactive - Needs Evaluation	5
	Inactive - Needs Evaluation	9
	Total	14
School Cleanup	Certified	3
	Inactive - Needs Evaluation	1
	Total	4
Total		130
Source: DTSC 2019.		

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Table 5.8-4 RCRA Info Sites in Santa Ana

Facility Name	Number of Sites
Transporter	123
Large Quantity Generators	18
Small Quantity Generators	110
Conditionally Exempt Small Quantity Generators	2
Permitted Wastewater Discharging Facilities	172
Toxics Release Inventory (TRI)	101
Total	526

Source: USEPA 2019a, 2019b.

Large Quantity Generator (LQG): generates over 1,000 kg (2,205 pounds) of hazardous waste, or 1 kg (2.2 pounds) of acutely hazardous waste during any month within the year.

Small Quantity Generator (SQG): generates 100 to 1,000 kg (220.5 to 2,205 pounds) of hazardous waste per month.

Asbestos

Asbestos is the name of a group of silicate minerals that are heat resistant and thus were commonly used as insulation and fire retardant. Inhaling asbestos fibers has been shown to cause lung disease (asbestosis) and lung cancer (mesothelioma). Beginning in the early 1970s, a series of bans was established by the EPA and the Consumer Product Safety Commission on the use of certain asbestos-containing materials in construction. Most US manufacturers voluntarily discontinued the use of asbestos in certain building products during the 1980s. Requirements for limiting asbestos emissions from building demolition and renovation activities are specified in South Coast AQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities).

Lead

Lead was formerly used as an ingredient in paint (before 1978) and as a gasoline additive; both of these uses have been banned. Lead is listed as a reproductive toxin and a cancer-causing substance; it also impairs the development of the nervous system and blood cells in children. Those demolishing pre-1978 structures may presume the buildings contain lead-based paint (LBP) without having an inspection for LBP. Lead must be contained during demolition activities (California Health & Safety Code sections 17920.10 and 105255).

Groundwater Plume

The south basin area includes a plume originating from more than 20 industrial locations located in Santa Ana, Irvine, and Tustin. The plume is bounded by Edinger Avenue, Main Street, the I-405 Freeway, Red Hill, and Von Karman. The contaminants of concern include volatile organic compounds (VOCs) and perchlorate. The uncontrolled plume occurs predominately in the shallow aquifer at 100-foot depth which flows into a deeper principal aquifer, bringing VOC contaminants with it. So far, contaminants have arrived in two municipal drinking water wells (OCWD 2018). OCWD is embarking on a comprehensive plan to control the spread and eventually remove these chemicals that have migrated beyond their original pollution sources. Regulatory oversight is provided by the DTSC and the Regional Water Quality Control Board. These two state agencies are working closely with OCWD and some cooperative potentially responsible parties to map the occurrence

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of the contaminants, identify appropriate remedies and implement groundwater cleanup (OCWD 2020a). As a component of the remedial plan, OCWD's consultant performed an assessment of the risk to human health and the environment associated with contaminated groundwater in the south basin area (OCWD 2020b).

Airport-Related Hazards

The John Wayne Airport (JWA) is outside of the city's southeast boundary (see Figure 3-2, *Citywide Aerial*). JWA is an international, commercial service airport owned and operated by the County of Orange. The service area includes more than three million people in 34 cities and unincorporated areas of Orange County.

In 2018, there were 204,561 civil takeoffs or landings and 706 military takeoffs or landings, for a total of 205,267 takeoffs or landings (FAA 2012).⁴

The John Wayne Airport Compatibility Land Use Plan (ACLUP) was issued by the Orange County Airport Commission in 2008. Parts of the city are within Safety Compatibility Zones for JWA, and parts of the city are in areas where heights of structures are limited pursuant to FAA Part 77 Regulations protecting airspace near the airport (Santa Ana 2009).

Safety Compatibility Zones

Zone 6, the Traffic Pattern Zone for JWA, extends over the southeast corner of the city (see Figure 5.8-5, *John Wayne Airport Safety Compatibility Zones*). Zone 6 allows for all residential uses and most nonresidential uses. Outdoor stadiums and similar uses with high intensities are not allowed. Additionally, children's schools, large day-care centers, hospitals, and nursing homes are to be avoided (ALUC 2008).

Height Limits

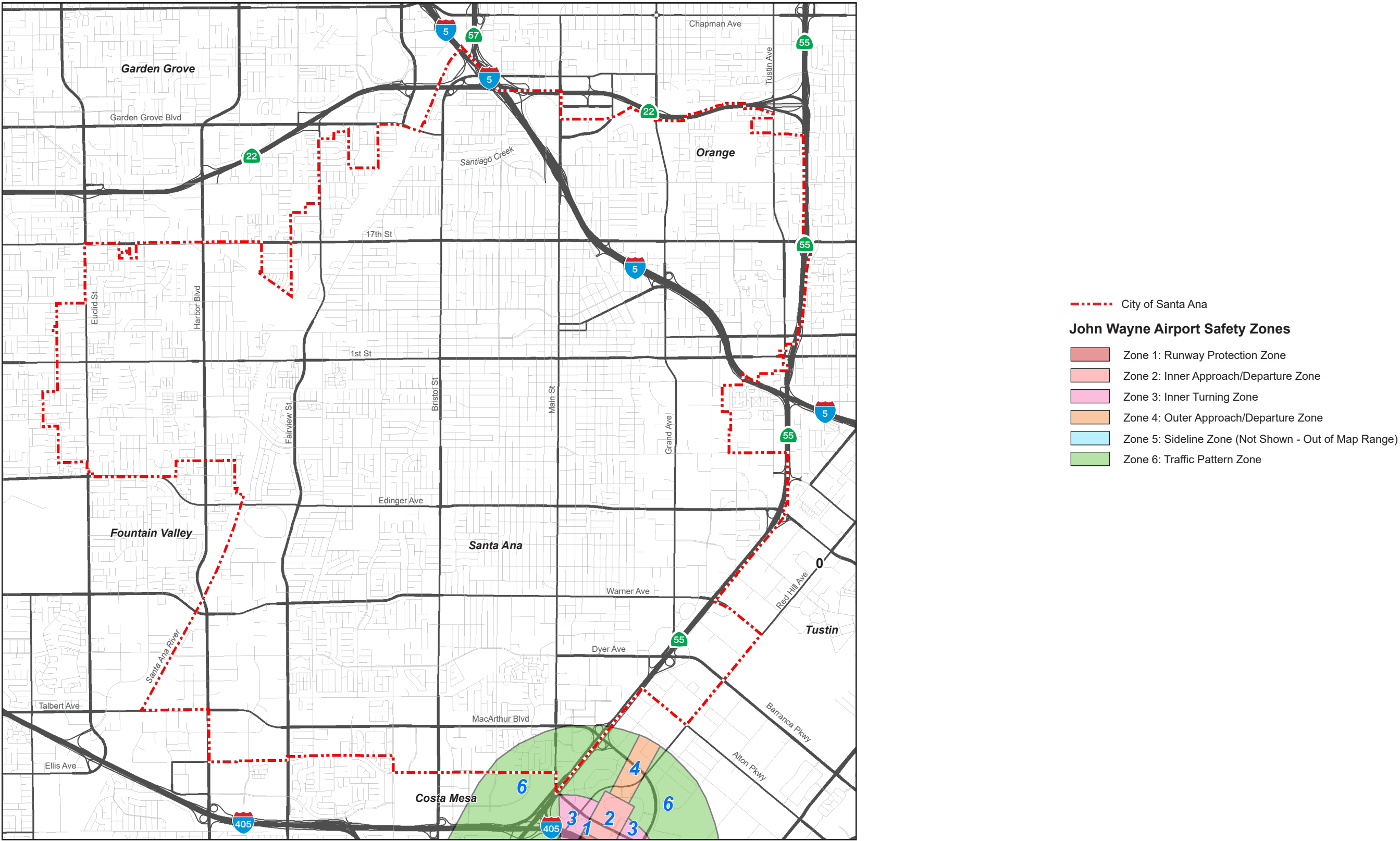
Most of the southeast parts of the city are in areas where heights of structures are regulated to avoid obstructions to aircraft under FAA Part 77 regulations (see Figure 5.8-6, *Height Restrictions per Federal Air Regulations Part 77*). For these areas, the regulation requires that notice be given to the FAA by a person proposing to construct a structure that would exceed specified heights and/or would be erected at specified sites. Notification requirements are described under Section 5.8.1.1, *Regulatory Background*.

Heliports

Heliports are only allowed outside of residential zoning districts with a Conditional Use Permit pursuant to Section 41-621 of the Santa Ana Municipal Code. In addition, any proposed heliports shall undergo review from ALUC, obtain an Airspace Analysis from the FAA as specified in Section 2.1.5 of the AELUP and confirm consistency with the AELUP prior to construction as specified in Section 4.7 of the AELUP.

⁴ "Itinerant" takeoffs or landings where the aircraft arrives from, or departs to, outside the airport area. Does not include practice flights limited to within 20 miles of the airport.

Figure 5.8-5 - John Wayne Airport Safety Compatibility Zones



Source: Orange County Airport Land Use Commission Airport Environs Land Use Plan for John Wayne Airport, 2008

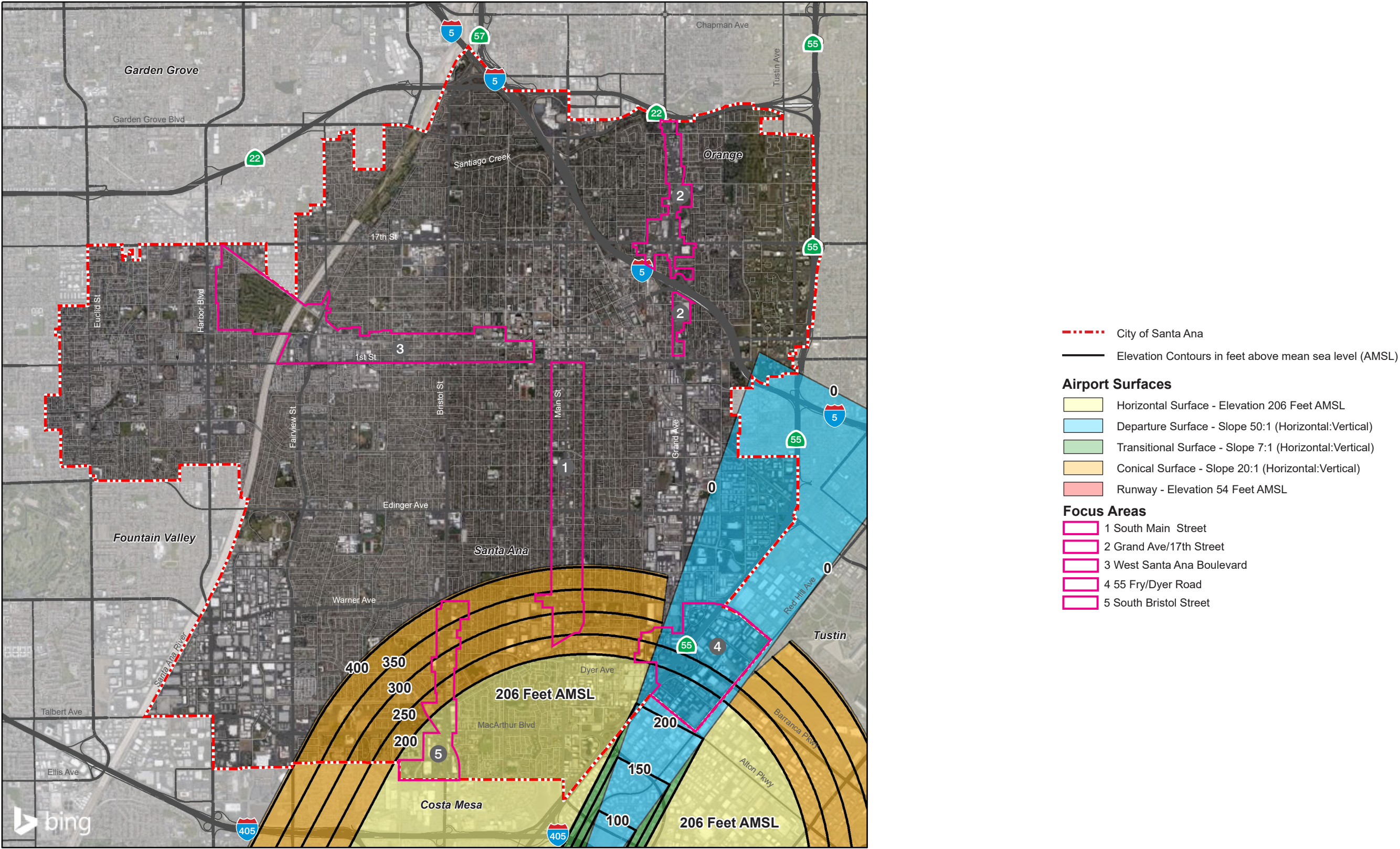


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Figure 5.8-6 - Height Restrictions per Federal Air Regulations Part 77



Source: Orange County Airport Land Use Commission Airport Environs Land Use Plan for John Wayne Airport, 2008

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5.8.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- H-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- H-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- H-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.
- H-4 Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- H-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would result in a safety hazard or excessive noise for people residing or working in the project area.
- H-6 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- H-7 Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

5.8.3 Regulatory Requirements and General Plan Policies

5.8.3.1 REGULATORY REQUIREMENTS

- RR HAZ-1 Hazardous materials and hazardous wastes will be transported to and/or from projects developed under the General Plan Update in compliance with any applicable state and federal requirements, including the U.S. Department of Transportation regulations listed in the Code of Federal Regulations (Title 49, Hazardous Materials Transportation Act); California Department of Transportation standards; and the California Occupational Safety and Health Administration standards.
- RR HAZ-2 Hazardous waste generation, transportation, treatment, storage, and disposal will be conducted in compliance with Subtitle C of the Resource Conservation and Recovery Act (Code of Federal Regulations, Title 40, Part 263), including the management of nonhazardous solid wastes and underground tanks storing petroleum and other hazardous substances. The projects developed under the General Plan Update will be designed and constructed in

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accordance with the regulations of the Orange County Health Care Agency, Environmental Health Division, which serves as the designated Certified Unified Program Agency.

- RR HAZ-3 Underground storage tank (UST) repairs and/or removals will be conducted in accordance with the California UST Regulations (Title 23, Chapter 16 of the California Code of Regulations). Any unauthorized release of hazardous materials will require release reporting, initial abatement, and corrective actions that will be completed with oversight from the Regional Water Quality Control Board, Department of Toxic Substances Control, Orange County Health Care Agency Environmental Health Division, South Coast Air Quality Management District, and/or other regulatory agencies, as necessary. Use of existing USTs will also have to be conducted (i.e., used, maintained and monitored) in accordance with the California UST Regulations (Title 23, Chapter 16 of the California Code of Regulations).
- RR HAZ-4 Demolition activities that have the potential to expose construction workers and/or the public to asbestos-containing materials or lead-based paint will be conducted in accordance with applicable regulations, including, but not limited to:
- South Coast Air Quality Management District's Rule 1403
 - California Health and Safety Code (Section 39650 et seq.)
 - California Code of Regulations (Title 8, Section 1529)
 - California Occupational Safety and Health Administration regulations (California Code of Regulations, Title 8, Section 1529 [Asbestos] and Section 1532.1 [Lead])
 - Code of Federal Regulations (Title 40, Part 61 [asbestos], Title 40, Part 763 [asbestos], and Title 29, Part 1926 [asbestos and lead])
- RR HAZ-5 The removal of hazardous materials, such as polychlorinated biphenyls (PCBs), mercury-containing light ballast, and mold, will be completed in accordance with applicable regulations pursuant to 40 CFR 761 (PCBs), 40 CFR 273 (mercury-containing light ballast), and 29 CFR 1926 (molds) by workers with the hazardous waste operations and emergency response (HAZWOPER) training, as outlined in 29 CFR 1910.120 and 8 CCR 5192.
- RR HAZ-6 New construction, excavations, and/or new utility lines within 10 feet or crossing existing high-pressure pipelines, natural gas/petroleum pipelines, or electrical lines greater than 60,000 volts will be designed and constructed in accordance with the California Code of Regulations (Title 8, Section 1541).
- RR HAZ-7 Development will be designed and constructed in accordance with the airport environs land use plan for John Wayne Airport. Building height restrictions, as specified in the airport environs land use plan, would apply in the city.

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5.8.3.2 GENERAL PLAN UPDATE POLICIES AND IMPLEMENTATION ACTIONS

The following are relevant policies and implementation actions of the Santa Ana General Plan update, which may reduce hazard impacts. Policy and implementation action revisions since the Draft PEIR are shown in track changes. Note that implementation actions were not listed at all in the Draft PEIR and have been added to more fully describe GPU components that will mitigate impacts. Note that only new implementation actions since the Draft PEIR public circulation have been highlighted (changes after August 3, 2020). The comprehensive, track changes listing of Policies and Implementation Actions in Appendix B-a show the changes since October 2020, when the GPU was presented to the Planning Commission. With the changes as marked, both versions represent the most up-to-date GPU Policies and Implementation Actions.

Community Element

- **Policy 3.2 Healthy Neighborhoods.** Continue to support the creation of healthy neighborhoods by addressing public safety, land use conflicts, mitigating hazardous soil contamination, and maintaining building code standards.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.

Conservation Element

- **Policy 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.
- **Implementation Action 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.

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Economic Prosperity Element

- **Policy 2.3 Complementary Businesses.** Encourage the development of mutually beneficial and complementary business clusters within the community.
- **Policy 2.5 Sufficient Industrial Land.** Ensure sufficient availability of industrial zoned properties and businesses that provide employment opportunities for the City's resident population.

Land Use Element

- ~~Policy 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.~~
- **Policy 3.7 Attractive Environment.** Promote a clean, safe, and creative environment for Santa Ana's residents, workers, and visitors.
- **Policy 3.8 Sensitive Receptors.** Avoid the development of industry and sensitive receptors in close proximity to each other land uses 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 utilized, or the hazardous waste an operation may that they generate or emit.
- **Policy 3.9 Noxious, Hazardous, Dangerous, and Polluting Uses Improving Health.** Improve the health of residents, students, and workers by limiting the impacts of construction activities and by discontinuing 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.
- **Implementation Action 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.
- **Implementation Action 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.
- Implementation Action 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.
- Implementation Action 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.

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- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.

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Noise Element

- **Policy 3.1 Residential Development.** Residential development within the John Wayne Airport (JWA) 65 dB(A) CNEL Noise Contour or greater is not supported.
- **Policy 3.2 Flight Paths.** Advocate that future flight path selection be directed away from existing noise sensitive land uses.

Public Services Element

- **Policy 2.1 Public Safety Agencies.** Collaborate with the Police Department and the Fire Authority to promote greater public safety through implementing Crime Prevention the implementation of crime prevention through eEnvironmental dDesign (CPTED) principals for all development projects.
- **Policy 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 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 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 2.5 Safety Programs.** Promote early childhood education and prevention programs that improve public safety and maintain ongoing community education opportunities.
- **Policy 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 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 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 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.

Open Space Element

- **Policy 2.3-8 Hazardous Materials.** Reduce or eliminate, aswhere feasible, the use of pesticides and herbicides that negatively impact human health at park facilities and publicly accessible open spaces.

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Safety Element

- **Policy 2.1 Regional Collaboration.** Consult and collaborate with federal, state, and regional agencies to identify and regulate the disposal and storage of hazardous materials, ~~and~~ prevent the illegal transportation and disposal of hazardous waste and facilitate the cleanup of contaminated sites.
- **Policy 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 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 arterial streets away from natural habitats and sensitive land uses.
- **Policy 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 2.5 Education and Best Practices.** ~~Improve~~ Promote public awareness of best practices for and participation in household hazardous waste management and disposal.
- **Policy 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.
- **Policy 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 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 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 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 4.4 Heliport/Helistop Approval and Requirements.** Any proposals for heliports/helipads within the City shall be submitted through the City to Airport Land Use Commission (ALUC) for a

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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 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 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.
- **Implementation Action 2.4 Lead Contamination.** Work with local with community organizations 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.

5.8.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.8.1: Project construction and operations would involve the transport, use, and/or disposal of hazardous materials. [Thresholds H-1, H-2, and H-3]

Existing and Proposed Industrial Facilities

As mentioned in Section 5.8.1.2, residents within the entire city of Santa Ana, like many cities in Los Angeles and Orange County, are exposed to elevated levels of toxic releases from industrial facilities that make or use toxic chemicals. Additionally, hazardous waste exposure is significant in nearly all environmental justice communities in Santa Ana, particularly EJ neighborhoods in the eastern industrial corridor.

The GPU does not introduce any general or heavy industrial uses anywhere in the city in comparison to existing conditions. The increase in the proposed industrial designated properties is all within the focus areas and is all designated Industrial Flex. The Industrial Flex land use designation is being introduced in areas already designated by the current General Plan for industrial or commercial land uses as a means of providing a buffer between existing industrial areas and existing residential areas (i.e., transition use). The intent of the Industrial Flex zone is to allow for cleaner industrial uses, including office-industrial flex space, small-scale clean

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manufacturing, research and development, artist galleries, craft maker spaces and live-work spaces. Live-work units are permitted within the Industrial Flex 1.5 land use designation and not permitted within the Industrial Flex 3.0 designation. This proposed zone would not expand industrial areas in the city and would reduce the exposure to hazardous materials and wastes for existing areas in the city that are adjacent to industrial areas. New residential and institutional uses in EJ communities near industrial uses would be minimal.

The West Santa Ana Boulevard Focus Area is primarily within EJ community boundaries. The GPU introduces new residential uses, including live-work spaces in the Industrial Flex 1.5 designation, as shown in Figure 5.2-7, *EJ Communities in the West Santa Ana Boulevard Focus Area*. There are no proposed heavy industrial uses surrounding these new sensitive receptors. The surrounding areas are also designated residential, institutional, and commercial uses in the current General Plan (see Figure 3-6, *Current General Plan Land Use Plan*). No new heavy manufacturing uses are introduced in this focus area pursuant to GPU development. The portion of the Grand Avenue/17th Street Focus Area south of I-5 encompasses an EJ community. The GPU redesignates this entire area as District Center and Urban Neighborhood uses (see Figure 5.2-9, *EJ Communities in the Grand Avenue/17th Street Focus Area*). There are no existing industrial land uses designated in this area (see Figure 3-4, *Existing Land Use*). The surrounding areas are also designated residential, institutional, and commercial uses in the current General Plan (see Figure 3-6, *Current General Plan Land Use Plan*). Therefore, new sensitive receptors within the EJ communities in these two focus areas would not be exposed to new impacts associated with hazardous materials and wastes. The South Bristol Street Focus Area does not include any EJ communities.

Properties in the EJ communities in the western part of the proposed 55 Freeway/Dyer Road Focus Area would be designated Industrial Flex 3.0 and Commercial land uses (see Figure 5.2-8, *EJ Communities in the 55 Freeway/Dyer Road Focus Area*), which would not increase the hazardous materials and hazardous waste burden to EJ communities within and adjacent to the focus area. Heavy manufacturing would not be allowed in this focus area.

The proposed South Main Street Focus Area redesignates properties fronting Main Street in the Pacific Park, Madison Park, Cedar Evergreen, Heninger Park, Memorial Park, and Delhi neighborhoods as Urban Neighborhoods, which provides commercial uses, low- and medium-density housing, or a combination of both in a vertically mixed-use format. These neighborhoods are designated EJ communities. New sensitive receptors would be surrounded by proposed residential and institutional uses (see Figure 5.2-6, *EJ Communities in the South Main Street Focus Area*). The surrounding areas are also designated residential, institutional, and commercial uses in the current General Plan (see Figure 3.6, *Current General Plan Land Use Plan*). However, the area south of Warner Avenue, which encompasses an EJ community, would introduce live-work spaces as part of the Industrial Flex 1.5 designation. The GPU would also introduce new institutional uses north of Warner Avenue (see Figure 5.2-6, *EJ Communities in the South Main Street Focus Area*). These new sensitive receptors would be near existing general industrial uses south of Warner Avenue (see Figure 3-4, *Existing Land Use*).

The GPU would introduce new residential and institutional uses near existing industrial uses in EJ communities. However, the use, storage, transport, and disposal of hazardous materials would be governed by existing regulations of several agencies, including the EPA, US Department of Transportation, California Division of Occupational Safety and Health, and the OCHCA. Furthermore, the GPU has policies and implementation

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actions that specifically target existing land use compatibility issues and aim to prevent any future impacts to new sensitive receptors within EJ communities.

