# AGENDA

EL SEGUNDO CITY COUNCIL
REGULAR MEETING
TUESDAY, FEBRUARY 1, 2022

4:00 PM CLOSED SESSION
6:00 PM OPEN SESSION

*ZOOM INFORMATION*
MEETING ID: 964 5963 7962
PIN: 730770

CITY COUNCIL CHAMBER
350 MAIN STREET, EL SEGUNDO, CA 90245

***PUBLIC ADVISORY:***
***THE CITY COUNCIL CHAMBER AND/OR LOBBY WILL ONLY BE OPEN TO THE PUBLIC FOR PUBLIC COMMUNICATIONS AND PUBLIC HEARING.***
***(Face masks/coverings are required to be worn inside City facilities)***

**Drew Boyles, Mayor**
**Chris Pimentel, Mayor Pro Tem**
**Carol Pirsztuk, Councilmember**
**Scot Nicol, Councilmember**
**Lance Giroux, Councilmember**

Tracy Weaver, City Clerk
Matthew Robinson, City Treasurer

Executive Team

Scott Mitnick, City Manager
Barbara Voss, Deputy City Manager
Jaime Bermudez, Police Chief
Michael Allen, Dev. Services Director
Elias Sassoon, Public Works Director
Melissa McCollum, Com. Services Dir.
Mark Hensley, City Attorney
Joe Lillio, Chief Financial Officer
Deena Lee, Fire Chief
Rebecca Redyk, HR Director
Charles Mallory, IT Director

MISSION STATEMENT:
"Provide a great place to live, work, and visit."

VISION STATEMENT:
"Be a global innovation leader where big ideas take off while maintaining our unique small-town character."

**How Can Members of the Public Observe and Provide Public Comments?**

- Residents can watch the meeting live via Spectrum Channel 3, AT&T U-Verse Channel 99 and/or El Segundo TV at YouTube.com. Access remotely via Zoom from a PC, Mac, iPad, iPhone, or Android device or by phone. Use URL https://zoom.us/j/96459637962 and enter PIN: 730770 or visit www.zoom.us on device of choice, click on "Join a Meeting" and enter meeting ID and PIN.

- Join by phone at 1-669-900-9128 and enter meeting ID and PIN. **Your phone number is captured by the Zoom software and is subject to the Public Records Act. Dial *67 BEFORE dialing in to remain anonymous.**

- For Public Communications, members of the public may provide comments in the Council Chamber or via Zoom. For in person comments, please fill out a Speaker Card located in the Chamber Lobby and for Zoom comments, notify meeting host by raising your virtual hand (see hand icon at bottom of screen) and you will be invited to speak. (If you do not wish for your name to appear on the screen, then use the drop-down menu and click on "rename" to rename yourself "anonymous") Please note that you will be placed in a "listen only" mode and your video feed will not be shared with City Council or members of the public.

- For written communication, submit to ALLELECTEDOFFICIALS@elsegundo.org by 3:00 PM to be uploaded to the Website. Emails received after 3:00 PM will be posted the next day.

- For Public Hearings, members of the public may provide comments in the Council Chamber or via Zoom.

- Speaker cards and attendee's information captured by Zoom software will be considered public documents subject to possible posting on the City's Website and are subject to disclosure under the Public Records Act.

**Additional Information**:
The City Council, with certain statutory exceptions, can only take action upon properly posted and listed agenda items. Any writings or documents given to a majority of City Council regarding any matter on this agenda that the City received after issuing the agenda packet are available for public inspection in the City Clerk's Office during normal business hours. Such documents may also be posted on the City's website at www.elsegundo.org and additional copies will be available at the City Council meeting.
Unless otherwise noted in the agenda, the public can only comment on City-related business that is within the jurisdiction of the City Council and/or items listed on the agenda during the Public Communications portions of the Meeting. Additionally, members of the public can comment on any Public Hearing item on the agenda during the Public Hearing portion of such item. The time limit for comments is five (5) minutes per person. Before speaking to the City Council, please state: your name, residence, and organization/group you represent, if desired. Please respect the time limits.

*In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk's Office at 310-524-2305. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.*

**4:00 PM CLOSED SESSION – CALL TO ORDER / ROLL CALL**

**PUBLIC COMMUNICATION – (RELATED TO CITY BUSINESS ONLY – 5-MINUTE LIMIT PER PERSON, 30-MINUTE LIMIT TOTAL)** *Individuals who have received value of $50 or more to communicate to the City Council on behalf of another, and employees speaking on behalf of their employer, must so identify themselves prior to addressing City Council. Failure to do so shall be a misdemeanor and punishable by a fine of $250. While all comments are welcome, the Brown Act does not allow City Council to take action on any item not on the agenda. City Council and/or City Manager will respond to comments after Public Communications is closed.*

**SPECIAL ORDERS OF BUSINESS**

**RECESS INTO CLOSED SESSION:** City Council may move into a closed session pursuant to applicable law, including the Brown Act (Government Code Section §54960, et seq.) for purposes of conferring with City's Real Property Negotiator; and/or conferring with City Attorney on potential and/or existing litigation; and/or discussing matters covered under Government Code Section §54957 (Personnel); and/or conferring with City's Labor Negotiators.

**CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION (GOV'T CODE §54956.9(D)(1): -5- MATTER(S)**

1. Scott O'Connor (City Police Officer) v. City of El Segundo, United States District Court (Central District of California), Civil Case No. 2:20-CV-0311 DMG (PLAx).
2. Scott Martinez (City Fire Fighter) v. City of El Segundo, Los Angeles Superior Court Case No. 21ST CV10637.
3. James Tulette (City Fire Fighter) v. City of El Segundo, Los Angeles Superior Court, Case No. 205T, CV44025.
4. Shawn Bonfield (City Fire Department Battalion Chief) v. City of El Segundo, Los Angeles Superior Court Case no. 20ST CV48677.
5. William Hatcher (Retired El Segundo Fire Fighter v. City of El Segundo, Los Angeles Superior Court, Case No. 21ST CV37399.
6. Richard Towne (Retired El Segundo Fire Fighter) v. City of El Segundo, Los Angeles Superior Court, Case No. 21ST CV19113.

**CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION**

Significant exposure to litigation pursuant to Government Code §54956.9(d) (2) and (3): -1- matter.

**PUBLIC EMPLOYMENT (GOV'T CODE § 54957) -1- MATTER(S)**

City Manager
Performance Evaluation

**6:00 PM – CONVENE OPEN SESSION – CALL TO ORDER / ROLL CALL**

**INVOCATION** – Pastor Chris Stewart, The Bridge Church

**PLEDGE OF ALLEGIANCE** – Mayor Pro Tem Pimentel

**PUBLIC COMMUNICATIONS – (RELATED TO CITY BUSINESS ONLY – 5 MINUTE LIMIT PER PERSON, 30 MINUTE LIMIT TOTAL)** *Individuals who have received value of $50 or more to communicate to the City Council on behalf of another, and employees speaking on behalf of their employer, must so identify themselves prior to addressing the City Council. Failure to do so shall be a misdemeanor and punishable by a fine of $250. While all comments are welcome, the Brown Act does not allow Council to take action on any item not on the agenda. The Council will respond to comments after Public Communications is closed.*

**SPECIAL PRESENTATIONS**

1. Introduction of Fire Marshall Nicole Pesqueira
2. Black History Month
3. COVID-19 Update

**CITY MANAGER FOLLOW-UP COMMENTS** – (Related to Public Communications)

**A. PROCEDURAL MOTIONS**

**Read all ordinances and resolutions on the Agenda by title only.**
Recommendation –

Approval

**B. CONSENT**

4. **City Council Meeting Minutes**
Recommendation –

Approve Regular and Special City Council Meeting minutes of January 18, 2022.

5. **Warrant Demand Register for December 20, 2021 through January 09, 2022**
Recommendation -

1. Ratify payroll and employee benefit checks; checks released early due to contracts or agreements; emergency disbursements and/or adjustments; and, wire transfers.

2. Approve Warrant Demand Register numbers 13A: warrant numbers 3038824 through 3038906, and 9002324 through 9002359.

6. **Amendment to the Professional Services Agreement with Vincent Benjamin Group LLC to Provide On-call Temporary Staffing Services for Use by All City Departments**

Recommendation - Authorize the City Manager to approve a second amendment to contract #6062 with Vincent Benjamin Group LLC for an additional $170,000 to increase the total contract authority to $469,950 for on-call temporary staffing services for use by all City departments.

7. **Resolutions Correcting City Contributions for CalPERS Medical Premiums**

Recommendation -

Adopt a resolution that corrects the City Contributions for CalPERS medical premiums for the following groups covered under the City of El Segundo Administrative Code, Title 1A Salaries and Conditions of Employment, Chapter 1A2 Management-Confidential Series.

1. Executive Management

2. Mid-Management/Confidential

## C. PUBLIC HEARINGS

8. **Resolution Establishing Cost-Recovery Fees Related to the Certified Unified Program Agency Single System and Refinery Emergency Notification System Implementation**

Recommendation -

Continue public hearing to February 15, 2022.

9. **Ordinance Amending El Segundo Municipal Code Titles 14 and 15 to Comply with State Law (SB9) to Allow for Increased Residential Density in the R-1 Single Family Residential Zone**

Recommendation -

1. Find that the proposed ordinance amending El Segundo Municipal Code Titles 14 and 15 is exempt from review under CEQA and the CEQA Guidelines because SB 9 specifically authorizes local agencies to impose certain objective standards consistent with the bill's provisions, and adopt an ordinance to implement its provisions. SB 9 further provides that such ordinances are not considered a "project" under CEQA (Gov. Code, § 65852.21, subd. (j)).

2. Waive first reading and introduce an ordinance amending ESMC Title 14 (Subdivision Regulations) to include subdivision standards for General Urban Lot Splits; and Title 15 adding new Section 15-4G – Two Unit Residential Developments and Urban Lot Splits in Single-Family Residential (R1) Zones, in accordance with the provisions of Senate Bill No. 9.

3. Schedule a second reading for the February 15, 2022 City Council meeting.

10. **Adoption of 2021-2029 Housing Element - 6th Cycle**

Recommendation -
Adopt a resolution approving a Negative Declaration and the final draft 2021-2029 Housing Element (Environmental Assessment No. EA 1271 and General Plan Amendment No. GPA 19-04).

## D. STAFF PRESENTATIONS

11. **Ordinance Amending Chapter 6 of Title 5 of the El Segundo Municipal Code Regarding the Regulation and Prohibition of Smoking in Designated Areas**

Recommendation -

1. Waive the first reading and introduce an ordinance amending Chapter 6 of Title 5 of the El Segundo Municipal Code regarding the regulations and prohibition of smoking in designated areas.

2. Schedule the second reading for the February 15, 2022 City Council meeting.

12. **Alternate Use Concept for the Urho Saari Swim Stadium - "The Plunge"**

Recommendation -

Review a proposed alternative use for The Plunge facility and direct staff accordingly.

## E. COMMITTEES, COMMISSIONS AND BOARDS PRESENTATIONS

13. **Diversity, Equity, and Inclusion Committee Public Safety Report**

Recommendation -

1. Receive and file the DEI Public Safety Report.

2. Direct staff to work with the DEI Committee to implement recommended activities.

**F. REPORTS** - CITY CLERK

14. **Resolution Updating City's Conflict of Interest Code**

Recommendation -

Adopt a resolution updating the City's 2022 Conflict of Interest Code.

15. **Ordinance Requiring E-Filing of Statement of Economic Interests and Campaign Finance Forms**

Recommendation -

Waive first reading and introduce an ordinance to mandate electronic and paperless filing of Fair Political Practices Commission campaign disclosure statements and statements of economic interest (Form 700).

**G. REPORTS** - CITY TREASURER

**H. REPORTS** - COUNCILMEMBERS

COUNCILMEMBER GIROUX

COUNCILMEMBER NICOL

COUNCILMEMBER PIRSZTUK

MAYOR PRO TEM PIMENTEL

MAYOR BOYLES

**I. REPORTS** - CITY ATTORNEY

**J. REPORTS/FOLLOW-UP** - CITY MANAGER

**CLOSED SESSION**

*The City Council may move into a closed session pursuant to applicable law, including the Brown Act (Government Code Section §54960, et seq.) for the purposes of conferring with the City's Real Property Negotiator; and/or conferring with the City Attorney on potential and/or existing litigation; and/or discussing matters covered under Government Code Section §54957 (Personnel); and/or conferring with the City's Labor Negotiators.*

**REPORT OF ACTION TAKEN IN CLOSED SESSION** (if required)

**MEMORIALS** - Kelly Burner and Dorothy Doukakis

**ADJOURNMENT**

POSTED:
DATE: January 28, 2022
TIME: 12:30 PM
BY: Tracy Weaver

# Proclamation

City of El Segundo, California

**WHEREAS,** Black History Month affords special opportunity to become more knowledgeable about black heritage, and to honor the many black leaders who have contributed to the progress of our nation; and

**WHEREAS,** Dr. Woodson initiated Black History Week, February 12, 1926; and for many years, the second week of February, chosen so as to coincide with the birthdays of Frederick Douglas and Abraham Lincoln, was celebrated by African Americans in the United States; and

**WHEREAS,** in 1976, as part of the nation's bicentennial, Black History Week was expanded and became established as Black History Month, and is now celebrated all over North America; and

**WHEREAS,** such knowledge can strengthen the insight of all our citizens regarding the issues of human rights, the great strides that have been made in the crusade to eliminate the barriers of equality for minority groups, and the continuing struggle against racial discrimination and unconscious bias.

**NOW, THEREFORE**, the Mayor and Members of the City Council of the City of El Segundo, California, hereby proclaim the month of February 2022 "**BLACK HISTORY MONTH"** and urge all citizens to join together in making this period of rededication to the principles of justice and equality for all people.

*Mayor Drew Boyles*

*Mayor Pro Tem Chris Pimentel* *Council Member Carol Pirsztuk*

*Council Member Scot Nicol* *Council Member Lance Giroux*

MEETING MINUTES OF THE EL SEGUNDO CITY COUNCIL
TUESDAY, JANUARY 18, 2022

CLOSED SESSION – Mayor Boyles called to order at 4:00 PM

ROLL CALL

| | | |
|---|---|---|
| Mayor Boyles | - | Present |
| Mayor Pro Tem Pimentel | - | Present |
| Council Member Pirsztuk | - | Present |
| Council Member Nicol | - | Present |
| Council Member Giroux | - | Present |

PUBLIC COMMUNICATION – (Related to City Business Only – 5-minute limit per person, 30-minute limit total) None

SPECIAL ORDER OF BUSINESS:

Mayor Boyles announced that Council would be meeting in closed session pursuant to the items listed on the Agenda.

CLOSED SESSION:

*City Council may move into a closed session pursuant to applicable law, including the Brown Act (Government Code Section §54960, et seq.) for purposes of conferring with City's Real Property Negotiator; and/or conferring with City Attorney on potential and/or existing litigation; and/or discussing matters covered under Government Code Section §54957 (Personnel); and/or conferring with City's Labor Negotiators as follows:*

CONFERENCE WITH CITY'S LABOR NEGOTIATOR (GOV'T CODE §54957.6):-8-MATTER(S)

1. Employee Organizations: Fire Fighters Association, Police Officers Association, Police Management Association, Police Support Services Employees Association, Supervisory, Professional Employees Association, City Employee Association, and Executive and Management/Confidential Employees (unrepresented groups).

Agency Designated Representative: Irma Moisa Rodriquez, City Manager, Scott Mitnick and Human Resources Director, Rebecca Redyk.

Adjourned Closed Session at 4:56 PM

OPEN SESSION – Mayor Boyles called to order at 6:00 PM

ROLL CALL

| | | |
|---|---|---|
| Mayor Boyles | - | Present |
| Mayor Pro Tem Pimentel | - | Present |
| Council Member Pirsztuk | - | Present |
| Council Member Nicol | - | Present |
| Council Member Giroux | - | Present |

INVOCATION – Pastor Jonathon Elmore, The Bridge Church

PLEDGE OF ALLEGIANCE – Council Member Nicol

SPECIAL PRESENTATIONS:

1. Presentation by Scott Mitnick, City Manager, introducing our new Police Chief, Jaime Bermudez.

2. Marsha Hansen, Chamber of Commerce CEO, announced the 2021 Chamber of Commerce Holiday Parade Winners.

3. El Segundo Economic Development Corporation Presentation given by Eric Chan, President.

3a. Los Angeles Hyperion Treatment Plant Wastewater Spill and Recovery Update given by Elias Sassoon, Public Works Director.

4. Covid-19 Update given by Fire Chief Lee and Dr. Marc Cohen.

PUBLIC COMMUNICATIONS – (Related to City Business Only – 5-minute limit per person, 30-minute limit total)
***In Chamber*** –
Eric Bahor, resident, commented on an alternative Plunge use project.
Artie McEwan, resident, commented on SB9 and SB10
Mike Rotolo, resident and CIPAC member, commented on item #D14. Not in favor of concluding CIPAC.
***Via Zoom –***
Jerome Scott, resident and CIPAC member, commented on item #D14. Not if favor of concluding CIPAC.

CITY MANAGER FOLLOW-UP COMMENTS:
Council Member Giroux asked that the Plunge commenter's item be agenized at the next meeting for discussion.

A. Read all Ordinances and Resolutions on the Agenda by Title Only.

MOTION by Council Member Giroux, SECONDED by Mayor Pro Tem Pimentel to read all ordinances and resolutions on the agenda by title only. MOTION PASSED BY UNANIMOUS VOICE VOTE. 5/0

B. CONSENT:

5. Approve Regular City Council Minutes of December 7, 2021 and December 21, 2022.
(Fiscal Impact: None)

6. Approve warrants demand register for December 13, 2021 through January 4, 2022, numbers 12A and 12B, warrant numbers 3038604 through 3038823, and 9002323. Ratify Payroll and employee benefit Checks; Checks released early due to contracts or agreement; Emergency disbursements and/or adjustments; and, Wire transfers.
(Fiscal Impact: $2,781,237.64 ($1,150,020.24 in check warrants and $1,631,217.40 in wire warrants))

7. Adopt Resolution No. 5303 approving design and plans for the Sewer Closed Circuit Television Inspection Project and authorize staff to advertise for bids. (Project No. PW 21-12)
(Fiscal Impact: $285,000.00, included in adopted FY 2021/22 Budget)

8. Reject Minako America Corporation's bid as nonresponsive, authorize the City Manager to execute Standard Works Construction Contract No. 6255 with FS Contractors, Inc. for $250,981 for the FY 2021-2022 Annual Concrete Improvements Project and authorize an additional $49,000 as contingency funds for potential unforeseen conditions. (Project No. PW 21-10)
(Fiscal Impact: $300,000.00, included in adopted FY 2021-2022 Budget)

9. Approve Fiscal Year (FY) 2022-23 & 2023-24 biennial budget calendar establishing study sessions and public hearing dates for FY 2022-23 Operating Budget, Capital Improvement Program Budget, and User Fees.
(Fiscal Impact: None: No additional funding requested. The annual budget process requires significant staff time and effort, which is included in the Adopted FY 2021-22 General Fund Budget. The budget calendar is the first step in developing an adopted budget on schedule.)

10. Adopt Resolution No. 5304 allowing public meetings to continue to be conducted via teleconferencing pursuant to Assembly Bill No. 361.
(Fiscal Impact: None)

11. Approve the El Segundo Senior Housing Board Corporation 2022 Operating Budget for the Park Vista senior housing facility located at 615 East Holly Avenue.
(Fiscal Impact: Park Vista senior living facility is owned by the City and is managed by Cadman Group. Provided in the breakdown below, the facility generated positive net operating revenue of $79,510 in 2021 and is projected to generate positive net operating revenue of $125,662 in 2022. The operation of the facility does not currently impact the City's General Fund)

MOTION by Council Member Nicol, SECONDED by Council Member Giroux approving Consent Agenda items 5, 6, 7, 9, 10, and 11. MOTION PASSED BY UNANIMOUS VOICE VOTE. 5/0

E. COMMITTEES, COMMISSIONS AND BOARDS: *(Moved up on the agenda in consideration of the DEI Committee's time)*

16. Diversity, Equity, and Inclusion Committee Citywide Organization Report
(Fiscal Impact: There will be direct and indirect fiscal impacts to the City's General Fund, including staff time and possibly funds for additional training and employee engagement activities. These costs will likely be absorbed via the current FY 2021-2022 General Fund Budget and future FY 2022-2023 General Fund Budget. If there are greater financial needs, staff will return to City Council for separate budget appropriation authority)

Kenneth Chancey, DEI Vice Chairperson gave a presentation.

Council Discussion

Council consensus to receive and file the presentation.

MOTION by Council Member Giroux, SECONDED by Council Member Pirsztuk directing staff to work with the DEI Committee to implement recommended activities. MOTION PASSED BY UNANIMOUS VOICE VOTE. 5/0

Recess at 7:41 PM

Reconvened at 8:53 PM

C. PUBLIC HEARING:

Council Member Nicol left the dais due to possible conflict of interest due to residence location.

15. Proposed Preferential Parking Zone 2 for Portions of California Street, Holly Avenue, and Kansas Street.
(Fiscal Impact: indirect cost of staff time to process this request will be absorbed in the adopted General Fund Budget. If the request is approved, there will be new costs associated with maintaining and enforcing the new preferential parking zone.)

Mayor Boyles stated this was the time and place for a public hearing regarding the proposed Preferential Parking Zone 2 for Portions of California Street, Holly Avenue, and Kansas Street.

Clerk Weaver stated that proper notice had been given in a timely manner and that written communication had been received in the City Clerk's office.

Elias Sassoon, Public Works Director reported on the item.

Public Input:
Victor Valdez, resident, in favor of permit parking in Parking Zone 2
Elizabeth Rahmel, resident, would like the Grand Tropez Units to be considered in the Permit parking program
Brett (last name unknown), in favor of permit parking in Parking Zone 2
John Stabile, resident, in favor of permit parking in Parking Zone 2
Sandi Black, resident, would like the Grand Tropez Units to be considered in the Permit parking program
Mio Bonillo, resident, in favor of permit parking in Parking Zone 2
Jim Wheeler, resident, in favor of permit parking in Parking Zone 2
Sam Nomura, resident, in favor of permit parking in Parking Zone 2
Matt Motal, resident, in favor of permit parking in Parking Zone 2
Heather Gronke, resident, in favor of permit parking in Parking Zone 2
Sergio Fajardo, resident, would like the Grand Tropez Units to be considered in the Permit parking program

MOTION by Council Member Giroux, SECONDED by Council Member Pirsztuk to close the hearing. MOTION PASSED BY UNANIMOUS VOICE VOTE. 4/0

Council discussion

Mark Hensley, City Attorney, read into the record the changes to the Resolution. To the effect of "Pilot program effective through April 30th 20123, unless rescinded earlier by the City Council."

Mark Hensley, City Attorney, read the Resolution by title only.

RESOLUTION NO. 5305

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL SEGUNDO, CALIFORNIA DESIGNATING PREFERENTIAL PARKING ZONE 2.

MOTION by Council Member Pirsztuk, SECONDED by Mayor Pro Tem Pimentel adopting Resolution No. 5305 as amended. MOTION PASSED BY UNANIMOUS VOICE VOTE. 4/0

Council Member Nicol returned to the dais.

D. STAFF PRESENTATIONS:

13. Main Street/Imperial Highway Monument Entry Feature Project
(Fiscal Impact: $450,000 ($250,000 General Fund & $200,000 Cultural Arts Fund) funding for this project was Included in the Adopted FY 2020-2021 CIP Fund Budget)

Elias Sassoon, Public Works Director reported on the item.

Council Discussion

MOTION by Mayor Pro Tem Pimentel, SECONDED by Council Member Giroux authorizing staff to execute Professional Services Agreement No. 6256 with Hirsch & Associates, Inc. in the amount of $66,110, with an additional $6,000 for contingency, to prepare the design of the Main Street / Imperial Highway Monument Entry Feature and authorize staff to remove existing signage at the Main Street and Imperial Highway intersection. MOTION PASSED BY UNANIMOUS VOICE VOTE. 5/0

14. Review of City Committees, Commissions and Boards
(Fiscal Impact: The proposed recommendations will result in expenditure/budget savings, reduced duplication of effort, more efficient use of staff time, and improved implementation of the City's Strategic Plan)

Scott Mitnick, City Manager reported on the item.

Council Discussion

Three (3) items were recommended to Council

Recommendation 1 – Prepare a staff report (by March 15, 2022) to conclude the Capital Improvement Program Advisory Committee, with the understanding that the City Council Finance Committee will be responsible for reviewing proposed capital improvement projects.

No Council interest in concluding the Capital Improvement Program Advisory Committee, therefore no motion was made.

Recommendation 2 - Prepare a staff report to convert the Environmental Committee to a Public Works Committee by March 15, 2022.

MOTION by Mayor Pro Tem Pimentel, SECONDED by Council Member Giroux to convert the Environmental Committee to a Public Works Committee by March 15, 2022. MOTION PASSED BY UNANIMOUS VOICE VOTE. 3/2 YES: Boyles Pimentel Giroux NO: Pirsztuk Nicol

Recommendation 3 - Conduct a thorough review of each City committee, commission, and board's bylaws (or equivalent documents); and provide potential revisions to City Council (by June 30, 2022) to ensure consistency of operating practices, duties, and responsibilities to align with the current Citywide organizational structure.