Safety Element Policies 2.1 through 2.3 promote coordination with federal, state, and regional agencies to identify, inventory, and regulate the disposal and storage of hazardous materials and hazardous wastes to prevent illegal transportation and disposal and to proactively mitigate potential impacts. These policies also limit truck routes through the city to arterial streets away from sensitive land uses. Land Use Element Policies 3.9 and 3.8 aim to discontinue the operation of polluting uses that are near sensitive receptors, with priority given to environmental justice area boundaries. Furthermore, Implementation Action 3.3 of the same element promotes collaboration with residents and industry stakeholders to create a program to incentivize the removal of existing heavy industrial uses adjacent to sensitive uses. Policy 1.5 of the Conservation Element addresses potential impacts of stationary emission sources on existing and proposed sensitive uses and promotes mitigating or applying special considerations and regulations on the siting of facilities that might significantly increase pollution near sensitive receptors within environmental justice boundaries. Implementation Action 1.5 states the City's commitment to monitor the South Coast Air Quality Management District permitting and inspection process and the Orange County Health Care Agency to identify businesses with potential hazardous materials or by-products, with a special focus on environmental justice communities. The city also commits to serve as a liaison for residents to identify potential emission violations. Therefore, impacts associated with existing and proposed industrial facilities would be less than significant.

Existing Hazardous Materials Sites

As shown in Table 5.8-5, there are 73 open leaking UST or cleanup site cases in the city and sphere of influence.

Table 5.8-5 Hazardous Materials Sites in the Plan Area: Open Cases

Site Name	Address	Type Of Site	Cleanup Status
Plan Area			
1300 Normandy Partners	1300 E. Normandy Pl.	Cleanup Program Site	Open – Inactive
7-Eleven Store #18167	1020 S. Bristol St.	LUST	Open – Site Assessment
Aeromil Engineering Co., Inc.	2344 Pullman St.	LUST	Open – Remediation
Aluminum Precision Products	2621 S. Susan St.	Cleanup Program Site	Open – Inactive
AMR Combs Fuel Farm	19301 Campus Dr.	LUST	Open – Remediation
Archies Texaco	4502 Westminster Ave.	LUST	Open – Site Assessment
ARCO #1047	2646 W. 1st St.	LUST	Open - Remediation
ARCO #3085	3361 S. Bristol St.	LUST	Open - Remediation
ARCO #5147	2245 S. Main St.	LUST	Open – Eligible for Closure
ARCO #6071	3414 S. Main St.	LUST	Open - Remediation
Barlen Enterprises Industrial Park	1410 E. St. Gertrude Pl.	Cleanup Program Site	Open – Assessment & Interim Remedial Action
Behr Process Corporation	3001 S. Yale St.	Cleanup Program Site	Open - Remediation
Bell Industries	1831 Ritchey St.	Cleanup Program Site	Open - Remediation
BFM Energy Products Corp.	2040 E. Dyer Rd.	Cleanup Program Site	Open - Remediation
Bristol Fiberlite Industries	401 E. Goetz Ave.	LUST	Open – Eligible for Closure

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Table 5.8-5 Hazardous Materials Sites in the Plan Area: Open Cases

Site Name	Address	Type Of Site	Cleanup Status
Cabrillo Park Shopping Center – Aztec Cleaners	1730 E. 17 th St.	Voluntary Cleanup Program	Open
Cherry Aerospace	1224 E. Warner Ave.	Cleanup Program Site	Open - Remediation
Chevron #9-1825	2261 N. Fairview St.	LUST	Open – Verification Monitoring
Circuit One	2103 S. Grand Ave.	Cleanup Program Site	Open – Remediation
CTC Global Facility	3901 S. Main St.	Cleanup Program Site	Open – Site Assessment
Diceon Electronics (Former)/Elexsys International Corp.	2215 S. Standard Ave.	Cleanup Program Site	Open – Site Assessment
Dyer Business Park	3107 Kilson Dr.	Cleanup Program Site	Open – Site Assessment
E-Z Serve #100841	2409 W. Edinger Ave.	LUST	Open – Verification Monitoring
Eco Gasoline	1131 S. Main St.	LUST	Open - Remediation
El Modena Flood Channel Investigation	Esplanade Ave. & Fairhaven Ave.	Cleanup Program Site	Open – Site Assessment
Embee Plating	2144 S. Hathaway St.	Cleanup Program Site	Open - Remediation
Empire Auto	110 E. Dyer Rd.	Voluntary Cleanup Program	Open
Former Alcoa Composites/Tre Astech Facility	3030 S. Red Hill Ave.	Cleanup Program Site	Open - Remediation
Former Industrial Property	201 E. Stevens Ave.	Cleanup Program Site	Open – Site Assessment
Former Los Amigos Dry Cleaner	1312 W. Edinger Ave.	Cleanup Program Site	Open – Verification Monitoring
Former Unocal 76 SS #5247 (AKA Crevier BMW)	1500 Auto Mall Rd. (Formerly 2031 E. Edinger)	LUST	Open – Site Assessment
G & M Oil #24	3301 S. Bristol St.	LUST	Open – Verification Monitoring
Gallade Chemical Inc	1230 E. St. Gertrude Pl.	Cleanup Program Site	Open - Remediation
GE Plastics	1831 E. Carnegie Ave.	Cleanup Program Site	Open - Remediation
Guadalajara Tires	2501 Westminster	LUST	Open - Remediation
Gulf Station (Chevron #35-2689)	1606 S. Standard Ave.	LUST	Open – Assessment & Interim Remedial Action
Halladay Properties	3035 Halladay	Cleanup Program Site	Open – Site Assessment
Holchem Service Chemical Co.	1341 Maywood Ave., East	Cleanup Program Site	Open - Remediation
Humble Oil Station 7-8869	1440 Broadway	LUST	Open – Site Assessment
Isaac Main Plaza/Metro CW	1801 S. Main St.	LUST	Open – Verification Monitoring
Isaac, Inc. (Village Pnt & Bdy)	1734 W. 1st St.	LUST	Open – Eligible for Closure
ITT Cannon	666 E. Dyer Rd.	Cleanup Program Site	Open - Remediation
JMA Trust	3320 S. Yale St.	Cleanup Program Site	Open – Site Assessment
Key Cleaners	3033 S. Bristol St.	Cleanup Program Site	Open – Site Assessment
L&N Costume Services	1602 E. Edinger Ave.	Cleanup Program Site	Open – Site Assessment
Llyod Pest Control Upgradient VOC Plume	566 E. Dyer Rd.	Cleanup Program Site	Open - Inactive
Martin Aviation (Fuel Farm)	19331 S. Airport Way	LUST	Open - Remediation
Mobil #18-HCN	1351 E. Dyer Rd.	LUST	Open – Eligible for Closure
Newport Hydraulics	1716 S. Santa Fe St.	LUST	Open - Inactive
OCWD – South Basin	Hotel Terrace Dr.	Project	Open – Site Assessment
Orange County Fire Station #33	18992 Ike Jones Rd.	Cleanup Program Site	Open – Site Assessment

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Table 5.8-5 Hazardous Materials Sites in the Plan Area: Open Cases

Site Name	Address	Type Of Site	Cleanup Status
Orange County South Basin		Complex Site Cleanup Program Facility	
Orco Tools and Equipment	2100 Ritchey St.	LUST	Open - Remediation
SA Recycling	2002 W. 5th St.	Cleanup Program Site	Open – Eligible for Closure
Safety-Kleen	2120 S Yale St.	LUST	Open – Site Assessment
Santa Ana Tower F.A.A.	18990 Ike Jones Rd.	Cleanup Program Site	Open – Site Assessment
Shell #510 Former	510 N. Bristol St.	LUST	Open – Site Assessment
Shell Station #1202 (Former)	1202 E. Edinger Ave.	LUST	Open - Remediation
South Coast Auction	2202 S. Main St.	LUST	Open – Verification Monitoring
South Coast Business Center	3400-3500 Warner Ave.	Cleanup Program Site	Open - Remediation
SPS Technologies	2701 S. Harbor	Cleanup Program Site	Open - Remediation
Thrifty Oil #008	704 N. Bristol St.	LUST	Open - Remediation
Thrifty Oil #015	2016 W. 17th St.	LUST	Open - Remediation
Thrifty Oil #150	1539 S. Standard Ave.	LUST	Open - Remediation
Thrifty Oil #376	801 N. Bristol St.	LUST	Open – Eligible for Closure
Troy Computer	2322 Pullman St.	Cleanup Program Site	Open - Site Assessment
Ultramar, Inc. Station #750	1501 S. Broadway	LUST	Open - Site Assessment
Universal Circuits	1720-1800 Newport Circle, East	Cleanup Program Site	Open - Site Assessment
Unocal #5356	1913 W. Edinger Ave.	LUST	Open – Verification Monitoring
Unocal #5422	1502 E. Edinger Ave.	LUST	Open - Remediation
Unocal #7470	114 S. Bristol St.	LUST	Open - Remediation
US Divers	3323 W. Warner Ave.	Cleanup Program Site	Open - Inactive
Waste Oil UST	3323 W. Warner Ave.	Cleanup Program Site	Open - Inactive
Wells Fargo Bank	2301 S. Main St.	LUST	Open – Site Assessment
West Coast Plating, Former	2525 S. Birch St.	Cleanup Program Site	Open – Inactive

Source: SWRCB 2020.

Any development, redevelopment, or reuse on or immediately adjacent to any of these sites would require environmental site assessment by a qualified environmental professional to ensure that the relevant projects would not disturb hazardous materials on any of the hazardous materials sites or plumes of hazardous materials diffusing from one of the hazardous materials sites, and that any proposed development, redevelopment, or reuse would not create a substantial hazard to the public or the environment.

Additionally, new stationary industrial sources near EJ communities would not be introduced due to the GPU, and new residential and institutional uses situated close to industrial facilities would be minimal. The environmental justice requirements of SB 1000—to update public policies for disadvantaged communities in order to reduce unique or compounded health risks, promote civil engagement in the public decision-making process, and prioritize improvements and programs—would also minimize any potential hazard. The Community Air Protection Program (created by the California Air Resources Board in response to AB 617) would reduce the exposure of the communities most impacted by air pollution. AB 617 statewide strategy

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include: (1) assessing and identification of communities with high cumulative exposure burdens, prioritization disadvantaged communities and sensitive receptor locations, based on modeling information, existing health data; (2) methodology for assessing and identifying the relative contribution of sources or categories of sources to air pollution in the community; (3) updating and implementing risk reduction audit and emissions reduction plans at least once every 5 years; and (4) assessment of measures available to reduce emissions from contributing sources or categories of sources.

Existing Lead-Contaminated Soil

As noted in Section 5.8.1.2, elevated lead concentrations in soils were found in EJ communities in Santa Ana, particularly in the cluster of census tracts in the central part of the city, just south of the I-5 freeway. Potential sources of soil lead contamination in Santa Ana include the historical use of leaded gasoline, historical and present-day point-source emissions from industrial facilities, and lead-based paint in older buildings (Masri 2020).

New sensitive receptors, introduced pursuant to the GPU, that are within EJ communities and near existing industrial uses include:

- Proposed institutional uses north of Warner Avenue in the South Main Street Focus Area.
- Proposed live-work spaces in the Industrial Flex 1.5 designation, in the area south of Warner Avenue in the South Main Street Focus Area.

Additionally, the GPU would introduce opportunities for live-work residential uses in the Industrial Flex 1.5 land use designation in the EJ community south of the I-5 freeway in the Grand Avenue/17th Street Focus Area (see Figure 5.2-9, *EJ Communities in the Grand Avenue/17th Street Focus Area*).

However, the GPU incorporates community health and related environmental hazards into the City's long-term planning and includes a comprehensive approach to be responsive to the community. The topic of lead contamination is one pollution factor the City considered in its development of the GPU policies and implementation actions. These policies and implementation actions include:

- Community Element Policy 3.2, and Implementation Actions 1.3, 3.3, and 3.5
- Conservation Element Policy 1.5, and Implementation Action 1.5
- Safety Element Policy 2.6 and Implementation Action 2.4. This implementation action specifically addresses lead contamination and aims to understand the prevalence, sources, and implications of lead contamination of soil across Santa Ana in addition to proposing solutions in collaboration with environmental justice stakeholders.
- Land Use Element Policies 3.8 and 3.9, and Implementation Actions 3.3, 3.19, 3.21, 3.22, 3.24, 3.26, 3.27, and 3.29. Implementation Action 3.19 addresses blood lead levels with special focus in environmental justice communities and for children living in pre-1978 housing, and Implementation Action 3.21 aims to identify funds to create a Santa Ana Prevent Lead Poisoning Education Program. Additionally,

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Implementation Action 3.22 promotes the investigation of public complaints regarding lead hazards and the enforcement of local housing standards to ensure healthy outcomes. Implementation Action 3.26 aims to identify baseline conditions for lead contamination in Santa Ana, monitor indicators of lead contamination, and measure positive outcomes. Implementation Action 3.29 involves updating 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 lead-contaminated soils to be remediated.

These GPU policies and implementation actions are intended to remedy existing lead-contaminated soil impacts on EJ communities and prevent any future impacts associated with new sensitive receptors introduced pursuant to the implementation of the GPU. Therefore, impacts from existing lead-contaminated soils is less than significant.

Existing Asbestos-Containing Materials and Lead-Based Paint

Many buildings in the plan area predate 1978 and thus may contain ACM and LBP. The history of Santa Ana is briefly described in Section 5.5, *Cultural Resources*. Demolition and removal of existing buildings could pose hazards to people and the environment through disturbance and/or release of ACM and LBP. Compliance with RR HAZ-4 and Implementation Action 3.6, 3.17, 3.18, and 3.20 (Land Use Element) would reduce the impact of existing ACM and LBP to less than significant.

Routine Use, Storage, Transport, and Disposal of Hazardous Materials

Construction

Construction in accordance with the General Plan Update will involve demolition, grading, and construction of new buildings. Potentially hazardous materials used during construction include substances such as paints, sealants, solvents, adhesives, cleaners, and diesel fuel. There is potential for these materials to spill or to create hazardous conditions. However, the materials used will not be in such quantities or stored in such a manner as to pose a significant safety hazard. These activities will also be short term or one time in nature. Project construction workers will be trained in safe handling and hazardous materials use.

To prevent hazardous conditions, existing local, state, and federal laws—such as those listed under Section 5.8.1.1, *Regulatory Background*—will be enforced at the construction sites. For example, compliance with existing regulations would ensure that construction workers and the general public are not exposed to any risks related to hazardous materials during demolition and construction. Cal/OSHA has regulations concerning the use of hazardous materials, including requirements for safety training, exposure warnings, availability of safety equipment, and preparation of emergency action/prevention plans. For example, all spills or leakage of petroleum products during construction activities must be immediately contained, the hazardous material identified, and the material remediated in compliance with state and local regulations for that contaminant. All contaminated waste must be collected and disposed of at an appropriately licensed disposal or treatment facility.

Furthermore, strict adherence to all emergency response plan requirements set by the Orange County Fire Authority would be required throughout the duration of project construction.

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Operation

Operation of projects developed pursuant to the General Plan Update would involve hazardous materials used in industrial and commercial land uses as well as hazardous materials used for cleaning and maintenance purposes in almost all developed land uses: cleaners, solvents, paints, pesticides, and fertilizers. The amounts of hazardous materials used would vary by land use type: amounts would be small for residential, school, institutional, and many office uses. Amounts would be larger for industrial uses; businesses selling hazardous materials, such as gasoline stations; and service businesses using hazardous materials in their operations, such as construction contractors, painters, cleaners, and printers.

The plan area has 112 small quantity generators of hazardous wastes in the plan area, 2 of which are conditionally exempt, and 18 large quantity generators of hazardous wastes (see Table 5.8-4, above).

The General Plan Update would designate 2,411 acres for industrial uses, a net increase of 683.1 acres over existing industrial uses (1,727.9 acres). The General Plan Update would designate a net decrease of 699.9 acres of commercial and office uses compared to existing conditions and would designate 251.4 acres for mixed uses, including commercial uses. Thus, General Plan Update buildout is expected to result in some increase in the number of hazardous waste generators. Hazardous wastes would be stored, transported, and disposed of in conformance with existing regulations of the EPA, US Department of Transportation, CalRecycle, and other agencies.

Accidental Release of Hazardous Materials

Construction and operation of projects approved under the General Plan Update would involve some risk of accidental release of hazardous materials used by the projects, as well as accidental disturbance of existing hazardous materials in the environment, such as petroleum products released from leaking USTs, or ACM or LBP in existing buildings that would be renovated or demolished. Use, storage, transport, and disposal of hazardous materials in conformance with regulations would reduce both the likelihood of an accidental release and the potential consequences in the event of an accidental release. Impacts would be less than significant.

Level of Significance Before Mitigation: With the implementation of RRs HAZ-1 through HAZ-5; Community Policy 3.2 and Implementation Actions 1.3, 3.3, and 3.5; Conservation Policy 1.5 and Implementation Action 1.5; Economic Prosperity Policies 2.3 and 2.5; Land Use Policies 3.7 through 3.9 and Implementation Actions 3.3, 3.6, 3.17 through 3.22, 3.24, 3.26, 3.27, and 3.29; Open Space Policy 2.8; Safety Policies 2.1 through 2.6; Policies 4.1 through 4.6; and Implementation Action 2.4, Impact 5.8-1 would be less than significant.

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HAZARDS AND HAZARDOUS MATERIALS

Impact 5.8-2: The plan area includes 555 sites included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 that could create a significant hazard to the public or the environment. [Threshold H-4]

Searches of environmental databases described in Section 5.8.1.2, *Existing Conditions*, identified 555 sites in the plan area: 18 were large quantity generators of hazardous wastes, 112 were small quantity generators, and 425 were hazardous materials sites on the GeoTracker and/or EnviroStor databases.

The list of 130 hazardous waste generators does not document releases of hazardous materials, and these generators are not environmental concerns related to the buildout of the General Plan Update. Of the 425 sites listed on GeoTracker and/or EnviroStor, cases were closed at 362 sites (85 percent). Only 63 sites are still open, which means that assessment, remediation, and/or verification of remediation is required at those sites. All 425 sites listed in Tables 5.8-2 and 5.8-3 are known to regulatory agencies.

Any development, redevelopment, or reuse on or next to any of these sites would require environmental site assessment by a qualified environmental professional to ensure that the project would not disturb hazardous materials on any of the hazardous materials sites or plumes of hazardous materials diffusing from one of the hazardous materials sites, and that any proposed development, redevelopment, or reuse would not create a substantial hazard to the public or the environment. Phase I Environmental Site Assessments are required for land purchasers to qualify for the Innocent Landowner Defense under CERCLA and to minimize environmental liability under other laws such as RCRA, and for lenders as a prerequisite to extend a loan for purchase of land. Impacts would be less than significant.

Level of Significance Before Mitigation: With the implementation of RRs HAZ-1 through HAZ-5, Conservation Policy 1.5, Economic Prosperity Policies 2.3 and 2.5, Land Use Policies 3.7 through 3.9, Open Space Policy 2.8, and Safety Policies 2.1 through 2.6 and Policies 4.1 through 4.6, Impact 5.8-2 would be less than significant.

Impact 5.8-3: Santa Ana is in the vicinity of an airport or within the jurisdiction of an airport land use plan. [Threshold H-5]

Land Use: Safety Compatibility Zones

Although part of the city is within Zone 6 (see Figure 5.8-4), the Traffic Pattern Zone for John Wayne Airport, there are no restrictions on residential land uses or on special characteristics (distracting lights or glare, sources of smoke or electrical interference, or attractors of birds), but Zone 6 prohibits outdoor stadiums and similar uses with very high intensities, and avoids children's schools, large day care centers, hospitals, and nursing homes (ALUC 2008). Safety zones are explained above in Table 5.8-1. The process for filing a project for a consistency determination with ALUC is specified in Section 4.7 of the AELUP. If the ALUC determines that a submittal is inconsistent with the AELUP, the ALUC must promptly notify the affected local agency. The local agency may modify the project to be consistent with the AELUP and resubmit the project to the ALUC for a determination of consistency, or choose to overrule the ALUC by following the procedure in Public Utilities Code Sections 21676 and 21676.5. This procedure requires the local agency to hold a public hearing with its

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governing body (e.g., Board of Supervisors, City Council), make specific findings that the proposed overruling is consistent with the purposes stated in Public Utilities Code Section 21670, and overrule the ALUC by at least a two-thirds vote of the governing body of the local agency.

Airspace Protection

Parts of the city are in areas where heights of structures are limited pursuant to FAA Part 77 Regulations that protect navigable airspace surrounding certain airports. The Airspace Protection Surface extends 10,000 feet horizontally from the runway at an elevation of 150 feet above the airport, or 206 feet above mean sea level (amsl), then angles upward an additional 4,000 feet horizontally at a slope of 1 vertical foot to 20 horizontal feet to an elevation of 400 feet amsl. Elevations in the part of Santa Ana under the Airspace Protection Surface range from 35 feet amsl at the southeast edge of the city to 60 feet amsl along the northeast edge of the Airspace Protection Surface. Maximum allowable heights of structures under the Airspace Protection Surface would vary by location. Existing heights of structures in Santa Ana are far below the maximum allowable heights under the Airspace Protection Surface. As set forth in Public Utilities Code Sections 21676 and 21676.5 and as discussed in the *California Airport Land Use Planning Handbook*, a key responsibility of an ALUC is to review particular types of local actions for compliance with the criteria and policies in a commission's adopted compatibility plan. Section 3.0 of the AELUP sets the policies and criteria by which a local action can be reviewed, and a determination of consistency can be made with the AELUP by the ALUC. Projects approved under the proposed General Plan Update would be required to comply with FAA airspace protection regulations using the AELUP consistency determination process. Thus, impacts are considered less than significant.

Heliports are only allowed outside of residential zoning districts with a conditional use permit pursuant to Section 41-621 of the Santa Ana Municipal Code. In addition, any proposed heliports shall undergo review by the ALUC, obtain an Airspace Analysis from the FAA as specified in Section 2.1.5 of the AELUP, and confirm consistency with the AELUP prior to construction, as specified in Section 4.7 of the AELUP.

Level of Significance Before Mitigation: With the implementation of RR HAZ-7, Conservation Policy 1.5, Economic Prosperity Policy 2.3, Land Use Policy 3.9, and Noise Policies 2.1 and 3.1 through 3.3, Impact 5.8-3 would be less than significant.

Impact 5.8-4: Buildout of the General Plan Update could affect the implementation of an emergency responder or evacuation plan. [Threshold H-6]

The City of Santa Ana has prepared a draft emergency operations plan (EOP) to ensure the most effective allocation of resources for the maximum benefit and protection of the civilian population in time of emergency. The EOP's objective is to incorporate and coordinate all available City resources into an efficient organization capable of responding to any emergency. Though no EOP can prevent all death and destruction, good plans carried out by knowledgeable and well-trained personnel will minimize losses. Santa Ana's EOP establishes the emergency organization and assigns tasks and general procedures. It provides for coordination of planning efforts of the various emergency staff and service elements using the Standardized Emergency Management System and National Incident Management System with all levels of government.

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The proposed General Plan Update permits development of substantial net increases of square footage and dwelling units. By increasing the population, traffic congestion may increase in these areas as well (see Section 5.16, *Transportation*, of this PEIR). Thus, in the event of an accident or natural disaster, evacuation plans and routes could be adversely affected by the increased traffic. However, the Santa Ana Police Department commands the City's Emergency Management Division. The Emergency Management Division responds to extraordinary emergency situations, including natural disasters.

The buildout of the General Plan Update would not result in substantial changes to the circulation patterns or emergency access routes, and would not block or otherwise interfere with use of evacuation routes. Buildout would not interfere with operation of the City's Emergency Operations Center and would not interfere with operations of emergency response agencies or with coordination and cooperation between such agencies; thus, impacts to emergency response planning would be less than significant.

Level of Significance Before Mitigation: With the implementation of Public Services Policies 2.1 through 2.9, Impact 5.8-4 would be less than significant.

Impact 5.8-5: Santa Ana is not in a designated fire hazard zone, and implementation of the General Plan Update will not expose structures and/or residences to wildland fire danger. [Threshold H-7]

The plan area is not within a fire hazard severity zone. The nearest fire hazard severity zone to the plan area is over three miles to the northeast. Thus, development pursuant to the General Plan Update would not pose wildland fire hazards, and impacts would be less than significant.

Level of Significance Before Mitigation: Due to the lack of wildland fire hazards in the plan area, Impact 5.8-5 would be less than significant.

5.8.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.8-1, 5.8-2, 5.8-3, 5.8-4, and 5.8-5.

There are no significant unavoidable adverse impacts relating to hazards.

5.8.6 References

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5.15 RECREATION

This section of the Recirculated Draft Program Environmental Impact Report (Draft Recirculated PEIR) evaluates the potential impacts on recreation in the City of Santa Ana associated with implementation of the General Plan Update (GPU). The potential for adverse impacts on accessibility of recreational facilities to existing and proposed residential neighborhoods, and impacts resulting from the construction of additional recreational facilities are evaluated based on existing facilities and their usage.

Subsequent to release of the Draft PEIR, a substantial level of concern arose regarding park and open space impacts associated with implementation of the GPU. Comments on the Draft PEIR focused on a lack of open space and recreation facilities within the City and raised the following issues:

- The substantial increase in population generated by the GPU when the city currently does not achieve its park standard of two acres per 1,000 people.
- Whether the GPU can ensure that parks/open space would be equitably distributed to serve city residents and disadvantaged communities in particular.
- The potential impact on park facilities in neighboring jurisdictions, particularly the City of Tustin, given the proximity of the 55 Freeway/Dyer Road Focus Area and the introduction of a substantial increase in population in this area.
- Whether in-lieu fees to mitigate park/open space impacts would translate into actual facilities given the lack of vacant properties in the city.