MOTION by Mayor Pro Tem Pimentel, SECONDED by Council Member Giroux to conduct a thorough review of each City committee, commission, and board's bylaws (or equivalent documents); and provide potential revisions to City Council by June 30, 2022. MOTION PASSED BY UNANIMOUS VOICE VOTE. 5/0

15. Chief Financial Officer Salary Range Adjustment
(Fiscal Impact: The estimated total cost of the proposed salary range adjustment for the remainder of FY 2021-22 is $10,980. Sufficient funding is available in the adopted FY 2021-2022 General Fund Budget. A budget adjustment is not required)

Rebecca Redyk, Human Resource Director reported on the item.

Council Discussion

Mark Hensley, City Attorney, read by title only:

RESOLUTION NO. 5306

A RESOLUTION MODIFYING THE BASIC MONTHLY SALARY RANGE FOR A FULL TIME JOB CLASSIFICAITON

MOTION by Council Member Nicol, SECONDED by Council Member Giroux adopting Resolution No. 5306. MOTION PASSED BY UNANIMOUS VOICE VOTE. 5/0

E. COMMITTEES, COMMISSIONS AND BOARDS:

16. *Moved to after Consent items.*

F. REPORTS – CITY CLERK – No report

G. REPORTS – CITY TREASURER – No report

H. REPORTS – COUNCIL MEMBERS

Council Member Giroux – Attended the LAWA meeting and gave an update.

Council Member Nicol – Invited residents to attend the Hyperion Forum meeting via Zoom on Jan. 20, 2022. Check the El Segundo website for more information. Congratulated AYSO Tournament of Champion teams.

Council Member Pirsztuk – Shout out to residents on Acacia for another great Candy Cane Lane Event

Mayor Pro Tem Pimentel – No report

Mayor Boyles – Attended the Southern California Association of Governments Regional Council Meeting and gave an update.

I. REPORTS – CITY ATTORNEY – No report

J. REPORTS/FOLLOW-UP – CITY MANAGER – Thanked the Council for their support of the DEI Committee, commented on the ESEDC presentation and LA

Chargers groundbreaking will be coming up in the next couple of months. The next Council Meeting will be February 1, 2022.

MEMORIALS – Mike Doucette and Beth Murida

Adjournment at 9:54 PM

_____
Tracy Weaver, City Clerk

SPECIAL MEETING MINUTES OF THE EL SEGUNDO CITY COUNCIL
TUESDAY, JANUARY 18 - 6:00 P.M.
REGULAR SESSION
Ran simultaneously with Regular Meeting

CALL TO ORDER - Mayor Boyles at 6:00 PM

ROLL CALL

| | | |
|---|---|---|
| Mayor Boyles | - | Present |
| Mayor Pro Tem Pimentel | - | Present |
| Council Member Pirsztuk | - | Present |
| Council Member Nicol | - | Present |
| Council Member Giroux | - | Present |

PUBLIC COMMUNICATION – (Related to City Business Only – 5-minute limit per person, 30-minute limit total) See Minutes of the Regular City Council Meeting for January 18, 2022.

E. COMMITTEES, COMMISSIONS AND BOARDS:

1. Temporary Reappointment of Planning Commissioner Jay Hoeschler

Council Discussion

MOTION by Council Member Pirsztuk, SECONDED by Council Member Nicol. Temporarily reappointing Jay Hoeschler to the Planning Commission until City Council conducts interviews and makes a final appointment this year. MOTION PASSED BY UNANIMOUS VOICE VOTE. 5/0

ADJOURNMENT at 9:54 PM

_____
Tracy Weaver, City Clerk

# City Council Agenda Statement

**Meeting Date:** February 1, 2022
**Agenda Heading:** Consent
**Item Number:** B.5

## TITLE:

Warrant Demand Register for December 20, 2021 through January 09, 2022

## RECOMMENDATION:

1. Ratify payroll and employee benefit checks; checks released early due to contracts or agreements; emergency disbursements and/or adjustments; and, wire transfers.

2. Approve Warrant Demand Register numbers 13A: warrant numbers 3038824 through 3038906, and 9002324 through 9002359.

## FISCAL IMPACT:

The warrants presented were drawn in payment of demands included within the FY 2021-2022 Adopted Budget. The total of $3,430,893.41 ($823,873.45 in check warrants and $2,607,019.96 in wire warrants) are for demands drawn on the FY 2021-2022 Budget.

## BACKGROUND:

California Government Code Section 37208 provides General Law cities flexibility in how budgeted warrants, demands, and payroll are audited and ratified by their legislative body. Pursuant to Section 37208 of the California Government Code, warrants drawn in payments of demands are certified by the City's Chief Financial Officer and City Manager as conforming to the authorized expenditures set forth in the City Council adopted budget need not be audited by the City Council prior to payment, but may be presented to the City Council at the first meeting after delivery.

In government finance, a warrant is a written order to pay that instructs a federal, state, county, or city government treasurer to pay the warrant holder on demand or after a specific date. Such warrants look like checks and clear through the banking system like checks. Warrants are issued for payroll to individual employees, accounts payable to vendors, to local governments, and to companies or individual taxpayers receiving a

refund.

**DISCUSSION:**

The attached Warrants Listing delineates the warrants that have been paid for the period identified above. The Chief Financial Officer certifies that the listed warrants were drawn in payment of demands conforming to the adopted budget and that these demands are being presented to the City Council at its first meeting after the delivery of the warrants.

**CITY STRATEGIC PLAN COMPLIANCE:**

Goal 5: Champion Economic Development and Fiscal Sustainability

Objective 5B: El Segundo approaches its work in a financially strategic and responsible way.

**PREPARED BY:**
Wei Cao, CPA, CPFO, Management Analyst
**REVIEWED BY:**
Joseph Lillio, Chief Financial Officer
**APPROVED BY:**
Barbara Voss, Deputy City Manager

**ATTACHED SUPPORTING DOCUMENTS:**

1. Register 13A summary pages

CITY OF EL SEGUNDO
WARRANTS TOTALS BY FUND

3038824 - 3038906
9002324 - 9002359

DATE OF APPROVAL: AS OF 01/06/22

REGISTER # 13A

| | | |
|---|---|---|
| 001 | GENERAL FUND | 243,977.51 |
| 104 | TRAFFIC SAFETY FUND | - |
| 106 | STATE GAS TAX FUND | 1,092.00 |
| 108 | ASSOCIATED RECREATION ACTIVITIES FUND | - |
| 109 | ASSET FORFEITURE FUND | 14,584.94 |
| 110 | MEAURE "R" | - |
| 111 | COMM. DEVEL. BLOCK GRANT | - |
| 112 | PROP "A" TRANSPORTATION | - |
| 114 | PROP "C" TRANSPORTATION | - |
| 115 | AIR QUALITY INVESTMENT PROGRAM | - |
| 116 | HOME SOUND INSTALLATION FUND | - |
| 117 | HYPERION MITIGATION FUND | - |
| 118 | TDA ARTICLE 3 - SB 821 BIKEWAY FUND | - |
| 119 | MTA GRANT | - |
| 120 | C.O.P.S. FUND | 19,500.00 |
| 121 | FEMA | - |
| 122 | L.A.W.A. FUND | - |
| 123 | PSAF PROPERTY TAX PUBLIC SAFETY | - |
| 124 | FEDERAL GRANTS | - |
| 125 | STATE GRANT | - |
| 126 | A/P CUPA PROGRAM OVERSIGHT SURCHARGE | 80.00 |
| 128 | SB-1 | - |
| 129 | CERTIFIED ACCESS SPECIALIST PROGRAM | - |
| 130 | AFFORDABLE HOUSING | - |
| 131 | COUNTY STORM WATER PROGRAM | - |
| 202 | ASSESSMENT DISTRICT #73 | - |
| 301 | CAPITAL IMPROVEMENT FUND | - |
| 302 | INFRASTRUCTURE REPLACEMENT FUND | - |
| 405 | FACILITIES MAINTENANCE | - |
| 501 | WATER UTILITY FUND | 103,905.44 |
| 502 | WASTEWATER FUND | 432,085.56 |
| 503 | GOLF COURSE FUND | - |
| 505 | SOLID WASTE FUND | - |
| 601 | EQUIPMENT REPLACEMENT | - |
| 602 | LIABILITY INSURANCE | 1,568.00 |
| 603 | WORKERS COMP. RESERVE/INSURANCE | - |
| 701 | RETIRED EMP. INSURANCE | - |
| 702 | EXPENDABLE TRUST FUND - DEVELOPER FEES | - |
| 703 | EXPENDABLE TRUST FUND - OTHER | 5,988.00 |
| 704 | CULTURAL DEVELOPMENT | - |
| 708 | OUTSIDE SERVICES TRUST | 1,092.00 |
| | TOTAL WARRANTS | $ 823,873.45 ✓ |

STATE OF CALIFORNIA
COUNTY OF LOS ANGELES

Information on actual expenditures is available in the Director of Finance's office in the City of El Segundo.

I certify as to the accuracy of the Demands and the availability of fund for payment thereof.

For Approval: Regular checks held for City council authorization to release.

CODES:

R = Computer generated checks for all non-emergency/urgency payments for materials, supplies and services in support of City Operations

For Ratification:

A = Payroll and Employee Benefit checks

AP - U = Computer generated Early Release disbursements and/or adjustments approved by the City Manager. Such as: payments for utility services, petty cash and employee travel expense reimbursements, various refunds, contract employee services consistent with current contractual agreements, instances where prompt payment discounts can be obtained or late payment penalties can be avoided or when a situation arises that the City Manager approves.

H = Handwritten Early Release disbursements and/or adjustments approved by the City Manager.

VOID CHECKS DUE TO ALIGNMENT:
N/A

VOID CHECKS DUE TO INCORRECT CHECK DATE:

VOID CHECKS DUE TO COMPUTER SOFTWARE ERROR:

NOTES

CHIEF FINANCIAL OFFICER Joseph Bobo

DATE: 1-18-2022

CITY MANAGER Barbara Voss (for SM)

DATE: 1-22-22

**CITY OF EL SEGUNDO**
**PAYMENTS BY WIRE TRANSFER**
**01/03/22 THROUGH 1/09/22**

| Date | Payee | | Description |
|---|---|---|---|
| 1/7/2022 | Mission Square | 106,066.63 | 457 payment Vantagepoint |
| 1/7/2022 | Mission Square | 1,198.62 | 401(a) payment Vantagepoint |
| 1/7/2022 | Mission Square | 550.00 | IRA payment Vantagepoint |
| 1/7/2022 | Cal Pers | 1,600.00 | Admin Fee - Retired Annuitant Late Fee |
| 1/7/2022 | Cal Pers | 578,924.65 | EFT Health Insurance Payment |
| 12/27/21-01/02/22 | Workers Comp Activity | 125,559.45 | SCRMA checks issued, less Swiss Re check reimbursement |
| 12/27/21-01/02/22 | Liability Trust - Claims | - | Claim checks issued/(voided) |
| 12/27/21-01/02/22 | Retiree Health Insurance | - | Health Reimbursment checks issued |
| | | 813,899.35 | |

**DATE OF RATIFICATION: 01/10/22**
**TOTAL PAYMENTS BY WIRE:** **813,899.35**

Certified as to the accuracy of the wire transfers by:

Treasury & Customer Services Manager — Date 1/10/22

Chief Financial Officer — Date 1-18-2022

City Manager — Date

Information on actual expenditures is available in the City Treasurer's Office of the City of El Segundo.

**CITY OF EL SEGUNDO**
**PAYMENTS BY WIRE TRANSFER**
**12/27/21 THROUGH 1/02/22**

| Date | Payee | | Description |
|---|---|---|---|
| 12/27/2021 | US Bank | 1,710,699.61 | Pension Obligation Bond Interest Payment |
| 12/30/2021 | ExpertPay | 1,763.42 | EFT Child support payment |
| 12/20/21-12/26/21 | Workers Comp Activity | 27,013.62 | SCRMA checks issued, less Swiss Re check reimbursement |
| 12/20/21-12/26/21 | Liability Trust - Claims | 53,643.96 | Claim checks issued/(voided) |
| 12/20/21-12/26/21 | Retiree Health Insurance | 0.00 | Health Reimbursment checks issued |
| | | 1,793,120.61 | |

**DATE OF RATIFICATION: 01/10/22**
**TOTAL PAYMENTS BY WIRE:** **1,793,120.61**

Certified as to the accuracy of the wire transfers by:

Treasury & Customer Services Manager — Date 1/10/22

Chief Financial Officer — Date 1-18-2022

City Manager — Date 1-22-22

Information on actual expenditures is available in the City Treasurer's Office of the City of El Segundo.

CITY OF EL SEGUNDO
WARRANTS TOTALS BY DEPARTMENT
AS OF 01/06/22
REGISTER # 13A

| DEPT# | NAME | TOTAL |
|---|---|---|
| | GENERAL FUND DEPARTMENTAL EXPENDITURES | |
| | **GENERAL GOVERNMENT** | |
| 1101 | City Council | 133.36 |
| 1201 | City Treasurer | 280.00 |
| 1300 | City Clerk | 420.22 |
| 2101 | City Manager | 3,757.18 |
| 2102 | Communications | 80.00 |
| 2201 | City Attorney | |
| 2401 | Economic Development | 20,683.06 |
| 2402 | Planning | 1,479.94 |
| 2500 | Administrative Services | 37,309.75 |
| 2601 | Government Buildings | 13,377.30 |
| 2700 | Community Outreach/Planning | |
| 2900 | Nondepartmental | 25,268.06 |
| 6100 | Library | 4,779.17 |
| | | 107,568.04 |
| | **PUBLIC SAFETY** | |
| 3100 | Police | 78,430.91 |
| 3200 | Fire | 3,744.76 |
| 2403 | Building Safety | 1,092.00 |
| 2404 | Plng/Bldg Sfty Administration | 11,308.31 |
| | | 94,575.98 |
| | **PUBLIC WORKS** | |
| 4101 | Engineering | 11,253.74 |
| 4200 | Streets/Park Maintenance | 4,100.46 |
| 4300 | Wastewater | 382,098.09 |
| 4601 | Equipment Maintenance | 9,186.08 |
| 4801 | Administration | 200.00 |
| | | 406,838.37 |
| | **COMMUNITY DEVELOPMENT** | |
| 5100,5200 | Recreation & Parks | 395.43 |
| 5400 | Centennial | |
| | | 395.43 |
| | EXPENDITURES | |
| | CAPITAL IMPROVEMENT | |
| | ALL OTHER ACCOUNTS | 214,495.63 |
| | **TOTAL WARRANTS** | 823,873.45 |

# City Council Agenda Statement

**Meeting Date:** February 1, 2022
**Agenda Heading:** Consent
**Item Number:** B.6

**TITLE:**

Amendment to the Professional Services Agreement with Vincent Benjamin Group LLC to Provide On-call Temporary Staffing Services for Use by All City Departments

**RECOMMENDATION:**

Authorize the City Manager to approve a second amendment to contract #6062 with Vincent Benjamin Group LLC for an additional $170,000 to increase the total contract authority to $469,950 for on-call temporary staffing services for use by all City departments.

**FISCAL IMPACT:**

This contract will be funded in FY 2021-2022 from savings from budgeted vacant full-time salary and benefit savings as well as professional services accounts in various departments.

Amount Budgeted: $469,950
Additional Appropriation:none
Account Number: Budgeted City-wide vacancies will be used to fund the contract increase

**BACKGROUND:**

The City entered into a professional services agreement with Vincent Benjamin Group LLC in March 2021 for on-call temporary staffing services under agreement #6062. This agreement provides temporary staffing to meet the operational needs of various departments in the following scenarios: where a permanent position is frozen for a specific length of time to provide budgetary savings, while a recruitment is conducted, during an employee's leave of absence, or when extra help is necessary. A first amendment entered into for fiscal year FY2021-2022, increased the contract authority from $49,950 to $299,950.

**DISCUSSION:**

Staff recommends an amendment to the professional services agreement with Vincent

Benjamin LLC to provide various City departments with on-call temporary staffing services for an amount not to exceed $469,950. Services provided under this agreement help to maintain customer service levels are in alignment with Strategic Plan Goal 1, “Enhance Customer Service, Engagement, and Communication; Embrace Diversity, Equity and Inclusion, Objective 1A: El Segundo provides unparalleled services to internal and external customers.”

## CITY STRATEGIC PLAN COMPLIANCE:

Goal 1: Enhance Customer Service, Engagement, and Communication; Embrace Diversity, Equity, and Inclusion

Objective 1A: El Segundo provides unparalleled service to internal and external customers.
Objective 1 B: El Segundo's engagement with the community ensures excellence.

**PREPARED BY:**
Rebecca Redyk, Human Resources Director
**REVIEWED BY:**
Rebecca Redyk, Human Resources Director
**APPROVED BY:**
Barbara Voss, Deputy City Manager

## ATTACHED SUPPORTING DOCUMENTS:

1. Second Amendment - Vincent Benjamin PSA 6062

**SECOND AMENDMENT TO
AGREEMENT NO. 6062 BETWEEN
THE CITY OF EL SEGUNDO AND
VINCENT BENJAMIN GROUP, LLC**

THIS SECOND AMENDMENT ("Amendment") is made and entered into this 1st day of February 2022, by and between the CITY OF EL SEGUNDO, a general law city and municipal corporation existing under the laws of California ("CITY"), and VINCENT BENJAMIN GROUP, a limited liability Corporation ("CONSULTANT"). The parties agree as follows:

1. Section 1 (C) is amended to read as follows:

   "As additional consideration, CITY agrees to pay CONSULTANT an additional sum not to exceed One-hundred seventy thousand dollars ($170,000.00), for a total contract sum of $469,950 for CONSULTANT'S services through June 30, 2022."

2. This Amendment may be executed in any number or counterparts, each of which will be an original, but all of which together constitutes one instrument executed on the same date.

3. Except as modified by this Amendment, all other terms and conditions of Agreement No. 6062 will remain the same.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF the parties hereto have executed this Amendment the day and year first hereinabove written.

CITY OF EL SEGUNDO

_____
Scott Mitnick,
City Manager

ATTEST:

_____
Tracy Weaver,
City Clerk

APPROVED AS TO FORM:

_____
Joaquin Vazquez,
City Attorney

VINCENT BENJAMIN GROUP LLC

_____
Bill Hoke,
CFO

Taxpayer ID No. 46-2885777

# City Council Agenda Statement

**Meeting Date:** February 1, 2022
**Agenda Heading:** Consent
**Item Number:** B.7

## TITLE:

Resolutions Correcting City Contributions for CalPERS Medical Premiums

## RECOMMENDATION:

Adopt a resolution that corrects the City Contributions for CalPERS medical premiums for the following groups covered under the City of El Segundo Administrative Code, Title 1A Salaries and Conditions of Employment, Chapter 1A2 Management-Confidential Series.

1. Executive Management
2. Mid-Management/Confidential

## FISCAL IMPACT:

Sufficient funding for the proposed action is included in the Adopted FY 2021-2022 Citywide Budget. No new funding is needed for this fiscal year.

## BACKGROUND:

CalPERS requires that all contracting agencies subject to the Public Employees' Medical and Hospital Care Act (PEMHCA) fix the amount of the employer contribution towards medical premiums by resolution. On December 7, 2021 resolutions amending the City contributions for CalPERS medical premiums for the Executive Management and Mid-Management/Confidential groups were brought to City Council for approval. Unfortunately, there was an error in these resolutions that requires correction.

## DISCUSSION:

The health allowance for employees in the Management Confidential series includes two components; a medical contribution and flexible benefit. The medical contribution is subject to the Public Employees' Medical and Hospital Care Act (PEMHCA) and the designated allowance may only be used towards the cost of CalPERS medical plan

premiums. The amounts listed in the resolutions from the December 7, 2021, Council meeting included the total health allowance rather than just the employer medical contribution. The attached resolutions reflect the previously approved employer medical contribution of $932 per month for the Executive Management group and $735 per month for the Mid-Management/Confidential group. Upon adoption, the Human Resources Department will record these corrected resolutions with CalPERS.

## CITY STRATEGIC PLAN COMPLIANCE:

Goal 3: Develop as a Choice Employer and Workforce

Objective: El Segundo is a city employer of choice and consistently hires for the future, with a workforce that is inspired, world-class and engaged, demonstrating increasing stability and innovation.

**PREPARED BY:**
Rebecca Redyk, Human Resources Director
**REVIEWED BY:**
Rebecca Redyk, Human Resources Director
**APPROVED BY:**
Barbara Voss, Deputy City Manager

## ATTACHED SUPPORTING DOCUMENTS:

1. Resolution Fixing the Employer Contribution 006 El Segundo Executive Management
2. Resolution Fixing the Employer Contribution 001 El Segundo El Segundo Mid-Management Confidential

**RESOLUTION NO.** Number
**FIXING THE EMPLOYER CONTRIBUTION**
**UNDER THE PUBLIC EMPLOYEES' MEDICAL AND HOSPITAL CARE ACT**
**AT AN EQUAL AMOUNT FOR EMPLOYEES AND ANNUITANTS**
**WITH RESPECT TO A RECOGNIZED EMPLOYEE ORGANIZATION**
**006 EL SEGUNDO EXECUTIVE MANAGEMENT**

WHEREAS, (1) **City of El Segundo** is a contracting agency under Government Code Section 22920 and subject to the Public Employees' Medical and Hospital Care Act (the "Act") for participation by members of **El Segundo Executive Management;** and

WHEREAS, (2) Government Code Section 22892(a) provides that a contracting agency subject to Act shall fix the amount of the employer contribution by resolution; and

WHEREAS, (3) Government Code Section 22892(b) provides that the employer contribution shall be an equal amount for both employees and annuitants, but may not be less than the amount prescribed by Section 22892(b) of the Act; now, therefore be it

RESOLVED, (a) That the employer contribution for each employee or annuitant shall be the amount necessary to pay the full cost of his/her enrollment, including the enrollment of family members, in a health benefits plan up to a maximum of **$932.00** per month, plus administrative fees and Contingency Reserve Fund assessments; and be it further

RESOLVED, (b) **City of El Segundo** has fully complied with any and all applicable provisions of Government Code Section 7507 in electing the benefits set forth above; and be it further

RESOLVED, (c) That the participation of the employees and annuitants of **City of El Segundo** shall be subject to determination of its status as an "agency or instrumentality of the state or political subdivision of a State" that is eligible to participate in a governmental plan within the meaning of Section 414(d) of the Internal Revenue Code, upon publication of final Regulations pursuant to such Section. If it is determined that **City of El Segundo** would not qualify as an agency or instrumentality of the state or political subdivision of a State under such final Regulations, CalPERS may be obligated, and reserves the right to terminate the health coverage of all participants of the employer; and be it further

RESOLVED, (d) That the executive body appoint and direct, and it does hereby appoint and direct, the City Clerk to file with the Board a verified copy of this resolution, and to perform on behalf of **City of El Segundo** all functions required of it under the Act; and be it further

RESOLVED, (e) That coverage under the Act be effective on **April 1, 2022**.

Adopted at a regular meeting of the El Segundo City Council at El Segundo, CA, this 1st day of February, 2022.

Signed: _____
Drew Boyles, Mayor

Attest: _____
Tracy Weaver, City Clerk

**RESOLUTION NO.** Number
**FIXING THE EMPLOYER CONTRIBUTION**
**UNDER THE PUBLIC EMPLOYEES' MEDICAL AND HOSPITAL CARE ACT**
**AT AN EQUAL AMOUNT FOR EMPLOYEES AND ANNUITANTS**
**WITH RESPECT TO A RECOGNIZED EMPLOYEE ORGANIZATION**
**001 EL SEGUNDO MID-MANAGEMENT/CONFIDENTIAL**

WHEREAS, (1) **City of El Segundo** is a contracting agency under Government Code Section 22920 and subject to the Public Employees' Medical and Hospital Care Act (the "Act") for participation by members of **El Segundo Mid-Management/Confidential**; and

WHEREAS, (2) Government Code Section 22892(a) provides that a contracting agency subject to Act shall fix the amount of the employer contribution by resolution; and

WHEREAS, (3) Government Code Section 22892(b) provides that the employer contribution shall be an equal amount for both employees and annuitants, but may not be less than the amount prescribed by Section 22892(b) of the Act; now, therefore be it

RESOLVED, (a) That the employer contribution for each employee or annuitant shall be the amount necessary to pay the full cost of his/her enrollment, including the enrollment of family members, in a health benefits plan up to a maximum of **$735.00** per month, plus administrative fees and Contingency Reserve Fund assessments; and be it further

RESOLVED, (b) **City of El Segundo** has fully complied with any and all applicable provisions of Government Code Section 7507 in electing the benefits set forth above; and be it further

RESOLVED, (c) That the participation of the employees and annuitants of **City of El Segundo** shall be subject to determination of its status as an "agency or instrumentality of the state or political subdivision of a State" that is eligible to participate in a governmental plan within the meaning of Section 414(d) of the Internal Revenue Code, upon publication of final Regulations pursuant to such Section. If it is determined that **City of El Segundo** would not qualify as an agency or instrumentality of the state or political subdivision of a State under such final Regulations, CalPERS may be obligated, and reserves the right to terminate the health coverage of all participants of the employer; and be it further

RESOLVED, (d) That the executive body appoint and direct, and it does hereby appoint and direct, the City Clerk to file with the Board a verified copy of this resolution, and to perform on behalf of **City of El Segundo** all functions required of it under the Act; and be it further

RESOLVED, (e) That coverage under the Act be effective on **April 1, 2022**.

Adopted at a regular meeting of the El Segundo City Council at El Segundo, CA, this 1st day of February, 2022.