The Draft PEIR concluded that upon implementation of required regulatory requirements and GPU policies, impacts to Recreation would be less than significant. It is typical in CEQA documents to conclude that project-related Recreation impacts would be mitigated to less than significant after compliance with Quimby Act fees and a lead agency's municipal code requiring payment of park fees or dedicated land for recreation uses. This is usually a defensible conclusion since CEQA requires mitigation of a proposed project's impact on existing conditions and does not require that mitigation remedy existing conditions. Upon consideration of the numerous comments received on the GPU, however, the City recognized that although applicable fees would be required for future development, there is no certainty that there would be available land in Santa Ana to develop additional park facilities to serve the increased population. Additionally, increased population generated by implementation of the GPU has the potential to further exacerbate the lack of available park and open space in disadvantaged communities.

The supplemental analysis in this Recirculated Draft PEIR, therefore, adds additional geographic context to understand existing conditions and the potential impact of implementing the GPU. This section has also been updated to reflect the additional GPU policies and implementation actions proposed to address parks and open space subsequent to distribution of the Draft PEIR and Planning Commission public hearing in November 2020. And finally, the PEIR has been revised to classify the significance of population growth associated with GPU implementation on Recreation to be significant and unavoidable.

5. Environmental Analysis

RECREATION

5.15.1 Environmental Setting

5.15.1.1 REGULATORY BACKGROUND

State

California Public Park Preservation Act

The primary instrument for protecting and preserving parkland is California's Public Park Preservation Act of 1971. Under California Public Resources Code Sections 5400 et seq., cities and counties may not acquire any real property that is in use as a public park for any nonpark use unless compensation, land, or both are provided to replace the parkland acquired. This ensures no net loss of parkland and facilities.

Quimby Act

The 1975 Quimby Act (California Government Code Section 66477) authorizes cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities. A 1982 amendment (AB 1600) requires agencies to clearly show a reasonable relationship between the public's need for the recreation facility or parkland, and the type of development project upon which the fee is imposed. Cities and counties with a high ratio of park space to inhabitants can set a standard of up to five acres per 1,000 people for new development. Cities and counties with a lower ratio can require the provision of up to three acres of park space per 1,000 people. The calculation of a city or county's park space to population ratio is based on a comparison of the population count of the last federal census to the amount of city/county-owned parkland.

Local

City of Santa Ana Municipal Code

The City of Santa Ana Municipal Code identifies land use categories, development standards, and other general provisions that ensure consistency between the City's General Plan and proposed development projects. The following provisions from the municipal code focus on park service impacts associated with new development projects and subdivisions and are relevant to the General Plan Update.

Chapter 34, Article VIII (Regulations for Dedication of Land for Park or Recreational Purposes): As a condition of approval of a final subdivision map for any subdivision with more than 50 parcels proposed for residential use, the subdivider may be required to dedicate land for park and recreational purposes at the time of final map approval. The dedication of land should promote the general standard of providing two acres of property devoted to parks and recreational purposes for each thousand persons residing in Santa Ana. The standards for determining land to be dedicated are shown in Table 5.15-1.

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RECREATION

Table 5.15-1 Standards for Dedication of Land

Dwelling Unit Type	Assumed Density Per Acre	Assumed Persons per Unit	Land to Be Dedicated per Dwelling Unit	
			Acre	Square Feet
Single-family	3 to 7.3	4.0	0.008	348.5
Duplexes	8.14	3.0	0.006	261.4
Multifamily	Variable	2.4	0.005	209.1

Source: Santa Ana 2019 (SAMC Section 34-204).

Chapter 35, Article IV (Residential Development Fee): Requires that any person adding net residential units or converting apartments to condominiums pay fees, dedicate land in lieu thereof, or a combination of both for the purpose of preserving an appropriate balance between the demand by residents for park and recreational facilities and the availability of such park and recreational facilities. This article also precludes residential development that would impose an excess demand on such facilities.

Development of parks in the city will require the construction of park and recreation facilities sufficient to provide two acres of such facilities per 1,000 population in the city. Fees paid shall be placed in a special fund to be known as the "Park Acquisition and Development Fund." Moneys in this fund shall be expended for the acquisition, construction, and renovation of park and recreation facilities. In the event the city meets the standard of two acres of such facilities per 1,000 population and will meet such criterion following all developments for which fees have been collected, any moneys remaining in the fund may be used for renovation of the city's existing parks.

5.15.1.2 EXISTING CONDITIONS

The Santa Ana Parks, Recreation, and Community Services Agency is responsible for delivering a variety of services to the community that includes recreation programs, parks, libraries, and operations of the Santa Ana Zoo. Currently, approximately 342 acres are developed as park space. The parks in the city range from 0.2 acres to 65.3 acres, and each provides varied amenities and facilities, such as playgrounds, shelters, picnic tables, sports fields, drinking fountains, restrooms, and parking (Santa Ana 2020).

Santa Ana's public park and recreation facilities are distributed generally uniformly throughout the city. However, the city does not meet the municipal code requirement of two acres of parkland per 1,000 residents (Ono 2020). Little current or future potential exists for the acquisition of additional park lands and open spaces, both because the city is almost fully developed and because demands on capital funds are highly competitive (Santa Ana 2010). However, in addition to parks and open space areas, the city also has recreational facilities and programs, trails, joint-use parks, and nearby regional recreation areas, as detailed below, which contribute to providing residents with recreational facilities.

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Parks and Open Space Areas

Existing Parks

The City owns and/or operates 44 parks and proposes to construct two additional parks. The City's current inventory of parks and recreational facilities is listed in Table 5.15-2 and shown on Figure 5.15-1, *Parks and Trails*.

Table 5.15-2 Public Parks Inventory

Park	Location	Acreage	Amenities
17th Street Triangle Park	2125 West 17th Street	0.70	Bike trail
Adams Park	2302 South Raitt Street	5.68	Ball diamonds, basketball courts, concession stand, multipurpose field, multipurpose court, playground (tots/youth), parking spaces/ handicapped parking, picnic tables, picnic shelters, restroom, sports field lighting
Angels Community Park	914 West 3rd Street	1.60	Ball diamonds, basketball courts, concession stand, multipurpose field, multipurpose court, playground (tots/youth), street parking, picnic tables
Birch Park	210 North Birch Street	2.37	Santa Ana Senior Center, concession stand, parking structure, picnic shelters, outdoor exercise equipment, restroom
Bomo Koral Park	900 West MacArthur Boulevard	10.40	Ball diamonds, drinking fountain, multipurpose field, parking stalls, picnic tables
Cabrillo Park	1820 East Fruit Street	7.60	Ball diamonds, drinking fountain, multipurpose field, parking stalls, picnic tables, restroom
Carl Thornton Park	1801 West Segerstrom Avenue	32.70	Barrier-free playground, ball diamonds, bike trail, multipurpose field, parking stalls, hiking/exercise trail, drinking fountain, playground, lake
Centennial Park	3000 West Edinger Avenue	65.26	Ball diamond, basketball courts, drinking fountain, multipurpose field, parking stalls, playground, picnic tables, restroom, sports field lighting, picnic shelters
Cesar Chavez Campesino Park	3311 West 5th Street	6.48	Ball diamond, basketball courts, drinking fountain, multipurpose field, parking stalls, playground, picnic tables, restroom, handball courts
Chepa's Park	1009 North Custer Street	0.41	Basketball court, drinking fountain, playground, benches, restroom, handball courts, street parking
Colonel William W. Eldridge Park	2933 North Fallbrook Drive	1.20	Street parking
Delhi Park	2314 South Halladay Street	9.94	Ball diamond, basketball courts, drinking fountain, multipurpose field, parking stalls, playground, restroom, handball courts
Edna Park	2140 West Edna Drive	3.56	Hiking/exercise trail, ball diamond, drinking fountain, multipurpose field, parking stalls, playground, picnic tables, restroom
El Salvador Center Park	1825 West Civic Center Drive	8.91	Ball diamond, basketball courts, concession stand, drinking fountain, multipurpose field, parking stalls, playground, picnic tables, restroom, handball courts, swimming pool (El Salvador Center), community garden
Fairview Triangle Park	1100 South Fairview Street	0.74	Bike trail, passive area
Fisher Cabin Park	2501 North Flower Street	2.58	Hiking/exercise trail, drinking fountain, street parking, playground, restroom, log cabin

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Table 5.15-2 Public Parks Inventory

Park	Location	Acreage	Amenities
French Park	901 North French Street	0.21	Benches, street parking
Friendship Park	2210 West Myrtle Street	0.10	Playground, street parking
Garfield Exercise Park	902 North Brown Street	0.10	Exercise equipment, street parking
Heritage Park	4812 West Camille Street	6.44	Ball diamond, drinking fountain, multipurpose field, parking stalls, playground, picnic tables, restroom
Jerome Park	726 South Center Street	19.27	Ball diamond, basketball courts, drinking fountain, gymnasium, handball courts, multipurpose field, parking stalls, playground, picnic tables, restroom, swimming pool (Jerome Center), community garden
Lillie King Park	500 West Alton	10.40	Drinking fountain, multipurpose field, parking stalls, playground, picnic tables
Mabury Park	1801 East Fruit Street	5.46	Drinking fountain, street parking, playground, picnic tables, picnic shelters
Madison Park	1528 South Standard Avenue	6.04	Ball diamonds, basketball courts, concession stand, multipurpose field, multipurpose court, playground (tots/youth), parking spaces/ handicapped parking, picnic tables, restroom
Maple and Occidental Park	Corner of Maple and Occidental Street	0.96	Drinking fountain, exercise equipment
Mariposa Park (6th and Lacy Park)	720 East 6th Street	0.43	Skate elements, drinking fountain, playground
McFadden Triangle Park	630 South Susan Street	0.77	Bike trail, passive areas
Memorial Park	2102 South Flower Street	16.30	Ball diamond, basketball courts, drinking fountain, handball courts, multipurpose field, parking stalls, playground, picnic tables, restroom, swimming pool (Memorial Center), exercise equipment
Memory Lane Park	1560 West Memory Lane	0.56	Hiking/exercise trail, drinking fountain, playground, picnic shelter, bike trail, exercise equipment
Morrison Park	2801 North Westwood Avenue	5.12	Ball diamond, basketball courts, drinking fountain, handball courts, multipurpose field, parking stalls, playground, picnic tables, tennis courts
Pacific Electric Park	Corner of McFadden Avenue and Maple Street	1.41	Drinking fountain, street parking, playground, picnic shelter, restroom, exercise equipment, community garden
Plaza Calle Cuarto Park	325 East Fourth Street	0.20	Restroom
Portola Park	1700 East Santa Clara Avenue	9.07	Ball diamond, basketball courts, drinking fountain, multipurpose field, parking stalls, playground, picnic tables, tennis courts
Riverview Park	1817 West 21st Street	8.33	Ball Diamond, Basketball Courts, Drinking Fountain, Hiking/Exercise Trail, Multipurpose Field, Parking Stalls, Playground
Rosita Park	706 North Newhope Street	8.68	Ball diamond, indoor basketball courts, drinking fountain, gymnasium, multipurpose field, swimming pool (Salgado Center), parking stalls, playground
Saddleback View Park	631 North Patricia Lane	0.92	Drinking fountain, street parking, playground, picnic table, picnic shelters
Sandpointe Park	3700 South Birch Street	7.73	Basketball courts, hiking/exercise trail, multipurpose field, drinking fountain, street parking, playground, picnic table, tennis courts, volleyball

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RECREATION

Table 5.15-2 Public Parks Inventory

Park	Location	Acreage	Amenities
Santa Ana Zoo at Prentice Park*	1801 East Chestnut Avenue	18.75	Playground, picnic tables
Santa Anita Park	300 South Figueroa Street	5.05	Ball diamond, basketball courts, multipurpose field, drinking fountain, playground, parking stalls, restroom, handball courts
Santiago Park	2535 North Main Street	34.57	Ball diamond, archery range, lawn bowling green, log cabin, wildlife and watershed interpretive center, multipurpose field, drinking fountain, playground, parking, restroom, tennis courts, bike trail
Sara May Downie Herb Garden	2405 North Flower Street	0.13	Benches, drinking fountain
Sasscer Park	502 West Santa Ana Boulevard	0.94	
Segerstrom Triangle Park	1000 West Hemlock Way	1.33	
Windsor Park	2915 West La Verne Avenue	10.81	Barrier-free playground, ball diamonds, multipurpose field, basketball courts, parking stalls, drinking fountain, playground, tennis courts, picnic tables, picnic shelter
Total Existing Parkland Acreage		341.99	
Future Parks			
Raitt/Myrtle Park	-	1.09	—
Standard/McFadden Park	-	0.66	—
TOTAL EXISTING AND PLANNED PARKLAND ACREAGE		343.83	

* This facility has limited access to the public.
Source: Santa Ana 2020; Ono 2020.

Centennial Park, the largest of all the city's parks, is in a relatively central position in the city and an important node of open space in the regional system. Grant funding was recently approved to develop two new parks—Raitt/Myrtle Park and Standard/McFadden Park (Ono 2020).

Parks and Open Space by Focus Area

Grand Avenue/17th Street

This focus area includes schools and higher education institutions, such as the Springs Charter School, which includes playfields at its site. There are parcels designated as open space in this focus area, however, there are no parks in this focus area. Parks near this focus area include Portola Park, Mabury Park, and Cabrillo Park.

South Main Street

There are no parks in this focus area, but parks that are within close proximity include Memorial Park, Madison Park, and Delhi Park. All parcels in this focus area consist of developed land.

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55 Freeway/Dyer Road

There are several parcels in this focus area designated as open space, however, they are developed (e.g., railroad, concrete channel). There is one open space parcel that is currently vacant and contains ruderal vegetation. There are no parks in this focus area; Delhi Park is adjacent to it.

South Bristol Street

All the parcels in this focus area are developed. There are no parks in this focus area; however, nearby parks include Sandpointe Park, Bomo Koral Park, Lillie King Park, and Carl Thornton Park.

West Santa Ana Boulevard

This focus area includes the Willowick Golf Course, Cesar Chavez Campesino Park, Angels Community Park, and Spurgeon Park (joint-use school park), which totals approximately 124.4 acres of parkland.

Existing Open Space Areas

In addition to the parks listed in Table 5.15-2, the city has open space areas that serve as additional recreational space for residents. The Santa Ana River and Santiago Creek are part of a regional system of open space corridors promoted by Orange County. In the city, the Santa Ana River extends between State Route 22 (SR-22) to MacArthur Boulevard. This corridor represents 116 acres of open space in the city.

Recreational Facilities

Santa Ana's Parks, Recreation, and Community Services Agency also provides recreational programs, including:

- Youth sports programs for children in pre-kindergarten through eighth grades
- Tennis facilities
- Aquatics programming during the summer months for all ages
- Family PRIDE clubs that allow families to participate in interactive family recreation
- A kayaking program that trains and prepares teens to participate in local, county, state, and national tournaments throughout the year
- A community garden program that offers youth and their families the training and motivation to adopt healthy food habits

The City has about 13.89 acres of sports facilities.

Trails

There are nine existing Class I bike trails in Santa Ana. The following Class I trails are in the plan area and shown on Figure 5.15-1, *Parks and Trails*: Refer to Section 5.16.1.2, *Existing Conditions*, of Chapter 5.16, *Transportation*, which provides definitions of the bikeway classifications.

- **Santa Ana River Bike Trail** extends northeast-southwest along the Santa Ana River.

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- **Santiago Creek Bike Trail** extends east-west along Santiago Creek.
- **Pacific Electric Bike Trail** extends north-south along Maple Street.
- **Alton Avenue Bike Trail** begins in Delhi Park and extends northeast-southwest to Alton Avenue. The trail then extends east-west along Alton Avenue.
- **Raitt Street Bike Trail** extends north-south in two separate sections along Raitt Street.
- **Greenville Street Bike Trail** extends north-south along Greenville Street.
- **Bear Street Bike Trail** extends north-south along Bear Street. The trail begins in Thorton Park.
- **Flower Street Bike Trail** extends north-south along Flower Street.
- **MacArthur Boulevard Bike Trail** extends east-west along MacArthur Boulevard.

Class II bike lanes exist on Bristol Street between McFadden Avenue and Civic Center Drive, and on Memory Lane between Flower Street and Bristol Street.

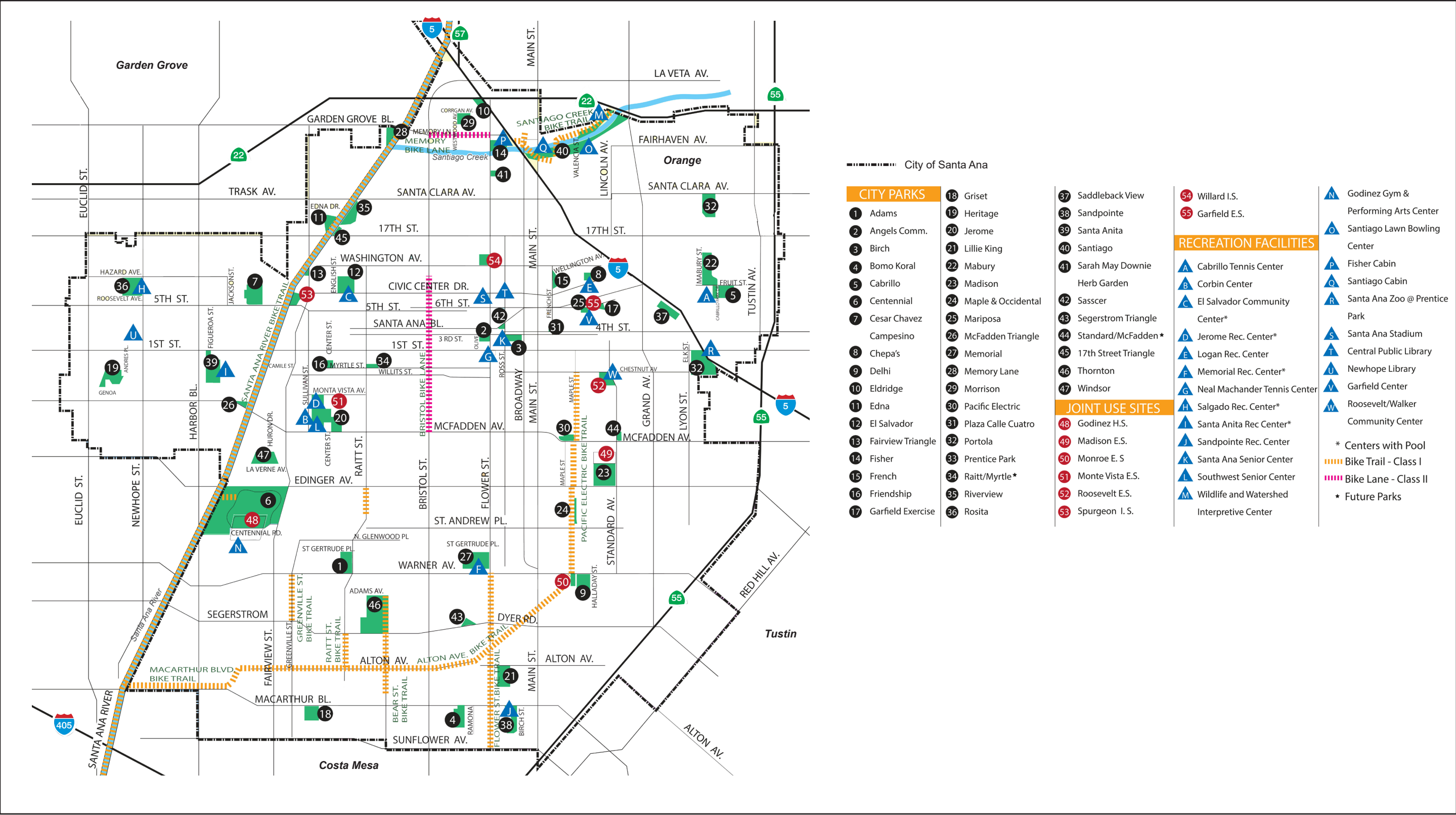
The city also has hiking trails in Sandpointe Park, Fisher Cabin Park, Riverview Park, Edna Park, Memory Lane Park, and Thornton Park.

There is a total of 36.89 acres of hiking trails and bike trails in the city (CSLS 2020).

Joint-Use School Parks

The City has a long-standing agreement with Santa Ana Unified School District (SAUSD) for joint use of district school recreational facilities by the public. The City currently has joint agreements with eight schools. The school facilities include athletic fields, performing arts centers, gymnasiums, auditoriums, swimming pools, and parking. Though these facilities are mainly for educational purposes during school hours, they are open to the public for recreational use after hours, during the summer, and on the weekends. Locations of these joint-use school parks are shown on Figure 5.15-1, *Parks and Trails*. Although not owned or maintained by the City, the recreational areas of the SAUSD schools are also applied to meeting the City's park standard. Therefore, it is assumed that the 42.64 acres of SAUSD school playfields is credited toward meeting the City's parkland standard.

Figure 5.15-1 - Parks and Trails



Source: City of Santa Ana Parks, Recreation, and Community Services Agency, 2020 (Santa Ana, 2020)

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Nearby Regional Recreation Areas

The following regional recreation areas are near the plan area and accessible to its residents and visitors:

- **Mile Square Regional Park.** Located on a 640-acre block bounded by Edinger Avenue, Euclid Avenue, Warner Avenue, and Brookhurst Street in Fountain Valley, near the southwest boundary of Santa Ana. Facilities at the park include two lakes, game fields, picnic areas, recreational and cultural center, a clubhouse, golf course, archery range, and radio-controlled airplane field.
- **Irvine Regional Park.** Located to the northeast of Santa Ana at 1 Irvine Park Road in the City of Orange, facilities at this park include tables and barbeques, parking, restrooms, paved bicycle/walking trail, six playgrounds, four softball fields, two horseshoe pits, a lake, and an equestrian trail.
- **Willowick Golf Course.** Located on the west side of the Santa Ana River is a 100-acre golf course owned and operated by the City of Garden Grove. The golf course has the highest usage of all courses in the county.
- **Fairview Regional Park.** Located at 2500 Placentia Avenue in Costa Mesa, southwest of Santa Ana. This park covers 210 acres and is developed with a mini railroad, vernal pools, cove chaparral, and open fields for games, gliders, etc.
- In addition, **Newport Beach** and **Newport Harbor** are less than 20 minutes from Santa Ana.

City of Santa Ana Parkland Standard

The Santa Ana Municipal Code establishes a standard of 2 acres of park and recreation facilities per 1,000 residents. Table 5.15-2 identifies the City's 341.99 acres of public parks serving the Santa Ana community. Combining City public parks with the 116 acres of open space area in the Santa Ana River corridor, the City has a total of approximately 457.99 acres of developed public parkland and open space. The City also has 42.64 acres of SAUSD joint-use school park facilities, 36.89 acres of hiking trails and bike trails, and 13.89 acres of sports facilities, for an overall total of 551.41 acres of public parks and recreational resources. Note that this does not include paseos, greenways, the two future parks, or private parks owned and maintained by homeowner associations.

Based on the 2019 estimated population of 334,774 for Santa Ana (see Table 3-5, *General Plan Update Existing and Buildout Population*), the plan area has approximately 1.65 acres of parkland for every 1,000 residents in the city based on the overall public parkland and recreational resources. This is 0.35 acre for every 1,000 residents short of meeting the General Plan standard or deficient approximately 118 acres. Table 5.15-3, *Existing vs. Required Public Parkland and Recreational Facilities Acreage*, quantifies the existing and additional acreage needed to meet the standard.

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Table 5.15-3 Existing vs. Required Public Parkland and Recreational Facilities Acreage

	Santa Ana Plan Area 2019 Population	Parkland Standard (Acres/1,000)	Required Acreage	Existing Acreage	Existing Deficiency
Developed Public Parkland and Recreational Resources	334,774	2	669.55 acres	551.41 acres	118.14 acres

Source: PlaceWorks 2020.

Funding

The City's General Fund is used to maintain park sites in the city. Improvement funding predominantly comes from federal/state grants, Community Development Block Grants (CDBG), or Park Residential Development Fees (Acquisition and Development fees) (Ono 2020).

Park Deficient Areas

As quantified above, the City has not achieved its 2.0 acres per 1,000 residents standard. The City's current ratio is 1.65 acres per 1,000 and the existing deficiency of approximately is 118 acre based on a combination of public parkland and recreational resources. The City also evaluates the park deficiency by geographic subareas. Figure 5.15-2, *Public Park Deficient Areas* highlights the areas characterized by a lack of City public parks. Park size and service area criteria are used to identify the deficient areas:

- A ½ mile area service radius is assumed for parks larger than 5 acres
- A ¼ mile area service radius is assumed for pocket parks less than 5 acres

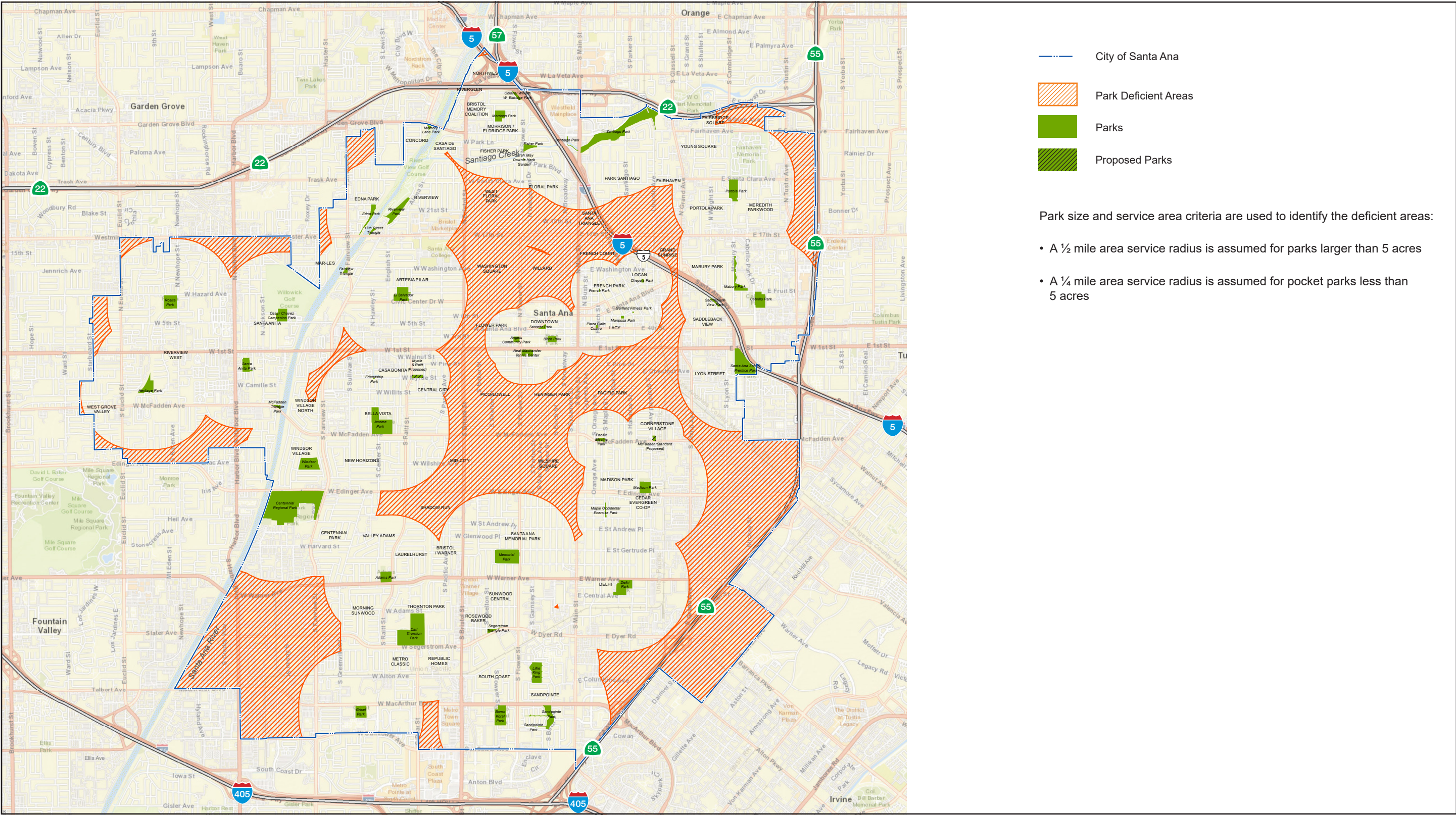
Public park deficient areas have also been mapped relative to the GPU Focus Area boundaries and environmental justice areas as defined by CalEnviroScreen (CES) composite scores greater than 75 percent (see Section 4.4, *Environmental Justice Areas* and Appendix A-b *Environmental Justice Background and Analysis*). These relationships are shown in Figure 5.15-3, *Public Park Deficiency with Overlays*.

5.15.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- R-1 Would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- R-2 Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Figure 5.15-2 - Public Park Deficient Areas



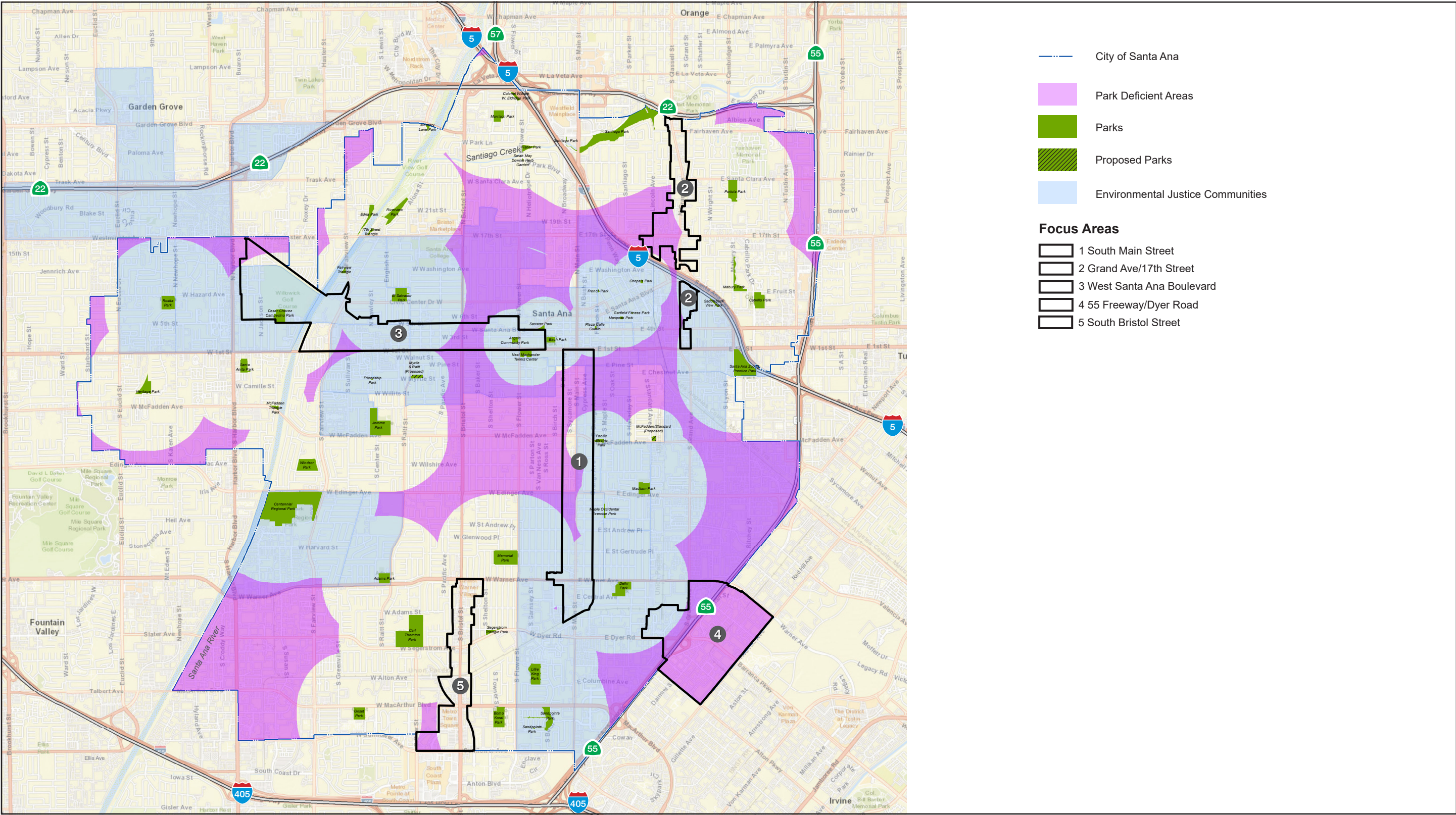
Source: City of Santa Ana, 2021

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Figure 5.15-3 - Public Park Deficiency with Overlays



Source: City of Santa Ana, 2021

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5.15.3 Regulatory Requirements and General Plan Policies

5.15.3.1 REGULATORY REQUIREMENTS

- RR REC-1 Residential development associated with the General Plan Update will be required to comply with the provisions of the Municipal Code Chapter 35, Article IV (Residential Development Fee). Residential development is mandated to pay fees, dedicate land in lieu thereof, or a combination of both for the purpose of preserving recreational facilities in the City.
- RR REC-2 As a condition of approval of a final subdivision map for any subdivision containing more than fifty (50) parcels proposed for residential use, subdividers may be required to dedicate land for recreational purposes in accordance with Chapter 34, Article VIII (Regulations for Dedication of Land for Park or Recreational Purposes) of the City's Municipal Code. Dedication of land shall promote the general standard of providing two acres of property devoted to parks and recreational purposes for each thousand persons residing within the City of Santa Ana.

5.15.3.2 GPU POLICIES AND IMPLEMENTATION ACTIONS

The following are relevant policies and implementation actions of the Santa Ana General Plan Update, which may reduce recreation impacts. Policy and implementation action revisions since the Draft PEIR are shown in track changes. Note that implementation actions were not listed at all in the Draft PEIR and have been added to more fully describe GPU components that will mitigate impacts. Note that only new implementation measures since the DPEIR public circulation have been highlighted. The track changes as shown below reflect the changes since the Draft PEIR was publicly circulated on August 3, 2020. The comprehensive, track changes listing of Policies and Implementation Actions in Appendix B-a show the changes since October 2020, when the GPU was presented to the Planning Commission. With the changes as marked, both versions represent the most up-to-date GPU Policies and Implementation Actions.

Community Element

Goal 1: Provide opportunities for public and private recreation and cultural programs that meet the needs of Santa Ana's diverse population.

- **Policy 1.1 Access to Programs.** Provide and maintain access to recreational and cultural programs to serve residential areas. Prioritize the provision of programs for residents living within park deficient or environmental justice areas.
- **Policy 1.2 Community Input.** Engage residents and community facility users to provide input for facility improvements and programming.
- **Policy 1.3 Equitable Programs.** Encourage recreational and cultural programs and activities of local interest that are inclusive and affordable to all.

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- **Policy 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 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 1.6 Recreation on Private Property.** Promote the development and use of privately-owned recreation and entertainment facilities ~~that are affordable that help and~~ meet the needs of Santa Ana residents.
- **Policy 1.7 Connections to Facilities.** Support efforts to connect residents and visitors to local and regional cultural, educational, and natural environments.
- ~~P~~
- **Policy 1.8 Developer Involvement.** Promote developer participation in the provision of community facilities to meet the recreational needs of residents.
- **Policy 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 1.11 Program Incentives.** Incentivize use of privately owned property to promote recreation, health, wellness, and art and culture programs.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 1.5. Alternative Facilities.** In park deficient and environmental justice 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

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other resources for potential park system acquisition, expansion to existing parks, and/or parks development opportunity within the community.

- **Implementation Action 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.
- **Implementation Action 2.1. Facilities to Support Lifelong Learning.** For areas in park deficient and environmental justice areas, 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.
- **Implementation Action 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 parks, programs and services that support health and wellness.

Land Use Element

Goal 1: Provide a land use plan that improves quality of life and respects our existing community.

- **Policy 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 boundaries.
- **Policy 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.

Goal 2: Provide a balance of land uses that meet Santa Ana's diverse needs.

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

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Goal 4: Support a sustainable Santa Ana through improvements to the built environment and a culture of collaboration.

- **Policy 4.9 Recreational Amenities.** Encourage public, private, and commercial recreational facilities in areas that are park and open space deficient.
- **Implementation Action 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.
- **Implementation Action 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.

Open Space Element

Goal 1: Provide an integrated system of accessible parks, recreation facilities, trails, and open space to serve the City of Santa Ana. safe, accessible, sustainable, and diverse park and facility system with recreational opportunities accessible to all residents.

- **Policy 1.1 Park Master Plan.** Create and regularly update a citywide parks master plan to provide guidance for the acquisition, development, maintenance and programming of parks, recreation facilities, trails and open space to meet community needs. ~~maintain a Santa Ana parks master plan that incorporates data on need, demographics, and health outcomes.~~
- **Policy 1.2 Parks and Recreation ~~System-Network~~.** ~~Support~~Establish a comprehensive and integrated network of parks, open space, and recreational facilities, trails and open space 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 1.3 Park Standard.** 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 ~~Achieve~~ a minimum of two acres per 1,000 residents in the City.
- **Policy 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 an environmental justice areas.
- **Policy 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.

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- **Policy 1.64 Park Access and Connectivity.** Create a Safe Routes to Parks program that e~~Establishes~~ and enhances ~~options for residents to access~~ to existing and new park and recreation facilities through safe walking, bicycling, and transit routes.
- **Policy 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 1.5 Development Amenities. Ensure all new development provides open space and effectively integrates pedestrian and multi-modal travelways to promote a quality living environment.~~
- ~~Policy 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, and seating.~~
- **Policy 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 1.8 Creative Solutions. Develop creative and flexible solutions to create infill parks in neighborhoods where traditional pocket, neighborhood, and community parks are not feasible.~~ **Policy 1.59 New Development Amenities.** Ensure all new development provides open space and effectively integrates parks, open space, and park deficient and environmental justice areas, prioritize the creation and dedication of new public parkland over the collection of impact fees, pedestrian and multi-modal travelways to promote a quality living environment
- **Policy 1.108 Creative Solutions for Deficiencies.** Develop creative and flexible solutions to ~~create infill~~ parks in neighborhoods where traditional pocket, neighborhood, and community parks are not feasible. Provide greenspace and recreation activities in neighborhoods where traditional parks are not feasible. Encourage public, private, and commercial recreational facilities in areas that are park deficient.
- **Policy 1.119 Funding Sources.** Explore and pursue all available funding, including nontraditional funding sources, for ~~park~~the acquisition, facility development, of parkland, the development of park facilities, programming, and maintenance of existing and new parks. Set aside park funding to have monies on hand to acquire and develop parkland when opportunities arise and to leverage grant options, including nontraditional finding sources.
- **Policy 1.120 Shared Use.** Collaborate with school districts, faith-based communities, and community serving organizations to expand shared use facilities through cooperative agreements, to maximize recreation options, as well as pursuing multiple use strategies of publicly owned land.
- ~~Policy 1.11 Accessibility. Design new and renovated existing parks, recreation facilities, and trails to provide access to residents of all physical abilities.~~

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[\[OS Policy 1.11 moved to OS Policy 2.14\]](#)

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

Goal 2: Provide a system of parks, open spaces, and community centers that are well-maintained, safe, and health environments for all users. welcoming, inclusive, safe, and healthy parks, recreation facilities, and activities to serve Santa Ana residents regardless of age, ability, or income.

- **Policy 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 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 2.3 Active Lifestyles.** Invest in parks, trails and programs that support sports, fitness, active transportation, and active lifestyles.
- **Policy 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 2.7 Healthy Indoor 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 2.8. Hazardous Materials.** Reduce or eliminate, where feasible, the use of pesticides and herbicides that negatively impact human health at park facilities and publicly accessible open spaces.
- **Policy 2.9 Safety Through Design.** Create a safe environment through implementation of Crime Prevention through Environmental Design (CPTED) principles in public spaces.
- **Policy 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 2.11 Neighborhood Engagement. 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 2.12 Park and Facility Character.** Ensure that parks and recreation facilities incorporate placemaking elements that foster social connections and community pride such as art, landscaping, murals, and amenities and facilities that reflect site character and local needs.

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- **Policy 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 2.14 ADA Accessibility.** Design new and renovate existing parks, recreation facilities, and trails to provide access to residents of varying abilities, including people with special needs.
- **Policy 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.
- ~~**Policy 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 2.4 Urban Forest.** Maintain, preserve, and enhance the City's urban forest as an environmental, economic, and aesthetic resource to improve residents' quality of life.~~
- ~~**Policy 2.6 Facility Maintenance.** Ensure all park facilities and open spaces are well maintained.~~

Goal 3: Maintain and manage parks, recreation facilities, trails, and open space to sustain city assets and support safe use. 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 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 3.2 Linking Development.** Promote bicycle and pedestrian linkages and amenities throughout new and existing development to promote use of alternative modes of transportation and active lifestyles.~~

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

~~**Policy 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.~~

- **Policy 3.1 Park and Facility Maintenance.** Ensure all parks, recreation facilities and open spaces are well maintained.
- **Policy 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.

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- [**Policy 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 of their lifecycles. This would include deferred maintenance and new capital projects.](#)
- **Policy 3.68 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.
- **Implementation Action 1.1. Park Needs Assessment and Master Plan.** Create, adopt, and implement a park needs assessment and master plan 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. to attain a park land standard of 2 acres per 1,000 residents.
- [**Implementation Action 1.2. Interagency Forum.** Convene an interagency forum to take a coordinate approach to evaluating the feasibility for converting City-owned properties to parkland, with special focus in park deficient and environmental justice areas.](#)
- [**Implementation Action 1.3. 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.](#)
- **Implementation Action 1.4. 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.
- [**Implementation Action 1.5. -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.](#)
- **Implementation Action 1.6. Development Fees.** Evaluate the fees required by the City's Residential Development Fee Ordinance and adjust them to better reflect current costs and needs. Update requirements regarding where fees are spent.
- **Implementation Action 1.7. Public Parkland Requirements for Larger Residential Projects.** Update the Residential Development Fee Ordinance for Larger Residential Projects to require public parkland within a 10-minute walking distance of the new residential projects. Consider allowing developers a reduction in on-site open space by giving credits for park development or the provision of private park land. Incentivize the creation of public parks that exceed City requirements, especially within park deficient and environmental justice 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.

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- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 1.10. New Parkland.** 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 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.
- **Implementation Action 2.8. 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.

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- Implementation Action 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.
- Implementation Action 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.
- Implementation Action 2.11. Program and Facility Fees. Evaluate program and facility rental fees to ensure that programming is sustainable, and fees are equitable and appropriate.
- Implementation Action 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.
- Implementation Action 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.
- Implementation Action 3.3. Asset Management. Forecast and track facility lifecycle to plan for the ongoing needs for park and landscaping renovations and replacement.

Public Services Element

Goal 1: Provide quality and efficient facilities that are adequately funded, accessible, safe, and strategically located.

- **Policy 1.5 Community Benefit.** Collaborate with community stakeholders to expand recreational, educational, cultural opportunities, promote active lifestyles, and maximize community benefit.
- **Implementation Action 1.8. Secondary Use of City-Owned Infrastructure.** Identify City water facilities that can accommodate recreation and/or public art amenities.

Urban Design Element

Goal 3: Create and maintain safe and attractive travelways through coordinated streetscape design.

- **Policy 3.6 Linear Park System.** Support open space improvements along roadways and non-vehicular paths, such as bike or multi-use trails, to ~~create~~connect linear ~~greenways leading~~ open space that connect to a network of parks and activity areas throughout the City.
- **Policy 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 3.11 Urban Forest.** Create a diverse urban forest with a variety of sustainable trees in medians, parkways, public open space, and private development.

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Goal 4: 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 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 4.5 Open Space at Nodes.** Promote creative, multi-purpose public space within nodes, major development projects, and people places.
- **Implementation Action 3.6. Linear Parks and Trails.** Within the parks master plan, address needs for off-street trails, including new linkages and linear park improvements, such as lighting, security features, signage, and enhanced landscaping.

Circulation/Mobility Element

Goal MCE-3: A safe, balanced, and integrated network of travelways for non-motorized modes of transportation that connects people to activity centers, inspiring healthy and active lifestyles.

- **Policy MCE-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.
- **Implementation Action 3.5. Safe Routes to Schools and Parks.** Develop and pursue implementation of a Safe Routes to School Plan and a Safe Routes to Parks Plan.

5.15.4 Environmental Impacts

The following impact analysis addresses thresholds of significance related to recreational facilities. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.15-1: The General Plan Update would generate additional residents that would increase the use of existing park and recreational facilities such that substantial physical deterioration of the facility could occur or be accelerated. [Threshold R-1]

The projected increase in population from the General Plan Update would lead to additional demands on parks and recreational facilities in the full buildout scenario. Table 5.15-4, *Existing and Proposed Public Parkland and Recreational Facilities*, outlines the existing and proposed park acreages.

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Table 5.15-4 Existing and Proposed Public Parkland and Recreational Facilities

	Santa Ana Plan Area Population	Parkland Standard (acres per 1,000 resident)	Public Parkland and Recreational Resources (acres)	Deficiency (acres)	Total Acres/ 1,000 residents
Existing Conditions (2019)	334,774	2	551.41 ¹	118.14	1.65
Full Buildout (2045)	431,629		563.78 ²	299.48	1.30

Source: Ono 2020.

Notes:

¹ This does not include the two future parks or private parks owned and maintained by homeowner associations.

² This includes the two future parks but does not include private parks owned and maintained by homeowner associations.

The projected full buildout would result in an estimated population growth of up to 96,855 additional residents. Table 5.15-4, shows the resultant ratio to buildout of the General Plan Update based on existing public parks and recreational facilities in addition to two newly funded parks. Existing and funded parks and recreational facilities would amount to approximately 563.78 acres. Without acquisition of new parkland, population growth related to buildout of the GPU would equate to 1.30 acres per 1,000 residents., which is 0.70 acres below the City's parkland standard.

Without provision of new parks and recreational facilities, buildout in accordance with the GPU, therefore, would exacerbate an existing shortage of recreation facilities. Additional park acres and recreational facilities/community centers would be needed to meet the increasing population demand (Ono 2020). The deficiency would be reduced by park and recreational amenities developed and maintained by the City in addition to private parks and recreational facilities owned and maintained by homeowner associations.

The extent to which the City can plan and implement future planned parks, trails, and other recreational facilities is related to funding availability. As described above, the Quimby Act establishes a funding mechanism for parkland acquisition for all local jurisdictions. Future development in accordance with the General Plan Update would be required to dedicate land or pay in-lieu impact fees per Chapter 34, Article VIII, and Chapter 35, Article IV, of the City's Municipal Code, as well as the Quimby Act. Collected park development impact fees would fund future park acquisition and development and assist the City in achieving the parkland standard of two acres per 1,000 residents. Table 5.15-1 shows the City's current park dedication standard. New residential development, therefore, would be required to meet the City's standards. Park and recreational improvements would also be funded by grants and CDBG funds. Provision of parks under implementation of the GPU, would occur over time.

Although required park fees for development could be sufficient to fund new parks and improvements, there is a lack of available land and lack of land designated as Open Space within the General Plan Update to develop new parks or expand existing facilities. The City of Santa Ana is essentially built-out. The increased demand on existing parks could result in physical deterioration of these resources. Moreover, based on the geographic analysis of park deficiencies in the City, residential development accommodated within the focus areas would be expected to further exacerbate park deficiencies within existing neighborhoods, including disadvantaged environmental justice areas. The lack of existing parks is particularly apparent for the 55 Fwy./Dyer Road focus

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area. The City acknowledges that if new parks are not provided in this area, the increased park demand generated by development in this focus area could spill over to the City of Tustin's parks and recreation facilities resulting in accelerated deterioration.

The extended Community Outreach Program conducted by the City from January through May 2021 culminated in the addition of numerous GPU policies and specific Implementation Actions to address existing park deficiencies and minimize the adverse impact of GPU implementation to parks and open space (as detailed in Section 5.15.3 *Regulatory Requirements and General Plan Policies*). These policies and actions specifically address the park master-planning, distribution of parks, serving disadvantaged communities, timing for park development, facility maintenance, and community input and partnerships. Implementation Action 1.7 requires and update of the Residential Development Fee Ordinance for Larger Residential Project to require public parkland within a 10-minute walking distance of the new residential projects.

The City is also committed to working closely with cities located adjacent to General Plan Focus Areas when preparing the City of Santa Ana's Parks and Recreation Master Plan to ensure that the Dyer/55 Focus Area and other growth areas of the City provide additional recreation, parks, and core services essential in making complete communities. In addition, the City is committed to identifying additional funding sources from new development projects to either procure land for parks or collect in-lieu fees for parks to minimize the potential for impacts on adjacent communities with regards to parks and open space utilization. The inclusion of publicly accessible open space is also part of the City of Santa Ana's development standards for residential/ mixed use development projects to address open space and recreation needs.

In summary, compliance with regulatory requirements and implementation of proposed GPU policies and Implementation Actions would reduce the potential impact of the proposed GPU on park facilities and minimize the impact on existing facilities. Given the existing park deficiencies and scale of development in park deficient areas, however, the project's impact would be potentially significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.15-2: Population increases resulting from project implementation would increase recreation demands that would require construction or expansion of recreation facilities that would have potential to result in physical impacts to the environment. [Threshold R-2]

The proposed General Plan Update guides growth and development within the City and is not a development project. However, it is estimated that the General Plan buildout would generate the demand for approximately 564 acres of parkland and recreational facilities assumed to serve the 2045 population. As discussed throughout this section, however, the City is essentially built-out and very limited vacant land is available to be developed with new recreational opportunities. Some undeveloped land could be improved or properties redeveloped to provide residents with new recreational opportunities Parks are also a permitted use under other land use designations (e.g., residential land uses), which could result in the development of recreational facilities outside of park-designated parcels.