Signed: _____
Drew Boyles, Mayor

Attest: _____
Tracy Weaver, City Clerk

# City Council Agenda Statement

**Meeting Date:** February 1, 2022
**Agenda Heading:** Public Hearings
**Item Number:** C.9

## TITLE:

Ordinance Amending El Segundo Municipal Code Titles 14 and 15 to Comply with State Law (SB9) to Allow for Increased Residential Density in the R-1 Single Family Residential Zone

## RECOMMENDATION:

1. Find that the proposed ordinance amending El Segundo Municipal Code Titles 14 and 15 is exempt from review under CEQA and the CEQA Guidelines because SB 9 specifically authorizes local agencies to impose certain objective standards consistent with the bill's provisions, and adopt an ordinance to implement its provisions. SB 9 further provides that such ordinances are not considered a "project" under CEQA (Gov. Code, § 65852.21, subd. (j)).

2. Waive first reading and introduce an ordinance amending ESMC Title 14 (Subdivision Regulations) to include subdivision standards for General Urban Lot Splits; and Title 15 adding new Section 15-4G – Two Unit Residential Developments and Urban Lot Splits in Single-Family Residential (R1) Zones, in accordance with the provisions of Senate Bill No. 9.

3. Schedule a second reading for the February 15, 2022 City Council meeting.

## FISCAL IMPACT:

There are no direct fiscal impacts associated with amending the Municipal Code.

## BACKGROUND:

Historically, state laws have left land use and zoning authority exclusively to local governments. The California Constitution allows cities and counties to "make and enforce within its limits, all local, police, sanitary and other ordinances and regulations not in conflict with general laws." It is from this fundamental power (commonly referred to as police power) that cities and counties derive their authority to regulate behavior to preserve the health, safety, and welfare of the public, including land use authority.

In recent years, state legislators have cited reports published by the State Legislative Analysts Office, that local government control and the California Environmental Quality Act ("CEQA") both contribute to the lack of housing production in the state. They argue that the lack of production has driven housing prices up and resulted in overcrowding within existing homes. These factors have prompted legislators to take sweeping actions, passing several housing related bills preempting local regulations related to housing. This includes increasing thresholds for by-right housing development approvals, streamlining approvals for affordable housing, and mandating ministerially approved accessory dwelling units.

In September 2020, Senate Bill No. 9 ("SB 9") was signed by Governor Newsom, to provide for by-right ministerial approval of housing developments of two units (i.e. a duplex) and/or the subdivision of a parcel into two equal parcels (urban lot split) in the single-family residential (R1) zone. According to the author of the bill, Senator Toni Atkins (Senate District 39, San Diego County), the bill intended to “promote small-scale neighborhood residential development by streamlining the process for a homeowner to create a duplex or subdivide an existing lot.”

Local agencies including 138 municipalities, several Councils of Government, dozens of neighborhood associations, the California Contract Cities Association, and the League of California Cities filed letters of opposition to the bill. By August 2021, a poll commissioned by Housing Is a Human Right showed 71% opposition to SB 9 among the general public, citing concerns that the bill would negatively impact homeownership, developers would drive up housing costs, and that the bill lacked provisions requiring affordable housing. However, despite the growing opposition to SB 9, the State Assembly and State Senate passed the bill on August 25 and 28, 2021, respectively. SB 9 became effective on January 1, 2022.

To address the requirements of SB 9, City Council authorized staff to engage with John Kaliski Architects ("JKA") to assist the City in the study and development of objective design standards to be required of two-unit development and/or urban lot splits in the R1 zone. On December 13, 2021, the Planning Commission held a special meeting and study session to discuss SB 9. During the study session, JKA presented an Existing Conditions, Findings, and Considerations Report. As part of this report, JKA provided several alternative approaches for design standards and guidelines for multi-unit residential construction within R1 zones, and sought feedback from the Commission to better inform recommendations for amended and/or additional zoning standards and guidelines to address the impacts of SB 9.

During the study session, the Commission provided several areas to be further explored, including parking requirements, size limitations, landscaping requirements, design and development standard requirements (e.g. setbacks, massing, site orientation, lot coverage, etc.), occupancy, and affordable housing provisions. This feedback was incorporated into a proposed Ordinance drafted to create objective

development standards that comply with SB 9 and other relative state legislation that requires no net-loss of buildable area or density while ensuring that the single-family character of El Segundo is maintained.

On January 13, 2022, the Planning Commission considered an Ordinance allowing certain subdivisions and multiple residential units in the Single-Family Residential Zone and establishing objective standards to implement the requirements of Senate Bill No. 9. After deliberation, discussion and suggested additional regulations related to building height and rear oriented massing, Planning Commission adopted a Resolution recommending City Council approve the proposed Ordinance. The proposed Ordinance includes SB 9-related non-zoning code Title 14 subdivision requirements that complement the zoning provisions that the Planning Commission recommended for approval.

**DISCUSSION:**

SB 9 mandates ministerial approval of two units (i.e. duplexes) on lots zoned for a single-family residence and requires ministerial approval of subdivision of an existing single residential parcel into two parcels. The new law creates the theoretical possibility for four units to be built on what is today a single-family parcel. As such, SB 9 could have a significant impact on El Segundo's R1 neighborhoods. For example, a typical 5,000 square foot lot with an existing single-family home may be divided into two 2,500 square foot lots with two units each (totaling four units).

Although local governments cannot prohibit duplexes or lot splits in the R1 zone due to the SB 9 mandates without making stringent health and safety impact standards, local governments may impose "objective design standards" that do not conflict with the law. With the ability to create and impose "objective design standards," JKA and staff developed the attached draft ordinance in accordance with the guidance provided by the Planning Commission in December, and with the intent of preserving and maintaining El Segundo's low-medium density residential homes and neighborhoods to the maximum extent possible.

The following is an outline summary of the proposed ordinance.

<u>Subdivision:</u>

- Limits the number of new parcels to two
- One of the two new lots cannot be smaller than 40-percent of the original lot area, and no smaller than 1,200 square feet
- Lot line splits must parallel the street frontage

Density:

- No more than two dwellings per lot
- Prohibits ADUs or JADUs on a lot improved with two-units

Development Standards for lots wider than 25-feet:

- No vehicular access from a street for lots that abut an alley, except when 80-percent or more of the properties on the same block face on the same side of the street have existing vehicular access from the street
- Minimum of one off-street parking spaces, except where otherwise prohibited by state law
- Maximum floor area ratio of 0.60:1.0
- Allowance of dwelling unit at least 800 square feet, maximum 1,050 square feet
- Minimum 22-foot front yard setback, or the prevailing front yard setback on the block, whichever is less
- Minimum 4-foot side and rear setback
- Building orientation must contain at least one entry door to a residential unit facing and be directly visible from the adjoining street and sidewalk
- Second floor can be no more than 90-percent of the first floor
- Attached garages must be offset a minimum of 3-feet from the front building facade
- Two, 24-inch box trees must be planted in the front yard

Development Standards for lots 25-feet wide or less:

- No vehicular access from a street for lots that abut an alley
- Minimum of two off-street parking spaces
- Minimum 22-foot front yard setback, or the prevailing front yard setback on the block, whichever is less

- Minimum 3-foot side setback
- Minimum 4-foot rear setback
- Two, 24-inch box trees must be planted in the front yard

General:

- Required to pay development impact fees and assessment fees
- May not be rented for less than 31 consecutive days
- Urban lot split applicants must sign affidavit stating intention to occupy one of the housing units
- Two-unit development applicants must record covenant requiring they will occupy one of the housing units as a primary residence
- Mandatory requirement that at least one unit in each two-unit residential development, or at least one unit on any lot created pursuant to an urban lot split, be offered for sale or for rent at a moderate, low, or very-low income household

Additional Requirements:

During the Planning Commission's review and discussion of the proposed Ordinance, the Commission requested that the additional standards below be included in the Ordinance:

- Require a porch or veranda for residences on lots that are 25-feet wide or less
- Include a minimum building separation for lots that are wider than 25-feet (four ft. proposed in the Ordinance)
- Include a building height restriction (lesser of 24' or two stories proposed in the Ordinance)

The Commission expressed that such standards could provide design elements that minimize bulk and mass, and helps to further maintain the R1 neighborhood character and appearance. As a result, Staff has included language to implement these standards into the proposed Ordinance.

Environmental Review

The proposed Ordinance is exempt from review under CEQA and the CEQA Guidelines because SB 9 specifically authorizes local agencies to impose certain objective standards consistent with the bill's provisions, and to adopt an ordinance to implement its provisions. SB 9 further provides that such ordinances are not considered a "project" under CEQA (Gov. Code, § 65852.21, subd. (j)).

Conclusion

With the assistance of JKA and the direction provided by the Planning Commission during the December 2021 study session, and in accordance with the provisions of SB 9, staff believes that the attached proposed Ordinance creates objective development standards while ensuring that the single-family character of El Segundo is maintained. As such, staff recommends that City Council adopt the attached Ordinance as recommended by the Planning Commission.

## CITY STRATEGIC PLAN COMPLIANCE:

Goal 1: Enhance Customer Service, Engagement, and Communication; Embrace Diversity, Equity, and Inclusion

Objective 1A: El Segundo provides unparalleled service to internal and external customers.

**PREPARED BY:**
Eduardo Schonborn, AICP, Planning Manager
**REVIEWED BY:**
Michael Allen, AICP, Development Services Director
**APPROVED BY:**
Barbara Voss, Deputy City Manager

## ATTACHED SUPPORTING DOCUMENTS:

1. Draft SB 9 Ordinance

**ORDINANCE NO. ____**

**AN ORDINANCE AMENDING EL SEGUNDO MUNICIPAL CODE TITLE 14 (SUBDIVISION REGULATIONS) TO ADD NEW CHAPTER 6 AND TITLE 15 (ZONING CODE) CHAPTER 4 TO ADD NEW ARTICLE G ALLOWING CERTAIN SUBDIVISIONS AND MULTIPLE RESIDENTIAL UNITS IN THE SINGLE FAMILY RESIDENTIAL ZONE AND ESTABLISHING OBJECTIVE STANDARDS PURSUANT TO SENATE BILL NO. 9.**

The City Council of the City of El Segundo does ordain as follows:

SECTION 1: The City Council finds and declares as follows:

A. On September 16, 2020, Senate Bill No. 9 ("SB 9") was approved by Governor Gavin Newsom. The bill amended Section 66452.6 of, and added Sections 65852.21 and 66411.7 to, the Government Code, relating to land use. SB 9 became effective on January 1, 2022;

B. On October 28, 2021, the City initiated an application for Environmental Assessment No. EA 1317 and Zone Text Amendment No. ZTA 22-01 to amend El Segundo Municipal Code ("ESMC") Chapter 15-4 to implement SB 9's requirements and allowance for certain local control elements;

C. On January 13, 2022, the Planning Commission held a duly noticed public hearing to receive public testimony and other evidence regarding the proposed Zone Text Amendment, including, without limitation, information provided to the Planning Commission by City staff and public testimony;

D. On January 13, 2022, the Planning Commission adopted Resolution No. 2911 recommending the City Council approve Environmental Assessment No. EA-1317 and Zone Text Amendment No. ZTA 22-01;

E. On _____, 2022, the City Council held a duly noticed public hearing and considered the information provided by City staff and public testimony regarding this Ordinance; and

F. This Ordinance and its findings are made based upon the entire administrative record including, without limitation, testimony and evidence presented to the City Council at its _____, 2022 hearing and the staff report submitted by the Development Services Department.

SECTION 2: *Environmental Assessment*. The Planning Commission finds that the proposed zone text amendment (Ordinance) is exempt from review under the California Environmental Quality Act (California Public Resources Code §§21000, et seq., "CEQA") and the regulations promulgated thereunder (14 California Code of Regulations §§15000,

et seq., the "State CEQA Guidelines") because SB 9 specifically authorizes local agencies to impose objective zoning, subdivision, and design standards consistent with the bill's provisions, and to adopt an ordinance to implement its provisions. SB 9 further provides that such ordinances are not considered a "project" under CEQA (Gov. Code, §§ 65852.21, subd. (j); 66411.7, subd. (n)).

SECTION 3: *Factual Findings and Conclusions*. The City Council finds, without limitation, that this Ordinance would result in the following:

A. Conformance with the provisions of Senate Bill No. 9, as approved by Governor Gavin Newsom on September 16, 2020;

B. Creates objective standards to implement the provisions of Senate Bill No. 9;

C. Allows subdivisions and allows construction of multiple residential units in the Single-Family Residential Zone; and

D. The General Plan Land Use designation for the affected properties in the Single-Family Residential (R-1) Zone is Single-Family Residential.

SECTION 4: *General Plan Findings*. As required under Government Code § 65860 the ESMC amendment proposed by this Ordinance is consistent with the El Segundo General Plan as follows:

A. The amendment conforms with the Land Use Element Goals, Objectives and Policies. Specifically, the amendment is consistent with Goal LU1, Objective LU1-1, Goal LU3, in that the amendment as a comprehensive whole creates design standards, and helps maintain a sense of place for the entire City; preserves and maintains the City's low-medium density residential nature, with low building height profile and character, and minimum development standards; and promotes the health, safety, and well-being of the people of El Segundo by adopting standards for the proper balance to maintain the character of the R1 Zone and continue El Segundo's "small town" atmosphere.

SECTION 5: *Zone Text Amendment Findings*. In accordance with ESMC § 15-4A and based on the findings set forth in Section 3, the proposed Ordinance is consistent with and necessary to carry out the purpose of the ESMC as follows:

A. The Ordinance is consistent with the purpose of the ESMC, which is to serve the public health, safety, and general welfare and to provide the economic and social advantages resulting from an orderly planned use of land resources.

B. The Ordinance is necessary to facilitate the development process and ensure the orderly development of buildings, parking areas, landscaping, and the location of uses in the City. The intent of the ordinance is to create objective standards, allow

subdivisions and allow construction of multiple residential in accordance with Senate Bill No. 9, which will facilitate and expedite the development process and provide economic and social benefits resulting from the orderly planned use of land resources.

SECTION 6: Chapter 4 (Residential Zones) of Title 15 (Zoning Regulations) of the ESMC is amended to add new Article G (Two-Unit Residential Development and Urban Lot Splits in Single-Family Residential (R1) Zones) as follows:

**"Article G.**
**Two-Unit Residential Developments and Urban Lot Splits in Single-Family Residential (R1) Zones**

**15-4G-1: PURPOSE**
**15-4G-2: GENERAL REQUIREMENTS**
**15-4G-3: GENERAL URBAN LOT SPLIT DEVELOPMENT STANDARDS**
**15-4G-4: DEVELOPMENT STANDARDS FOR LOTS WIDER THAN TWENTY-FIVE FEET**
**15-4G-5: DEVELOPMENT STANDARDS FOR LOTS TWENTY-FIVE FEET WIDE OR LESS**
**15-4G-6: APPLICATION PROCESS**
**15-4G-7: TENANCY**
**15-4G-8: INCLUSIONARY UNITS**

**15-4G-1: PURPOSE**

This article is adopted pursuant to Government Code section 65852.6, 65852.21, and 66411.7 for the purpose of implementing the City's regulation of two-unit residential development and urban lot splits in the City's Single-Family Residential Zone.

Government Code section 65852.21(a) requires the City ministerially approve certain housing developments containing no more than two residential units within a single-family residential zone. Government Code section 66411.7(a) requires that the City ministerially approve a parcel map for an urban lot split, subject to standards set forth in Government Code section 66411.7(a)(1), (2), and (3).

**15-4G-2: GENERAL REQUIREMENTS**

Notwithstanding the standards outlined in this Article G of Chapter 4 of Title 15 of this code, all other standards provided in Article A of Chapter 4 of Title 15 of this code will apply, unless otherwise set forth in this Article G or prohibited by state law.

## 15-4G-3: GENERAL URBAN LOT SPLIT DEVELOPMENT STANDARDS

All urban lot splits with two-unit residential developments within the R1 Zone must comply with the R1 development standards contained in Section 17.210.020 and the development standards of this Section 15-4G-3. If there are conflicts between the provisions of Section 17.210.020 and this Section 15-4G-3, the provisions of this Section will govern.

A. Urban lot splits must incorporate all built-form parameters of State of California Government Code Section 66411.7, including:

1. A parcel map that subdivides an existing R1 parcel will create no more than two new parcels of approximately equal lot area and with one of the two created parcels not smaller than 40 percent of the lot area of the original parcel proposed for subdivision. See Figure 4G-1.

2. Both newly created parcels will be no smaller than 1,200 square feet in gross area.

3. No more than two (2) dwelling units per lot will be constructed on a R1 urban lot split.

4. Accessory Dwelling Units or Junior Accessory Dwelling Units are prohibited where an Urban Lot Split is also developed with a two-unit residential development pursuant to Section 15-4G-4 and 15-4G-5.

5. A minimum of one off-street parking spaces will be provided per newly constructed dwelling unit. No parking is required if parcel is located within one-half mile walking distance of a High-quality Transit Corridor or major transit stop or if a car share vehicle is located within one-block of the parcel.

B. Lot line splits will be parallel to public street frontages. See Figure 4G-2.

C. When cross easements across lot split parcels are required to provide access to units, or access to vehicle parking spaces, or access to utilities and utility connections, or access between lot split parcels, or access for any other purpose, a covenant establishing the cross easement acceptable to the Development Services Department must be recorded with the Los Angeles County Recorder upon the filing of the Final Parcel Map described in chapter 6 of title 14 of this code.

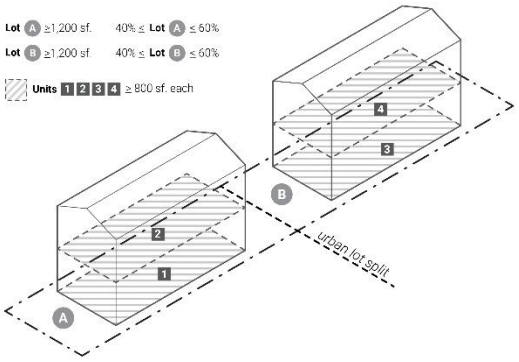



Figure 4G-1

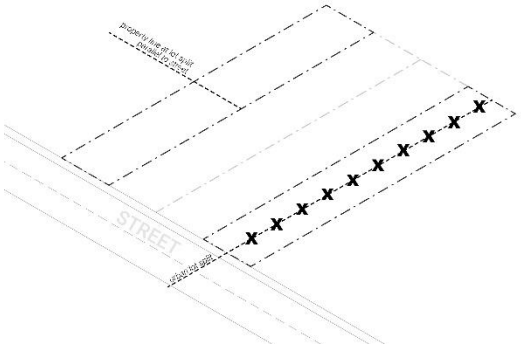



Figure 4G-2

## 15-4G-4: DEVELOPMENT STANDARDS FOR LOTS WIDER THAN TWENTY-FIVE FEET

All two-unit residential developments and urban lot splits on lots that are wider than twenty-five feet (25') within the R1 Zone must comply with the development standards contained in this section.

A. Where an R1 lot abuts an alley, vehicular access to the lot must be from the alley, except when 80 percent or more of the properties on the same block face on the same side of the street have existing vehicular access from the street. For the purposes of this section, the "block" is defined as the properties on the same side of the street between the nearest intersecting streets.

B. When an R1 lot is not alley-adjacent, a maximum of one, maximum ten feet (10') wide, access drive is permitted in the front yard.

C. A minimum of one off-street parking spaces will be provided per newly constructed dwelling unit. No parking is required if parcel is located within ½ mile walking distance of a High-quality Transit Corridor or major transit stop or if a car share vehicle is located within one-block of the parcel.

D. On lots abutting an alley no vehicular access must be provided from a street.

E. Floor Area Ratio:

1. The maximum total building area on the lot must not exceed an overall floor area ratio (FAR) of 0.60:1.0.

2. Each unit must be at least 800 square feet of residential floor area but no larger than 1,050 square feet of residential floor area.

F. Setbacks:

1. Front Yard: Structures must maintain a twenty-two foot (22') minimum setback or the prevailing front yard setback, whichever is less. For the purposes of this section, "prevailing" is defined as the numerical value describing the average front yard setback dimension of each lot within the block of the development, exclusive of the lowest 25% and the highest 25% dimensions. For the purposes of this section, the "block" is defined as the properties on the same side of the street between the nearest intersecting streets.

    a. Permitted Front Yard Setback Encroachments: as provided by Section 15-4A-6(D)(1)(a).

2. Side Yard: Structures must maintain a minimum setback of four feet (4') on each side of the lot.

3. Rear Yard: Structures must maintain a minimum setback of four feet (4') on the first and second floors.

Notwithstanding Subsections F(1), F(2), and F(3) above, no setback must be required for an existing structure or new structure constructed in the same location and to the same dimensions of an existing structure.

G. Building Orientation

1. At least one entry door to a residential unit must face and be directly visible from the adjoining street and sidewalk.

H. Mass and Bulk:

1. Second levels must be less than or equal to ninety percent (90%) of the area of the first level.

2. All attached garages must be offset at minimum three feet (3') from the front building façade plane.

I. Height and two-story limitation: Height and two-story limitation: The height of structures must not exceed the lesser of twenty-four feet (24') or two (2) stories.

J. Landscaping: A minimum of two (2) twenty-four-inch (24") box trees with irrigation must be planted in the front yard.

## 15-4G-5: DEVELOPMENT STANDARDS FOR LOTS TWENTY-FIVE FEET WIDE OR LESS

All two-unit residential developments and urban lot splits on lots that are twenty-five feet (25') wide or less within the R1 Zone must comply with the development standards contained in this section.

A. Where an R1 lot abuts an alley, vehicular access to the lot must be from the alley.

B. A minimum of one off-street parking spaces must be provided per newly constructed dwelling unit. No parking is required if parcel is located within ½ mile walking distance of a High-quality Transit Corridor or major transit stop or if a car share vehicle is located within one-block of the parcel.

C. Floor Area Ratio:

1. The maximum total building area on the lot must not exceed an overall floor area ratio (FAR) of 1.0:1.0.

2. Each unit must be at least 800 square feet of residential floor area but no larger than 875 square feet of residential floor.

D. Setbacks:

1. Front Yard: Structures must maintain a twenty-two foot (22’) minimum setback or the prevailing front yard dimension, whichever is less. For the purposes of this section, “prevailing” is defined as the numerical value describing the average front yard setback dimension of each lot within the block of the development, exclusive of the lowest 25% and the highest 25% dimensions. For the purposes of this section, the "block" is defined as the properties on the same side of the street between the nearest intersecting streets.

   a. Permitted Front Yard Setback Encroachments: Porches or verandas in a front yard setback not fully enclosed on three (3) sides (railings and/or columns permitted) may encroach into the front yard setback a maximum of six feet (6’), and any other improvements allowed by Section 15-4A-6(D)(1)(a).

2. Side Yard: Structures must maintain a minimum setback of three feet (3’) on each side of the lot.

3. Rear Yard: Structures must maintain a minimum setback of four feet (4’) on the first and second floors.

Notwithstanding Subsections D(1), D(2), and D(3) above, no setback will be required for an existing structure or new structure constructed in the same location and to the same dimensions of an existing structure.

E. Height and two-story limitation: The height of structures must not exceed the lesser of twenty-four feet (24') or two (2) stories.

F. Design Requirements for Street-Facing Residences:

1. A porch or veranda must be provided along the front façade of a street-facing residence.

2. The porch or veranda may not be fully enclosed on three (3) sides (railings and/or columns permitted).

3. The porch or veranda may encroach into the front yard setback a maximum of six feet (6').

G.. Landscaping: A minimum of one (1) twenty-four-inch (24") box tree with irrigation must be planted in the front yard.

H. Building Separation: A minimum distance of at least four feet (4') must be maintained between buildings.

**15-4G-6: APPLICATION PROCESS; FEES**

Any application for a building permit to create a two-unit residential development or a lot created pursuant to an Urban Lot Split in compliance with this Article on a single-family residential lot will be ministerially approved. Properties developed under this section will be subject to all applicable fees, including development impact fees, and assessments.

**15-4G-7: TENANCY**

A. Each unit created under this chapter may be rented separately, however rental terms must not be less than 31 consecutive days or allow termination of the tenancy prior to the expiration of at least one 31-day period occupancy by the same tenant.

B. Urban Lot Split: The applicant for an urban lot split must sign an affidavit, in the form approved by the City Attorney, stating that the applicant intends to occupy one of the housing units on the newly created lots as its principal residence for a minimum of three years from the date of the approval of the Urban Lot Split. This subsection does not apply to an applicant that is a "community land trust," as defined in clause (ii} of subparagraph (C) of paragraph (11) of subdivision (a) of Section 402.1 of the Revenue and

Taxation Code or is a "qualified nonprofit corporation" as described in Section 214.15 of the Revenue and Taxation Code.

C. Two-Unit Residential Development: The property owner of a parcel on which a two-unit residential development is proposed must record a covenant with the county recorder which requires the property owner to occupy one of the housing units on the newly created units as its principal residence.

**15-4G-8: INCLUSIONARY UNITS**

At least one of the units in each two unit residential development, or at least one unit on any lot created pursuant to an Urban Lot Split, must be constructed and offered for sale or for rent as a moderate, low, or very low-income unit, restricted for occupancy by a moderate, low or very low-income household, as defined in and pursuant to the procedures in the City's "Affordable Housing Policies and Procedures."

SECTION 7: Title 14 of the ESMC is amended to add new Chapter 6 "General Urban Lot Splits" to read as follows:

"**Chapter 6**

**GENERAL URBAN LOT SPLITS**

**14-6-1: PURPOSE**
**14-6-2: PARCEL MAP REQUIRED**

**14-6-1: PURPOSE**

This article is adopted pursuant to Government Code section 66452.6, 65852.21, and 66411.7 for the purpose of implementing the City's regulation of two-unit residential development and urban lot splits in the City's Single-Family Residential Zone.