Development and operation of new or expanded recreational facilities may have an adverse physical effect on the environment, including impacts relating to air quality, biological resources, lighting, noise, and traffic.

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Environmental impacts associated with the construction of new and/or expansions of existing recreational facilities in accordance with the proposed land use plan are addressed in the respective topical sections of the Draft PEIR (e.g., please see Aesthetics, Air Quality/GHG, Biological Resources, Cultural Resources, Noise, Transportation section of Chapter 5, *Environmental Analysis*) and this Draft Recirculated PEIR. Impacts). Addressing the site-specific impacts of these parks at this time would be beyond the scope of this programmatic EIR. Furthermore, potentially adverse impacts to the environment that may result from the expansion of parks, recreational facilities, and multiuse trails pursuant to buildout of the proposed land use plan would be less than significant upon the implementation of the General Plan Update's goals, policies, and actions and existing federal, state, and local regulations. Subsequent environmental review for future individual park developments would also be required. Although construction and/or expansion of new parks and recreation facilities would be subject to GPU policies and implementation actions; regulatory requirements, and future, project-specific environmental review under CEQA, it is still possible that development of such facilities could result in significant, unavoidable impacts. Consequently, impacts from the General Plan Update relating to new and/or expanded recreational facilities would be potentially significant.

Level of Significance Before Mitigation: Impact 5.15-2 would be potentially significant.

5.15.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.15-2.

Without mitigation, the following impact would be **potentially significant**:

- **Impact 5.15-1:** The General Plan Update would generate additional residents that would increase the use of existing park and recreational facilities such that substantial physical deterioration of the facility could occur or be accelerated. [Threshold R-1]
- **Impact 5.15-2:** Population increases resulting from project implementation would increase recreation demands that would require construction or expansion of recreation facilities that would have potential to result in physical impacts to the environment. [Threshold R-2]

5.15.6 Mitigation Measures

As described above, GPU Policies and Implementation Actions have been supplemented with specific actions and timing parameters to address parks and open space impacts. No feasible mitigation measures beyond these policies and implementation actions have been identified.

5.15.7 Level of Significance After Mitigation

Impacts 5.15-1 and 5.15-2 would remain significant and unavoidable.

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5.15.8 References

- California Department of Finance (DOF). 2019, May. Report E-1: Population Estimates for Cities, Counties, and the State: January 1, 2018 and 2019.
<http://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-1/>.
- Ono, Ron (administrative services manager). 2020, March 9. Questionnaire Response. Park, Recreation, and Community Services Agency. [EIR Appendix J-b]
- Santa Ana, City of. 2010, January. General Plan Open Space, Parks and Recreation Element.
https://www.santa-ana.org/sites/default/files/Documents/OpenSpace_Parks_Rec.pdf.
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https://library.municode.com/ca/santa_ana/codes/code_of_ordinances.
- . 2020. Parks Location. Parks, Recreation and Community Services. <https://www.santa-ana.org/parks/parks-location>.

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6. Significant Unavoidable Adverse Impacts

At the end of Chapter 1, *Executive Summary*, is a table that summarizes the impacts, mitigation measures, and levels of significance before and after mitigation. Mitigation measures would reduce the level of impact, but the following impacts would remain significant, unavoidable, and adverse after mitigation measures are applied:

Air Quality

- **Impact 5.2-1, Inconsistency with Air Quality Management Plan.** The General Plan Update (GPU) would be inconsistent with the South Coast Air Quality Management Plan (AQMP) because buildout under the GPU would exceed the population estimates assumed for the AQMP and would cumulatively contribute to the nonattainment designations of the South Coast Air Basin (SoCAB).

Incorporation of Mitigation Measure AQ-2 into future development projects for the operation phase would contribute to reduced criteria air pollutant emissions associated with buildout of the GPU. Additionally, goals and policies in the GPU would promote increased capacity for alternative transportation modes and implementation of transportation demand management strategies. However, due to the magnitude and scale of the land uses that would be developed, no mitigation measures are available that would reduce operation and construction impacts below South Coast Air Quality Management District (AQMD) thresholds. In addition, the population and employment assumptions of the AQMP would continue to be exceeded until the AQMP is revised and incorporates the projections of the General Plan Update. Therefore, Impact 5.2-1 would remain significant and unavoidable.

- **Impact 5.2-2, Construction Emissions.** Buildout of the General Plan Update would occur over a period of approximately 25 years or longer. Construction activities associated with buildout of the GPU could generate short-term emissions that exceed the South Coast AQMD's significance thresholds during this time and cumulatively contribute to the nonattainment designations of the SoCAB. Implementation of Mitigation Measure AQ-1 would reduce criteria air pollutant emissions from construction-related activities to the extent feasible. However, construction time frames and equipment for site-specific development projects are not available at this time, and there is a potential for multiple development projects to be constructed at one time, resulting in significant construction-related emissions. Therefore, despite adherence to Mitigation Measure AQ-1, Impact 5.2-2 would remain significant and unavoidable.
- **Impact 5.2-3, Long-Term Emissions.** Buildout in accordance with the GPU would generate long-term emissions that would exceed South Coast AQMD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the SoCAB. Mitigation Measure AQ-2, in addition to the goals and policies of the GPU, would reduce air pollutant emissions to the extent feasible. The measures and policies covering topics such as expansion of the pedestrian and bicycle networks, promotion of public and active transit, and support to increase building energy efficiency and energy conservation would also

6. Significant Unavoidable Adverse Impacts

reduce criteria air pollutants in the city. Further, compared to existing baseline year conditions, emissions of NO_x, CO, and SO_x are projected to decrease from current levels despite growth associated with the GPU.

However, Impact 5.2-3 would remain significant and unavoidable due to the magnitude of the overall land use development associated with the GPU. Contributing to the nonattainment status would also contribute to elevated health effects associated with criteria air pollutants.

- **Impact 5.2-4, Exposure of Sensitive Receptors to Toxic Air Contaminants.** Buildout of the GPU could expose sensitive receptors to substantial concentrations of toxic air contaminants. Buildout could result in new sources of criteria air pollutant emissions and/or toxic air contaminants (TACs) near existing or planned sensitive receptors. Review of development projects by South Coast AQMD for permitted sources of air toxics (e.g., industrial facilities, dry cleaners, and gasoline dispensing facilities) would ensure that health risks are minimized. Additionally, Mitigation Measure AQ-3 would ensure mobile sources of TACs not covered under South Coast AQMD permits are considered during subsequent, project-level environmental review by the City of Santa Ana. Individual development projects would be required to achieve the incremental risk thresholds established by South Coast AQMD, and TACs would be less than significant.

However, implementation of the GPU would generate TACs that could contribute to elevated levels in the air basin. Though individual projects would achieve the project-level risk threshold of 10 per million, they would nonetheless contribute to the higher levels of risk in the SoCAB. Therefore, the GPU's cumulative contribution to health risk is significant and unavoidable.

- **Impact 5.2-5, Exceeding Localized Significance Thresholds.** Because existing sensitive receptors may be close to project-related construction activities and large emitters of on-site operation-related criteria air pollutant emissions, construction and operation emissions generated by individual development projects have the potential to exceed South Coast AQMD's Local Significance Thresholds (LSTs). Mitigation Measures AQ-1 and AQ-2 would reduce the regional construction and operation emissions associated with buildout of the GPU and therefore also result in a reduction of localized construction- and operation-related criteria air pollutant emissions to the extent feasible. However, even with the implementation of these mitigation measures, Impact 5.2-5 would remain significant and unavoidable.

Cultural Resources

- **Impact 5.4-1, Historic Resources.** Generally, potential impacts to historical resources resulting from future projects developed pursuant to the GPU would be mitigated by the City's fulfillment of its statutory responsibilities under CEQA. However, for certain development pursuant to the GPU, the City may determine that significant impacts to historical resources cannot be avoided. The City shall require, at a minimum, that the affected historical resources be thoroughly documented before issuance of any permits. Though the possible demolition or alteration of a historical resource cannot be mitigated to a less than significant level, recordation of the resource would reduce significant adverse impacts to historical

6. Significant Unavoidable Adverse Impacts

resources to the maximum extent feasible. Nevertheless, impacts to historical resources would be significant and unavoidable.

Greenhouse Gas Emissions

- **Impact 5.7-1, Greenhouse Gas Emissions.** Implementation of Mitigation Measure GHG-1 would ensure that the City is tracking and monitoring the City's GHG emissions in order to chart a trajectory to achieve the long-term, year 2050, GHG reduction goal set by Executive Order S-03-05. However, at this time, there is no plan past 2030 that achieves the long-term GHG reduction goal established under Executive Order S-03-05. As identified by the California Council on Science and Technology, the state cannot meet the 2050 goal without major advancements in technology. Advancements in technology in the future could provide additional reductions and allow the State and City to meet the 2050 goal, but in the meantime, Impact 5.7-1 would be significant and unavoidable.

Noise

- **Impact 5.12-1, Construction Noise.** Mitigation Measure N-1 would reduce potential noise impacts during construction to the extent feasible. However, due to the potential for proximity of construction activities to sensitive uses, the number of construction projects occurring simultaneously, and the potential duration of construction activities, Impact 5.12-1 could result in a temporary substantial increase in noise levels above ambient conditions. Therefore, impacts would remain significant and unavoidable. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects analyzed at the project level.
- **Impact 5.12-2, Traffic Noise.** Mitigation Measure N-2 would reduce potential interior noise impacts to future noise-sensitive receptors below the thresholds. However, there are no feasible or practical mitigation measures available to reduce project-generated traffic noise to less than significant levels for existing residences along affected roadways. No individual measures and no set of feasible or practical mitigation measures are available to reduce project-generated traffic noise to less than significant levels in all cases. Thus, traffic noise would remain a significant and unavoidable impact. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects analyzed at the project level.

6. Significant Unavoidable Adverse Impacts

Population and Housing

- **Impact 5.13-1, Population and Housing Growth.** Full buildout of the GPU would result in a population of 431,629, and the city's 2045 population growth would be approximately 20 percent greater than the Orange County COG's 2045 projections. Furthermore, the city's housing units at buildout would be 115,053, which exceeds the Orange County COG's projection by 38 percent. There are no feasible mitigation measures to mitigate the population and housing growth at buildout, and impacts would be significant and unavoidable.

Recreation

- **Impact 5.15-1, Physical Deterioration of Parks and Recreational Facilities.** Compliance with regulatory requirements and implementation of proposed GPU policies and implementation actions would reduce the potential impact of the proposed GPU on existing park facilities. However, because of the existing park deficiencies and scale of development in park-deficient areas, the project's impact would be significant and unavoidable.
- **Impact 5.15-2, Impacts from Construction or Expansion of Parks and Recreational Facilities.** Population increases resulting from project implementation would increase recreation demands and require construction or expansion of recreation facilities that would have potential to result in physical impacts to the environment.

7. Alternatives to the General Plan Update

7.1 INTRODUCTION

This Recirculated Draft PEIR section updates the Draft PEIR to include a new project alternative to address the significant Recreation impact of the General Plan Update (GPU) as proposed (see Section 5.15, *Recreation*). In accordance with CEQA, the Reduced Park Demand Alternative has been defined and evaluated for its potential to lessen or eliminate significant impacts of the proposed project.

7.1.1 Purpose and Scope

The California Environmental Quality Act (CEQA) requires that an environmental impact report (EIR) include a discussion of reasonable project alternatives that would “feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives” (CEQA Guidelines § 15126.6[a]). As required by CEQA, this chapter identifies and evaluates potential alternatives to the General Plan Update (GPU).

Section 15126.6 of the CEQA Guidelines explains the foundation and legal requirements for the alternatives analysis in an EIR. Key provisions are:

- “[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.” (15126.6[b])
- “The specific alternative of ‘no project’ shall also be evaluated along with its impact.” (15126.6[e][1])
- “The no project analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” (15126.6[e][2])
- “The range of alternatives required in an EIR is governed by a ‘rule of reason’ that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.” (15126.6[f])
- “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should

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consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)” (15126.6[f][1]). “Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.” (15126.6[f][2][A])C

- “An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.” (15126.6[f][3])

For each development alternative, this analysis:

- Describes the alternative.
- Analyzes the impact of the alternative as compared to the GPU.
- Identifies the impacts of the project that would be avoided or lessened by the alternative.
- Concludes whether the alternative would eliminate a significant, unavoidable impact compared to the proposed GPU.
- Assesses whether the alternative would meet most of the basic project objectives.
- Evaluates the comparative merits of the alternative and the project.

According to Section 15126.6(d) of the CEQA Guidelines, “[i]f an alternative would cause...significant effects in addition those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.”

7.1.2 Project Objectives

As described in Section 3.2, the following objectives have been established for the GPU and will aid decision makers in their review of the project, the project alternatives, and associated environmental impacts.

1. Promote infill development while respecting and protecting established neighborhoods.
2. Optimize high density residential and mixed-use development that maximizes potential use of mass transit.
3. Provide locations for new housing development that maximizes affordable housing opportunities to achieve both City and regional housing goals.
4. Facilitate new development at intensities sufficient to generate community benefits and attract economic activity.
5. Provide housing and employment opportunities at an urban level of intensity at the city’s edge.
6. Introduce mixed-use urban villages and encourage experiential commercial uses that are more walkable, bike friendly, and transit oriented.
7. Develop opportunities for live/work, artist spaces, and small-scale manufacturing.

7. Alternatives to the General Plan Update

7.1.3 Significant Impacts of the Project

As discussed above, a primary consideration in defining project alternatives is their potential to reduce or eliminate significant impacts of the GPU. The impact analysis in Chapter 5 of this Draft PEIR concludes that implementation of the GPU would result in the following significant impacts.

7.1.3.1 SIGNIFICANT UNAVOIDABLE IMPACTS

Air Quality

- **Impact 5.2-1** The General Plan Update would be inconsistent with the South Coast Air Quality Management Plan (AQMP) because buildout under the plan would exceed the population estimates assumed for the AQMP and would cumulatively contribute to the nonattainment designations of the South Coast Air Basin (SoCAB).
- **Impact 5.2-2** Construction activities associated with buildout of the General Plan Update would generate short-term emissions that exceed the South Coast Air Quality Management District (AQMD's) significance thresholds and cumulatively contribute to the nonattainment designations of the SoCAB.
- **Impact 5.2-3** Buildout in accordance with the General Plan Update would generate long-term emissions that would exceed South Coast AQMD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the SoCAB.
- **Impact 5.2-4** Buildout of the General Plan Update could expose sensitive receptors to substantial concentrations of toxic air contaminants.
- **Impact 5.2-5** Construction and operation emissions generated by individual development projects have the potential to exceed South Coast AQMD's Local Significance Thresholds.

Cultural Resources

- **Impact 5.4-1** The proposed General Plan Update would allow development in areas that have historic resources identified by previous cultural resource surveys. Development in these areas would, therefore, potentially cause the disturbance of historic resources in the plan area.

Greenhouse Gas Emissions

- **Impact 5.7-1** Implementation of the proposed General Plan Update would result in a decrease in GHG emissions in horizon year 2045 in comparison to existing conditions but may not meet the long-term GHG reduction goal under Executive Order S-03-05.

7. Alternatives to the General Plan Update

Noise

- **Impact 5.12-1** Due to the potential for proximity of construction activities to sensitive uses, the number of construction projects occurring simultaneously, and the potential longevity of construction activities, construction noise could result in a temporary substantial increase in noise levels above ambient conditions.
- **Impact 5.12-2** Buildout of the individual land uses and projects for implementation of the General Plan Update would expose existing residences to project-generated traffic noise.

Population and Housing

- **Impact 5.13-1** At buildout, the General Plan Update would result in an increase in population and housing units that exceeds the Orange County COG projections by approximately 20 and 38 percent, respectively. There are no feasible mitigation measure and impacts would be significant and unavoidable.

Recreation

- **Impact 5.15-1:** The General Plan Update would generate additional residents that would increase the use of existing park and recreational facilities such that substantial physical deterioration of the facility could occur or be accelerated.
- **Impact 5.15-2** Population increases resulting from project implementation would increase recreation demands that would require construction or expansion of recreation facilities that would have potential to result in physical impacts to the environment.

7.1.3.2 SIGNIFICANT UNTIL MITIGATED IMPACTS

Air Quality

- **Impact 5.2 6** Industrial land uses accommodated under the General Plan Update could create other emissions, such as those leading to objectionable odors, that would adversely affect a substantial number of people.

Biological Resources

- **Impact 5.3-1** Buildout under the General Plan Update could impact plant and animal species and habitat that are sensitive or protected under federal and/or California regulations.
- **Impact 5.3-4** Implementation of the General Plan Update could impact wildlife corridors and nesting sites.

7. Alternatives to the General Plan Update

Cultural Resources

- **Impact 5.4-2** Development consistent with the General Plan Update could impact archeological resources.

Geology and Soils

- **Impact 5.6-4** Paleontological resources could be impacted by development resulting from the implementation of the General Plan Update.

Noise

- **Impact 5.12-3** The potential for sensitive receptors within the plan area to be exposed to annoying and/or interfering levels of vibration from commercial or industrial operations and existing railroad lines, operations-related vibration impacts associated with implementation of the GPU are considered potentially significant.

Tribal Cultural Resources

- **Impact 5.17-1** Buildout consistent with the General Plan Update could adversely impact tribal cultural resources that are listed in a register.
- **Impact 5.17-2** Buildout consistent with the General Plan Update could adversely impact tribal cultural resources pursuant to criteria in Public Resources Code Section 5024.1(c).

7.2 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

“Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts” (CEQA Guidelines § 15126.6[c]).

7.2.1 Alternative Mobility Element: Roadway Classifications

The proposed Mobility Element as included in the GPU evolved over a long process and coordination with the Orange County Transportation Authority (OCTA). During this process, alternative packages of arterial roadway classifications were considered that involved roadways included in OCTA’s Master Plan of Arterial Highways (MPAH). The majority of reclassifications proposed were identified for bicycle facility safety improvements in the City’s Safe Mobility Santa Ana (SMSA) Plan prepared in 2016. Most of the reclassifications identified were for roadways where bicycle and pedestrian safety improvements would require roadway reconfiguration and a reduction in the number of existing or planned travel lanes. Many of the SMSA recommendations across the city have already been or are in the process of being implemented along arterial roadways without reducing the number of lanes.

7. Alternatives to the General Plan Update

A cursory review of two optional roadway reclassification packages was conducted to determine whether these optional plans would have the potential to eliminate significant impacts of the proposed GPU and meet most the project objectives. It was determined that a detailed evaluation of this alternative was not needed to provide a reasonable range of EIR project alternatives. Transportation/traffic impacts of the proposed project were determined to be less than significant—vehicle miles traveled per service population (VMT/SP) falls below the significance threshold for the GPU without mitigation. Although these alternatives may have some potential to reduce VMT (by reducing the number of travel lanes for some roadways) and thereby also potentially reduce air quality, greenhouse gas (GHG), and traffic noise impacts, these alternatives would also result in more inconsistencies with the MPAH and result in more traffic congestion. Although traffic congestion is no longer a CEQA consideration, the GPU sets standards for level of service that will be considered by decision-makers. Moreover, the Reduced Density and RTP/SCS were determined to provide meaningful alternatives to consider for the potential of reducing air quality, GHG, and traffic noise impacts.

7.2.2 Reduced Traffic Noise Alternative

Since traffic noise was determined to be a significant, unavoidable impact of the proposed GPU, a project alternative designed to eliminate this significant impact was considered. The required reduction in traffic volumes, or average daily traffic (ADT), along roadways where buildout of the GPU would result in significant increases in noise were determined. These estimates were compared to the surrounding land uses that would generate ADTs for the respective roadway segments. Table 7-1, *Roadway Segments with Significant Traffic Noise Increases*, lists the roadways that would experience significant noise impacts under the GPU. Traffic noise along these roadways would both exceed the noise standard and abut sensitive land uses (e.g., residences, schools, hospitals).

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Table 7.1 Roadway Segments with Significant Traffic Noise Increases

Roadway	Segment	Existing ADT	Future 2045 ADT w/GPU	Existing Traffic Noise Level at 50 feet (dBA CNEL)	Future 2045 Traffic Noise Level at 50 feet w/GPU (dBA CNEL)	Traffic Noise Increase, dBA CNEL
Harbor Boulevard	Segerstrom Avenue to MacArthur Boulevard	47,125	56,900	71.9	77.6	5.7
ADT Reduction Required ¹			21,500			
Sensitive Receptors: Hotel						
Main Street	17th Street to 20th Street	32,044	43,000	72.5	74.1	1.6
ADT Reduction Required			42,000			
Sensitive Receptors: Church						
Segerstrom Avenue	Fairview Street to Raitt Street	19,326	29,600	71.2	73.6	2.4
ADT Reduction Required ¹			24,000			
Sensitive Receptors: Residences						
Bristol Street	Edinger Avenue to Warner Avenue	37,238	54,500	74.4	76.3	1.9
ADT Reduction Required ¹			50,000			
Sensitive Receptors: Schools and Residences						
Flower Street	Warner Avenue to Segerstrom Avenue	15,378	33,300	70.1	73.9	3.8
ADT Reduction Required ¹			19,500			
Sensitive Receptors: Residences						
Main Street	MacArthur Boulevard to Sunflower Avenue	23,692	29,000	73.1	74.7	1.6
ADT Reduction Required ¹			28,500			
Sensitive Receptors: Residences						

7. Alternatives to the General Plan Update

Table 7.1 Roadway Segments with Significant Traffic Noise Increases

Roadway	Segment	Existing ADT	Future 2045 ADT w/GPU	Existing Traffic Noise Level at 50 feet (dBA CNEL)	Future 2045 Traffic Noise Level at 50 feet w/GPU (dBA CNEL)	Traffic Noise Increase, dBA CNEL
Grand Avenue	Edinger Avenue to Warner Avenue	17,735	37,300	71.1	75.7	4.7
ADT Reduction Required ¹			18,000			
Sensitive Receptors: Library						
Warner Avenue	Grand Avenue to Red Hill Avenue	22,435	34,600	73.1	75.4	2.4
ADT Reduction Required ¹			28,500			
Sensitive Receptors: Church, Dyer Focus Area						
Dyer Road	Red Hill Avenue to Pullman Street	31,248	57,500	74.1	78.0	3.9
ADT Reduction Required ¹			46,000			
Sensitive Receptors: Hotel						
Main Street	La Veta Avenue to Memory Lane	31,004	50,200	73.8	75.9	2.1
ADT Reduction Required ¹			43,000			
Sensitive Receptors: Hospital, Residences at 200 feet – traffic noise would attenuate to 64 dBA CNEL at residences.						

Source: Based on FHWA's traffic noise prediction model methodology using roadway volumes, vehicle mix, time of day splits, and number of lanes provided by IBI 2020.

Note: **Bold** values = significant traffic noise increase

¹ Indicates approximate ADT reduction needed to reduce impact to be less than significant.

7. Alternatives to the General Plan Update

As summarized in the table, several segments would experience significant, unavoidable traffic noise impacts without the land use changes proposed under the GPU. Since significant traffic noise could not be avoided, further evaluation of this alternative was not deemed meaningful.

7.3 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Given the significant, unavoidable impacts identified for the proposed GPU, project alternatives with the potential to substantially reduce development were identified for further review. Significant GPU impacts such as long-term air quality impacts, GHG emissions, population and housing impacts, and recreation impacts directly relate to the level of development anticipated in the city. At the programmatic level of this GPU EIR, site-specific information regarding potential significant historical impacts is not available, and therefore an alternative could not be customized to reduce that impact. A reduced intensity alternative would also be expected to reduce the significant traffic noise impact (as discussed above). The following development alternatives to the proposed GPU were chosen for further analysis:

- **No Project/Current General Plan Alternative.** The evaluation of the No Project alternative is required by CEQA. The No Project alternative is typically defined as the development scenario that would occur if the project as proposed is not adopted. For a General Plan, the No Project alternative is typically represented by the jurisdiction's existing general plan, including land use plan, circulation master plan, and policies included in each general plan element. Therefore, this alternative assumes that the existing General Plan, with various adoption dates for different elements between 1982 and 2014, would remain in effect. This existing General Plan also reflects amendments, including new Specific Plans and special zoning areas that have been adopted up through the Notice of Preparation for this GPU.
- **Reduced Intensity Alternative** (Reduced capacity for the 55 Fwy/Dyer Road and South Bristol focus areas). Under the GPU, the only areas that include revisions to land use designations to accommodate new growth are within the five focus areas. The majority of remaining growth, as detailed in Table 3-8, would occur within previously approved Specific Plans and Special Zoning areas. A nominal amount of growth is assumed in other areas of the city and would not require land use amendments. The Reduced Intensity Alternative would substantially reduce development capacity in two focus areas, 55 Fwy/Dyer Road and South Bristol Street, that accommodate approximately 65 percent of the housing unit growth and 72 percent of the nonresidential use (by building square footage) of the growth projected for the combined focus areas under the GPU. Section 3.3.2.5, *General Plan Buildout Scenario*, provides a discussion of factors considered in determining assumed buildout densities for the GPU. For the focus areas, the forecast buildout is based on development at approximately 80 percent of the maximum allowed development for each respective land use designation. For this alternative, development of the 55 Fwy/Dyer Road and South Bristol focus areas would be reduced to approximately 50 percent of the maximum allowed per the land use designations. As detailed in Table 7-5, this alternative would reduce housing units by 5,383 and would reduce total building square footage by approximately 4.2 million square feet distributed between these two focus areas. This alternative would also reduce population by 19,825 and jobs by 9,184. Overall, this alternative would reduce the housing growth accommodated by the GPU land use changes by approximately 18 percent and reduce nonresidential building square footage by approximately 27 percent.

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- **2020 RTP/SCS Consistency Alternative** (Reduced development for RTP/SCS population/housing consistency). This alternative was developed to evaluate an update to the General Plan that would be consistent with the population and housing projections used to develop the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), now referred to as Connect SoCal (adopted May 7, 2020). Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The plan embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. As evaluated in Section 5.13-7, *Population and Housing*, the proposed GPU would result in a significant population and housing impact because development under the GPU would substantially exceed the projections used in Connect SoCal. SCAG uses locally prepared population and housing projections to develop the regional plan. For the City of Santa Ana, those projections were provided by the Orange County Council of Governments as prepared by the Center for Demographic Research. The population/housing figures reflected for Santa Ana in the regional plan for 2045 are: population, 360,100; total housing units: 80,100; and total jobs, 176,400. Projections for the RTP/SCS (Connect SoCal) use land use designations as approved in the adopted General Plan. The employment projections are similar for the GPU and RTP/SCS scenarios, but the RTP/SCS projections for population and housing units are substantially lower than GPU projections (18 percent and 27 percent lower, respectively). The RTP/SCS alternative, therefore, represents the least development intensive project alternative evaluated for this Draft PEIR.

This alternative would substantially reduce the growth that would be accommodated within the focus areas under the GPU. New growth within the focus areas would total 6,380 housing units and approximately 3.7 million square feet of nonresidential uses instead of a total additional 23,955 housing units and approximately 15.7 million square feet of nonresidential uses in the focus areas. This alternative distributes anticipated development throughout the focus areas and the approved Specific Plan/Special Zoning areas. For purposes of this alternative, it is assumed that a development cap would be used to limit total growth to the projections shown.

Subsequent updates of the regional plan would incorporate updated land use from the GPU and resolve the substantial discrepancy between the population and housing projections. Note also that the Draft PEIR concludes that the GPU is consistent with the goals of the RTP/SCS (see Table 5.10-1). This alternative has been defined to eliminate the significant impact associated with substantial population growth that is inconsistent with the regional plan, and to reduce other significant, growth-related impacts (AQ/GHG, traffic noise) associated with the GPU as proposed.

- **Reduced Park Demand Alternative.** As described in Section 5.15, *Recreation*, a substantial level of controversy surrounds the potential impact of GPU implementation on the recreation opportunities in Santa Ana. Numerous comments on this issue were received during the comment period for the Draft PEIR as well as during the Planning Commission public hearing (November 9, 2020). The community emphasized that the City's park standard of 2 acres per 1,000 residents is not achieved under existing conditions and that development allowed under the GPU would further exacerbate park and open space

7. Alternatives to the General Plan Update

shortages. Residents also noted that park access is not equitable throughout the city, and several disadvantaged neighborhoods would be disproportionately affected by high-density development and higher use of limited parks in their communities. The City of Tustin commented on the lack of parks to serve proposed high density in development in the 55 Fwy/Dyer Road focus area and the potential for new residents to use parks in Tustin.

The areas proposed for substantial new residential development under the GPU were compared to the distribution of existing parks—location, size, and demand—to define the *Reduced Park Demand Alternative* (see Figures 5.1-2, *Park Deficiency Areas with Neighborhoods*, and 5.15-3, *Park Deficiency w/Overlays*). Unless new parks are constructed, growth in any of the focus areas would exacerbate the current level of park deficiency either in or adjacent to disadvantaged, environmental justice (EJ) communities. The *Reduced Park Demand Alternative*, therefore reduces residential growth by 11,225 units by eliminating or reducing residential land uses and intensity in the five focus areas. Overall, nonresidential square footage would be reduced by a total of approximately 2.8 million square feet within the focus areas compared to the proposed GPU. The nonresidential square footage would increase, however, in two of the focus areas: 17th Street/Grand Avenue by 697,000 square feet, and South Bristol by 739,000 square feet. New residential growth under this alternative would largely be in currently planned areas that are generally near a substantial number of existing park facilities. Some residential growth would be introduced into two focus areas at substantially lower intensities to reduce the potential impact on park facilities.

- **South Main Street.** This focus area would remain as currently planned as a commercial corridor (GC) instead of Urban Neighborhood (UN) and District Center (DC) to reduce intensity so that there are no additional units constructed beyond existing conditions; there is a significant presence of EJ communities that are served by parks, but the existing parks are very small.
- **South Bristol Focus Area.** District Center (DC) changed to Urban Neighborhood (UN) to reduce intensity by 2,273 units on sites that are more than a half mile from existing parks (generally west of Bristol and south of MacArthur Boulevard).
- **Grand Avenue/17th Street.** Stay as currently planned as a lower density residential (LR-7) and commercial corridor (GC) to reduce intensity so that there are no additional units constructed beyond existing conditions, because much of the focus area is more than a half mile from existing parks.
- **West Santa Ana Boulevard.** This focus area would remain as currently planned with lower density residential (LR-7) instead of Urban Neighborhood (UN) to reduce intensity so that no additional units are constructed beyond existing conditions; there is a significant presence of EJ communities with areas that are farther than a half mile from existing parks in this focus area.
- **55 Freeway/Dyer Road.** District Center (DC) changed to Urban Neighborhood (UN) to reduce intensity by 5,381 units because a majority of the area is more than a half mile from existing parks in Santa Ana; the reduced intensity would also reduce potential impacts on adjacent parkland in Tustin.

Table 7-2 summarizes the three alternatives described above selected for evaluation. They have been determined to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic

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objectives of the GPU, but which may avoid or substantially lessen any of the significant effects. Note that Recreation has been added as an “Environmental Reason Considered” for each of the development project alternatives. In the Draft PEIR, Recreation was not determined to be a significant, unavoidable impact of the proposed project, but it has been updated in this Recirculated Draft PEIR to be classified as significant. Each of the development alternatives reduces development in comparison to the proposed GPU, and therefore has the potential to reduce recreation impacts. The discussion to consider the potential for these alternatives to reduce/eliminate this significant impact has been included in the updated table.

Table 7-2 Project Alternatives Description

Alternative Description	Environmental Reasons Considered
<p>Proposed Project</p> <p>The GPU is the comprehensive update of the Santa Ana General Plan. As detailed in Chapter 3, <i>Project Description</i>, land use changes in the proposed GPU focus on five areas in Santa Ana that offer opportunities for enhanced growth and flexibility and are suited to assist in achieving the core vision established for the GPU. These focus areas are:</p> <ul style="list-style-type: none"> • South Main Street • Grand Avenue/17th Street • West Santa Ana Boulevard • 55 Freeway/Dyer Road • South Bristol Street 	N/A
<p>No Project/Current General Plan Alternative</p> <p>The buildout for the current GP includes the full entitlement of the specific plan and special zoning areas. The current GP focuses more on employment growth in the focus areas instead of housing growth.</p>	Required by CEQA
<p>Reduced Intensity Alternative</p> <p>Development potential for the two focus areas with the greatest growth capacity under the GPU is reduced under this alternative to approximately 50 percent of the maximum densities allowed by their respective land use designations for both housing units and nonresidential building square footage. The combined reduction for the 55 Freeway /Dyer Rd. and South Bristol Street focus areas under this alternative would be 5,383 housing units and 4.3 MSF. There would be no changes to any other proposed land use or to the Circulation-Mobility Element under the Reduced Intensity Alternative in comparison to the proposed GPU. All other assumptions remain the same as for the proposed GPU.</p>	<p>Potential to reduce significant impacts related to:</p> <ul style="list-style-type: none"> • Air Quality • Greenhouse Gas Emissions • Noise • Population and Housing • Recreation
<p>2020 RTP/SCS Consistency Alternative</p> <p>To achieve the lower projections reflected in the RTP/SCS, this alternative would substantially reduce the growth that would be accommodated within the focus areas under the GPU. Instead of a total additional 23,955 housing units and approximately 15.7 MSF within the focus areas, new growth within the focus areas would total 6,380 housing units and approximately 3.7 MSF nonresidential uses (reducing the growth by over 70 percent for both housing and nonresidential building SF relative to the GPU for focus areas). New development would primarily take place through pipeline projects that are already approved within the Specific Plan and Special Zoning Districts. The total estimated buildout of these projects, however, could not be completely accommodated. As shown in Table 7-6, this alternative, therefore, distributes anticipated development throughout the focus areas and the approved Specific Plans/Special Zoning areas. For purposes of this alternative, it is assumed that a development cap would be used to limit total growth to the projections shown. Existing development entitlements would not be reduced, but development would be monitored and capped at the levels shown. The market would drive the precise location and timing of projects until the maximum cap was reached.</p>	<p>Potential to reduce significant impacts related to:</p> <ul style="list-style-type: none"> • Population and Housing • Air Quality • Greenhouse Gas Emissions • Noise • Recreation

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Table 7-2 Project Alternatives Description

Alternative Description	Environmental Reasons Considered
<p>Reduced Park Alternative</p> <p>As with the other project alternatives, in comparison to the proposed GPU, the Reduced Park Alternative would only modify land uses within the five focus areas. It would result in an overall 47 percent reduction in housing units within the focus areas, from 23,955 units for the proposed GPU to 12,730 units for this project alternative. No residential units beyond existing units would be constructed in the following focus areas: 17th Street/Grand Avenue, South Main Street, and West Santa Ana Boulevard. In comparison to the proposed GPU, new residential units in the 55 Freeway/Dyer Road focus area would be reduced by 5,381 units (for a remaining total of 4,571 new units), and new units in the South Bristol Street focus area would be reduced by 2,273 units for a total of 3,220 new units at buildout. Nonresidential square footage would be reduced by approximately 2.8 MSF total within the focus areas in comparison to the proposed GPU.</p> <p>The reduction in units within the 55 Freeway/Dyer Road and South Bristol Street focus areas would be from those areas characterized as more than ½ mile from park facilities.</p>	<p>Potential to reduce significant impacts related to:</p> <ul style="list-style-type: none"> • Air Quality • Greenhouse Gas Emissions • Noise • Population and Housing • Recreation
<p>Notes: MSF = million square feet. RTP/SCS = Southern California Association of Governments' Regional Transportation Plan and Sustainable Communities Strategy.</p>	

An EIR must identify an “environmentally superior” alternative, and where the No Project Alternative is identified as environmentally superior, the EIR is required to identify as environmentally superior an alternative from among the others evaluated. Each alternative's environmental impacts are compared to the GPU and determined to be environmentally superior, neutral, or inferior. Section 7.7 identifies the environmentally superior alternative. The proposed GPU (preferred land use alternative) is analyzed in detail in Chapter 5 of the Draft PEIR and this Recirculated Draft PEIR.

7.3.1 Alternatives Comparison

The following statistical analysis provides a summary of general socioeconomic buildout projections for the three land use alternatives and the proposed GPU. The analysis provides a buildout scenario that would occur if all the areas of the city were to develop to the probable capacities yielded by each respective project alternative. Table 7-3 identifies citywide information regarding housing unit, population, and job projections, and also provides the resultant jobs-to-housing ratio for each alternative. Tables 7-4 through 7-6 provide detailed comparisons between the GPU and the proposed alternatives for housing units, nonresidential square footage, and jobs by focus area and Specific Plan/Special Zoning area.

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Table 7-3 Project Alternatives: Socioeconomic Comparison

	General Plan Update	No Project/Current General Plan Alternative	Reduced Intensity Alternative	2020 RTP Population/Housing Consistency Alternative	Reduced Park Demand Alternative
Dwelling Units	115,053	101,858	109,670	83,538	103,828
Population	431,629	383,202	411,804	352,941	389,518
Jobs	170,416	182,003	161,232	172,545	164,482
Jobs-to-Housing Ratio	1.5	1.8	1.5	2.1	2.4

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Table 7-4 No Project/Current General Plan vs. Proposed GPU: Buildout Comparison

PLANNING AREA	Proposed General Plan Update			No Project/Current General Plan			Net Difference		
	Housing Units	Bldg. Sq. Ft. ³	Jobs	Housing Units	Bldg. Sq. Ft. ¹	Jobs	Housing Units	Bldg. Sq. Ft. ¹	Jobs
FOCUS AREAS	23,955	15,684,285	35,044	10,760	18,350,142	46,631	-13,195	2,665,857	11,587
55 Freeway/Dyer Road	9,952	6,142,283	13,302	2,730	6,518,616	19,145	-7,222	376,333	5,843
Grand Avenue/17th Street	2,283	703,894	1,622	517	2,419,688	5,360	-1,766	1,715,794	3,738
South Bristol Street	5,492	5,082,641	11,192	3,260	4,136,428	11,078	-2,232	-946,213	-114
South Main Street	2,308	946,662	2,151	1,641	2,428,499	4,947	-667	1,481,837	2,796
West Santa Ana Boulevard	3,920	2,808,805	6,777	2,612	2,846,911	6,101	-1,308	38,106	-676
SPECIFIC PLAN / SPECIAL ZONING	20,524	16,958,445	39,702	20,524	16,958,445	39,702	0	0	0
Adaptive Reuse Overlay Zone ²	1,260	976,935	2,567	1,260	976,935	2,567	0	0	0
Bristol Street Corridor Specific Plan	135	143,139	282	135	143,139	282	0	0	0
Harbor Mixed Use Transit Corridor Specific Plan	4,622	1,967,982	1,578	4,622	1,967,982	1,578	0	0	0
MainPlace Specific Plan	1,900	2,426,923	5,380	1,900	2,426,923	5,380	0	0	0
Metro East Mixed-Use Overlay Zone	5,551	4,685,947	12,258	5,551	4,685,947	12,258	0	0	0
Midtown Specific Plan	607	1,818,253	4,615	607	1,818,253	4,615	0	0	0
Transit Zoning Code	6,449	4,939,266	13,022	6,449	4,939,266	13,022	0	0	0
ALL OTHER AREAS OF THE CITY³	70,574	40,325,086	95,670	70,574	40,325,086	95,670	0	0	0
CITYWIDE TOTAL	115,053	72,967,816	170,416	101,858	75,633,673	182,003	-13,195	2,665,857	11,587

Source: Santa Ana 2020.

¹ Only includes nonresidential building square footage.

² 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.

³ The City has included an assumption for growth on a small portion (5 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.

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Table 7-5 Reduced Intensity Alternative vs. Proposed GPU: Buildout Comparison

PLANNING AREA	Proposed General Plan Update			Reduced Intensity Alternative			Difference		
	Housing Units	Bldg. Sq. Ft. ³	Jobs	Housing Units	Bldg. Sq. Ft. ¹	Jobs	Housing Units	Bldg. Sq. Ft. ¹	Jobs
FOCUS AREAS	23,955	15,684,285	35,044	18,572	11,474,939	25,860	-5,383	-4,209,347	-9,184
55 Freeway/Dyer Road	9,952	6,142,283	13,302	6,220	3,838,927	8,987	-3,732	-2,303,356	-4,315
Grand Avenue/17th Street	2,283	703,894	1,622	2,283	703,894	1,622	0	0	0
South Bristol Street	5,492	5,082,641	11,192	3,841	3,176,651	6,323	-1,651	-1,905,990	-4,869
South Main Street	2,308	946,662	2,151	2,308	946,662	2,151	0	0	0
West Santa Ana Boulevard	3,920	2,808,805	6,777	3,920	2,808,805	6,777	0	0	0
SPECIFIC PLAN / SPECIAL ZONING	20,524	16,958,445	39,702	20,524	16,958,445	39,702	0	0	0
Adaptive Reuse Overlay Zone ²	1,260	976,935	2,567	1,260	976,935	2,567	0	0	0
Bristol Street Corridor Specific Plan	135	143,139	282	135	143,139	282	0	0	0
Harbor Mixed Use Transit Corridor Specific Plan	4,622	1,967,982	1,578	4,622	1,967,982	1,578	0	0	0
MainPlace Specific Plan	1,900	2,426,923	5,380	1,900	2,426,923	5,380	0	0	0
Metro East Mixed-Use Overlay Zone	5,551	4,685,947	12,258	5,551	4,685,947	12,258	0	0	0
Midtown Specific Plan	607	1,818,253	4,615	607	1,818,253	4,615	0	0	0
Transit Zoning Code	6,449	4,939,266	13,022	6,449	4,939,266	13,022	0	0	0
ALL OTHER AREAS OF THE CITY³	70,574	40,325,086	95,670	70,574	40,325,086	95,670	0	0	0
CITYWIDE TOTAL	115,053	72,967,816	170,416	109,670	68,758,470	161,232	-5,383	-4,209,347	-9,184

Source: Santa Ana 2020.

¹ Only includes nonresidential building square footage.

² 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.

³ The City has included an assumption for growth on a small portion (5 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.

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Table 7-6 2020 RTP Population/Housing Consistency Alternative vs. Proposed GPU: Buildout Comparison

PLANNING AREA	Proposed General Plan Update			2020 RTP Consistency Alternative			Difference		
	Housing Units	Bldg. Sq. Ft. ³	Jobs	Housing Units	Bldg. Sq. Ft. ¹	Jobs	Housing Units	Bldg. Sq. Ft. ¹	Jobs
FOCUS AREAS	23,955	15,684,285	35,044	6,380	13,421,155	28,428	-17,575	-2,263,130	-6,616
55 Freeway/Dyer Road	9,952	6,142,283	13,302	1,221	5,666,453	8,898	-8,731	-475,830	-4,404
Grand Avenue/17th Street	2,283	703,894	1,622	561	1,400,741	3,568	-1,722	-696,847	-1,946
South Bristol Street	5,492	5,082,641	11,192	220	1,577,511	3,337	-5,272	-3,505,130	-7,855
South Main Street	2,308	946,662	2,151	1,720	1,685,978	3,455	-588	739,316	1,304
West Santa Ana Boulevard	3,920	2,808,805	6,777	2,658	3,090,472	9,170	-1,262	281,667	2,393
SPECIFIC PLAN / SPECIAL ZONING	20,524	16,958,445	39,702	6,584	17,495,238	48,447	-13,940	536,793	8,745
Adaptive Reuse Overlay Zone ²	1,260	976,935	2,567	260	976,935	3,043	-1,000	0	476
Bristol Street Corridor Specific Plan	135	143,139	282	135	143,139	282	0	0	0
Harbor Mixed Use Transit Corridor Specific Plan	4,622	1,967,982	1,578	1,324	1,944,731	3,615	-3,298	-23,251	2,037
MainPlace Specific Plan	1,900	2,426,923	5,380	1,900	2,426,923	5,380	0	0	0
Metro East Mixed-Use Overlay Zone	5,551	4,685,947	12,258	844	3,094,749	9,255	-4,707	-1,591,198	-3,003
Midtown Specific Plan	607	1,818,253	4,615	607	1,885,065	4,824	0	66,812	209
Transit Zoning Code	6,449	4,939,266	13,022	1,514	7,023,697	22,048	-4,935	2,084,431	9,026
ALL OTHER AREAS OF THE CITY³	70,574	40,325,086	95,670	70,574	40,325,086	95,670	0	0	0
CITYWIDE TOTAL	115,053	72,967,816	170,416	83,538	71,241,479	172,545	-31,515	-1,726,337	2,129

Source: Santa Ana 2020.

¹ Only includes nonresidential building square footage.

² 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.

³ The City has included an assumption for growth on a small portion (5 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.

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Table 7-7 Reduced Park Demand Alternative vs. Proposed GPU: Buildout Comparison

PLANNING AREA	Proposed Project			Alternative Reduced Park Demand Alternative			Difference		
	Housing Units	Bldg. Sq. Ft. ³	Jobs	Housing Units	Bldg. Sq. Ft. ¹	Jobs	Housing Units	Bldg. Sq. Ft. ¹	Jobs
FOCUS AREAS	23,955	15,684,285	35,044	12,729	11,911,102	29,110	-11,226	-2,773,184	-5,934
55 Freeway/Dyer Road	9,952	6,142,283	13,302	4,571	3,838,927	8,987	-5,381	-2,303,356	-4,315
Grand Avenue/17th Street	2,283	703,894	1,622	561	1,400,741	3,568	-1,722	696,847	1,946
South Bristol Street	5,492	5,082,641	11,192	3,219	3,176,651	6,323	-2,273	-1,905,990	-4,869
South Main Street	2,308	946,662	2,151	1,720	1,685,978	3,455	-588	739,316	1,304
West Santa Ana Boulevard	3,920	2,808,805	6,777	2,658	2,808,805	6,777	-1,262	0	0
SPECIFIC PLAN / SPECIAL ZONING	20,524	16,958,445	39,702	20,524	16,958,445	39,702	0	0	0
Adaptive Reuse Overlay Zone ²	1,260	976,935	2,567	1,260	976,935	2,567	0	0	0
Bristol Street Corridor Specific Plan	135	143,139	282	135	143,139	282	0	0	0
Harbor Corridor Specific Plan	4,622	1,967,982	1,578	4,622	1,967,982	1,578	0	0	0
Main Place Specific Plan	1,900	2,426,923	5,380	1,900	2,426,923	5,380	0	0	0
Metro East Overlay Zone	5,551	4,685,947	12,258	5,551	4,685,947	12,258	0	0	0
Midtown Specific Plan	607	1,818,253	4,615	607	1,818,253	4,615	0	0	0
Transit Zoning Code	6,449	4,939,266	13,022	6,449	4,939,266	13,022	0	0	0
ALL OTHER AREAS OF THE CITY ³	70,574	40,325,086	95,670	70,574	40,325,086	95,670	0	0	0
CITYWIDE TOTAL	115,053	72,967,816	170,416	103,828	70,194,633	164,482	-11,226	-2,773,184	-5,934

Source: City of Santa Ana, 2020.

¹. Only includes nonresidential building square footage.

². 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.

³. The City has included an assumption for growth on a small portion (5 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.

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7.3.2 Environmental Impact Comparison

Table 7-8, *Environmental Impact Comparison: Project Alternatives*, assesses the relative impact for each project alternative in comparison to the GPU. All of the environmental categories evaluated for the GPU in this Draft PEIR are compared. A determination is provided whether the impact is “less than” (LT), “greater than” (GT), or “similar to” (S) the respective environmental impact for the GPU. The table also provides a notation if an alternative is expected to eliminate a significant impact of the proposed project (reduce its severity to less than significant).