Government Code Section 66411.7(a) requires that the City ministerially approve a parcel map for an urban lot split, subject to standards set forth in Government Code section 66411.7.

**14-6-2: PARCEL MAP REQUIRED**

Any person proposing to subdivide a property in the Single Family Residential (R1) Zone for the purpose of implementing an urban lot split pursuant to Government Code section 66411.7 must file a Parcel Map application in accordance with El Segundo Municipal Code Section 14-1-3. The Parcel Map must be approved by

the Development Services Director if said Parcel Map complies with the provisions and applicable requirement specified in Article G of Chapter 15-4 of this Code and Government Code section 66411.7."

SECTION 8: *Enforceability*. Repeal of any provision of the ESMC does not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before this Ordinance's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

SECTION 9: *Validity of Previous Code Sections*. If this entire Ordinance or its application is deemed invalid by a court of competent jurisdiction, any repeal or amendment of the ESMC or other city ordinance by this Ordinance will be rendered void and cause such previous ESMC provision or other the city ordinance to remain in full force and effect for all purposes.

SECTION 10: *Severability.* If any part of this Ordinance or its application is deemed invalid by a court of competent jurisdiction, the City Council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Ordinance are severable.

SECTION 11: *Recording*. The City Clerk is directed to certify the passage and adoption of this Ordinance; cause it to be entered into the City of El Segundo's book of original ordinances; make a note of the passage and adoption in the records of this meeting; and, within fifteen (15) days after the passage and adoption of this Ordinance, cause it to be published or posted in accordance with California law.

SECTION 12: *Execution*. The Mayor or presiding officer is hereby authorized to affix his signature to this Ordinance signifying its adoption by the City Council, and the City Clerk, or duly appointed deputy, is directed to attest thereto.

SECTION 13: *Electronic Signatures.* This Ordinance may be executed with electronic signatures in accordance with Government Code §16.5. Such electronic signatures will be treated in all respects as having the same effect as an original signature.

SECTION 14: *Effectiveness*. This Ordinance will go into effect and be in full force and effect on the thirty-first (31st) day after its passage and adoption. If SB 9 is repealed in whole or in part, the corresponding ESMC chapter and/or sections will also be deemed repealed.

PASSED AND ADOPTED this ___ day of _____, 2022.

_____
Drew Boyles, Mayor

ATTEST:

STATE OF CALIFORNIA )
COUNTY OF LOS ANGELES ) SS
CITY OF EL SEGUNDO )

I, Tracy Weaver, City Clerk of the City of El Segundo, California, do hereby certify that the whole number of members of the City Council of said City is five; that the foregoing Ordinance No. ____ was duly introduced by said City Council at a regular meeting held on the ____ day of _____, 2022, and was duly passed and adopted by said City Council, approved and signed by the Mayor, and attested to by the City Clerk, all at a regular meeting of said Council held on the ____ day of _____, 2022, and the same was so passed and adopted by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Tracy Weaver, City Clerk

APPROVED AS TO FORM:
MARK D. HENSLEY, CITY ATTORNEY

_____
Joaquin Vazquez, Deputy City Attorney

# City Council Agenda Statement

**Meeting Date:** February 1, 2022
**Agenda Heading:** Public Hearings
**Item Number:** C.10

**TITLE:**

Adoption of 2021-2029 Housing Element - 6th Cycle

**RECOMMENDATION:**

Adopt a resolution approving a Negative Declaration and the final draft 2021-2029 Housing Element (Environmental Assessment No. EA 1271 and General Plan Amendment No. GPA 19-04)

**FISCAL IMPACT:**

There is no direct fiscal impact associated with the adoption of the 2021-2029 Housing Element. The adoption of the Housing Element includes several programs and policies to be implemented between 2021 and 2029. Implementation of these policies and programs would require staff time or the procurement of professional services. Any costs associated with the implementation of these programs and policies would be incorporated into the City's operational budget each year for City Council consideration and approval.

**BACKGROUND:**

Government Code § 65588 requires that cities periodically review and revise their General Plan Housing Elements. The Housing Element is one of 10 elements in El Segundo's General Plan. The Housing Element must be consistent with the goals, policies and objectives of the other nine General Plan Elements.

The City's current Housing Element was adopted on February 4, 2014, for the planning period of 2013-2021. The City's next Housing Element covers an 8-year planning period, extending from October 15, 2021 to October 15, 2029 ($6^{th}$ Cycle). The City must adopt its Housing Element for the 2021-2029 cycle and submit it to the Department of Housing and Community Development (HCD) no later than February 12, 2022.

Regional Housing Needs Assessment (RHNA)

As a part of the update to the Housing Element, state law requires that jurisdictions provide their "fair share" of regional housing needs. Local governments and Councils of Governments (COGs) are charged with determining the existing and future housing needs for their respective regions. The Southern California Association of Governments (SCAG) is responsible for preparing the Regional Housing Needs Assessment ("RHNA") for the following six counties: Los Angeles County, Orange County, Ventura County, San Bernardino County, Riverside County and Imperial County. As of 2021, SCAG's allocation ("fair share" of the regional total) for El Segundo is a total of 492 units. The 492 housing units for El Segundo are part of the anticipated total regional construction need of 1,341,928 units (812,060 of which are in Los Angeles County). In addition to the City's current RHNA allocation, the City is responsible for making up a shortfall of housing production during the 5th Housing Element Cycle. The shortfall during the 2013-2021 planning period is 29 units. Thus, the total requirement for El Segundo during the 6th Cycle Housing Element period is 521 units. The allocation of 521 units for El Segundo is broken down into four categories as follows:

| Income Category | 5th Cycle Carryover | 6th Cycle RHNA | Total RHNA | Percent |
|---|---|---|---|---|
| **Extremely/Very Low Income** | 18 | 189 | 207 | 39.7% |
| **Low Income** | 11 | 88 | 99 | 19.0% |
| **Moderate Income** | 0 | 84 | 84 | 16.1% |
| **Above Moderate Income** | 0 | 131 | 131 | 25.1% |
| **Total** | 29 | 492 | 521 | 100.00% |

The discussion section below briefly describes the Housing Element outreach and preparation process, outlines the contents of the draft Housing Element, and addresses the comments received from HCD during its most recent review.

**DISCUSSION:**

Public Outreach and Housing Element Process to Date

*Public Outreach*
The City engaged in a substantial public outreach effort to residents, businesses, and other housing stakeholders in the Housing Element update process. The outreach effort involved several public meetings to obtain information regarding the community's

housing needs, as well as feedback on documents produced by staff, such as the Sites Inventory and the draft Housing Element. Public meetings held are listed below:

- April 13, 2021 - Community meeting to obtain input on housing needs and suggestions for programs and policies.
- June 14, 2021 - Joint Planning Commission and City Council meeting to discuss the selection of potential sites to meet the City's RHNA requirements
- September 30, 2021 - Planning Commission public workshop to discuss the Draft Housing Element

In addition to the public meetings above, staff met individually with each Planning Commissioner and City Councilmember to answer questions and obtain feedback regarding the Site Inventory and the draft Housing Element.

Parallel and complementary to the public meetings, staff engaged in an outreach and information delivery process through multiple media, including the following:

- Established and maintained a dedicated webpage regarding the Housing Element (https//www.elsegundo.org/housing-element). The webpage content included general information regarding the housing element, updates on the City's progress, draft documents, and announcements regarding future events.
- Conducted an online survey to gauge the community's views on the City's housing needs, potential locations for new housing, and potential housing related programs.
- Produced a YouTube Video regarding the Housing Element update process (https://youtu.be/SC9DJxxGQq8).
- Utilized social media postings (Facebook, YouTube, etc.) as well as mass email bulletins to update and engage the public.

*HCD Submittal and Review*
On October 11, 2021, the City submitted a draft Housing Element to HCD for a 1st review. The City received a comment letter from HCD on December 8, 2021 (Exhibit No. 3) that contained 32 individual comments/corrections covering four broad areas. HCD comments are described in a subsequent section of this report. Staff has addressed HCD's comments in the revised draft of the Housing Element that was presented to the Planning Commission January 13, 2022 and is attached to this report (Exhibit No. 5). In addition, staff has prepared a matrix listing each HCD comment and

the location (page number) where staff has made edits to the Housing Element to address each comment. That matrix is also attached to this report as Exhibit No. 4.

*Planning Commission Recommendation*
On January 13, 2022, the Planning Commission held a duly noticed public hearing to consider the revised Housing Element and related Negative Declaration. During the public hearing, the Planning Commission heard from representatives of the Southwest Carpenters union who recommended that the City consider a policy to require hiring local and skilled labor in the construction of future housing in the City. During the discussion, Planning Commissioner Maggay expressed support for a future policy of hiring local and skilled labor in housing construction in the City. In addition, he and the rest of the Commission requested that staff systematically implement and evaluate all the programs and policies in the draft Housing Element. Commissioner Keldorf requested that staff schedule a study session with Many Mansions before a draft Affordable Housing Strategy is presented to the City Council this summer. Finally, Chair Baldino requested that staff provide a yearly update to the Planning Commission before the City's Annual Housing Progress Report ("APR") is submitted to HCD. Generally, the Commission expressed support for all the policies and programs in the draft Housing Element and did not propose any changes. At the conclusion of the public hearing, the Planning Commission voted unanimously to adopt Resolution No. 2909 recommending City Council approval of the 2021-2029 Housing Element.

2021-2029 Housing Element Content

*Housing Element Summary and Organization*
The 2021-2029 Housing Element update is a policy document that sets the goals and policies to address the City's housing needs. This includes provisions to meet the City's "fair share" housing allocation, described above, and programs to protect and preserve the existing housing stock. To accomplish this, the following components are included in the document:

- *Chapter 1-Introduction*: This chapter provides a brief overview of the City, Current Housing Element Law, Regional Housing Needs Assessment, and the process of preparation and organization of the document.

- *Chapter 2-Community Profile*: This section discusses the demographic, socio-economic, and housing characteristics of the City of El Segundo.

- *Chapter 3-Housing Characteristics*: Provides an overview of the City's housing stock relative to general condition, age, housing type, rental rates and housing costs, etc.

- *Chapter 4-Housing Constraints*: Discusses governmental and non-governmental constraints to housing development in El Segundo through an examination of market conditions, environmental conditions, and

governmental programs and regulations that affect the provision of adequate and affordable housing.

- *Chapter 5-Housing Opportunities*: This section evaluates the potential for additional residential development that could occur in the City and discusses opportunities for energy conservation in residential development.

- *Chapter 6-Housing Plan:* This section identifies the housing goals and policies for the 6th Cycle Housing Element planning period (2021-2029) and discusses the City's programs for addressing unmet housing needs, removing of constraints to housing, and achieving quantitative objectives based on the identified goals.

*Site Inventory*
In order to meet the City's RHNA requirements, the housing element identifies properties in the City where new housing can be accommodated, including:

1. Potential Accessory Dwelling Unit ("ADU") construction. Based on ADU permit trends from 2018-2020, staff estimates that at least 80 ADUs will be permitted over the course of the Housing Element planning period (2021-2029). Trends throughout the state show that the market rate rental amount for a substantial proportion of these units falls into the very low, low, and moderate income categories.

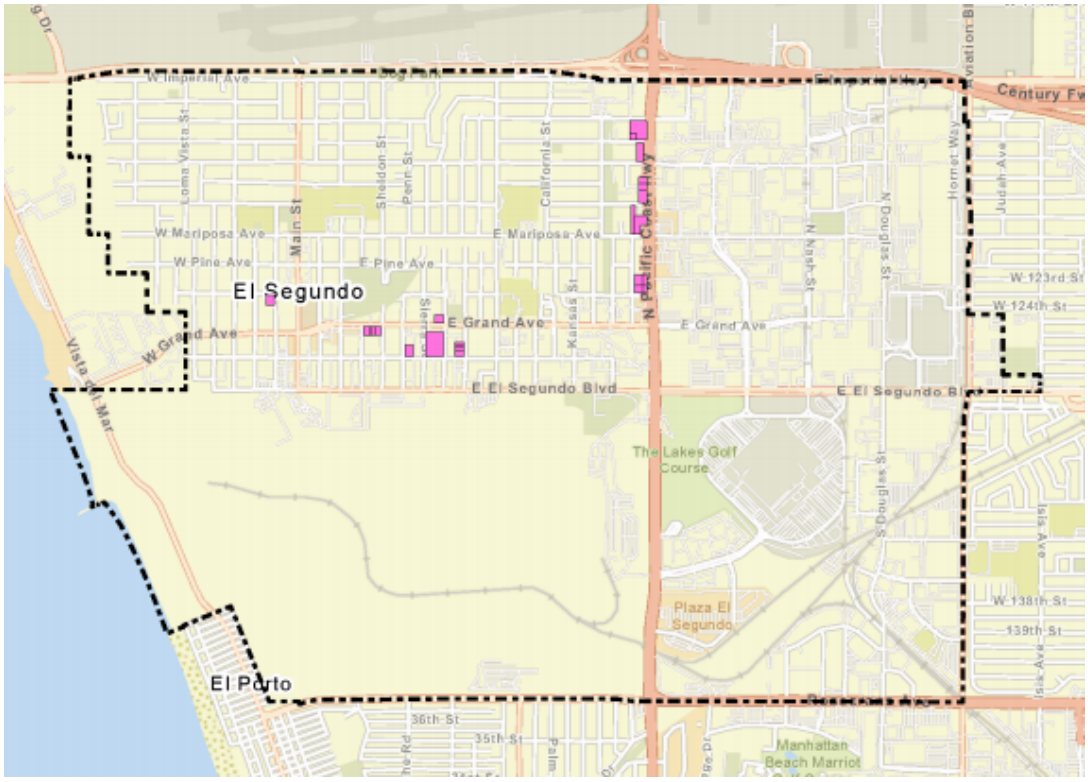
2. Entitled projects. The City recently approved entitlements for a mixed-used project in the Downtown Specific Plan (DSP) at 203-209 Richmond Street. The project will be constructed during the Housing Element planning period (2021-2029) and will result in four above moderate income (market rate) units.

3. The residential sites inventory (sites to be rezoned). Using criteria established by HCD, staff has identified 24 sites that will need to be rezoned to accommodate additional residential capacity (See Figure 1 below). The Housing Element proposes to apply a RHNA Mixed Use Overlay (MU-O) on 19 of the sites and a RHNA Overlay (O) on five. The MU-O overlay allows a minimum density of 40 units per acre and a maximum density of 50 units per acre, which the O overlay allows a minimum density of 30 units per acre and a maximum density of 40 units per acre. The candidate rezone sites can accommodate a minimum of 590 units on 14 acres of land overall.

The entitled project sites and the sites to be rezoned are displayed on the Sites

Inventory Map (Figure No. 1) below. A full list of the sites is provided in Exhibit No. 5.

**Figure No. 1 - Site Inventory Map**




*Housing Programs*
In addition to the Site Inventory, the Housing Element includes a number of programs to be implemented during the 2021-2029 planning period that aim to preserve the existing housing stock and encourage construction of new housing. The programs cover the following areas/activities:

1. Housing Rehabilitation
2. Code Compliance Inspection Program
3. Accessory Dwelling Units (ADU)
4. Inclusionary Housing Ordinance and Affordable Housing Strategy
5. Provision of Adequate Sites
6. Monitoring of No Net Loss (SB 166)
7. Lot Consolidation
8. El Segundo Municipal Code (ESMC) Amendments
9. Fair Housing Program

A full description and implementation timelines for these programs is provided in the draft Housing Element (Exhibit No. 4).

Department of Housing and Community Development (HCD) Review

Upon review of the Draft Housing Element, HCD sent a review letter, dated December 8, 2021, providing comments on the City's Draft Housing Element (Exhibit No. 5). As noted in its letter, HCD would find the Draft Housing Element in compliance with state law provided that the City revised the document to address its comments, which cover the following general areas:

A. Housing Needs, Resources and Constraints

1. Affirmatively furthering fair housing, including an assessment of fair housing in the jurisdiction.

2. Analysis of population and employment trends and documentation of projections and a quantification of existing and projected needs for all income levels.

3. An inventory of land suitable and available for residential development, including vacant sites and sites having realistic and demonstrated potential for redevelopment during the planning period and an analysis of the relationship of zoning and public facilities and services to these sites.

4. An analysis of potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels, and for persons with disabilities.

B. Housing Programs

1. Identify actions that will be taken to make sites available during the planning period with appropriate zoning and development standards and with services and facilities to accommodate that portion of the city’s or county’s share of the regional housing need for each income level.

2. The housing element shall contain programs which assist in the development of adequate housing to meet the needs of extremely low-, very low-, low- and moderate-income households.

3. Address and, where appropriate and legally possible, remove governmental and nongovernmental constraints on the maintenance, improvement, and development of housing, including housing for all income levels and housing for persons with disabilities. The program shall remove constraints on, and provide reasonable accommodations for housing for persons with disabilities.

4. Promote and affirmatively further fair housing opportunities and promote housing throughout the community or communities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability, and other characteristics protected by state and federal fair housing and planning law.

C. Quantified Objectives

1. Establish the number of housing units, by income level, that can be constructed, rehabilitated, and conserved over a five-year time frame.

D. Public Participation

1. Local governments shall make a diligent effort to achieve public participation of all economic segments of the community in the development of the housing element, and the element shall describe this effort.

Staff has worked with the City's housing consultant to address HCD's comments. The revised 2021-2029 Housing Element (Exhibit No. 5) shows the revisions made to the previous draft. Underline is used for text that has been added, and ~~strikethrough~~ for text that has been removed.

Staff believes that the revised Housing Element (Exhibit No. 5) identifies adequate sites and provides programs that are feasible to implement and will be of a benefit to the City. However, if the City Council has concerns regarding any of the proposed revisions, staff recommends that the City Council identify those concerns to staff so they can be addressed in the final draft of the Housing Element submitted to HCD.

Staff will forward the revised document to HCD by February 11, 2022. Should HCD find that the document complies with State Law, it will certify and approve the document. It is important to have HCD certify and approve the Housing Element since oftentimes there is pending state legislation that, if adopted, could impose penalties upon cities that do not have an HCD-certified Housing Element in compliance with State Law. Based upon the potential impacts that legislation may have on cities with housing elements found not to be in compliance with State Law, and since staff has worked diligently with the City's housing consultant, staff recommends that the City Council adopt the attached resolution approving the Final Draft 2021-2029 Housing Element.

General Plan Amendment

ESMC Section 15-27-3 sets forth the findings required in order for the City to approve a General Plan Amendment. The findings, along with staff's analysis, are listed below:

1. *The amendment must be consistent with the General Plan.*

The Housing Element update is consistent with the Land Use Element of the General Plan in that it identifies locations for new housing without affecting the character of existing single-family residential neighborhoods. Further, there is no evidence that the proposed housing sites inventory and housing programs do not conflict with any of the goals, policies, and objectives of the General Plan.

2. *The amendment is necessary to serve the public health, safety, and general welfare.*

The Housing Element update is necessary to serve the public health, safety, and general welfare, in that it identifies programs to help maintain and improve the existing housing stock in the City. In addition, it identifies sites and proposes new development standards to facilitate the development of additional housing in the community, which contributes to improving the existing jobs-housing balance in the City. Further, the Housing Element identifies sites and proposes programs that will facilitate the development of housing that is affordable to households of various income levels and thus will provide equal housing opportunities to all parts of the community.

3. *The proposed update to the Housing Element is in the public interest.*

The Housing Element update is in the public interest, in that through the implementation of its policies and programs it will help achieve the following goals:

1. Preserve and protect the existing housing stock by encouraging the rehabilitation of deteriorating dwelling units and the conservation of the currently sound housing stock.

2. Provide sufficient new, affordable housing opportunities in the City to meet the needs of groups with special requirements, including the needs of lower and moderate- income households.

3. Provide opportunities for new housing construction in a variety of locations and a variety of densities.

4. Remove governmental constraints on housing development.

5. Provide housing opportunities including ownership and rental, fair-market and assisted, in conformance with open housing policies and free of

discriminatory practices.

For the reasons indicated above, staff believes that the proposed Housing Element update is consistent with the General Plan and the required General Plan Amendment findings of approval can be made.

Environmental Review

In accordance with Public Resources Code § 15063 (CEQA), a Negative Declaration of was prepared. The document was sent to the State Clearinghouse and to various other agencies for review and comment. The review and comment period began on November 26, 2021 and ended on December 27, 2021. During the public comment period, the City received no comments that were relevant to the initial study/Negative Declaration.

The draft Housing Element has been made available for public review on the City's website since October 11, 2021.

As shown in the attached Initial Study, the project will not result in or create any significant impacts to Aesthetics, Agriculture and Forest Resources, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation/Traffic, or Utilities and Service Systems. As such, staff has concluded that a Negative Declaration may be adopted for the proposed project.

Public Comments

During the initial study and Negative Declaration public review period, staff received a comment letter from the law firm of Mitchell M. Tsai, which represents the "Southwest Carpenters" union group. The comment letter is not directly related to the Initial Study/Negative Declaration. Rather, it recommends that the City consider the inclusion of a policy or program within the Housing Element itself that "requires the use of a local skilled and trained workforce to benefit the community's economic development and environment." The full letter is attached as Exhibit No. 6 to this report.

## CITY STRATEGIC PLAN COMPLIANCE:

Goal 1: Enhance Customer Service, Engagement, and Communication; Embrace Diversity, Equity, and Inclusion

Objective 1 B: El Segundo's engagement with the community ensures excellence.

Goal 3: Develop as a Choice Employer and Workforce

Objective: El Segundo is a city employer of choice and consistently hires for the future, with a workforce that is inspired, world-class and engaged, demonstrating increasing stability and innovation.

Goal 4: Develop and Maintain Quality Infrastructure and Technology

Objective 4A: El Segundo's physical infrastructure supports an appealing, safe and effective community.

Goal 5: Champion Economic Development and Fiscal Sustainability

Objective 5A: El Segundo promotes economic growth and vitality for business and the community.

**PREPARED BY:**
Paul Samaras, AICP, Principal Planner
**REVIEWED BY:**
Michael Allen, AICP, Development Services Director
**APPROVED BY:**
Barbara Voss, Deputy City Manager

## ATTACHED SUPPORTING DOCUMENTS:

1. Exhibit No 1 - City Council Reso
2. Exhibit No 2 - Initial Study and Negative Declaration
3. Exhibit No 3 - HCD Comment letter dated December 8
4. Exhibit No 4 - HCD Comment Matrix
5. Exhibit No 5 - Draft 2021-2029 Housing Element (strikethrough version)
6. Exhibit No 6 - Comment letter dated November 29

**RESOLUTION NO. ____**

**A RESOLUTION OF THE CITY COUNCIL APPROVING ENVIRONMENTAL ASSESSMENT NO. EA-1271 AND ADOPT GENERAL PLAN AMENDMENT NO. 19-04 (2021-2029 HOUSING ELEMENT), AMENDING THE HOUSING ELEMENT OF THE EL SEGUNDO GENERAL PLAN.**

The City Council of the City of El Segundo does resolve as follows:

SECTION 1: The City Council finds and declares that:

A. In accordance with California law, the City is required to prepare a Housing Element for its General Plan every 8 years. The next planning cycle runs from October 15, 2021 through October 15, 2029, for jurisdictions within the Southern California Association of Governments (SCAG) region;

B. In general, the Housing Element must identify and analyze existing and projected housing needs and establish goals, policies, and quantified objectives, financial resources, and scheduled programs for the preservation, improvement and development of housing within the City's jurisdiction;

C. The City Council directed that the 2021-2029 Housing Element be prepared;

D. The City held a community meeting on April 13, 2021, a Joint City Council and Planning Commission study session on June 14, 2021, and a Planning Commission public workshop on September 30, 2021. These meetings where opportunities to provide the community an overview of the Housing Element process including a review of applicable state law and the Regional Housing Needs Assessment ("RHNA"); community profile information and an existing conditions report; and an overview of the existing Housing Element Goals, Policies, and Objectives;

E. Based on comments received from the public, governmental agencies, the Planning Commission and the City Council, the Housing Element was prepared for submission to the California Department of Housing and Community Development (HCD) for review and certification;

F. In addition, the City reviewed the project's environmental impacts under the California Environmental Quality Act (Public Resources Code §§ 21000, *et seq.*, "CEQA"), the regulations promulgated thereunder (14 Cal. Code of Regulations §§15000, *et seq.*, the "CEQA Guidelines");

G. An Initial Study of Environmental Impacts was prepared pursuant to the requirements of CEQA Guidelines § 15063. The Initial Study demonstrated that the proposed project would not cause any significant environmental impacts. A Negative Declaration was prepared and circulated for public review and comment from November 26, 2021 to December 27, 2021;

H. A Notice of Intent to adopt a Negative Declaration was prepared, posted and circulated pursuant to CEQA Guidelines § 15072 to allow the public, responsible and trustee agencies to review and comment on the Negative Declaration;

I. The Development Services Department completed its review and scheduled a public hearing regarding the project before this Commission on January 13, 2022;

J. On January 13, 2022, the Commission held a duly noticed public hearing on the 2021-2029 Housing Element and the related Initial Study and Negative Declaration. At the conclusion of the public hearing the Planning Commission adopted Resolution No. 2909 recommending City Council approval of the 2021-2029 Housing Element and the related Initial Study and Negative Declaration

K. On February 1, 2022, the City Council held a duly noticed public hearing to receive public testimony and other evidence regarding the Housing Element update including, without limitation, information set forth in the staff report.

L. This Resolution, and its findings, are made, in part, based upon the evidence presented to the City Council at its February 1, 2022 public hearing, including the staff report submitted by the Development Services Department.

SECTION 2: *Factual Findings and Conclusions.* The City Council finds the following:

A. The purpose of revising the Housing Element of the General Plan is to refine and make appropriate adjustments to the programs, goals, policies and objectives to comply with State law and to address concerns raised by the community regarding housing needs in the City in furtherance of the general welfare of the City.

B. The proposed Housing Element identifies and analyzes existing and projected housing needs. It also provides a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing. The Housing Element identifies and proposes the rezoning of adequate sites for housing, including rental housing, factory-built housing, mobile homes,

and emergency shelters, and makes adequate provisions for the existing and projected needs of all economic segments of the community as required by Government Code § 65583.

C. The proposed Housing Element will facilitate the creation of 634 housing units as required by the Regional Housing Needs Assessment (RHNA) within the 2021-2029 planning period.

D. The proposed new housing programs will protect and preserve existing housing stock and encourage and facilitate the provision of housing for all economic segments of the community.

E. During the preparation of the Housing Element Update, the public, civic organizations, public agencies and other community groups were provided the opportunity to participate in the preparation of the Element at meetings held on April 13, 2021, June 14, 2021, and September 30, 2021 as required by Government Code § 65351.

SECTION 3: *Environmental Assessment*. The City Council finds that the Negative Declaration ("ND") prepared for the draft 2021-2029 Housing Element was completed in compliance with the requirements of the California Environmental Quality Act and its implementing Guidelines and reflects the independent judgment of the City. The Commission has reviewed and considered the ND, together with all of the comments received during the public review process, and, based on the totality of the evidence in the record, finds that there is no substantial evidence that the proposed project will have a significant effect on the environment, cumulative or otherwise.

SECTION 4: *General Plan Findings.* Based on the findings of fact set forth herein and the totality of the evidence in the record, the City Council finds as follows:

A. The proposed update to the Housing Element is consistent with the General Plan.

The Housing Element update will further all other objectives, goals and policies of applicable elements of the General Plan and will not obstruct their attainment. The Housing Element establishes goals, policies, and programs to preserve the existing housing stock and to encourage construction of new residential units, including affordable housing, without affecting the character of existing single-family residential neighborhoods. The proposed Housing Element will allow the City to achieve these goals in a manner that is consistent with the Land Use Element, in that before the implementation of the proposed housing overlays, the General Plan Land Use Element will be amended to ensure consistency with the densities contemplated in those overlays.

B. The amendment is necessary to serve the public health, safety, and general welfare.

The Housing Element update is necessary to serve the public health, safety, and general welfare, in that it identifies programs to help maintain and improve the existing housing stock in the City. In addition, it identifies sites and proposes new development standards to facilitate the development of additional housing in the community, which contribute to improving the existing jobs-housing balance in the City. Further, the Housing Element identifies sites and proposes programs that will facilitate the development of housing that is affordable to households of various income levels and thus will provide equal housing opportunities to all segments of the community.

C. The proposed updated to the Housing Element is in the public interest.

The Housing Element update is in the public interest, in that through the implementation of its policies and programs it will help achieve the following goals:

1. Preserve and protect the existing housing stock by encouraging the rehabilitation of deteriorating dwelling units and the conservation of the currently sound housing stock.
2. Provide sufficient new, affordable housing opportunities in the City to meet the needs of groups with special requirements, including the needs of lower and moderate- income households.
3. Provide opportunities for new housing construction in a variety of locations and a variety of densities.
4. Remove governmental constraints on housing development.
5. Provide housing opportunities including ownership and rental, fair-market and assisted, in conformance with open housing policies and free of discriminatory practices.

SECTION 5: *Actions*. Based upon the foregoing findings and the evidence in the record as a whole, the City Council:

A. Adopts the Negative Declaration; and

B. Approves the 2021-2029 Housing Element attached as Exhibit “A” and incorporated herein by this reference.

C. Directs staff to submit the 2021-2029 Housing Element to the Department of Housing and Community Development (HCD) for review and Certification.

SECTION 6: *Reliance on Record.* Each and every one of the findings and determinations in this Resolution are based on the competent and substantial evidence, both oral and written, contained in the entire record relating to the project. The findings and determinations constitute the independent findings and determinations of the City Council in all respects and are fully and completely supported by substantial evidence in the record as a whole.

SECTION 7: *Limitations.* The City Council's analysis and evaluation of the project is based on the best information currently available. It is inevitable that in evaluating a project that absolute and perfect knowledge of all possible aspects of the project will not exist. One of the major limitations on analysis of the project is the City Council's knowledge of future events. In all instances, best efforts have been made to form accurate assumptions. Somewhat related to this are the limitations on the City's ability to solve what are in effect regional, state, and national problems and issues. The City must work within the political framework within which it exists and with the limitations inherent in that framework.

SECTION 8: *Summaries of Information.* All summaries of information in the findings which precede this section are based on the substantial evidence in the record. The absence of any particular fact from any such summary is not an indication that a particular finding is not based in part on that fact.

SECTION 9: The City Clerk is directed to certify the adoption of this Resolution.

SECTION 10: This Resolution takes effect immediately upon its adoption.

**PASSED, APPROVED AND ADOPTED this ___ day of February 2022.**

_____
Drew Boyles, Mayor

APPROVED AS TO FORM:

_____
Mark D. Hensley, City Attorney

ATTEST:

STATE OF CALIFORNIA )
COUNTY OF LOS ANGELES ) SS
CITY OF EL SEGUNDO )

I, Tracy Weaver, City Clerk of the City of El Segundo, California, do hereby certify that the whole number of members of the City Council of said City is five; that the foregoing Resolution No. _____ was duly passed, approved, and adopted by said City Council, at a regular meeting of said Council held on the ___ day of February 2022, approved and signed by the Mayor, and attested to by the City Clerk, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Tracy Weaver, City Clerk

# CITY OF EL SEGUNDO
# HOUSING ELEMENT UPDATE
# INITIAL STUDY

November 2021

**Planning and Building Safety Department**
350 Main Street
El Segundo, CA 90245  (310) 524-2380

# TABLE OF CONTENTS


I. INTRODUCTION ..... I-1

A. INTRODUCTION AND REGULATORY GUIDANCE ..... I-1

B. LEAD AGENCY ..... I-1

C. PURPOSE AND DOCUMENT ORGANIZATION ..... I-1

II. INITIAL STUDY CHECKLIST ..... II-1

A. PROJECT DESCRIPTION ..... II-1

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED ..... II-14

C. DETERMINATION ..... II-14

D. EVALUATION OF ENVIRONMENTAL IMPACTS ..... II-15

1. Aesthetics ..... II-16
2. Agriculture and Forestry Resources ..... II-19
3. Air Quality ..... II-20
4. Biological Resources ..... II-26
5. Cultural Resources ..... II-29
6. Energy ..... II-31
7. Geology and Soils ..... II-33
8. Greenhouse Gas Emissions ..... II-37
9. Hazards and Hazardous Materials ..... II-44
10. Hydrology and Water Quality ..... II-48
11. Land Use and Planning ..... II-53
12. Mineral Resources ..... II-55
13. Noise ..... II-56
14. Population and Housing ..... II-59
15. Public Services ..... II-61
16. Recreation ..... II-66
17. Transportation ..... II-67
18. Tribal Cultural Resources ..... II-70
19. Utilities and Service Systems ..... II-72
20. Wildfire ..... II-75
21. Mandatory Findings of Significance ..... II-77

## LIST OF FIGURES

Figure 1, Regional Location Map ..... II-2

Figure 2, Site Inventory Map – Minimum and Maximum Dwelling Units ..... II-13

## LIST OF TABLES

Table 1, El Segundo Housing Needs Assessment (2021-2029) ..... II-4

Table 2, Projection of ADU Activities ..... II-5

Table 3, Entitled Projects ..... II-5

Table 4, Pacific Coast Commons Specific Plan ..... II-8

Table 5, Candidate Sites ..... II-9

Table 6, South Coast Air Basin Attainment Status ..... II-21

Table 7, Consistency with CARB 2208 Scoping Plan Policies and Measures ..... II-39

Table 8, Consistency with CARB 2017 Scoping Plan Policies and Measures ..... II-41

Table 9, El Segundo Recreational Facilities ..... II-62

# I. INTRODUCTION

## A. INTRODUCTION AND REGULATORY GUIDANCE

An Initial Study (IS) is conducted by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines Section 15063[a]). If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15064(a). However, if the lead agency determines the impacts are, or can be reduced to, less than significant, a Mitigated Negative Declaration (MND) or Negative Declaration (ND) may be prepared instead of an EIR (CEQA Guidelines Section 15070[b]). Pursuant to CEQA Guidelines Section 15070, a MND or ND is appropriate when the project's Initial Study identifies potentially significant effects, but:

a. Revisions to the project plan were made that would avoid or reduce the effects to a point where clearly no significant effects would occur; and

b. There is no substantial evidence that the project, as revised, may have a significant effect on the environment.

This IS prepared by the City of El Segundo (including an attached Environmental Checklist form) determined that the proposed project will not have a significant environmental effect, and the preparation of an EIR is not required. This IS/ND has been prepared in accordance with Section 15070 of the State California Environmental Quality Act (CEQA) Guidelines.

## B. LEAD AGENCY

The lead agency is the public agency with primary responsibility over a proposed project. In accordance with CEQA Guidelines Section 15051(b)(1), "the lead agency will normally be the agency with general governmental powers." The project would be approved and carried out by the City of El Segundo. Therefore, based on the criteria described above, the City of El Segundo, Development Services Department is the lead agency for the proposed project.

## C. PURPOSE AND DOCUMENT OGRANIZATION

The City is proposing to implement the Housing Element 2021-2029 Update (project). The purpose of this IS/ND is to evaluate the potential environmental effects and the document is divided into the following sections:

### I. INTRODUCTION

This section provides an introduction and describes the purpose and organization of this document.

## II. INITIAL STUDY CHECKLIST

This section includes the project background and a detailed description of the project. This section describes the environmental setting for each of the environmental subject areas; evaluates a range of impacts classified as “no impact,” “less than significant impact,” “less than significant impact with mitigation incorporated,” or “potentially significant impact” in response to the environmental checklist and provides an environmental determination for the project.

## III. REFERENCES

This section identifies resources used in the preparation of the IS/ND.

# A. PROJECT DESCRIPTION

**1. Project Title:**

City of El Segundo Housing Element Update

**2. Lead Agency Name and Address:**

City of El Segundo
Development Services Department
350 Main Street
El Segundo, CA 90245

**3. Lead Agency Contact Person and Phone Number:**

Paul Samaras, AICP, Principal Planner, (310) 524-2340

**4. Project Location:**

El Segundo, California
County of Los Angeles

The City of El Segundo Housing Element update would apply to the entire geographic area located within the boundaries of the City of El Segundo (City), located in the southern portion of Los Angeles County approximately 20 miles southwest of downtown Los Angeles. **Figure 1, Regional Location Map** shows the boundaries of the City within the region.

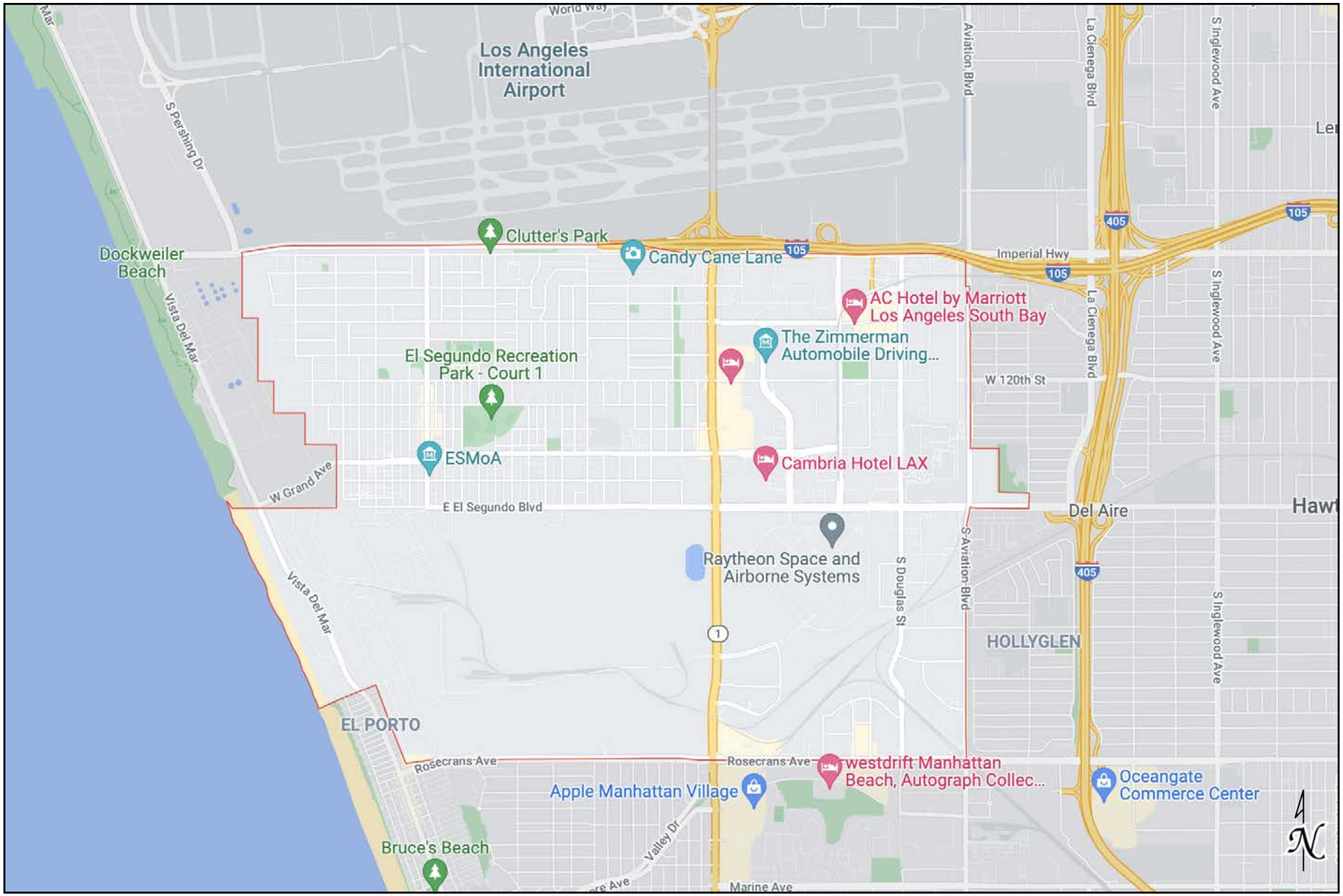
**5. Applicant's Name and Address:**

City of El Segundo
Development Services Department
350 Main Street
El Segundo, CA 90245

**6. General Plan Land Use Designation:**

.

No changes to the underlying General Plan designations are proposed. The El Segundo General Plan provides for a range of land use designations/zones in the City that can accommodate residential units. Multiple residential General Plan land use designations within the City provide opportunities for development of housing projects, including: Single-Family Residential, Two-Family Residential, Multi-Family Residential, Neighborhood Commercial, Downtown Commercial, Downtown Specific Plan, Medium Density Residential, Pacific Coast Commons Mixed-Use 1, Pacific Coast Commons Mixed-Use 2, and 540 East Imperial Avenue Specific Plan.




City of El Segundo Boundary

Source: Google Maps, October 2021

Figure 1
Regional Vicinity Location Map

**7. Zoning Designation:**

The Housing Element proposes the addition of RHNA Mixed Use Overlay and RHNA Overlay zoning to specific parcels currently zoned as Commercial (CO, C-2, C-3), Residential (R-3), Parking, and Downtown Specific Plan. No changes to the underlying zoning designations are proposed.

Multiple residential zoning designations within the City provide opportunities for development of housing projects, including Single-Family Residential (R-1), Two-Family Residential (R-2, Multi-Family Residential (R-3), Neighborhood Commercial (C-2), Downtown Commercial (C-RS), Downtown Specific Plan (DSP), and Medium Density Residential (MDR) Overlay Zone. The Pacific Coast Commons Specific Plan (PCCSP) includes two mixed-use districts that allow residential: PCC Mixed-Use 1 (PCC MU-1) and PCC Mixed-Use 2 (PCC MU-2). The 540 East Imperial Ave Specific Plan (EIASP) permits a mix of single family and multi-family residential units. Caretaker units are permitted in conjunction with development in the City's Smoky Hollow Specific Plan West (SH-W) and East (SH-E) zones.

**8. Description of Project:**

The project is the adoption and implementation of the El Segundo Housing Element Update (project). The El Segundo Housing Element consists of the following major components:

1. An assessment of past housing achievements.

2. An analysis of the City's population, household and employment base, and the characteristics of the City's housing stock.

3. An updated evaluation of housing need.

4. Preparation of an inventory of potential housing sites in the community.

    a. An examination of governmental and non-governmental constraints on the production, maintenance, and affordability of housing.

    b. Preparation of a Housing Program to address El Segundo's identified housing needs, including proposed housing goals, policies and programs.

5. An assessment of fair housing, as required by AB 686, which states that cities need to" affirmatively further fair housing" by "taking meaningful actions, in addition to combating discrimination, that overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity" for persons of color, persons with disabilities, and other protected classes.

**<u>Regional Housing Needs Allocation (RHNA)</u>**

In accordance with Government Code § 65584, projected housing needs for each city and county in the Southern California region are prepared by Southern California Association of Governments (SCAG) under a process known as the Regional Housing Needs Assessment (RHNA). The RHNA allocates regional housing needs by income level among member jurisdictions.

California law established the planning period for the current RHNA from June 30, 2021 to October 15, 2029. SCAG's allocation for El Segundo is 492 units. The 492 housing units for El Segundo are out

of the anticipated total construction need of 1,341,928 units in the SCAG region (812,060 of which are in the Los Angeles County). The allocation of 492 units for El Segundo is broken down into the four categories as follows: 189 very low-income households, 88 low-income households, 84 moderate-income households, and 131 above-moderate income households.

For the 2021-2029 Housing Element update, SCAG allocated the City a RHNA of 492, including 189 very low income and 88 low income units. The City had a shortfall for the 2014-2021 planning period. The shortfall requires the City to accommodate an additional 18 very low income and 11 low income units, for a total of 521 units. The City's RHNA allocation by income category is shown in **Table 1, El Segundo Regional Housing Needs Assessment (2021-2029)**.

**Table 1**
**El Segundo Regional Housing Needs Assessment (2021-2029)**

| Income Category | 5th Cycle Carryover | 6th Cycle RHNA | Total RHNA | Percent |
|---|---|---|---|---|
| Extremely Low/Very Low* | 18 | 189 | 207 | 39.7% |
| Low* | 11 | 88 | 99 | 19.0% |
| Moderate | 0 | 84 | 84 | 16.1% |
| Above Moderate | 0 | 131 | 131 | 25.1% |
| **Total** | **29** | **492** | **521** | **100%** |

Note: The City has a RHNA allocation of 207 very low-income units (inclusive of extremely low-income units). Pursuant to State law (AB 2634), the City must project the number of extremely low-income housing needs based on Census income distribution or assume 50% of the very low-income units as extremely low. Assuming an even split, the City's RHNA allocation of 207 very low-income units may be divided into 104 very low and 103 extremely low-income units. However, for purposes of identifying adequate sites for the RHNA allocation, State law does not mandate the separate accounting for the extremely low-income category.

*Includes the 5th Cycle Housing Element shortfall of 18 extremely/very low and 11 low-income units.

Source: Southern California Association of Governments (SCAG), 6th Cycle Final RHNA Allocation Plan, 2021.

**Methods to Accommodate the RHNA Allocation**

In addition to the proposed programs, goals and policies, the anticipated Accessory Dwelling Units, projects entitled and pending projects were used to illustrate how the City of El Segundo intends on accommodating the RHNA allocation.

***Anticipated Accessory Dwelling Units (ADUs)***

New State laws passed since 2017 have substantially relaxed the development standards and procedures for the construction of Accessory Dwelling Units (ADUs). In response to AB 881, the City amended the ADU ordinance in 2019 to comply with new State law, including allowing for Junior ADUs. Between January 2018 and November 2020, the City's ADU permitting trend is as follows:

- 2018 – 13 ADUs
- 2019 – 13 ADUs
- 2020 – 8 ADUs (as of November 2020)

Based on this trend, the City projects an average of 10 ADUs annually. These ADUs are permitted by right and the Housing Element does not propose or result in any modifications to the existing by right ADU allowance(s). The Housing Element includes a program to proactively facilitate ADU development. Based on annual averages and increased City efforts, the City conservatively anticipates

80 ADUs during the eight-year planning period from 2021 and 2029. Affordability of the potential ADUs, shown in **Table 2, Projection of ADU Activities**, is based on SCAG's Regional Accessory Dwelling Unit Affordability Analysis as approved by HCD.

**Table 2**
**Projection of ADU Activities**

| Income Level | # of Units | SCAG Affordability Distribution |
|---|---|---|
| Extremely Low Income | 12 | 15% |
| Very-Low Income | 2 | 2% |
| Low Income | 34 | 43% |
| Moderate Income | 5 | 6% |
| Above Moderate Income | 27 | 34% |
| **Total** | **80** | **100%** |
| Source: SCAG Regional Accessory Dwelling Unit Affordability Analysis 2020 | | |

***Entitled Projects***

203 Richmond Street

The 203 Richmond Street project was approved by the Planning Commission on July 8, 2021. The project consists of one 0.24-acre parcel (4136-024-017) located at the, now closed, City jail and accompanying surface parking. The project includes the development of three above moderate-income units. The 203 Richmond Street project is in the Downtown Specific Plan (DSP) with an allowed density of 12.5 units per acre. The site is bordered by DSP-zoned parcels to the north, east, and south, and R-3 zoned parcels to the west. This project is expected to be completed within the 6th cycle Housing Element planning period. The Housing Element does not propose or result in this project approval. The 203 Richmond Street project is detailed in **Table 3, Entitled Projects**.

209 Richmond Street

This project is comprised of one market rate (above moderate) unit to be constructed at 209 Richmond Street. The Planning Commission approved the project on July 8, 2021. The project consists of two parcels (4136-024-008, 4136-024-009) totaling 0.16 acres. The project is located in the DSP zone and is currently used for retail. The Housing Element does not propose or result in this project approval. This project is detailed in **Table 3, Entitled Projects**.

**Table 3**
**Entitled Projects**

| Parcel Number | Acres | Address | Zone | Allowed Density | Existing Use | Affordability | Total Capacity |
|---|---|---|---|---|---|---|---|
| 4136-024-017 | 0.24 | 203 Richmond St | DSP | 12.5 | Old City Jail/Open-air parking lot | Above Moderate | 3 |
| 4136-024-008<br>4136-024-009 | 0.16 | 209 Richmond St | DSP | 12.5 | Retail (Haydenshapes Surfboards) | Above Moderate | 1 |
| Source: City of El Segundo Housing Element Update, 2021. | | | | | | | |

***Pending Projects***

The Pacific Coast Commons Specific Plan (PCCSP) was submitted to the City in May 2019 and is currently going through the entitlement process. The Housing Element does not propose or result in this project approval. The PCCSP would include approximately 6.4 gross acres and allows for up to 263 new housing units and 11,252 square feet of new commercial/retail uses. The Specific Plan proposes five new land use districts, including two mixed-use districts allowing residential development, PCC Mixed-Use 1 (PCC MU-1) and PCC Mixed-Use 2 (PCC MU-2). The PCCSP proposes to include about 32 lower income units as part of the project.

*Pacific Coast Commons Mixed-Use 1*

A total of 120 units are proposed in PCC MU-1. The Housing Element does not propose or result in this project approval. PCC MU-1 allows for a density of up to 97 units per acre. This district specifically allows for multi-family residential (apartments) and commercial development. The existing parking lot serving the Aloft hotel will be demolished to accommodate the proposed residential and commercial uses. All residential uses in the Specific Plan are comprised of lower income and above moderate-income units. PCC MU-1 can accommodate 120 units, including 15 lower income units and 105 above moderate-income units. PCC MU-1 sites are presented in Table 4.

*Pacific Coast Commons Mixed-Use 2*

PCC MU-2 allows multi-family residential (apartments and condominiums) and commercial development. This district is currently a parking lot serving the Fairfield Inn and Suites hotel. The parking lot will be demolished and replaced with the proposed residential and commercial uses. PCC MU-2 can accommodate 143 units, including 17 lower income units and 126 above moderate-income units. Of the 143 units, 137 are apartments and 6 are townhomes. The Housing Element does not propose or result in this project approval. PCC MU-2 sites are shown in **Table 4, Pacific Coast Commons Specific Plan**.

**Residential Sites Inventory**

An important component of the El Segundo Housing Element is the identification of sites for future housing development, and an evaluation of the adequacy of those sites in fulfilling the City's share of regional housing needs. To accomplish this, all city parcels were surveyed to determine their development capacity. Due to the lack of vacant and underutilized sites in El Segundo, the City has selected candidate sites for rezoning. Each site was analyzed in light of the development standards for its proposed zoning designation. All parcels in El Segundo were evaluated through a process of elimination based on required criteria set by the State (HCD).