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Table 7-8 Environmental Impact Comparison

Impact	No Project/Current General Plan Alternative	Reduced Intensity Alternative	2020 RTP/SCS Consistency Alternative	Reduced Park Demand Alternative
Aesthetics	<p>Under this alternative, fewer housing units and more nonresidential square footage would be developed in the focus areas compared to the GPU. Land use designations and ultimate buildout outside of the focus areas would be the same as for the GPU. Overall, within the focus areas, the No Project alternative would be characterized by lower density and a reduced visual scale in comparison to the GPU. A discussion of the maximum densities and heights each of the five focus areas is provided below:</p> <ul style="list-style-type: none">• Grand Avenue/17th Street. The current General Plan allows density up to 1.0 FAR in General Commercial and Professional and Administrative Office designations (and up to 1.15 FAR is allowed in the <i>Orange County Register</i> site) and 7 du/acre in Low Density Residential designation and heights generally up to 35 feet above grade (not taking into account Specific Development districts within the focus area).• 55 Freeway/Dyer Road. The current General Plan allows density up to 1.7 FAR in District Center designation and heights generally up to 35 feet above grade (not taking into account Specific Development districts within the focus area).• South Bristol Street. The current General Plan allows density up to 1.0 FAR in District Center and General Commercial designations and 15 du/acre in Medium Density Residential and heights generally up to 35 feet above grade (not taking into account Specific Development districts within the focus area).• South Main Street. The current General Plan allows density up to 1.0 FAR in the District Center and General Commercial designations and 7 du/acre in Low Density Residential designation and heights generally up to 35 feet above grade (not taking into account Specific Development districts and within the focus area).• West Santa Ana Boulevard. The current General Plan allows density up to 1.5 FAR in the Urban Neighborhood designation and 15 du/acre in the Medium Density Residential designation and heights generally up to 35 feet above grade (not taking into account Specific Development districts within the focus area). <p>The GPU introduces new policies that would protect neighborhood character and landmarks as well as enhance new public spaces. In comparison to the current General Plan, the updated Circulation-Mobility Element in the GPU reclassifies several arterials to provide new pedestrian and bikeway improvements. These improvements, along with implementing required design guidelines, are expected to enhance the livability and character of several communities. Since this alternative would reduce building intensity and heights in the focus areas, it would be anticipated to reduce light and glare impacts. Overall, aesthetic impacts for the No Project alternative would be considered less than aesthetic impacts for the GPU.</p> <p>LT</p>	<p>In comparison to the proposed GPU, this alternative would only modify land uses within the 55 Freeway/Dyer Road and South Bristol Street focus areas. Housing units and nonresidential building space would both be reduced by approximately 30 to 35 percent relative to the GPU land uses for these two focus areas. Design guidelines and amenity requirements would be assumed not to change in comparison to the GPU. Similarly, the Circulation-Mobility Element and associated roadway classification, bike, pedestrian, and mass transit improvements and policies would be the same as for the GPU. The visual impact of this alternative, therefore, would be limited to two focus areas and would be expected to reduce both the overall footprint of development and building heights within these two areas (by approximately 30 percent relative to the GPU). Light and glare impact within the 55 Freeway /Dyer and South Bristol Street focus areas could also be expected to be reduced to some degree. Overall, however, the aesthetics impacts citywide would be similar to the proposed GPU.</p> <p>S</p>	<p>Overall, this alternative would substantially reduce development capacity, particularly for housing, relative to the proposed GPU. Citywide it would result in a 73 percent reduction in housing units at buildout and an approximately 14 percent reduction in nonresidential building space. As shown in Table 7-6, this alternative assumes that densities would be reduced throughout the city, including previously approved Specific Plan and Special Districts. Development intensity would be reduced in all the focus areas as well, resulting in a 27 percent reduction in allowed housing units in the focus areas and an approximately 2.5 percent reduction in nonresidential uses. In comparison to the GPU, this alternative—and visual character—would be much less residential. Approximately 17,500 fewer housing units would be built in the combined focus areas in comparison to the GPU. The approximately 6,300 new units that would be accommodated would be expected to be in lower profile buildings. The change in nonresidential space would not be as great, but would be substantially different for some areas in comparison to the GPU. Approximately 3.5 MSF less would be accommodated within the South Bristol Street focus area. This would limit the vision for this area as a new District Center and Urban Neighborhood. This alternative, however, would increase building square footage in the South Main Street and West Santa Ana Boulevard focus areas. Therefore, impacts to visual appearance would be reduced compared to the GPU.</p> <p>It is difficult to categorize the relative aesthetic impact of this alternative in comparison to the GPU. Development would be substantially reduced but also very different. It would dramatically reduce residential units citywide (by 31,515 units) in comparison to the GPU and decrease nonresidential space (approximately 2.26 MSF citywide) in comparison to the GPU. The limited new development in focus areas (and in comparison to the current General Plan) would limit opportunities and available funding to support some major amenities that would benefit aesthetics. Overall, for purposes of the Draft PEIR, the relative impact of this alternative has been determined to be similar. In reality, the character would be substantially different and not necessarily result in an impact less or greater than the proposed GPU.</p> <p>S</p>	<p>In comparison to the proposed GPU, this alternative would result in lower density development and a reduced residential scale. Changes relative to the proposed GPU would only occur in the focus areas. Residential development within three focus areas would be limited to existing conditions; therefore, aesthetic impacts in these communities (Grand Avenue/17th Street, South Main Street, and West Santa Ana Boulevard) would differ from the proposed project. Although fewer related aesthetic improvements could be anticipated, overall GPU policies related to aesthetics would still apply to these areas. Design guidelines and amenity requirements would be assumed not to change in comparison to the GPU. Similarly, the Circulation-Mobility Element and associated roadway classification, bike, pedestrian, and mass transit improvements and policies would be the same as for the GPU. Overall, the aesthetics impacts citywide would be similar to the proposed GPU.</p> <p>S</p>
Agriculture Resources	<p>The City is a highly urbanized area with its entire area nearly built out. Furthermore, according to the California Resource Agency’s Department of Conservation, the City does not have any significant agricultural resources. Therefore, no impacts to farmland would occur under the proposed project and no further analysis is required in the PEIR. The city has land designated or zoned for agricultural use but these lands constitute a very small percentage of the area of Santa Ana and are mainly in the outskirts of the city in the north and northeast and outside the focus areas. Furthermore, the city does not have any land designated or zoned for forestland, timberland, or timberland production. There would be no impacts from this alternative on agriculture, similar to the GPU.</p> <p>S</p>	<p>This alternative, similar to the No Project/Current General Plan alternative and the GPU, would have less than significant impacts to agricultural resources.</p> <p>S</p>	<p>This alternative, similar to the No Project/Current General Plan alternative and the GPU, would have less than significant impacts to agricultural resources.</p> <p>S</p>	<p>This alternative, similar to the No Project/Current General Plan alternative and the GPU, would have less than significant impacts to agricultural resources</p> <p>S</p>

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Impact	No Project/Current General Plan Alternative	Reduced Intensity Alternative	2020 RTP/SCS Consistency Alternative	Reduced Park Demand Alternative
Air Quality	<p>In comparison to the GPU, the No Project alternative is characterized by 1) more employment and 2) less housing development in the city.</p> <ul style="list-style-type: none">• The current General Plan is the basis for the SCAG growth model and therefore would not exceed the SCAG forecasts; however, as with the GPU, the substantial growth projected at buildout would exceed South Coast AQMD's AQMP regional significance thresholds, resulting in a significant, unavoidable impact.• Due to a substantial increase in employment (approximately 12,000 more in comparison to GPU buildout) as well as more dispersed housing in comparison to the proposed GPU, this alternative may increase vehicle miles traveled and related traffic air quality emissions. However, the GPU has policies that would encourage mixed use and infill development near focus areas and major travel corridors and would ultimately reduce VMT in the city.• Housing growth and a larger nonresidential building footprint could also result in exposing a greater number of sensitive receptors to pollutants concentrations from construction activity and other sources.• The land uses that have the potential to create objectionable odors would remain the same, causing a similar impact as existing conditions. <p>GT</p>	<p>This alternative would reduce housing development and nonresidential development projects within two focus areas of the city, resulting in fewer residents (by approximately 4 percent) and employees (by approximately 5.5 percent) compared to the GPU.</p> <ul style="list-style-type: none">• Decreasing the residential and nonresidential development footprint would decrease pollutants produced during construction and would decrease the amount of energy used in homes and businesses.• This alternative would reduce vehicle miles traveled and related traffic air quality emissions.• Decreased development footprint in the city may reduce exposure of sensitive receptors to pollutant concentrations.• The land uses that have the potential to create objectionable odors would remain the same, causing a similar impact as existing conditions. <p>Although this alternative reduces impacts, the reduction would not eliminate a significant impact of the GPU.</p> <p>LT (impact would remain significant)</p>	<p>This alternative would limit new development in the city to reflect consistency with the 2020 RTP/SCS projections. It would substantially reduce housing units and population and moderately increase nonresidential uses and employees.</p> <ul style="list-style-type: none">• Decreasing the residential development footprint would decrease pollutants produced during construction and would decrease the amount of energy used in homes.• Fewer people living in the city would generate fewer vehicle trips and reduce transportation emissions, reducing air quality impacts.• The land uses that have the potential to create objectionable odors would remain the same, causing a similar impact as existing conditions. <p>Although this alternative would reduce Air Quality impacts, it would not eliminate a significant impact of the GPU.</p> <p>LT (impact, however, would remain significant)</p>	<p>This alternative would reduce housing development and nonresidential development projects within the five focus areas of the city, resulting in fewer residents (by approximately 10 percent) and employees (by approximately 3 percent) compared to the GPU.</p> <ul style="list-style-type: none">• Decreasing the residential and nonresidential development footprint would decrease pollutants produced during construction and would decrease the amount of energy used in homes and businesses.• This alternative would reduce vehicle miles traveled and related traffic air quality emissions.• Decreased development footprint in the city may reduce exposure of sensitive receptors to pollutant concentrations.• The land uses that have the potential to create objectionable odors would remain the same, causing a similar impact as existing conditions. <p>Although this alternative reduces impacts, it would not eliminate a significant impact of the GPU.</p> <p>LT (impact would remain significant)</p>
Biological Resources	<p>In comparison to the GPU, the No Project alternative would be similarly characterized by infill development in a relatively built-out city. Whereas the GPU includes the development of more housing units, the No Project alternative includes more nonresidential square footage, and housing units are less densely developed and occupy larger lots. Therefore, it is anticipated that the resulting disturbance of land and biological resources would be similar. Furthermore, the open space and park areas would remain under the No Project alternative as well as the GPU. Therefore, impacts to biological resources would be similar.</p> <p>S</p>	<p>This alternative reduces housing units and nonresidential square footage in the 55 Freeway/Dyer Road and South Bristol Street focus areas. All other assumptions remain the same. The reduced development in two focus areas could result in a reduction of land disturbance, but alternatively, could result in lower profile development with larger building footprints. Overall disturbance would likely be similar to the proposed GPU. Moreover, the two subject focus areas are not characterized by native vegetation or sensitive habitat or species. The impact to biological resources would be similar to the proposed GPU.</p> <p>S</p>	<p>This alternative would substantially reduce housing development in the city and moderately reduce nonresidential development. As with the proposed GPU, sensitive resources (such as Santiago Creek) would be protected. The reduction in land development and related land disturbance, however, could be expected to reduce the potential to impact biological resources.</p> <p>LT</p>	<p>This alternative would not permit any increase in housing units within three of the five focus areas, reducing housing by 11,226 compared to the proposed GPU. It would also reduce nonresidential square footage by approximately 2.8 MSF. As with the proposed GPU, sensitive resources (such as Santiago Creek) would be protected. The reduction in land development and related land disturbance, however, could be expected to reduce the potential to impact biological resources.</p> <p>LT</p>
Cultural Resources	<p>In comparison to the GPU, the No Project alternative would result in a moderate increase to nonresidential building square footage and fewer housing units. With the exception of focus areas, however, land use designations and development potential would be the same as for the GPU. The potential to impact archaeological resources would be similar. As with the GPU, cultural resource impacts to historical resources would remain significant and unavoidable even with the implementation of the 1997 GP Land Use Element EIR mitigation measures.</p> <p>S</p>	<p>This alternative would result in less growth in the 55 Freeway/Dyer Road and South Bristol Street focus areas with all other assumptions remaining the same. Therefore, this alternative would have a slightly less impact on land disturbance and subsequently on cultural resources.</p> <p>LT (potential impact to historical resources, however, would remain significant)</p>	<p>The substantial reduction in development under the RTP/SCS alternative would reduce land disturbance and be expected to reduce the potential to impact cultural resources, including archaeological and historical resources. Potential impacts to historical resource, however, would remain significant.</p> <p>LT (potential impact to historical resources, however, would remain significant)</p>	<p>This alternative would limit housing development to existing conditions in the Grand Avenue/17th Street, South Main Street, and West Santa Ana Boulevard focus areas, and would also reduce housing density in the South Bristol and 55 Freeway/Dyer Road focus areas. Development potential for nonresidential square footage would also be minimally reduced. Therefore, it could be expected to reduce land development and potential disturbance to historical and archaeological resources.</p> <p>LT (potential impact to historical resources, however, would remain significant)</p>
Energy	<p>This alternative would result in an increase of approximately 2.6 MSF of nonresidential building square feet (approximately 3.5 percent increase in comparison to GPU) and a substantial reduction in allowable residential units compared to the GPU (13,195 fewer units). This alternative would reduce housing energy use and increase nonresidential building use in comparison to the GPU. It may reduce vehicle miles traveled and related fuel use. The No Project alternative would not include GPU policies to support the state's transition to a carbon-neutral economy. Overall, this alternative would increase energy in some areas and decrease other energy needs. Overall, energy impacts would be considered similar to the GPU.</p> <p>S</p>	<p>This alternative reduces new housing development and other nonresidential development in two focus areas: 55 Freeway /Dyer Road and South Bristol Street. This alternative would therefore reduce housing and nonresidential building energy use. Additionally, this alternative may decrease vehicle miles traveled and related fuel use. Overall this alternative would decrease energy impacts relative to the GPU, and as with the GPU, would be less than significant.</p> <p>LT</p>	<p>This alternative limits new development in the city to reflect consistency with the 2020 RTP/SCS projections. This alternative would result in a substantial reduction in residential units and a slight increase in nonresidential building square footage in the city. As a result, this alternative would reduce vehicle miles traveled and related energy use. This alternative would decrease energy use compared to the GPU, and as with the GPU, would be less than significant.</p> <p>LT</p>	<p>This alternative reduces new housing development and other nonresidential development. This alternative would therefore reduce housing and nonresidential building energy use. Additionally, this alternative may decrease vehicle miles traveled and related fuel use. Overall, this alternative would decrease energy impacts relative to the GPU, and as with the GPU, would be less than significant.</p> <p>LT</p>

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Impact	No Project/Current General Plan Alternative	Reduced Intensity Alternative	2020 RTP/SCS Consistency Alternative	Reduced Park Demand Alternative
Geology and Soils	<p>Similar to the GPU, the No Project alternative would be characterized by infill development in a relatively built-out city. In comparison to the GPU, the No Project alternative would result in a moderate increase in nonresidential building square footage and fewer housing units. With the exception of focus areas, however, land use designations and development potential would be the same as for the GPU. Whereas the GPU includes the development of more housing, the No Project alternative includes more nonresidential square footage and housing units that are less densely developed and occupy larger lots. Therefore, it is anticipated that the resulting disturbance of land would be similar. Exposure of new development to geological and soils hazards, including seismic shaking, landslides, erosion, liquefaction, and land subsidence, would be similar to the GPU. And as with the GPU, geotechnical and soils hazards would be mitigated to less than significant with implementation of existing regulatory measures, including compliance with the California Building Codes and National Pollutant Discharge Elimination System (NPDES) requirements and best management practices. Furthermore, as with the GPU, paleontological resource impacts would be mitigated to less than significant per the adopted mitigation in the 1997 GP Land Use Element EIR.</p> <p>S</p>	<p>This alternative reduces new housing development and other nonresidential development in two focus areas: 55 Freeway /Dyer Road and South Bristol Street. It would be expected to reduce potential geotechnical hazards associated with development in these focus areas and also expose fewer residents and employees As with the GPU, this alternative would comply with the same regulations summarized under the No Project/Current General Plan alternative. Impacts would be slightly less than the GPU.</p> <p>LT</p>	<p>The substantial reduction in development potential under the RTP/SCS alternative would reduce land disturbance and related, potential geotechnical hazards. Fewer residents and employees would be exposed to geotechnical and soils hazards. As with the GPU, this alternative would comply with the same regulations summarized under the No Project/Current General Plan alternative. Impacts would be slightly less than the GPU.</p> <p>LT</p>	<p>This alternative reduces new housing development and other nonresidential development in all of the five focus areas. It would be expected to reduce potential geotechnical hazards associated with development in these focus areas and also expose fewer residents and employees. As with the GPU, this alternative would comply with the same regulations summarized under the No Project/Current General Plan alternative. Impacts would be slightly less than the GPU.</p> <p>LT</p>
Greenhouse Gas Emissions	<p>Development in the city would comply with existing GHG regulations, CARB’s Scoping Plan, and the City’s Climate Action Plan adopted in December 2015. The increase in employment as well as more dispersed housing in comparison to the GPU would increase vehicle miles traveled and related GHG emissions in comparison to the GPU. This alternative, however, reduces the total housing units by approximately 13,000 units, which would reduce GHG emissions. In comparison to the No Project alternative, however, the GPU has policies that would encourage mixed use and infill development near focus areas and major travel corridors and would ultimately reduce VMT in the city. Overall GHG emissions would likely be greater under the No Project alternative and, as with the proposed project, would be significant and unavoidable.</p> <p>GT</p>	<p>This alternative reduces new housing development and other nonresidential development in two focus areas: 55 Freeway /Dyer Road and South Bristol Street. It would result in fewer residents and employees in comparison to the GPU. This alternative would reduce VMT in comparison to the GPU as well as reduce GHG emissions generated by building energy use. Overall, this alternative would reduce GHG impacts relative to the GPU, but the GHG impact would remaining significant and unavoidable.</p> <p>LT (impact would remain significant)</p>	<p>This alternative would limit new development in the City to reflect consistency with the 2020 RTP/SCS projections. It would substantially reduce housing units and population, and moderately increase nonresidential uses and employees. It would reduce VMT-generated GHG emissions as well as building energy emissions. It would decrease GHG emissions compared to the GPU, but the GHG impact would remain significant and unavoidable.</p> <p>LT (impact would remain significant)</p>	<p>This alternative reduces new housing development and other nonresidential development in the five focus areas. It would result in fewer residents and employees in comparison to the GPU. This alternative would reduce VMT in comparison to the GPU as well as reduce GHG emissions generated by building energy use. Overall, this alternative would reduce GHG impacts relative to the GPU, but the GHG impact would remain significant and unavoidable.</p> <p>LT (impact would remain significant)</p>
Hazards and Hazardous Materials	<p>As with the GPU, the transport, use, and storage of hazardous materials would be mitigated by comprehensive regulations. Similarly, airport-related safety hazards would be mitigated by compliance with regulations and the County’s Airport Land Use Commission.</p> <p>The overall hazards impacts would therefore be similar to the GPU, and as with the GPU, would be less than significant.</p> <p>S</p>	<p>As with the GPU, the transport, use, and storage of hazardous materials would be mitigated by comprehensive regulations. Similarly, airport-related safety hazards would be mitigated by compliance with regulations and the County’s Airport Land Use Commission.</p> <p>The overall hazards impacts would therefore be similar to the GPU, and as with the GPU, would be less than significant.</p> <p>S</p>	<p>As with the GPU, the transport, use, and storage of hazardous materials would be mitigated by comprehensive regulations. Similarly, airport-related safety hazards would be mitigated by compliance with regulations and the County’s Airport Land Use Commission.</p> <p>The overall hazards impacts would therefore be similar to the GPU, and as with the GPU, would be less than significant.</p> <p>S</p>	<p>As with the GPU, the transport, use, and storage of hazardous materials would be mitigated by comprehensive regulations. Similarly, airport-related safety hazards would be mitigated by compliance with regulations and the County’s Airport Land Use Commission.</p> <p>The overall hazards impacts would therefore be similar to the GPU, and as with the GPU, would be less than significant.</p> <p>S</p>

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Impact	No Project/Current General Plan Alternative	Reduced Intensity Alternative	2020 RTP/SCS Consistency Alternative	Reduced Park Demand Alternative
Hydrology and Water Quality	<p>In comparison to the GPU, the No Project alternative would be similarly characterized by infill development in a relatively built-out city. Therefore, impacts to hydrology and water quality would be minimal. Furthermore, the open space and park areas would remain under the No Project alternative.</p> <p>As with the GPU, development under the current General Plan would be subject to the myriad of regulations that control potential flooding and water quality impacts. These include NPDES, which regulates discharges into waters of the United States and mandates MS4 permits (regulating municipal storm sewer systems) and Storm Water Pollution Prevention Plans (SWPPPs) requiring implementation of best management practices for potential surface water and water quality impacts related to project construction. Additionally, the No Project alternative would be subject to flood hazard development reviews in compliance with Chapter 7 (Floodplain Management Regulations) of the City's municipal code. Hydrology impacts, therefore, would be similar to the GPU.</p> <p>S</p>	<p>The reduced intensity alternative is a reduced version of the GPU. It would reduce new housing development and other nonresidential development in two focus areas: 55 Freeway/Dyer Road and South Bristol Street. These areas are already developed, and decreasing the intensity of development in these areas would not be expected to measurably alter pervious areas and related stormwater runoff. As with the GPU, this alternative would comply with the same regulations summarized under the No Project alternative. Impacts would be similar to the GPU.</p> <p>S</p>	<p>The substantial reduction in development potential under the RTP/SCS alternative would reduce land disturbance and potentially preserve more existing pervious land area, thereby decreasing stormwater flows relative to the GPU. This reduction, however, would likely be minimal and not change the overall level of the hydrology and water quality impact in comparison to the GPU. The 2020 RTP Consistency alternative would comply with the regulations as summarized under the No Project alternative. These regulations would mitigate the hydrology and water quality impact to less than significant. Impacts would be similar to the GPU.</p> <p>S</p>	<p>This alternative is a reduced version of the GPU and would result in fewer residents and employees in comparison to the GPU. These focus areas are already developed, and decreasing the intensity of development in these areas would not be expected to measurably alter pervious areas and related stormwater runoff. As with the GPU, this alternative would comply with the same regulations summarized under the No Project alternative. Impacts would be similar to the GPU.</p> <p>S</p>
Land Use and Planning	<p>As with the GPU, the No Project alternative would not divide established communities and would comply with the Airport Environs Land Use Plan (AELUP). The No Project alternative, however, lacks policies (and related land use changes) that promote the goals of SCAG's 2020-2045 RTP/SCS, such as:</p> <ul style="list-style-type: none">Encouraging the development of diverse housing types in areas that are supported by multiple transportation options.Supporting healthy and equitable communities.Increasing person and goods movement and travel choices within the transportation system.Reducing greenhouse gas emissions and improving air quality.Adapting to a changing climate and supporting an integrated regional development pattern and transportation network. <p>The GPU evolved to concentrate development in new areas to take advantage of mass transit and provide for mixed-use opportunities. Furthermore, the updated circulation <u>mobility</u> element aims at creating complete streets across the city to promote multimodal transportation and decrease VMT. Therefore, the No Project alternative would have a greater impact on land use and planning.</p> <p>GT</p>	<p>As with the GPU, the Reduced Intensity alternative would not divide established communities and would comply with the Airport Environs Land Use Plan (AELUP). This alternative reduces new housing development and other nonresidential development in two focus areas: 55 Freeway /Dyer Road and South Bristol Street. Under the GPU, these focus areas were designed to introduce higher intensity urban development and take advantage of their locations relative to mass transit improvements and service and existing opportunities to integrate and expand other major activity areas (South Coast Metro). The substantial reduction in opportunities for these areas would not as effectively meet the City's land use objectives of the regional RTP/SCS goals. Overall, this alternative would increase land use and planning impacts.</p> <p>GT</p>	<p>As with the GPU, the 2020 RTP/SCS Consistency alternative would not divide established communities and would comply with the Airport Environs Land Use Plan (AELUP). Although developed to be consistent with the RTP/SCS population and housing projections (to eliminate the significant population impact of the GPU), this alternative would not be nearly as effective as the proposed GPU in achieving the regional RTP/SCS goals and objectives (as described under the No Project alternative). It would not provide the opportunities to optimize multimodal transportation and new mixed-use, urban communities. Overall, this alternative would increase land use and planning impacts.</p> <p>GT</p>	<p>As with the GPU, the Reduced Park Demand alternative would not divide established communities and would comply with the Airport Environs Land Use Plan (AELUP). This alternative reduces new housing development and other nonresidential development in the five focus areas. Under the GPU, these focus areas were designed to introduce higher intensity urban development and take advantage of their locations relative to mass transit improvements and service and existing opportunities to integrate and expand other major activity areas. The substantial reduction in opportunities for development in these areas would not as effectively meet the City's land use objectives or the regional RTP/SCS goals. Overall, this alternative would increase land use and planning impacts.</p> <p>GT</p>
Mineral Resources	<p>Given that the entire City does not have mineral resource sectors or active or inactive mines, implementation of the No Project alternative, similar to the GPU, would not cause a loss of availability of known mineral resources. Overall, the impact to mineral resources would be similar to the GPU and would be less than significant.</p> <p>S</p>	<p>This alternative, similar to the No Project/Current General Plan alternative and the GPU, would have less than significant impacts to mineral resources.</p> <p>S</p>	<p>This alternative, similar to the No Project/Current General Plan alternative and the GPU, would have less than significant impacts to mineral resources.</p> <p>S</p>	<p>This alternative, similar to the No Project/Current General Plan alternative and the GPU, would have less than significant impacts to mineral resources.</p> <p>S</p>