*Candidate Sites*

The City has selected 27 candidate sites. The City is proposing the addition of a RHNA housing overlay (RHNA-O) and RHNA mixed-use overlay (RHNA MU-O) to the sites' General Plan and zoning. The Housing Element does not effectuate these overlay zones, rather, these are recommended legislative

actions that would be implemented separately and after the adoption of the Housing Element. Currently, the sites are designated and zoned for commercial, parking, residential, and office uses. The current General Plan designations and zoning would remain, with overlays added, which would allow property owners to have the option to develop under either set of standards (the underlying General Plan and zoning or the overlay).

A complete list of the current and proposed general plan and zoning designations are included in **Table 5, Candidate Sites**. **Figure 2, Candidate Sites** shows the location of the candidate sites.

The RHNA housing overlay (RHNA-O) allows residential units to be built at a minimum density of 30 units per acre and a maximum density of 40 units per acre, while the RHNA MU-O allows a minimum density of 40 units per acre and a maximum density of 50 units per acre. Potential units were calculated based on the minimum density allowed. The candidate rezone sites can accommodate a total of 548 units at a minimum density or 792 units at maximum density on 14.7 acres of land.

**Table 4**
**Pacific Coast Commons Specific Plan**

| Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Max. Density | Existing Use | Lower Income Units | Above Mod. Income Units | Total Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4139-025-075 | 0.2 | PCH/Holly Ave | General Commercial | C-3 | PCCSP | MU-1 | 97 | Surface Parking | 3 | 13 | 16 |
| 4139-025-073 | 0.6 | Indiana St/E Holly Ave | General Commercial | C-3 | PCCSP | MU-1 | 97 | Surface Parking | 4 | 43 | 47 |
| 4139-025-074 | 0.4 | Indiana St/E Holly Ave | General Commercial | C-3 | PCCSP | MU-1 | 97 | Surface Parking | 4 | 30 | 34 |
| 4139-025-076 | 0.3 | E Holly Ave/N PCH | General Commercial | C-3 | PCCSP | MU-1 | 97 | Surface Parking | 4 | 19 | 23 |
| 4139-024-057 | 0.7 | E Mariposa/N PCH | Parking | P | PCCSP | MU-2 | 80 | Surface Parking | 6 | 48 | 54 |
| 4139-024-058 | 1.1 | E Mariposa/N PCH | Parking | P | PCCSP | MU-2 | 80 | Surface Parking | 11 | 78 | 89 |
| **Total** | **3.3** | | | | | | | | **32** | **231** | **263** |

**Table 5**
**Candidate Sites**

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Total Capacity (Min.) | Total Capacity (Max.) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4135-011-005 | 0.3 | 406 E Grand Ave | Neighborhood Commercial | C-2 | Mixed Use Overlay | MU-O | 40 | 50 | 13 | 17 |
| 2 | 4135-011-024 | 0.2 | 412 E Grand Ave | Neighborhood Commercial | C-2 | Mixed Use Overlay | MU-O | 40 | 50 | 6 | 8 |
| 3 | 4135-011-003 | 0.2 | 418 E Grand Ave | Neighborhood Commercial | C-2 | Mixed Use Overlay | MU-O | 40 | 50 | 7 | 8 |
| 4 | 4135-011-023 | 0.3 | 430 E Grand Ave | Neighborhood Commercial | C-2 | Mixed Use Overlay | MU-O | 40 | 50 | 13 | 17 |
| 5 | 4135-017-900 | 0.6 | 210 Penn St | Multi-Family Residential | R-3 | Overlay | O | 30 | 40 | 19 | 25 |
| 6 | 4135-022-025 | 0.3 | 817 E Franklin Ave | Parking | P | Overlay | O | 30 | 40 | 9 | 12 |
| 7 | 4135-022-026 | 0.2 | Maryland St/ Franklin Ave | Parking | P | Overlay | O | 30 | 40 | 4 | 6 |
| 8 | 4135-022-027 | 0.2 | Maryland St/ Franklin Ave | Parking | P | Overlay | O | 30 | 40 | 4 | 6 |
| 9 | 4135-022-028 | 0.2 | Maryland St/ Franklin Ave | Parking | P | Overlay | O | 30 | 40 | 4 | 6 |

**Table 5**
**Candidate Sites**

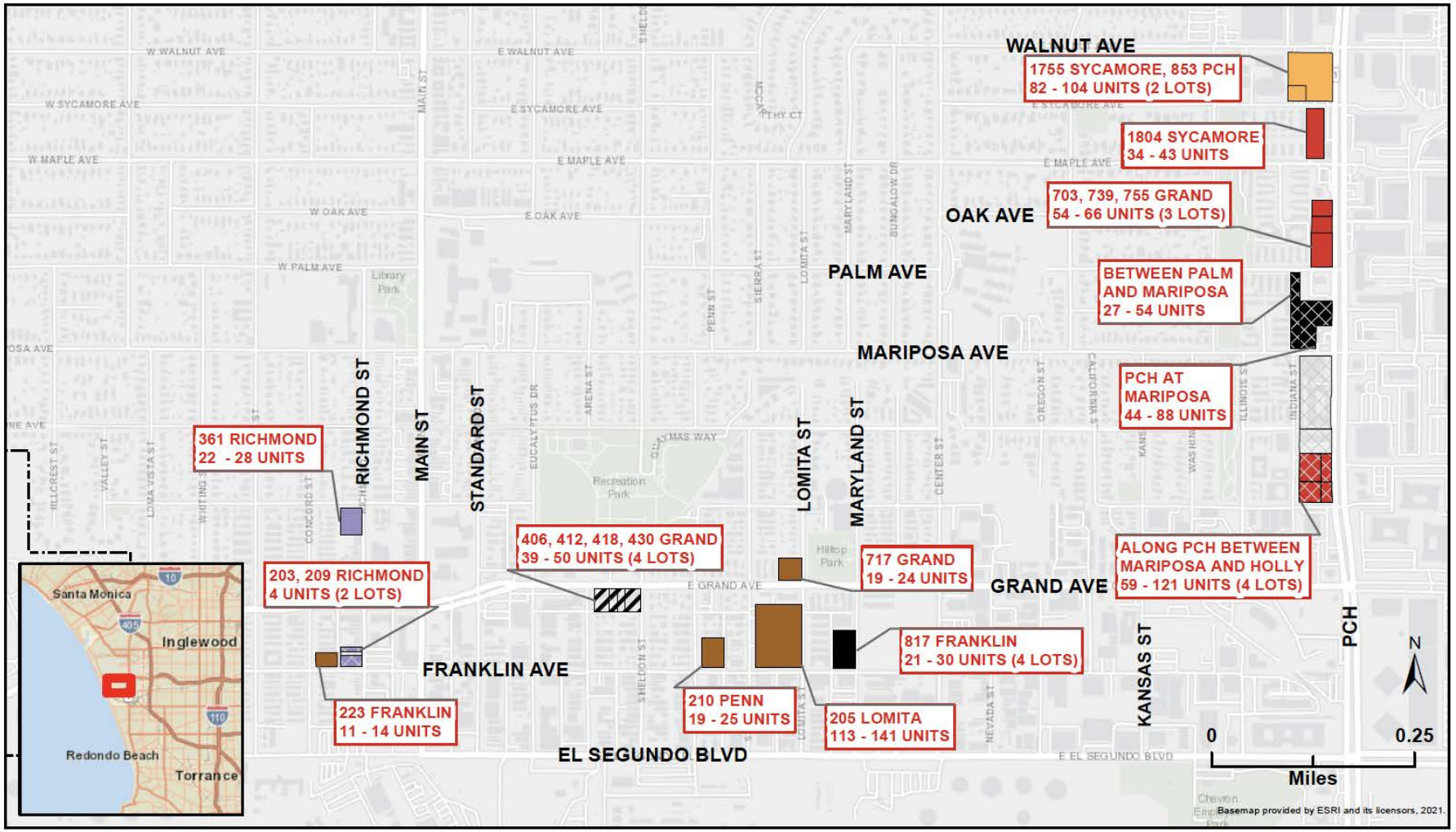
| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Total Capacity (Min.) | Total Capacity (Max.) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 4135-022-035 | 2.8 | 205 Lomita | Multi-Family Residential | R-3 | Mixed Use Overlay | MU-O | 40 | 50 | 113 | 141 |
| 11 | 4135-023-023 | 0.5 | 717 E Grand Ave | Multi-Family Residential | R-3 | Mixed Use Overlay | MU-O | 40 | 50 | 19 | 24 |
| 12 | 4136-017-046 | 0.6 | 361 Richmond St | Downtown Specific Plan | DSP | Mixed Use Overlay | MU-O | 40 | 50 | 22 | 28 |
| 13 | 4136-024-018 | 0.3 | 223 W Franklin Ave | Multi-Family Residential | R-3 | Mixed Use Overlay | MU-O | 40 | 50 | 11 | 14 |
| 14 | 4139-017-004 | 0.3 | 1755 E Sycamore Ave | Corporate Office | CO | Mixed Use Overlay | MU-O | 40 | 50 | 10 | 13 |
| 15 | 4139-017-040 | 1.8 | 835 N Pacific Coast Highway | Corporate Office | CO | Mixed Use Overlay | MU-O | 40 | 50 | 72 | 91 |
| 16 | 4139-017-043 | 0.9 | 1804 E Sycamore | General Commercial | C-3 | Mixed Use Overlay | MU-O | 40 | 50 | 34 | 43 |
| 17 | 4139-018-001 | 0.7 | 703 N Pacific Coast Highway | General Commercial | C-3 | Mixed Use Overlay | MU-O | 40 | 50 | 28 | 34 |

**Table 5**
**Candidate Sites**

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Total Capacity (Min.) | Total Capacity (Max.) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | 4139-018-012 | 0.3 | 739 N Pacific Coast Highway | General Commercial | C-3 | Mixed Use Overlay | MU-O | 40 | 50 | 13 | 16 |
| 19 | 4139-018-003 | 0.3 | 755 N Pacific Coast Highway | General Commercial | C-3 | Mixed Use Overlay | MU-O | 40 | 50 | 13 | 16 |
| 20 | 4139-025-075 | 0.2 | PCH/Holly Ave | General Commercial | C-3 | Mixed Use Overlay | PCCSP, PCC MU-1 | 40 | 97 | 8 | 16 |
| 21 | 4139-025-073 | 0.6 | Indiana St/Holly Ave | General Commercial | C-3 | Mixed Use Overlay | PCCSP, PCC MU-1 | 40 | 97 | 23 | 47 |
| 22 | 4139-025-074 | 0.4 | Indiana St/Holly Ave | General Commercial | C-3 | Mixed Use Overlay | PCCSP, PCC MU-1 | 40 | 97 | 17 | 34 |
| 23 | 4139-025-076 | 0.3 | Holly Ave/PCH | General Commercial | C-3 | Mixed Use Overlay | PCCSP, PCC MU-1 | 40 | 97 | 11 | 23 |
| 24 | 4139-0245-057 | 0.7 | Mariposa/PCH | Parking | P | Mixed Use Overlay | PCCSP, PCC MU-1 | 40 | 80 | 27 | 54 |
| 25 | 4139-024-058 | 1.1 | Mariposa/PCH | Parking | P | Mixed Use Overlay | PCCSP, PCC MU-1 | 40 | 80 | 44 | 89 |

**Table 5**
**Candidate Sites**

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Total Capacity (Min.) | Total Capacity (Max.) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 4136-024-017 | 0.2 | 203 Richmond St | Downtown Specific Plan | DSP | Mixed Use Overlay | – | 0 | 12.5 | 3 | 3 |
| 27 | 4136-024-008 | 0.2 | 209 Richmond St | Downtown Specific Plan | DSP | Mixed Use Overlay | – | 0 | 12.5 | 1 | 1 |
| **Total** | | **14.7** | | | | | | | | **548** | **792** |




## MAP LEGEND

**SITE INVENTORY BY ZONING DISTRICT**

- Single-Family Residential (R-1)
- Two-Family Residential (R-2)
- Multi-Family Residential (R-3)
- Downtown Commercial (C-RS)
- Neighborhood Commercial (C-2
- General Commercial (C-3)
- Corporate Office (CO)
- Parking (P)
- Downtown Specific Plan (DSP)

**PENDING RESIDENTIAL PROJECTS**
*CURRENTLY IN PROJECT REVIEW/ ENTITLEMENT PENDING

Figure 2
Site Inventory Map - Minimum and Maximum Dwelling Units

**9. Surrounding Land Uses and Setting:**

Various, Citywide

The sites are surrounded by urbanized development including land designated for Two-Family Residential, Multi-Family Residential, Commercial, Urban Mixed Use, and Corporate land uses.

**10. Other Public Agencies Whose Approval Is Required**:

The California Department of Housing and Community Development reviews and determines whether the Housing Element Update complies with State of California law. No other approvals by outside public agencies are required.

**11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1**:

The City of El Segundo typically initiates consultation with the Gabrielino-Tongva Tribe, Gabrielino/Tongva Nation, Gabrielino Tongva Indians of California Tribal Council, Gabrielino/Tongva San Gabriel Band of Mission Indians, and San Gabriel Band of Mission Indians—Kizh Nation and their designated tribal representatives. On October 21, 2021, the City sent letters to the above listed tribes to elicit input in the Housing Element update and requested information regarding tribal cultural resources within the City. None of the Native American Tribes contact have requested consultation.

## B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors that would be potentially affected by this project and are mitigated to a less than significant impact are indicated below.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☐ Biological Resources | ☐ Cultural Resources | ☐ Energy |
| ☐ Geology/Soils | ☐ Greenhouse Gas Emissions | ☐ Hazards & Hazardous Materials |
| ☐ Hydrology/Water Quality | ☐ Land Use/Planning | ☐ Mineral Resources |
| ☐ Noise | ☐ Population/Housing | ☐ Public Services |
| ☐ Recreation | ☐ Transportation/Traffic | ☐ Tribal Cultural Resources |
| ☐ Utilities/Service Systems | ☐ Wildfire | ☐ Mandatory Findings of Significance |

## C. DETERMINATION

On the basis of this initial evaluation:

☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because of the incorporated mitigation measures and revisions in the

project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

| | |
|---|---|
| Signature | 11-24-2021<br>Date |
| Paul Samaras | Principal Planner |

## D. EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources cited. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards.

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect, and construction as well as operational impacts.

3) A "Less Than Significant Impact" applies when the proposed project would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.

4) "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

5) "Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The initial study must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **1. AESTHETICS.** Except as provided in Public Resources Code Section 21099 would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☐ | ☒ |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcrops, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ☒ |
| c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☐ | ☒ |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☐ | ☒ |

**Environmental Setting**

***Scenic Vistas and Scenic Resources***

The City's General Plan does not define any designated scenic vistas or resources in the City. The General Plan includes an Open Space designation applied to areas that are preserved as usable or visual open space both publicly- and privately-owned. The Open Space Element states that open space provides visual relief from urban development and helps shape the urban form.

***Visual Character***

As stated in the Land Use Element, the City of El Segundo is a unique City that has very distinct and identifiable areas. These distinct areas include residential, the Civic Center, older industrial areas, and office and commercial uses. The western boundary of the City includes 0.8 miles of shoreline along the Santa Monica Bay. With the exception of the shoreline area, the City is fully developed with urbanized uses.

***Light and Glare***

The City is developed with established existing sources of light and glare, such as streetlights and parking lights, walkway lights, lighted recreational facilities, and light emitted from residential and nonresidential buildings. The City is surrounded by other urbanized development on all sides. Many of the City's residential neighborhoods are surrounded or flanked with commercial, light manufacturing uses, and highway uses which may create greater lighting effects.

***Regulatory Setting***

Regulations exist at state and local levels that guide development and influence the physical form and aesthetic character of the City and include:

- California Scenic Highway Program
- El Segundo General Plan
- El Segundo Municipal Code

**Checklist Discussion**

***a) & c) No Impact.***

The 2021-2029 Housing Element Update in and of itself does not propose or authorize any projects or development plan. The Housing Element sets forth the City's policies and detailed programs for meeting existing and future housing needs as determined by the RHNA process, for conserving and enhancing affordable housing, providing adequate housing sites, and for increasing affordable housing opportunities for extremely low/very-low, low, moderate, and above moderate income persons and households.

Future development would be required to adhere to all city design guidelines and standards including the Zoning Ordinance, General Plan policies, and any additional specific development guidelines for a particular area. The City's General Plan and Zoning Ordinance would be amended to include the RHNA housing overlay (RHNA-O) and RHNA mixed-use overlay (RHNA MU-O). The Zoning Ordinance amendments would specify development standards for each zoning overlay district to ensure quality development in the community.

No sites are proposed in Open Space designated areas. All future projects would be developed on sites that are zoned for residential, office, commercial, and mixed-use areas. No areas currently designated as open space would be converted to urban uses and no development would be permitted to encroach on open space.

All future projects would be treated as individual projects and may be subject to specific environmental analysis. Nevertheless, there are no policies in the Housing Element which either permit or promote development in areas that aren't currently developed with existing uses. There are no policies or programs in the Housing Element that would directly affect scenic vistas nor any that would degrade the visual character of the City. The project would therefore have **no impact.**

**b)** ***No Impact.***

There are no state scenic highways in the vicinity of El Segundo. Therefore, there would be **no impact.**

**d)** ***No Impact.***

As previously stated, the 2021-2029 Housing Element Update in itself does not propose or authorize any projects or development plan. Future development would occur in areas that are currently urbanized and commonly experience the impacts of existing light sources. Additionally, speculating about the precise nature of potential future development in accordance with the overlay standards would not yield any meaningful information. Future development would likely replace existing development and would therefore not introduce additional light and glare impacts. Future development in the City would be

required to be designed and constructed in accordance with the El Segundo Zoning Ordinance to prevent spillover light effects or the use of materials that would create new glare. Therefore, the Housing Element 2021-2029 Update would have **no impact** on light and glare.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **2. AGRICULTURE AND FORESTRY RESOURCES.** Would the project: | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | ☐ | ☐ | ☐ | ☒ |
| d) Result in the loss of forestland or conversion of forestland to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use? | ☐ | ☐ | ☐ | ☒ |

**Environmental Setting**

The City of El Segundo is an urban environment designated for residential, commercial, and manufacturing uses and is essentially built out. There is no land within the City of El Segundo designated or zoned for agricultural use, farmland, forest, or timber production nor are there any existing agricultural, farmland, forest or timber production uses. Pursuant to the Farmland Mapping and Monitoring Program, the City is designated as Urban and Built Up Land and Non-Agricultural or Natural Vegetation (California Department of Conservation 2018).

**Checklist Discussion**

***a), b), c), d), e) No Impact.***

The Housing Element update does not propose or authorize any development. The project would not convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. No land within the City of El Segundo is subject to the Williamson Act contract. As mentioned above, the City of El Segundo does not have any land that is designated or zoned for forest use or timber production. Additionally, there are no nearby agricultural sites that would be affected by development within El Segundo. The project would have **no impact** on agricultural or forest resources.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **3. AIR QUALITY.** Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard? | ☐ | ☐ | ☒ | ☐ |
| c) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

**Environmental Setting**

Both the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. Ambient air quality standards are set to protect public health and are levels of pollutants which represent safe levels that avoid specific adverse health effects. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The major criteria pollutants are ozone, carbon monoxide, nitrogen dioxide, and particulate matter. Both federal and state ambient air quality standards apply, as established by the U.S. Environmental Protection Agency (USEPA) and state air quality agencies (CALEPA for California). California air quality standards are generally more stringent that federal standards.

The City of El Segundo is within the South Coast Air Basin (basin). In Los Angeles County, the South Coast Air Quality Management District (SCAQMD) is the agency responsible for protecting the public health and welfare through the administration of federal and state air quality laws and policies. This regional agency regulates air quality through its permit authority over most types of stationary emission sources and through its planning and review process.

***Attainment Designations***

Specific geographic areas that do not meet federal air quality standards (National Ambient Air Quality Standards [NAASQS]) or state air quality standards (California Ambient Air Quality Standards [CAAQS]) for a particular air quality pollutant are in "nonattainment" areas for the pollutant. The current federal and state attainment status for the basin is provided in **Table 6, Federal and State Air Quality Designations in the South Coast Air Basin**.

**Table 6**
**South Coast Air Basin Attainment Status**

| Pollutant | Standard[1] | Averaging Time | Designation[2] | Attainment Date[3] |
|---|---|---|---|---|
| 1-Hour Ozone | NAAQS | 1979 1-Hour (0.12 ppm) | Nonattainment (Extreme) | 2/6/2023 (not attained)[4] |
| | CAAQS | 1-Hour (0.09 ppm) | Nonattainment | N/A |
| 8-Hour Ozone[5] | NAAQS | 1997 8-Hour (0.08 ppm) | Nonattainment (Extreme) | 6/15/2024 |
| | NAAQS | 2008 8-Hour (0.075 ppm) | Nonattainment (Extreme) | 7/20/2032 |
| | NAAQS | 2015 8-Hour (0.070 ppm) | Nonattainment (Extreme) | 8/3/2038 |
| | CAAQS | 8-Hour (0.070 ppm) | Nonattainment | Beyond 2032 |
| CO | NAAQS | 1-Hour (35 ppm) | Attainment (Maintenance) | 6/11/2007 (attained) |
| | CAAQS | 8-Hour (9 ppm) | Attainment | 6/11/2007 (attained) |
| $NO_2$ [6] | NAAQS | 1-Hour (0.1 ppm) | Unclassifiable/Attainment | N/A (attained) |
| | NAAQS | Annual (0.053 ppm) | Attainment (Maintenance) | 9/22/1998 (attained) |
| | CAAQS | 1-hour (0.18 ppm) Annual (0.030 ppm) | Attainment | - |
| $SO_2$[7] | NAAQS | 1-Hour (75 ppb) | Designations Pending (expect Uncl./Attainment) | N/A (attained) |
| | NAAQS | 24-Hour (0.14 ppm) Annual (0.03 ppm) | Unclassifiable/Attainment | 3/19/1979 (attained) |
| PM10 | NAAQS | 1987 24-Hour (150 µg/m$^3$) | Attainment (Maintenance)[8] | 7/26/2013 (attained) |
| | CAAQS | 24-Hour (50 µg/m$^3$) Annual (20 µg/m$^3$) | Nonattainment | N/A |
| PM2.5 [9] | NAAQS | 2006 24-Hour (35 µg/m$^3$) | Nonattainment (Serious) | 12/31/2019 |
| | NAAQS | 1997 Annual (15.0 µg/m$^3$) | Attainment | 8/24/2016 |
| | NAAQS | 2021 Annual (12.0 µg/m$^3$) | Nonattainment (Serious) | 12/31/2025 |
| | CAAQS | Annual (12.0 µg/m$^3$) | Nonattainment | N/A |
| Lead | NAAQS | 3-Months Rolling (0.15 µg/m$^3$) | Nonattainment (Partial)[10] | 12/31/2015 |

Notes:
Source: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf
[1] NAAQS = National Ambient Air Quality Standards, CAAQS = California Ambient Air Quality Standards
[2] U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable.
[3] A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration.
[4] 1-hour O3 standard (0.12 ppm) was revoked, effective June 15, 2005 ; however, the Basin has not attained this standard based on 2008-2010 data and is still subject to anti-backsliding requirements.

**Table 6**
**South Coast Air Basin Attainment Status**

[*5] 1997 8-hour O3 standard (0.08 ppm) was reduced (0.075 ppm), effective May 27, 2008; the revoked 1997 O3 standard is still subject to anti-backsliding requirements.
[6] New NO2 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO2 standard retained.
[7] The 1971 annual and 24-hour SO2 standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO2 1-hour standard. Area designations are still pending, with Basin expected to be designated Unclassifiable /Attainment.
[8] Annual PM10 standard was revoked, effective December 18, 2006; 24-hour PM10 NAAQS deadline was 12/31/2006; SCAQMD request for attainment redesignation and PM10 maintenance plan was approved by U.S. EPA on June 26, 2013, effective July 26, 2013.
[9] Attainment deadline for the 2006 24-Hour PM2.5 NAAQS (designation effective December 14, 2009) is December 31, 2019 (end of the 10th calendar year after effective date of designations for Serious nonattainment areas). Annual PM2.5 standard was revised on January 15, 2013, effective March 18, 2013, from 15 to 12 µg/m3. Designations effective April 15, 2015, so Serious area attainment deadline is December 31, 2025.
[10] Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect redesignation to attainment based on current monitoring data.

***Air Quality Management Plan***

Every three (3) years the SCAQMD prepares a new Air Quality Management Plan (AQMP), updating the previous plan and having a 20-year horizon. On March 23, 2017 CARB approved the 2016 AQMP. The 2016 AQMP is a regional blueprint for achieving the federal air quality standards and healthful air. The 2016 AQMP includes both stationary and mobile source strategies to ensure that rapidly approaching attainment deadlines are met, that public health is protected to the maximum extent feasible, and that the region is not faced with burdensome sanctions if the Plan is not approved or if the NAAQS are not met on time.

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the SCAQMD Air Quality Management Plan (AQMP). The SCAQMD CEQA Handbook states that "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project would be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies.

***Sensitive Receptors***

CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers.

***Regulatory Setting***

Regulations exist at federal, state, and local levels with regard to air quality and include:

- Federal Clean Air Act
- California Clean Air Act
- State Implementation Plan
- California Energy Code
- Regional Air Quality Strategy
- South Coast Air Quality Management District Rules and Regulations

**Checklist Discussion**

**a)** ***Less Than Significant Impact.***

The proposed project is an update to the City of El Segundo Housing Element. SCAG's Regional Housing Needs Allocation (RHNA) for the City for the 2021-2029 planning period is 521 units. To meet the RHNA requirements, the Housing Element identifies possible housing sites to address El Segundo's RHNA obligation. These sites consist of entitled/approved/pipeline projects, accessory dwelling units (ADUs), and candidate/new sites.