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Impact	No Project/Current General Plan Alternative	Reduced Intensity Alternative	2020 RTP/SCS Consistency Alternative	Reduced Park Demand Alternative
Noise	<p>The No Project alternative would result in a substantial increase in employment as well as more dispersed housing in comparison to the GPU. Approximately 13,000 fewer housing units would be constructed. Therefore, this alternative may increase vehicle miles traveled and related traffic noise impacts. The higher anticipated building square footage under the No Project alternative would result in more construction activity, but the construction activity would be more spread out. Construction-related noise is a highly localized impact, and the severity of impacts depends on the equipment used, distance to nearby sensitive receptors, time of day, and overall duration of construction. Impacts would be similar to the GPU. As with the GPU, both construction and traffic noise impacts would be significant and unavoidable.</p> <p>S</p>	<p>The reduction of both housing units and jobs would reduce construction noise and traffic-related impacts for the Reduced Intensity alternative. Although these impacts would be decreased, particularly in the 55 Freeway/Dyer Road and South Bristol Street focus areas, it is not anticipated that impacts would be reduced to less than significant, and these impacts would remain significant and unavoidable.</p> <p>LT (construction and traffic noise, however, would remain significant)</p>	<p>This alternative limits new development in the city to reflect consistency with the 2020 RTP/SCS projections. This alternative would result in a substantial reduction in residences and a slight increase in employees in the city, which would reduce both construction noise and traffic-related impacts. Due to a decrease in reduction in residential growth compared with the proposed GPU, construction and traffic-related impacts would be reduced. Relative to the proposed GPU, implementation of this alternative would likely remove significant traffic noise impacts along a few of the significantly impacted roadways. Although these impacts would be decreased, it is not anticipated that impacts could be reduced to less than significant, and these impacts would remain significant and unavoidable.</p> <p>LT (construction and traffic noise, however, would remain significant)</p>	<p>This alternative reduces residential growth by eliminating or reducing residential land uses and intensity in the five focus areas. Due to a reduction in residential growth compared with the proposed GPU, construction and traffic-related impacts would be reduced. Relative to the proposed GPU, implementation of this alternative would likely remove significant traffic noise impacts along a few of the significantly impacted roadways. However, overall, construction and traffic noise impacts along other roadway segments would remain significant and unavoidable.</p> <p>LT (construction and traffic noise, however, would remain significant)</p>
Population and Housing	<p>The No Project alternative would result in an 11 percent decrease in population at buildout in comparison to the GPU. However, like the GPU, the population and household projections for the No Project alternative exceed the Orange County regional council of governments (COG) and the 2020/2045 RTP/SCS projections and would result in a significant and unavoidable impact.</p> <p>LT (the population impact would remain significant)</p>	<p>The reduced intensity would reduce new housing development and other nonresidential development in two focus areas: 55 Freeway /Dyer Road and South Bristol Street. This alternative would reduce population by 5,383 persons and housing units by 19,825 units in comparison to the GPU. The resultant projections for population and housing in 2045 would still substantially exceed the Orange County COG and 2020/2045 RTP/SCS projections for the City. Therefore, population growth would be substantial and similar to the GPU and would be significant and unavoidable.</p> <p>LT (the population impact would remain significant)</p>	<p>This alternative reduces population growth in the city so that the 2045 population is less than the population projected by the Orange County COG and the 2020-2045 RTP/SCS. The Orange County COG projects a 2045 population of 360,077 for the city, and the 2020-2045 RTP/SCS projects a population of 360,100. Therefore, population and housing impacts associated with this alternative are less than the GPU. Additionally, this alternative reduces a significant and unavoidable impact to less than significant.</p> <p>LT (eliminates a significant and unavoidable impact)</p>	<p>This alternative’s reduction in housing units would result in an approximate 10 percent population reduction in comparison to the GPU. The estimated buildout population of 389,518, however, would still exceed the 360,100 person population of the 2020-2045 RTP/SCS projection. Therefore, population growth would be substantial and population growth would remain a significant and unavoidable impact of this project alternative.</p> <p>LT (the population impact would remain significant)</p>
Public Services	<p>Relative to the GPU, the No Project alternative would result in an approximate 7 percent increase in employment opportunities and an 11 percent decrease in residents citywide. Since employment centers generate fewer calls for police and fire services than residential uses and do not directly generate increased school or library needs, public service impacts would be reduced under the No Project alternative relative to the GPU.</p> <p>LT</p>	<p>This alternative would reduce development capacity in the 55 Fwy/Dyer Road and South Bristol Street focus areas. The land use change would result in a 5,383 reduction in housing units and a population reduction of 19,825 citywide. Public service demands, therefore, would be reduced, although not substantially, relative to the proposed GPU.</p> <p>LT</p>	<p>In comparison to the GPU, this alternative would reduce population by 18 percent and would result in a very slight increase in employment (1 percent) citywide. Since employment centers generate fewer calls for police and fire services and do not directly generate increased school or library needs, this alternative would reduce service demands and overall impacts relative to the GPU.</p> <p>LT</p>	<p>This alternative would reduce residential development in the five focus areas and result in an overall reduction of 11,225 units in comparison to the proposed GPU. It would also reduce nonresidential commercial/industrial development by approximately 2.8 MSF. The reduced scale of this project alternative would reduce public service demands in comparison to the proposed GPU. As with the GPU, public service impacts would be less than significant.</p> <p>LT</p>
Recreation	<p>The No Project alternative would reduce the resident population by 11 percent compared to the GPU; this would reduce the demand for open space and recreational facilities relative to the GPU. Based on the City’s standard, however, without creation of more park facilities, the increase in population would result in an approximately 202-acre park deficit and a resultant 1.47 park acres per 1000 residents. Although less than the 299-acre deficit upon implementation of the GPU, this impact would be significant. Moreover, under the No Project alternative, the myriad of policies and implementation actions developed for the GPU to address park shortages would not be approved. Overall, this impact is concluded to be similar to the proposed GPU.</p> <p>S (impact would remain significant and unavoidable)</p>	<p>This alternative would substantially reduce development within the 55 Freeway /Dyer Road and South Bristol Street focus area relative to the GPU. Combined, housing units within these two areas would be reduced by 5,383 units, resulting in an overall city population decrease of approximately 5 percent compared to the GPU. This alternative would particularly reduce recreation demand within the respective focus areas. The overall citywide park deficit would be approximately 260 acres (1.37 park acres per 1,000 residents) compared to 299 acres and 1.31 acres per 1,000 residents for the proposed GPU. Overall, the recreation impact would be reduced, but as with the proposed GPU would be significant and unavoidable.</p> <p>LT (impact would remain significant and unavoidable)</p>	<p>This alternative would reduce population by 18 percent and would result in a decrease in demand on existing parks and a decreased need for new parks compared to the GPU. The reduced housing units and related recreation facility demand would be distributed throughout all the focus areas and several of the Specific Plan areas under this alternative. Without new parks, this alternative would result in a 142-acre park deficit with 1.60 park acres per 1,000 residents. Given the unavailability of land for park development, although this alternative would substantially reduce the impact on recreation relative to the proposed GPU, the impact would remain significant and unavoidable.</p> <p>LT (impact would remain significant and unavoidable)</p>	<p>As described in this chapter, this alternative was developed to reduce park demand. It would reduce population growth by approximately 10 percent in comparison to the proposed GPU, but would also avoid new residential development in the areas currently most underserved with park facilities. If no additional parks were created, at buildout, this alternative would result in a park deficit of 215 acres and 1.45 acres per 1,000 residents, compared to 1.31 acres per 1,000 residents for the GPU. As with the proposed GPU, the numerous policies and implementation actions would serve to mitigate the park shortage, but there is no guarantee that the City’s standard of 2.0 acres per 1,000 residents would be achieved. This impact would be reduced but would remain significant and unavoidable.</p> <p>LT (impact would remain significant and unavoidable)</p>

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Table 7-8 Environmental Impact Comparison

Impact	No Project/Current General Plan Alternative	Reduced Intensity Alternative	2020 RTP/SCS Consistency Alternative	Reduced Park Demand Alternative
Transportation and Traffic	<p>As detailed in the Traffic Impact Study, the vehicle miles traveled (VMT) for the 2045 No Project scenario for the city is 12,163,794 (with a VMT/SP of 22.8). The VMT for the city in 2045 with the implementation of the GPU is 1,518,959 (with a VMT/SP of 20.3). Several factors would result in a greater VMT impact for the No Project alternative in comparison to the GPU. The No Project alternative has more nonresidential square footage and lower density residential uses. In comparison, the GPU was developed to optimize multimodal transportation and introduces higher density residential and mixed-use land uses proximate to mass transit opportunities. In addition to land use changes, numerous new policies facilitate reduced auto trips and alternative transportation improvements. The VMT for the No Project alternative would increase impacts relative to the GPU. It would result in a VMT/SP of 22.8 compared to 20.3 for the GPU. Since 22.8 exceeds the significance threshold of 22.0 adopted by the City, it would result in a significant new impact.</p> <p>GT (introduces a new significant impact)</p>	<p>In comparison to the GPU, this alternative would reduce housing and nonresidential uses in the South Bristol Street and 55 Freeway/Dyer Road focus areas and result in a decrease in total VMT for the city in 2045. However, because the residential development proposed in the GPU for the South Bristol Street and 55 Freeway/Dyer Road focus areas would be in dense mixed-use districts that are also designated high-quality transit areas (HQTAs), it is anticipated that this alternative would result in a slightly higher VMT/SP compared to the GPU. It is expected that the VMT/SP for this alternative would still be lower than the No Project scenario.</p> <p>GT</p>	<p>Because this alternative would reduce population by approximately 18 percent and result in a slight increase in employment (1 percent) in comparison to the GPU, it would be expected to reduce total VMT. However, it would be expected to increase VMT/SP, the metric used to determine the significance of transportation impacts, when compared to the GPU. The reduction in housing units in mixed-use districts and HQTAs would be expected to increase the forecast VMT/SP for this alternative when compared to the GPU, thereby increasing transportation impacts. If the VMT/SP exceeded 20.3, it would introduce a new significant impact. Without extensive modeling, the actual VMT/SP that would result is unknown. It is expected that the VMT/SP for this alternative would be lower than for the No Project scenario.</p> <p>GT</p>	<p>This alternative would result in the elimination of increases to the forecast number of housing units in the Grand Avenue/17th Street, South Main Street, and West Santa Ana Boulevard focus areas. In addition, new residential units in the 55 Freeway/Dyer Road focus areas would be reduced by 5,381 units compared to the GPU (remaining total of 4,571 new units), and new units in the South Bristol Street focus area would be reduced by 2,273 units for a total of 3,220 new units at buildout. The reduction in housing units in these mixed-use and HQTA districts would be anticipated to reduce overall VMT, but would increase the VMT/SP forecast when compared to the GPU. This is because the additional units proposed as part of the GPU in these HQTAs have a much lower VMT/SP, helping to reduce the overall citywide average. It is expected that the VMT/SP for this alternative would nevertheless be lower than the No Project scenario.</p> <p>GT</p>
Tribal Cultural Resources	<p>In comparison to the GPU, the No Project alternative would be characterized by less dense residential development on larger lots and increased nonresidential square footage. However, the GPU introduces more housing units in the focus areas, resulting in similar land disturbance overall and thus a similar potential to impact tribal cultural resources. The 1997 GP Land Use Element EIR does not include a discussion of tribal cultural resources, but any development pursuant to the No Project alternative that would require a General Plan amendment would need to abide by the regulatory requirements of AB 52 and the cultural resources mitigation measures in the 1997 GP Land Use Element EIR. As with the GPU, tribal cultural resource impacts would be mitigated to less than significant.</p> <p>S</p>	<p>This alternative would result in less growth in the 55 Freeway/Dyer Road and South Bristol Street focus areas with all other assumptions remaining the same. Therefore, this alternative would have a slightly less impact on land disturbance and subsequently on tribal cultural resources.</p> <p>LT</p>	<p>This alternative includes a growth cap on development in the city compared to the GPU. Less development would mean less land disturbance and slightly decreased impacts to tribal cultural resources.</p> <p>LT</p>	<p>This alternative would result limit residential growth in 3 focus areas to existing conditions and reduce growth in the 55 Freeway/Dyer Road and South Bristol Street focus areas. It would also reduce non-residential development by approximately 2.8MSF. With all other assumptions remaining the same. Therefore, this alternative would have a slightly less impact on land disturbance and subsequently on tribal cultural resources</p> <p>LT</p>
Utilities and Service Systems	<p>Relative to the GPU, the No Project alternative would increase nonresidential square footage and decrease dwelling units citywide. Since residential use is associated with a higher water demand and higher sewage generation, the No Project alternative would result in an overall decrease of approximately 38 percent in demand for these services compared to the GPU.</p> <p>Additionally, the No Project alternative would generate 4.5 million pounds per day of solid waste at buildout, which is 43 percent more than the GPU, since nonresidential uses generate more solid waste than residential uses. This additional waste generation could still be accommodated by the existing landfills.</p> <p>Furthermore, this alternative would result in a minimal increase to electricity use and a 3 percent decrease in natural gas use compared to the GPU.</p> <p>Since the No Project alternative would decrease water demand, wastewater generation, and natural gas consumption and would increase solid waste generation, impacts of this alternative are less than the GPU.</p> <p>LT</p>	<p>This alternative would reduce population and jobs by approximately 5 percent in comparison to the GPU. It would therefore, reduce utility impacts, although not substantially, compared to the proposed GPU.</p> <p>LT</p>	<p>This alternative would reduce housing by 27 percent and nonresidential square footage by approximately 1 percent Therefore water demand, wastewater generation, solid waste generation, and electricity and natural gas demands would all be less for this alternative.</p> <p>LT</p>	<p>This alternative would reduce housing by 10 percent and nonresidential square footage by approximately 4 percent Therefore water demand, wastewater generation, solid waste generation, and electricity and natural gas demands would all be less for this alternative.</p> <p>LT</p>

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Table 7-8 Environmental Impact Comparison

Impact	No Project/Current General Plan Alternative	Reduced Intensity Alternative	2020 RTP/SCS Consistency Alternative	Reduced Park Demand Alternative
Wildfire	The nearest fire hazard severity zone to the city is about 3.8 miles away, at the southern tip of the Peters Canyon Regional Park. Therefore, the city is not in or near state responsibility areas or lands classified as very high fire hazard severity zones. Additionally, no area in the city is at the wildland-urban interface. Therefore, this alternative, like the GPU, would have no impacts. S	This alternative, similar to the No Project/Current General Plan alternative and the GPU, would have less than significant impacts from wildfires. S	This alternative, similar to the No Project/Current General Plan alternative and the GPU, would have less than significant impacts from wildfires. S	This alternative, similar to the No Project/Current General Plan alternative and the GPU, would have less than significant impacts from wildfires. S

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7.3.3 Environmental Impact Conclusion

Table 7-9 summarizes the environmental impacts of each alternative compared to the proposed project.

Table 7-9 Summary of Proposed Project and Alternatives Impacts

Topic	General Plan Update	No Project/Existing General Plan	Reduced Intensity	2020 RTP/SCS Consistency	Reduced Park Demand Alternative
Aesthetics	LTS	-	=	=	=
Agricultural Resources	LTS	=	=	=	=
Air Quality	S/U	+	-	-	-
Biological Resources	LTS/M	=	=	-	-
Cultural Resources	S/U	=	-	-	-
Energy	LTS	=	-	-	-
Geology and Soils	LTS/M	=	-	-	-
Greenhouse Gas Emissions	S/U	+	-	-	-
Hazards and Hazardous Materials	LTS	=	=	=	=
Hydrology and Water Quality	LTS	=	=	=	=
Land Use and Planning	LTS	+	+	+	+
Mineral Resources	LTS	=	=	=	=
Noise	S/U	=	-	-	-
Population and Housing	S/U	-	-	-	-
Public Services	LTS	-	-	-	-
Recreation	LTS	-	-	-	-
Transportation	LTS	+	+	+	+
Tribal Cultural Resources	LTS/M	=	-	-	-
Utilities and Service Systems	LTS	-	-	-	-
Wildfire	LTS	=	=	=	=

Notes: LTS = Less than Significant; LTS/M = Less than Significant with Mitigation Incorporated; S/U = Significant and Unavoidable

(-) The alternative would result in less of an impact than the proposed project.

(+) The alternative would result in greater impacts than the proposed project.

(=) The alternative would result in the same/similar impacts as the proposed project.

No Project/Current General Plan Alternative. This alternative would result in similar impacts to 11 impact categories, reduced impacts to 5 environmental impacts, and increased impacts to 4 categories. Impacts would

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be similar for agricultural resources, biological resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, tribal cultural resources, and wildfire. This alternative would reduce impacts for aesthetics, population and housing, public services, recreation, and utilities and service systems. Impacts to air quality, greenhouse gas emissions, land use and planning, and transportation would increase. This alternative does not mitigate any of the significant and unavoidable impacts associated with the GPU to a less than significant impact. It would also exceed the City's VMT threshold. Overall, impacts under this alternative would decrease in comparison to the proposed project.

Reduced Intensity Alternative. This alternative would result in similar impacts to 7 impact categories, reduce impacts to 11 categories and increase impacts to two categories. Impacts would be similar for aesthetics, agricultural resources, biological resources, hazards and hazardous materials, hydrology and water quality, mineral resources, and wildfire. This alternative would decrease impacts to air quality, cultural resources, energy, geology and soils, greenhouse gas emissions, noise, population and housing, public services, recreation, tribal cultural resources, and utilities and services. It would be expected to increase 2 impacts; land use and planning impacts and transportation impacts relative to the GPU. As with the GPU, impacts to air quality, cultural resources, greenhouse gas emissions, noise, and population and housing would remain significant and unavoidable. Overall, impacts under this alternative would be decreased in comparison to the proposed project.

2020 RTP/SCS Consistency Alternative. This alternative would reduce impacts to 12 environmental impacts, result in similar impacts to 6 categories, and increase impacts to 1 category. It would reduce impacts to air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, noise, population and housing, public services, recreation, tribal cultural resources, and utilities and service systems. Impacts would be very similar for aesthetics, agricultural resources, hazards and hazardous materials, hydrology and water quality, mineral resources, and wildfire. It would increase impacts to land use and planning. It would also increase impacts to transportation and potentially introduce a new significant impact. It is anticipated, however, that under this alternative, transportation could be mitigated to less than significant. Under the GPU, transportation impacts are less than significant without mitigation. As with the GPU, impacts to air quality, cultural resources, greenhouse gas emissions, and noise would remain significant and unavoidable. The impact to population and housing would be reduced to less than significant. Overall, impacts under this alternative would be reduced in comparison to the proposed project.

Reduced Park Demand Alternative. This alternative would result in similar impacts to 6 impact categories, reduced impacts to 12 categories, and increased impacts to 2 categories. Impacts would be similar for aesthetics, agricultural resources, hazards and hazardous materials, hydrology and water quality, mineral resources, and wildfire. This alternative would decrease impacts to air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, noise, population and housing, public services, recreation, tribal cultural resources, transportation, and utilities and services. It would reduce the recreation impacts of the proposed GPU, as it was designed to do, and would improve the park acres/resident ratio compared to the proposed GPU. Recreation impacts to disadvantaged communities would also be reduced. Given the lack of available land for new parks, however, it would not eliminate the significant, unavoidable impact of the project. It would be expected to increase land use and planning impacts relative to the GPU. As with the GPU, impacts to air quality, cultural resources, greenhouse gas emissions, noise, and population and housing would remain

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significant and unavoidable. Overall, impacts under this alternative would be decreased in comparison to the proposed project.

7.3.4 Ability to Achieve Project Objectives

The determination of whether an alternative achieves a particular objective is not black or white. Each alternative has the potential to achieve the respective objective to some extent. None of the alternatives would optimize housing (including affordable housing) and transportation objectives to the extent of the GPU. The table shows “maybe” if it is possible to achieve the specific objective, but the feasibility to do so is uncertain or the level of achievement marginal. Table 7-10 summarizes each alternative’s ability to achieve the project objectives.

Table 7-10 Ability of Each Alternative to Meet the Project Objectives

Objective	General Plan Update	No Project/Current General Plan	Reduced Density	2020 RTP/SCS Consistency	Reduced Park Demand Alternative
1. Promote infill development while respecting and protecting established neighborhoods.	Yes	Yes	Yes	Maybe	Yes
2. Optimize high density residential and mixed-use development that maximizes potential use of mass transit.	Yes	No	No	No	No
3. Provide locations for new housing development that maximizes affordable housing opportunities to achieve both City and regional housing goals.	Yes	No	Maybe	No	Maybe
4. Facilitate new development at intensities sufficient to generate community benefits and attract economic activity.	Yes	No	Maybe	No	Maybe
5. Provide housing and employment opportunities at an urban level of intensity at the city’s edge.	Yes	No	Maybe	No	Maybe
6. Introduce mixed-use urban villages and encourage experiential commercial uses that are more walkable, bike friendly, and transit oriented.	Yes	Yes	Yes	No	Maybe
7. Develop opportunities for live/work, artist spaces, and small-scale manufacturing.	Yes	Maybe	Yes	Maybe	Yes

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No Project/Current General Plan. The No Project/Current General Plan alternative, as shown in Table 7-9, would not achieve many of the proposed GPU's objectives. The existing land use plan does not provide the opportunities for housing and employment at the levels required to meet local and regional goals. Moreover, the No Project alternative would not provide numerous policies as included in the GPU to achieve these goals and invigorate communities. The current General Plan, however, protects established neighborhoods, and several Specific Plans and Special Zoning areas would provide for infill opportunities, protect established neighborhoods, and would result in mixed-use villages and bike- and pedestrian-friendly communities.

Reduced Density Alternative. The Reduced Density Alternative reduces the level of development for two of the five focus areas (55 Fwy/Dyer Road and South Bristol Street) relative to the GPU. No other changes to the GPU are made for this alternative. It is assumed to include the same General Plan policies and would not modify the ~~Circulation-Mobility~~ Element or related improvements. Therefore, this alternative would attain many of the project's objectives. It would not optimize high density housing and mass transit opportunities, and so was found not to attain Objective 2. It would, however, achieve Objectives 3 to 5, but to a lesser extent than the proposed GPU. With the reduced opportunities in the 55 Freeway /Dyer Road and South Bristol focus areas, it would not be as effective in providing affordable housing opportunities and may not be as economically feasible in terms of funding community benefits. It would provide mixed-use opportunities that are bike and pedestrian friendly and provide opportunities for live-work, artist spaces, and small-scale manufacturing.

2020 RTP/SCS Consistency Alternative. Due to the substantial reduction in housing opportunities citywide, this alternative is the least effective in achieving the project objectives of the GPU. By setting a development cap to limit housing and nonresidential development to the projections for the city as reflected in the 2020 RTP/SCS, this alternative reduces housing units by 31,515 relative to the GPU. It reduces housing development potential within the focus areas by 73 percent in comparison to the GPU, and reduces overall city future development by 27 percent. To achieve this reduction, the development cap would not only limit focus area development but would restrict the entitled housing within Specific Plans/Special Zoning areas (reducing total housing within these areas by almost 14,000 units). This alternative clearly would not optimize high density housing that maximizes mass transit use (Objective 2) or provide urban level intensities at the urban edges (Objective 3). Moreover, it would not facilitate intensities that attract economic activities, particularly since it would not allow the maximum entitlement of approved Specific Plans and Special Zoning areas. It would achieve the remainder of the objectives, but to a lesser extent than the GPU. It would protect established neighborhoods, but not promote infill development as much as the GPU or other alternatives (Objective 1). It would provide only limited opportunities for live-work, artist spaces, and small-scale manufacturing (Objective 7).

Reduced Park Demand Alternative. The Reduced Park Demand Alternative reduces residential development within the five focus areas by a total of 11,226 units in comparison to the proposed GPU. Residential development within three of the focus areas (South Main Street, Grand Avenue/17th Street, and West Santa Ana Boulevard) would be limited to development reflected in existing conditions. New units within the 55 Fwy/Dyer Road and South Bristol Street focus areas would be reduced by 5,381 and 2,273 units, respectively, allowing a total new housing development for these two areas of 7,791 units (compared to 15,444 for these two areas under the GPU).

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No other changes to the GPU are made for this alternative. It is assumed to include the same General Plan policies and would not modify the ~~Circulation-Mobility~~ Element or related improvements. Therefore, this alternative would attain some of the project's objectives. It would promote infill development to a lesser extent than the GPU and would protect established neighborhoods (Objective 1), and would also develop opportunities of live-work, artist spaces, and small-scale manufacturing (Objective 7). Given the substantial reduction in housing units, it was also concluded that it would not meet Objectives 2 and 3, to maximize high density residential development and mixed use proximate to potential mass transit use (Objective 2) and to maximize affordable housing and achieve City and regional housing goals (Objective 3). It would, however, achieve Objectives 4 through 6, but to a lesser extent than the proposed GPU. With new opportunities eliminated in three focus areas and the reduced opportunities in the 55 Freeway /Dyer Road and South Bristol focus areas, it would not be as effective in providing affordable housing opportunities and may not be as economically feasible in terms of funding community benefits. It would provide mixed-use opportunities that are bike and pedestrian friendly and provide opportunities for live-work, artist spaces, and small-scale manufacturing.

7.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the “environmentally superior alternative” and, in cases where the “No Project” Alternative is environmentally superior to the GPU, the environmentally superior development alternative must be identified. One alternative has been identified as “environmentally superior” to the GPU:

- The RTP/SCS is concluded to be the environmentally superior alternative. As summarized in Section 7.3.3, the No Project alternative is not environmentally superior to the proposed GPU. Both the Reduced Density and RTP/SCS alternatives reduce environmental impacts in comparison to the GPU, but the RTP/SCS reduces more impacts and eliminates a significant, unavoidable impact of the GPU. This alternative was designed with the objective of eliminating the significant population impact of the GPU. This alternative also reflects the alternative that reduces potential future development more than any of the other alternatives.

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