The City would add overlay designations to the General Plan and zoning of the candidate sites that would result in an increase in the current density allowed on the site or an increase in population on sites previously not designated for residential uses. The overlay designations on these sites also require changes to the City's General Plan Map and Zoning Map. Therefore, the estimated population for the candidate sites would be higher than the population forecasted for these sites in the General Plan since that estimate was based on a different use or density. Although the Housing Element would result in slightly higher population than those estimated in the General Plan, the increased residential density of the future development of the Housing Element is in response to SCAG forecasts in relation to the City's RHNA and SCAG's Regional Council recently approved and fully adopted the Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)). Although the 2016 AQMP does not include the emissions of the additional population growth associated with the Housing Element, as the AQMP is based on population, employment, and VMT in the South Coast Air Basin region as projected by SCAG and operation of the new land uses associated with the Housing Element would not cumulatively contribute to the nonattainment designations of the South Coast Air Basin, the Housing Element would be consistent with the AQMP.

Therefore, the project would have a **less than significant** impact on implementation of the applicable air quality plan.

**b), c)** ***Less Than Significant Impact.***

***Short-Term (Construction) Emissions***

Future development consistent with the General Plan could result in an increase in criteria pollutants during construction activities, such as excavation and grading, exhaust emissions of construction equipment, and the use of typical construction materials such as asphalt and other construction materials that tend to volatilize into the atmosphere.

Information regarding each specific development project accommodated under the Housing Element (such as construction timeline, earthworks information, amount and type of construction equipment etc.) would be needed in order to quantify the level of impact associated with construction activity.

Construction activities associated with the buildout of the future development of the Housing Element are anticipated to occur sporadically over an approximately 9-year period (i.e., 2021-2029) or longer. Future development would be comprised of multiple smaller development projects, each having its own construction timeline and activities. The individual construction projects would be subject to regulatory measures including Rule 403 for fugitive dust control, Rule 1113 for architectural coatings, and other applicable SCAQMD regulatory measures as well as applicable policies and implementation measures of the General Plan Update. In addition, potential mitigation could be imposed at the project level including extension of construction schedules and/or use of special equipment etc. In addition to compliance with SCAQMD rules, the construction activity associated with each individual project would also be subject to all applicable policies and implementation measures contained in the City's Zoning Code. Adherence to applicable regulations and policies would contribute to minimizing construction-related criteria air pollutant emission. Additionally, any future project resulting from adoption and implementation of the Housing Element would be required to comply with SCAQMD's and El Segundo's regulations, which include implementation of dust control measures.

***Long-Term (Operational) Emissions***

Future residential development would potentially increase population in the City and expose existing sensitive receptors to pollutant concentrations. The potential operational air quality impacts of future residential projects largely would be associated with motor vehicle trips generated by the proposed developments. Since most of the anticipated development sites would result in the replacement of existing development with new housing and mixed-use projects, the increase in the number of vehicle trips is not expected to be significant. Additionally, public transit routes are located along major roadways in the City including Imperial Highway, Grand Avenue, El Segundo Boulevard, Main Street, Pacific Coast Highway, and Aviation Boulevard. Additionally, the City is served by the Metro Green Line. The development sites are located along or within walking distance of these major transportation corridors with existing transit stops. This placement of development sites is intended to encourage transit use and reduce auto dependency. Any minor increase in vehicle trips generated would only marginally increase daily emissions of ozone precursors and particulate matter ($PM_{10}$ and $PM_{2.5}$) and would likely be below SCAQMD established thresholds for consideration of a significant impact.

***Conclusion***

The project is the adoption of the City of El Segundo's Housing Element 2021-2029 Update. Any individual development project would be subject to environmental review pursuant to CEQA and the City's local procedures to determine if any long-term air quality impacts would occur from the operation of a specific new development. As such, the project would not result in a cumulatively considerable net increase of any criteria pollutant in which the project region is in nonattainment under the federal and state ambient air quality standard. Therefore, the project would have a **less than significant impact** in the region's nonattainment criteria pollutants and exposure of sensitive receptors to substantial pollutant concentrations.

**d)** ***Less Than Significant Impact.***

***Short-Term (Construction) Emissions***

Future residential development construction activities could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust and architectural coatings. These compounds would be

emitted in various amounts at various locations during construction and potentially effect nearby sensitive receptors. However, odors are highest near the source and would quickly dissipate away from the source. Such odors are temporary and generally occur at magnitudes that would not affect a substantial number of people. Therefore, impacts related to construction-generated odors would be **less than significant**.

***Long-Term (Operational) Emissions***

Typical long-term operational characteristics of residential development are not associated with the creation of odors nor anticipated to generate odors affecting a substantial number of people. Implementation of the Housing Element 2021-2029 would result in possible construction of additional residential units. The Housing Element 2021-2029 would not create uses that, in the long-term operation, would be typically associated with the creation of such odors, nor are they anticipated to generate odors affecting a substantial number of people. Therefore, impacts related to odors generated from residential operations from the Housing Element 2021-2029 would be **less than significant**.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **4. BIOLOGICAL RESOURCES.** Would the project: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? | ☐ | ☐ | ☒ | ☐ |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? | ☐ | ☐ | ☒ | ☐ |
| c) Have a substantial adverse effect on state or federally protected wetlands a (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☒ | ☐ |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☒ | ☐ |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ☒ |
| f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

**Environmental Setting**

The City of El Segundo is a dense and urban community with very limited vacant land. The City is bounded by urban development to the north, east, and south. The western boundary of the City includes 0.8 miles of shoreline along the Santa Monica Bay. With the exception of the shoreline area, the City is fully developed with urbanized uses.

The General Plan includes an Open Space designation applied to areas that are public parks or private land reserved for open spaces. However, all these lands are either developed with park uses or utility infrastructure and surrounded by urbanized areas.

Although there are areas within El Segundo that contain sensitive habitat for the coastal habitat for the El Segundo Blue Butterfly, these areas are located in coastal areas. As described in the General Plan Conservation Element, the El Segundo Blue Butterfly is listed on the federal endangered species list, and is dependent upon and rarely strays from coastal buckwheat plants. At this time, the butterfly occurs on a 1.96 acre preserve adjacent to and maintained by the Chevron Refinery and in the dune area under the flight path of the Los Angeles International Airport.

The shoreline is classified as Estuarine and Marine Wetland on the U.S. Fish and Wildlife Service's National Wetlands Inventory. One area of the City is shown as Freshwater Emergent Wetland. This area is located in the western area of the City on undeveloped land near the Hyperion Water Treatment Plant. There are several areas south of Grand Avenue and west of Vista Del Mar that are classified as Freshwater Ponds. Other than these areas, there are no sensitive habitats, riparian habitats, or wetlands in the City.

The City has ordinances related to the removal of City street trees by private individuals but does not have a tree preservation policy or ordinance.

***Regulatory Setting***

Regulations exist at federal, state, and local levels with regard to biological resources and include:

- Federal Endangered Species Act
- Federal Migratory Bird Treaty Act
- Federal Clean Water Act
- California Endangered Species Act
- California Fish and Game Code
- Natural Community Conservation Planning Act
- Porter-Cologne Water Quality Control Act
- City of El Segundo General Plan
- City of El Segundo Municipal Code (Title 9, Chapter 3)

***Checklist Discussion***

***a) b) c) d) Less than Significant Impact.***

The project is the adoption of the City of El Segundo Housing Element 2021-2029. The General Plan Housing Element is a policy document that addresses the housing need in the City; no actual development is proposed as part of the Housing Element. The project would not result in the approval of any physical improvements.

The proposed Housing Element sites are located in urbanized area that have been developed previously. Inasmuch as the Housing Element could indirectly result in residential development and improvement, the project could result in increased density in residential and mixed-use areas of the City. However, the City is largely built-out and the City's General Plan Land Use Element and zoning code focuses residential growth into urbanized portions of the City.

No development is proposed on or near the areas mapped as wetlands. Because the areas where potential development may occur have already been disturbed through urban development, no significant changes are anticipated in the diversity or number of species of plants or animals, or in the deterioration of existing wildlife habitat. No riparian habitat, wetlands, wildlife corridors or nurseries would be impacted.

Existing applicable federal, state, and/or local policies would prevent development in areas that support sensitive or special status species, federally protected wetlands, or migration corridors.

Accordingly, adoption of the Housing Element 2021-2029 would have a **less than significant impact** on biological resources, including candidate, sensitive, or special-status species; riparian habitat or other sensitive natural community; federally protected wetlands a (including, but not limited to marsh, vernal pool, coastal, etc.); or native resident or migratory fish or wildlife species, corridors, or nurseries.

**e)** ***No Impact.***

The project is the adoption of the City of El Segundo Housing Element 2021-2029. The General Plan Housing Element is a policy document that addresses the housing need in the City; no actual development of land is proposed as part of the Housing Element. The City does not have a tree preservation ordinance for trees on private property. In the event future development requires the removal of trees on City property, as part of the approval process the developer would be required to comply with City policies related to tree removal and replacement. Therefore, the project would not conflict with tree preservation policies or ordinances and there would be **no impact**.

**f)** ***No Impact.***

The City does not have a Habitat Conservation Plan nor Natural Community Conservation Plan. The General Plan Housing Element is a policy document that addresses the housing need in the City; no actual development or rezoning/redesignation of land is proposed as part of the Housing Element As discussed above, the project would not result in the approval of any physical improvements and does not propose any changes non-urbanized areas. The areas of the City identified for potential development sites are located within fully developed, urban settings surrounded by office, commercial, and residential land uses void of native plant or animal life and limited cover and foraging habitat and the project would not significantly impact biological resources. There are no Habitat Conservation Plans or Natural Community Conservation Plans applicable to these areas. Therefore, the project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan and **no impacts** would occur.

***Mitigation Measures***

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **5. CULTURAL RESOURCES.** Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5? | ☐ | ☐ | ☒ | ☐ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | ☐ | ☐ | ☒ | ☐ |
| c) Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☐ | ☒ | ☐ |

**Environmental Setting**

The City of El Segundo was incorporated in 1917. The City has very distinct and identifiable areas. The City has a very strong residential base, which is a mixture of single-family, two-family, and multi-family residential structures. The Downtown area includes the Civic Center. Near the Downtown is the Smoky Hollow, an older industrial area that contains mostly older industrial buildings of one or two stories.

Areas south of El Segundo Boulevard and west of Pacific Coast Highway are mostly occupied by the Chevron Refinery, which occupies approximately one-third of the City. The Refinery also occupies a portion of the coastal zone, along with a Southern California Edison Generating Station. The beach area is publicly owned and accessible.

Areas of the City east of Pacific Coast Highway consist of a combination of industrial, office, and commercial uses. This area contains the large areas of development consisting of a mixture of office and research and development uses, as well as the U.S. Air Force Base.

***Regulatory Setting***

Regulations exist at federal, state, and local levels with regard to cultural resources and include:

- National Historic Preservation
- National Register of Historic Places
- Federal Native American Graves Protection and Repatriation Act
- California Register of Historic Resources
- CEQA Guidelines Section 15064.5
- California Native American Graves Protection and Repatriation Act
- California Public Resources Code Section 5097
- Assembly Bill 52
- Senate Bill 18
- El Segundo General Plan Conservation Element
- El Segundo Municipal Code

**Checklist Discussion**

***a), b) Less Than Significant Impact.***

The Housing Element is a General Plan policy document that addresses housing need in the City. The Housing Element Update does not propose or authorize any specific development and would not result in physical alterations or improvements. Future development would occur in urban areas that are currently developed. It is unknown if or when any development would occur on the sites. Therefore, buildings that are not considered historic resources at this time, would need to be evaluated to determine if any are historic resources. It is unknown if there are any archaeological resources on the sites, which are located on previously developed and disturbed areas. In the unlikely event that future development does disturb archaeological resources, compliance with state regulations pertaining to discovery of archaeological resources would ensure that impacts are avoided. The project would result in a **less than significant impact**.

***c) Less Than Significant Impact.***

The 2021-2029 Housing Element is a policy document and does not propose, permit, nor authorize any development. Future residential uses to meet the RHNA demand would be located in areas that are entirely urbanized and have experienced past grading or excavation. There are no specific development projects proposed for the project that would include excavation or grading. In the unlikely event that future development does disturb human remains, compliance with state regulations pertaining to discovery of human remains, including California Health and Safety Code Section 7050.5, which states that no further disturbance shall occur until the County Coroner has made a determination of the origin and disposition pursuant to Public Resources Code Section 5097.98, would ensue. The project would result in a **less than significant impact**.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **6. ENERGY.** Would the project: | | | | |
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ☒ | ☐ |

**Environmental Setting**

***Electricity***

Electricity is provided to the City by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons, within a service area encompassing approximately 50,000 square miles. SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers.

***Natural Gas***

Natural gas is provided to the City by Southern California Gas (SoCalGas).

***Regulatory Setting***

Regulations exist at federal, state, and regional levels with regard to energy and include:

- Federal Corporate Average Fuel Economy (CAFE) Standards
- Federal Energy Independence and Security Act
- California Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Standards (Title 24, Part 11)
- California's Renewable Portfolio Standard
- Senate Bill 350
- Senate Bill 100
- Assembly Bill 32 (California Global Warming Solutions Act of 2006) and Senate Bill 32
- Assembly Bill 1493 (Pavley I)
- Executive Order S-1-07 (California Low Carbon Fuel Standard)
- California Air Resources Board:
- Advanced Clean Car Regulation
- Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen, and other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles
- Sustainable Communities Strategy (SB 375)

- Assembly Bill 758
- Senate Bill 1389
- City of El Segundo Climate Action Plan

**Checklist Discussion**

**a), b)** ***Less Than Significant Impact.***

The project is the adoption of the City of El Segundo Housing Element 2021-2029 Update. The General Plan Housing Element is a policy document that addresses the housing need in the City; no actual development is proposed as part of the Housing Element. The project would not directly result in the approval of any physical improvements. Therefore, no direct consumption of energy will occur. Inasmuch as the Housing Element could indirectly result in residential development and improvement, such development would be infill development on sites that currently consume energy. In general, infill and redevelopment results in more efficient consumption of electrical and natural gas energy as new structures would be constructed in accordance with current energy regulations, such as Title 24 standards and applicable CALGreen requirements which are stricter than previous, earlier regulations.

The City adopted a Climate Action Plan (CAP) in December 2017 that identifies the City's existing GHG emissions, existing sustainability efforts, and strategies and implementation measures to reduce greenhouse gases. The CAP includes policies and measures that emphasize smart growth, affordable housing, and Transit Oriented Development to increase housing density near public transit and incentivize walking and transit usage. The CAP includes policies aimed at increasing energy efficiency, reducing solid waste, increasing urban greening, and encourage energy generation and storage.

The City has adopted a Green Building Standards Code, which introduces sustainable construction practices in planning, design, energy, resource and water efficiency, material conservation and environmental quality. Policies and programs of this Housing Element would encourage and facilitate the redevelopment of underutilized residential and manufacturing sites within the City, including along primary transit corridors and some sites are near commercial uses. Residential development that is both pedestrian- and transit-oriented conserves energy by reducing the number of vehicular trips and efficient use of land and construction materials.

Lastly, the City is included in the South Bay Bicycle Master Plan, which is intended to guide the development and maintenance of a comprehensive bicycle network and set of programs and policies throughout the cities of El Segundo, Gardena, Hermosa Beach, Lawndale, Manhattan Beach, Redondo Beach, and Torrance for the next 20 years.

Furthermore, in accordance with state, regional, and local plans and polices, infill development sites including those located in proximity to transit, would reduce vehicle miles traveled resulting in a reduction in the consumption of petroleum-based fuels. Therefore, future development would not be expected to consume energy in wasteful, inefficient, or unnecessary way. As such, adoption of the Housing Element 2021-2029 would not conflict with or obstruct plans for renewable energy or energy efficiency. Accordingly, impacts would be **less than significant**.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **7. GEOLOGY AND SOILS.** Would the project: | | | | |
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? | ☐ | ☐ | ☒ | ☐ |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv) Landslides? | ☐ | ☐ | ☐ | ☒ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ☒ |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☐ | ☒ | ☐ |

**Environmental Setting**

***Faulting and Seismicity***

There are no major fault zones located within the City of El Segundo. However, ther are several faults within the region that could have an impact on the City. Active faults that could affect the City include the Newport-Inglewood, Charnock, Santa Monica, Sierra Madre, and Palos Verdes Fault Zones. Other faults that could affect the City include the Verdugo, San Fernando, and San Andreas Faults. The San Andreas Fault is approximately 55miles northeast of the City and is considered the most seismically active fault in

the southern California region. These faults are all close enough or expected to generate strong enough shaking that could affect the City. However, the level of seismicity in El Segundo, both as to maximum credible earthquake intensity and likely earthquake occurrences, is the same as for the rest of the Los Angeles Basin.

The City is not at significant hazard from surface rupture as the nearest fault is the Newport-Inglewood, which is 5 miles from the City.

***Terrain and Soil Conditions***

With the exception of a very small area adjacent to the Hyperion Water Reclamation Plant, the City is relatively flat; therefore, the risk of landsliding is low. Some areas of the City are located on sand dune formations with high groundwater tables. These soils are considered susceptible to liquefaction. Therefore, the City is at high to moderate risk for liquefaction.

***Paleontological Resources***

Based on prior paleontological investigations performed for the Crenshaw Transit Corridor Project and LAX Master Plan Final EIS/EIR, sensitive paleontological resources were identified in the vicinity of the City. Therefore, there is some potential and sensitivity for paleontological resources.

Regulatory Setting

Regulations exist at state and local levels with regard to geology and soils and include:

- California Alquist-Priolo Earthquake Fault Zoning Act
- California Seismic Hazards Mapping Act
- California Building Code
- El Segundo Building Code
- El Segundo General Plan Public Safety Element

**Checklist Discussion**

**a.i-ii)** ***Less Than Significant Impact.***

The project is the adoption of the City of El Segundo Housing Element 2021-2029 Update. The General Plan Housing Element is a policy document that addresses the housing need in the City; no actual development or rezoning/redesignation of land is proposed as part of the Housing Element. The project would not result in the approval of any physical improvements.

Indirect impacts could occur through potential future development. The Housing Element includes an inventory of sites that are adequate to accommodate the City's assigned share of regional housing need, but it does not propose development projects. As all areas of the City are essentially built-out, all future development would be infill and/or replacement of existing uses.

As southern California is seismically active, potential impacts associated with seismic hazards, including rupture of a fault, strong seismic shaking and seismic-related ground failure currently exist. Earthquakes that could affect the City would most likely originate from the Newport-Inglewood, Charnock, Santa Monica, Sierra Madre, Palos Verdes, Verdugo, San Fernando, and San Andreas Faults. These faults are

close enough in proximity or expected to generate strong enough shaking that could affect the City. As future development would only occur on sites currently or previously developed, impacts resulting from potential construction would be the same as under current conditions.

The General Plan addresses geology and soils in the Safety Element, and the City has adopted the California Building Code that includes provisions for construction in seismically active areas, and on different types of soils. The level of seismicity in El Segundo, both as to maximum credible earthquake intensity and likely earthquake occurrences, is approximately the same as for the Los Angeles Basin. Adherence to regulatory codes, such as Uniform Building Code (UBC) and California Building Code (CBC), would ensure that all new development would be built to adequately withstand strong seismic ground shaking through proper engineering and design. Depending on location and scope, may be required to prepare geologic reports to address potential geologic impacts associated with the development of the site. The City ensures compliance with development requirements at the time of building permits are issued.

Neither adoption of the Housing Element update nor any future development within the urban/developed core would result in potential impacts associated with seismic hazards that don't currently exist. Therefore, impacts related to geology and soil, such as faulting, groundshaking, and soil instability would be **less than significant**.

**a.iii)** ***Less than Significant Impact.***

Strong seismic ground shaking could result in liquefaction of poorly consolidated and saturated soils. Liquefaction occurs when water-saturated sediments are subjected to extended periods of shaking. The Safety Element of the El Segundo General Plan states that some areas of the City are located on sand dune formations with high groundwater tables. Although the Housing Element itself does not propose, permit nor authorize any development, meeting the required housing needs would require future development. Adherence to regulatory codes, such as UBC and CBC, would ensure new structures be built to adequately withstand liquefaction or ground failure associated with strong seismic ground shaking through proper engineering and design. This would limit the potential impact **to less than significant**.

**a.iv)** ***No Impact.***

The project would not result in the approval of any physical improvements. The City is relatively flat, therefore, the sites are all located in areas that are predominately flat. Therefore, the potential for seismically-induced landslides to occur is low. Though landslides in the urban area are unlikely, future development in the City would be required to adhere to all applicable UBC and CBC standards therefore, therefore there would be **no impact**.

**b)** ***Less than Significant Impact.***

The proposed project is the adoption of the Housing Element update which in and of itself does not authorize any future development. Moreover, soil erosion or loss of topsoil would generally not occur as the City is primarily built out. No specific development is proposed, and no changes to policies resulting in increased erosion would occur. Continued adherence to the standards of the existing CBC and compliance with the National Pollutant Discharge Elimination System (NPDES) permit and Storm Water Pollution Prevention Plan (SWPPP) requirements, as well as implementation of best management practices, would limit impacts related to soil erosion. Additionally, all future development would be

required to implement Best Management Practices (BMPs) for construction activities as specified by the California Storm Water Best Management Practices Handbook and/or the City's Storm Water BMP Manual. The BMPs include measures guiding the management and operation of construction sites to control and minimize the volume of surface runoff. These measures address procedures for controlling erosion and sedimentation and managing all aspects of the construction process. All development projects must comply with all City, state, and federal standards pertaining to stormwater run-off and erosion. As such, impacts would be **less than significant** related to erosion.

**c), d)** ***Less than Significant Impact.***

The project is the adoption of the City of El Segundo Housing Element 2021-2029 Update. The General Plan Housing Element is a policy document that addresses the housing need in the City; no actual development is proposed as part of the Housing Element Update. The project would not result in the approval of any physical improvements. New developments would be located on sites that have already been developed. It is unlikely that a new structure on a previously or currently occupied site designated for urban use would experience unstable conditions that were not previously encountered. Future risks would be similar those that currently exist. Additionally, proper engineering and adherence to required building standards, such as the UBC and CBC should ensure that impacts would be **less than significant**.

**e)** ***No Impact.***

The opportunity sites identified for potential future development in the Housing Element are all located within urban sites within the City. The City, including the opportunity sites are served by existing sewer infrastructure. No septic tanks would be required, and **no impact** would occur.

**f)** ***Less than Significant Impact.***

As previously stated, the General Plan Housing Element is a policy document that addresses housing need in the City; no actual development is proposed as part of the Housing Element. Therefore, its adoption would not, in itself, impact paleontological resources. Future development would be constructed on infill sites or other sites that are currently occupied with structures and have previously been graded. Although future development would not likely disturb paleontological resources, as required by El Segundo Municipal Code Appendix J Section J 104.2, Regular Grading Permit, an application for a regular grading permit shall include the limits and depths of cut and fill. Additionally, Appendix J Section J 104.2.3 Engineered Grading Requirements, any application for an engineered grading permit needs to include plans, specifications, and supporting data in the form of a soils engineering report and engineering geology report. Therefore, the City would have information available from plans and/or geotechnical evaluations would determine if redevelopment or construction would require deeper excavation than current conditions. As such, impacts would be **less than significant.**

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **8. GREENHOUSE GAS EMISSIONS.** Would the project: | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☒ | ☐ |

**Environmental Setting**

Global temperatures are moderated by naturally occurring atmospheric gases. These gases are commonly referred to as greenhouse gases (GHGs) because they function like a greenhouse, allowing solar radiation (sunlight) into the Earth's atmosphere but prevent heat from escaping, thus warming the Earth's atmosphere. GHGs, as defined under California's Assembly Bill (AB) 32, include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition. GHG emissions from human activities are the most significant driver of observed climate change since the mid-20th century.[1] Global climate change refers to changes in average climatic conditions over the entire Earth, including temperature, wind patterns, precipitation, and storms.

Regulatory Setting

Regulations exist at federal, state, regional, and local levels with regard to GHGs and include:

- Federal Clean Air Act
- Light Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards
- California Code of Regulations, Title 24, Part 6
- California Green Building Standards Code
- Executive Order S-3-05
- Assembly Bill 32 – Global Warming Solution Act of 2006
- Senate Bill 375
- Senate Bill 743
- Senate Bill 97

[1] *United Nations Intergovernmental Panel on Climate Change, Climate Change 2013: The Physical Science Basis, Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2013.*

- Executive Order B-30-15
- Senate Bill 32 and Assembly Bill 197
- Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases
- Assembly Bill 341
- Executive Order S-01-07
- Senate Bill 350
- Senate Bill 100
- California Air Resources Board: Scoping Plan

**Checklist Discussion**

**a)** ***Less Than Significant Impact.***

The project is the adoption of the City of El Segundo Housing Element 2021-2029 Update. The General Plan Housing Element is a policy document that addresses the housing need in the City; no actual development is proposed as part of the Housing Element. The project would not result in the approval of any physical improvements. The Housing Element includes an inventory of sites that are adequate to accommodate the City's assigned share of regional housing need, but it does not propose development projects. Inasmuch as the Housing Element could indirectly result in residential development and improvement, the project could result in GHG emissions from construction activities, increased vehicle use, energy consumption, natural gas combustion, water usage (i.e., water transport energy consumption), and other building sources. Such emissions would incrementally contribute to the global GHG levels.

However, since the project would not directly result in the approval of any physical improvements, no direct generation of greenhouse gases would occur. Inasmuch as the Housing Element could indirectly result in residential development and improvement, such development would be infill development on sites that currently generate greenhouse gases. In general, infill and redevelopment results in fewer greenhouse gases as new structures would be constructed in accordance with current energy regulations, such as Title 24 standards and applicable CALGreen requirements which are stricter than previous, earlier regulations. The City adopted a Green Building Code, which introduces sustainable construction practices in planning, design, energy, resource and water efficiency, material conservation and environmental quality.

Policies and programs of this Housing Element would encourage and facilitate the redevelopment of underutilized residential and manufacturing sites within the City, including along primary transit corridors and some sites are near commercial uses. Residential development that is both pedestrian- and transit-oriented reduces greenhouse gas emissions by reducing the number of vehicular trips, vehicle miles traveled, and efficiently using land and construction materials.

Accordingly, future residential development supported by the Housing Element Update would be required to implement policies and programs that reduce GHG emissions through more energy efficient residential buildings sited proximate to transit opportunities. Therefore, the project would not generate significant greenhouse gas emissions or conflict with greenhouse gas plans and impacts would be **less than significant**.

**b)** ***Less Than Significant Impact.***

The Housing Element would not have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. The Housing Element's consistency with applicable plans is discussed below.

**CARB Scoping Plan Consistency**

In November 2017, CARB released the 2017 Scoping Plan. This Scoping Plan incorporates, coordinates, and leverages many existing and ongoing efforts and identifies new policies and actions to accomplish the State's climate goals, and includes a description of a suite of specific actions to meet the State's 2030 GHG limit. In addition, Chapter 4 provides a broader description of the many actions and proposals being explored across the sectors, including the natural resources sector, to achieve the State's mid and long-term climate goals.

Guided by legislative direction, the actions identified in the 2017 Scoping Plan reduce overall GHG emissions in California and deliver policy signals that will continue to drive investment and certainty in a low carbon economy. The 2017 Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and Trade Program, which constrains and reduces emissions at covered sources.

As the latest, 2017 Scoping Plan builds upon previous versions. Project consistency with applicable strategies of both the 2008 and 2017 Plan are assessed in **Table 7, Consistency with CARB 2008 and 2017 Scoping Plan Policies and Measures** and **Table 8, Consistency with CARB82017 Scoping Plan Policies and Measures.** As discussed below, the future development accommodated in the Housing Element is consistent with the applicable strategies of the CARB Scoping Plan.

**Table 7**
**Consistency with CARB 2008 Scoping Plan Policies and Measures**

| 2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions | Project Compliance with Measure |
|---|---|
| California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals. | Consistent. These are CARB enforced standards; vehicles that access the future development sites of the Housing Element that are required to comply with the standards will comply with the strategy. |
| Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California. | Consistent. The future development projects accommodated under the Housing Element will be required to comply with the current Title 24 standards. |

**Table 7**
**Consistency with CARB 2008 Scoping Plan Policies and Measures**

| 2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions | Project Compliance with Measure |
|---|---|
| Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard. | Consistent. These are CARB enforced standards; vehicles that access the future development sites of the Housing Element that are required to comply with the standards will comply with the strategy. |
| Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures. | Consistent. These are CARB enforced standards; vehicles that access the future development sites of the Housing Element that are required to comply with the standards will comply with the strategy. |
| Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty vehicle efficiency measures. | Consistent. These are CARB enforced standards; vehicles that access the future development sites of the Housing Element that are required to comply with the standards will comply with the strategy. |
| Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. | Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The future development accommodated in the Housing Element will be subject to these mandatory standards. |
| High Global Warming Potential Gases – Adopt measures to reduce high global warming potential gases. | Consistent. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the future development sites of the Housing Element that are required to comply with the measures will comply with the strategy. |
| Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste. | Consistent. The state is currently developing a regulation to reduce methane emissions from municipal solid waste landfills. The future development of the Housing Element will be required to comply with City programs and regulations related to solid waste, which comply, with the 75 percent reduction required by 2020 per AB 341. |
| Water – Continue efficiency programs and use cleaner energy sources to move and treat water. | Consistent. The future development projects accommodated under the Housing Element will be required to comply with all applicable City ordinances and CAL Green requirements. |
| Source: CARB Scoping Plan (2008) | |

**Table 8**
**Consistency with CARB 2017 Scoping Plan Policies and Measures**

| 2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions | Project Compliance with Recommended Action |
|---|---|
| Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations. | Consistent. These are CARB enforced standards; vehicles that access the future development sites of the Housing Element that are required to comply with the standards will comply with the strategy. |
| Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030. | Consistent. These are CARB enforced standards; vehicles that access the future development sites of the Housing Element that are required to comply with the standards will comply with the strategy. |
| Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100 percent of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NOX standard. | Consistent. These are CARB enforced standards; vehicles that access the future development sites of the Housing Element that are required to comply with the standards will comply with the strategy. |
| Implement Mobile Source Strategy: Last Mile Delivery: New regulation that would result in the use of low NOX or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030. | Consistent. These are CARB enforced standards; vehicles that access the future development sites of the Housing Element that are required to comply with the standards will comply with the strategy. |
| Implement SB 350 by 2030: Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030. | Consistent. The future development projects accommodated under the Housing Element will be required to comply with the current Title 24 standards. |
| By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383. | Consistent. The future development of the Housing Element will be required to comply with City programs and regulations related to solid waste, which comply, with the 75 percent reduction required by 2020 per AB 341. |

Source: CARB Scoping Plan (2017)

*Executive Orders S-03-05 and B-30-15*

The future development accommodated under the Housing Element is consistent with the State's Executive Orders S-3-05 and B-30-15, which are orders from the State's Executive Branch for the purpose of reducing GHG emissions. These strategies call for developing more efficient land-use patterns to match population increases, workforce, and socioeconomic needs for the full spectrum of the population. The project includes elements of smart land use as it proposes the additional of overlays on specific sites within the City of El Segundo to accommodate forecasted population growth within the City. Furthermore,

the sites identified for future development within the Housing Element are well-served by transportation infrastructure.

Although the emissions levels of the future development accommodated under the Housing Element in 2050 cannot be reliably quantified, statewide efforts are underway to facilitate the State's achievement of that goal and it is reasonable to expect the emissions profile of the proposed uses would only decline as the regulatory initiatives identified by ARB in the First Update are implemented, and other technological innovations occur. As such, given the reasonably anticipated decline in emissions once fully constructed and operational, the future development accommodated under the Housing Element is consistent with the Executive Order's horizon-year goal.

Many of the emission reduction strategies recommended by ARB would serve to reduce the project's emissions level to the extent applicable by law and help lay the foundation "…for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," as called for in ARB's First Update to the AB 32 Scoping Plan. As such, the project's emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets and Executive Order S-3-05 and B-30-15.

*SCAG's RTP/SCS*

SCAG's Regional Council approved and fully adopted the Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy) and the addendum to the Connect SoCal Program Environmental Impact Report in September 2020. Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal is supported by a combination of transportation and land use strategies that help the region achieve state greenhouse gas emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry and utilize resources more efficiently. By integrating the Forecasted Development Pattern with a suite of financially constrained transportation investments, Connect SoCal can reach the regional target of reducing greenhouse gases, or GHGs, from autos and light-duty trucks by 8 percent per capita by 2020, and 19 percent by 2035 (compared to 2005 levels).

The proposed project is the City of El Segundo Housing Element and requires the addition of overlay designations on proposed Housing Element opportunity sites, which requires changes to the City's General Plan Map and Zoning Map. The increased residential units accommodated under the Housing Element is in response to SCAG developing a Regional Housing Needs Allocation (RHNA) for the City of El Segundo for the City's 2021-2029 Housing Element planning period. As the City of El Segundo does not currently have an adequate number of sites with zoning in place to meet the RHNA requirements, the City identified possible housing sites to address El Segundo' RHNA obligation. These identified sites are the future development analyzed in this report and identified in the Housing Element.

The future sites identified in the Housing Element are all located in developed areas with existing roadway networks and near existing transit stops. Furthermore, the sites are located proximate to other surrounding existing residential, commercial, and institutional uses. Therefore, as the increased residential density of the future development of the Housing Element is in response to SCAG forecasts and the future development would be located in developed areas in proximity to existing transportation

networks, the Housing Element is considered to be consistent with the measures identified in the SCAG RTP/SCS.

Therefore, the Housing Element would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. Furthermore, the future development accommodated in the Housing Element will be required to comply with applicable Green Building Standards and City of El Segundo's policies regarding sustainability (as dictated by the City's General Plan). Impacts would be **less than significant**.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **9. HAZARDS AND HAZARDOUS MATERIALS.** Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☒ | ☐ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☒ | ☐ |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☒ |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? | ☐ | ☐ | ☐ | ☒ |

**Environmental Setting**

***Hazardous Materials***

Hazardous materials encompass a wide range of substances, some of which are naturally occurring and some of which are manufactured. Examples of hazardous materials include pesticides, herbicides, petroleum products, metals (e.g., lead, mercury, arsenic), asbestos, and chemical compounds used in manufacturing. Hazardous materials are used for a variety of purposes, including service industries, various small businesses, medical uses, schools, and households. Many chemicals used in household cleaning, construction, dry cleaning, film processing, landscaping, and automotive maintenance and repair are considered hazardous. Small-quantity hazardous waste generators include facilities such as automotive repair, dry cleaners, and medical offices. Hazardous materials could pose a substantial present

or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed.

***Other Hazards***

According to CAL FIRE, the City of El Segundo is not located in a Very High Fire Hazard Severity Zone.

***Regulatory Setting***

Regulations exist at federal, state, and local levels with regard to hazards and hazardous materials and include:

- Comprehensive Environmental Response, Compensation, and Liability Act
- Resources Conservation and Recovery Act
- Hazardous Materials Transportation Act
- Federal Aviation Regulations Part 77
- California Code of Regulations
- Hazardous Materials Release Response Plans and inventory Act
- Emergency Response to Hazardous Materials Incidents
- California Government Code Section 65962.5
- Emergency Response to Hazardous Materials Incidents
- Los Angeles County 2019 All-Hazards Mitigation Plan
- City of El Segundo Fire Department CUPA Area Plan for Emergency Response to Hazardous Materials Incidents
- City of El Segundo General Plan
- City of El Segundo Municipal Code

**Checklist Discussion**

**a), b), c), d)** ***Less Than Significant Impact.***

The project is the adoption of the City of El Segundo Housing Element 2021-2029. The Housing Element is a policy-level document that encourages the provision of a range of housing types and affordability levels and does not include specific development proposals or development entitlements. However, future development of residential units constructed consistent with the General Plan could create a significant hazard to future residents through the exposure to the routine transport, use, or disposal of hazardous materials into the environment; through the exposure to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; through the exposure of handling or emission of hazardous materials, or by locating residential development on a site included on a list pursuant to Government Code Section 65962.5.

The project would not result in the approval of any physical improvements. The Housing Element includes an inventory of sites that are adequate to accommodate the City's assigned share of regional housing need, but it does not propose development projects. Inasmuch as the Housing Element Update could indirectly result in residential development and improvement, each potential development site would be evaluated at the time of development proposal in accordance with the requirements of CEQA. As hazardous substances have properties that, above certain thresholds, are toxic to humans and/or the ecosystem,

multiple regulatory programs in place are designed to minimize the chance for unintended releases and/or exposures to occur.

The City of El Segundo Fire Department Certified Unified Program Agency (CUPA) Area Plan for Emergency Response to Hazardous Materials Incidents establishes specific emergency management policies and procedures for coordinating the El Segundo Fire Department (ESFD) integrated response to hazardous materials incidents. The Area Plan identifies local, state, and federal responsibilities during incidents involving the release or threatened release of hazardous substances. Additionally, the City of El Segundo and other state and local agencies, such as the Department of Toxic Substances Control and Los Angeles County Environmental Health and Quality Department regulate hazardous materials in coordination with one another. The County enforces Title 26, Division 6, *California Highway Patrol*, of the California Code of Regulations (CCR) to reduce impacts associated with accidental release from the transportation of hazardous materials on roads in Los Angeles County, and the potential for an increased demand for incident emergency response.

Other programs establish remediation requirements for sites where contamination has occurred. If development sites are determined to contain contaminants, proper remediation will be required in accordance with these regulatory programs. Furthermore, the types of hazardous materials used, stored, and generated by residential uses consist of typical household cleaners, solvents, and fuel waste oils, etc., which are well regulated by federal and state laws. Therefore, adoption of the Housing Element 2021-2029 would not create a significant hazard to the public or the environment with regard to the handling, use, storage, release, or emissions of hazardous materials, including in proximity to schools. Accordingly, impacts related to hazardous materials would be **less than significant**.

**e)** ***Less Than Significant Impact.***

Los Angeles International Airport is located adjacent to the City's northern border across Imperial Highway. The Los Angeles County Airport Land Use Commission (ALUC) prepared the Los Angeles County Airport Land Use Plan (ALUP), revised on December 1, 2004. The ALUP provides for the orderly expansion of Los Angeles County's public use airports and the areas surrounding them. It is also intended to provide for the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards. In formulating the ALUP, the Los Angeles County ALUC established provisions for safety, noise insulation, and the regulation of building height in areas adjacent to each of the county's public airports.

The project is the adoption of the City of El Segundo Housing Element 2021-2029 Update. The General Plan Housing Element is a policy document that addresses the housing need in the City; no actual development of land is proposed as part of the Housing Element. The project would not result in the approval of any physical improvements. As all areas of the City are essentially built-out, all future development would be infill and/or replacement of existing uses. As future development would only occur on sites currently or previously developed, impacts resulting from construction of new housing on the candidate sites would be the same as under current conditions.

Therefore, neither adoption of the Housing Element update nor any future development within the urban/developed core would result in potential impacts associated with airport hazards or noise that don't currently exist. Therefore, impacts related to airport hazards and noise would be **less than significant**.

**f)** ***No Impact.***

As stated in the General Plan Public Safety Element, the City has an Emergency Operations Plan, which outlines responsibilities and procedures the City would follow in the event of an emergency or City-wide disaster. Future construction and development activities that may indirectly occur from the Housing Element, would be performed consistent with City engineering and fire safety standards, and are not expected to physically interfere with the Emergency Operations Plan. Therefore, there would be **no impact**.

Potential future residential and/or mixed-use development supported by the Housing Element would not interfere with adopted emergency response or evacuation plan because such projects are not anticipated to alter street locations or access. All new development in the City is required to comply with existing fire codes and ordinances regarding emergency access, such as widths, surfaces, vertical clearance, brush clearance, and allowable grades. None of the projects would result in such an increase in population on the site that traffic would impede evacuation routes. Therefore, adoption of the Housing Element 2021-2029 Update would not impede or conflict with any adopted emergency response or evacuation plans, and the project would have **no impact** on emergency response or evacuation plans.

**g)** ***No Impact.***

According to CAL FIRE, the City of El Segundo is not located in a Very High Fire Hazard Severity Zone. Therefore, none of the Housing Element sites are located within the Very High Fire Hazard Severity Zone. The Housing Element sites would not be subject to any more risk than other development in the City not located within a Very High Fire Hazard Severity Zone. Therefore, there would be **no impact** related to wildfire.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **10. HYDROLOGY AND WATER QUALITY.** Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? | ☐ | ☐ | ☒ | ☐ |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | |
| i) result in substantial erosion or siltation on- or off-site? | ☐ | ☐ | ☒ | ☐ |
| ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | ☐ | ☐ | ☒ | ☐ |
| iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☐ | ☒ | ☐ |
| iv) impede or redirect flood flows? | ☐ | ☐ | ☒ | ☐ |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☒ | ☐ |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☒ | ☐ |

**Environmental Setting**

***Groundwater***

The City is located within the West Coast Groundwater Basin. Since 1962, the West Coast Basin has been an adjudicated groundwater basin, and the amount of groundwater extracted is limited by court judgment. The City no longer withdraws from this groundwater source as it receives its water from the West Basin Municipal Water District. West Basin purchases imported water from the Metropolitan Water District of Southern California and wholesales the imported water to cities and private companies in southwest Los Angeles County, including El Segundo.

***Surface Water***

The City is bounded to the west by the Pacific Ocean. No surface waters of resource exist in the City.

***Flooding***

The Federal Emergency Management Agency (FEMA) is mandated by the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 to evaluate flood hazards and provide Flood Insurance Rate Maps (FIRMs) for local and regional planners to promote sound land use and floodplain development. Further, the Flood Disaster Protection Act requires owners of all structures in identified Special Flood Hazard Areas to purchase and maintain flood insurance as a condition of receiving Federal or federally related financial assistance, such as mortgage loans from federally insured lending institutions. The National Flood Insurance Reform Act of 1994 further strengthened the National Flood Insurance Program (NFIP) by providing a grant program for State and community flood mitigation projects. The act also established a system (Community Rating System - CRS) for crediting communities that implement measures to protect the natural and beneficial functions of their floodplains, as well as managing the erosion hazard.

The only area of El Segundo located in a flood zone is the 0.8-mile frontage along the Pacific Ocean, which is considered a Special Flood Hazard Area.

Regulatory Setting

Regulations exist at federal, state, regional, and local levels with regard to hydrology and water quality and include:

- Clean Water Act/National Pollutant Discharge Elimination System Requirements
- National Flood Insurance Program
- NPDES Construction General Permit
- NPDES Groundwater Permit
- NPDES Municipal Permit
- Porter-Cologne Water Quality Control Act
- Water Quality Control Plan for the San Diego Basin
- Los Angeles County 2019 All-Hazards Mitigation Plan
- City of El Segundo General Plan
- City of El Segundo Municipal Code

**Checklist Discussion**

**a)** ***Less Than Significant Impact.***

The General Plan Housing Element is a policy document that addresses the housing need in the City; no actual development of land is proposed as part of the Housing Element. The Housing Element includes an inventory of sites that are adequate to accommodate the City's assigned share of regional housing need, but it does not propose actual development projects.

Future residential development would either be through replacement, infill or upgrade, no undeveloped areas would be developed. The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality. Regulations set forth by the U.S. EPA and the

State Water Resources Control Board have been developed to fulfill the requirements of this legislation. U.S. EPA's regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by water quality control boards, which for the El Segundo area is the Los Angeles Regional Water Quality Control Board (RWQCB).

Proposed projects are required to comply with the City's NPDES permit and local policies and ordinances regarding urban runoff and water quality. In practical terms, the requirements seek to reduce water pollution by both reducing the volume of stormwater runoff and the amount of pollutants that are contained within the runoff. The methods used to achieve these objectives vary from site to site, but can include measures such as a reduction in impervious surfaces, onsite detention facilities, biofiltration swales, settlement/debris basins, etc. Therefore, future development supported by the Housing Element would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. As such, impacts would be **less than significant**.

**b)** ***Less Than Significant Impact.***

The City is located within the West Coast Groundwater Basin. The City receives its water from the West Basin Municipal Water District and does not pump any groundwater. As stated in the West Basin Municipal Water District's 2015 Urban Water Management Plan (UWMP), their estimated 2020 water supply consists of: 19 percent groundwater; 52 percent imported water; 12 percent recycled water; 17 percent water conservation savings; and less than 1 percent desalinated water.

West Basin Municipal Water District's groundwater supply is extracted from the West Coast Groundwater Basin, which covers approximately 140 square miles and underlies much of the West Basin service area, including El Segundo. Because the basin is adjudicated (i.e., the amount to be extracted each year has been determined by a court decision), the rights to the amount of groundwater extracted each year remain virtually the same. The Water Replenishment District of Southern California (WRD) is responsible for maintaining and replenishing the basin. Natural replenishment of the basin's groundwater supply occurs through the underflow from the Central Groundwater Basin and limited local precipitation. Artificial replenishment of the basin, which is the responsibility of the WRD, occurs through a mix of imported and recycled water. Groundwater recharge through surface spreading occurs at the following locations: Montebello Forebay Spreading Grounds adjacent to Rio Hondo and the San Gabriel River, within the unlined portion of the San Gabriel River, and behind the Whittier Narrows Dam in the Whittier Narrows Reservoir.

Although the City is largely build-out, future residential development would potentially increase population in the City. However, new homes would be constructed to meet California Green Building Standards Code, which establishes standards requiring water conserving fixtures and conservation features. Therefore, although the project would result in an increase in housing units and population in the City, new development would incorporate water efficient fixtures and would only result in a nominal increase in water demand. This nominal increase would not significantly decrease groundwater supplies. Additionally, development would occur on sites previously developed with impervious surfaces. Therefore, development resulting from the Housing Element would not increase impervious surface area overall, and substantial changes to groundwater infiltration would not occur.

Any future site plans would be reviewed by the City to include site-specific design measures that would allow for infiltration as part of erosion and runoff prevention. Future development projects would not

contribute to the depletion of groundwater supplies and would not substantially interfere with groundwater recharge. Therefore, this impact would be **less than significant**.

**c) i), ii), iii), iv)*Less Than Significant Impact.***

The proposed project is the City of El Segundo Housing Element, which proposes the addition of overlay designations on proposed Housing Element opportunity sites. This addition would require changes to the City's General Plan Map and Zoning Map. The Housing Element Update includes an inventory of sites that are adequate to accommodate the City's assigned share of regional housing need, but it does not propose development projects. As the sites would be infill or replacement on smaller lots, future grading and vegetation removal would not result in the exposure of large amounts of soil to erosion during construction activities.

All future development would be required to comply with codes that address stormwater runoff control. New housing projects would be required to adhere to water quality and runoff regulations including those set forth by the National Pollution Discharge Elimination System (NPDES) Construction General Permit and the City's grading regulations and ordinance. As such, development projects are required to implement Best Management Practices (BMPs) for construction activities as specified by the California Storm Water Best Management Practices Handbook, and/or the City's Minimum Best Management Practices and Storm Water BMP Manual. The BMPs include measures guiding the management and operation of construction sites to control and minimize the potential contribution of pollutants to storm runoff from these areas. These measures address procedures for controlling erosion and sedimentation and managing all aspects of the construction process to ensure control of potential water pollution sources. All development projects must comply with all City, state, and federal standards pertaining to stormwater run-off and erosion.

In addition, given that the City is primarily build-out, future residential development would not be expected to result in increased in impervious surface area, substantial changes to drainage patterns, or changes to groundwater infiltration. Accordingly, impacts related to the alteration of drainage patterns would be **less than significant**.

**d) *Less than Significant Impact.***

The City is located adjacent to the Pacific Ocean, which could create tsunami. However, this tsunami hazard area does not extend into any part of the City that is developed. Development resulting from the Housing Element would occur on previously developed sites in the City.

The City does not contain large bodies of water that would be subject to seiche. Accordingly, impacts related to the risk from tsunami or seiche would be **less than significant**.

**e) *Less Than Significant Impact.***

The project is the adoption of the City of El Segundo Housing Element 2021-2029. The project would not result in the approval of any physical improvements. The Housing Element includes an inventory of sites that are adequate to accommodate the City's assigned share of regional housing need, but it does not propose development projects. Inasmuch as the Housing Element Update could indirectly result in residential development and improvement, such development would be subject to regulations and policies specifically designed to prevent surface and groundwater water quality and hydrology effects as well as

prevent flooding. Therefore, future development supported by the Housing Element would not conflict with water quality or groundwater management plans and impacts related to hydrology and water quality would be **less than significant**.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **11. LAND USE AND PLANNING**. Would the project**:** | | | | |
| a) Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☒ | ☐ |

**Environmental Setting**

The City of El Segundo has a total land area of 5.4 square miles. The City of El Segundo is located in the southern portion of Los Angeles County, approximately 20 miles southwest of downtown Los Angeles. The City is bordered on the north by the Los Angeles International Airport; on the west by the Pacific Ocean; to the south by the City of Manhattan Beach; and to the east by the 405 Freeway. These barriers isolate El Segundo's residential and downtown communities from other South Bay communities.

As stated in the Land Use Element, the City of El Segundo is a unique City that has very distinct and identifiable areas. These distinct areas include residential, the Civic Center, older industrial areas, and office and commercial uses. The western boundary of the City includes 0.8 miles of shoreline along the Santa Monica Bay. With the exception of the shoreline area, the City is fully developed with urbanized uses. The City has a very strong residential base, which is a mixture of single-family, two-family, and multi-family residential. The City's stock of 7,463 dwelling units is characterized by a relatively even balance between single and multi-family residences.

Regulatory Setting

Regulations exist at state and local levels with regard to land use and include:

- California Planning and Zoning Law, Government Code Sections 65000 et seq.
- Southern California Association of Governments Connect SoCal Plan
- City of El Segundo General Plan
- City of El Segundo Municipal Code

**Checklist Discussion**

**a)** ***No Impact.***

Projects with the potential to divide a community include highways, railways, and large building or infrastructure projects that change the street grid. The project is the adoption of the City of El Segundo Housing Element 2021-2029. The project would not result in the approval of any physical improvements or development projects. The Housing Element policies guide housing, emphasizing provision of affordable housing and a range of housing types and locations. The Housing Element includes an inventory of sites that are adequate to accommodate the City's assigned share of regional housing need, but it does not

propose development projects. Future residential development would be primarily infill both through redevelopment of an existing site or the development of higher density mixed use projects. As such, adoption of the Housing Element 2021-2029 would not physically divide an established community and **no impact** would occur.

**b)** ***Less Than Significant Impact.***

The proposed project is the City of El Segundo Housing Element and requires the addition of overlay designations on proposed Housing Element opportunity sites. Although the project requires changes to the City's General Plan Map and Zoning Map for the overlay designations, the project by itself would not result in the approval of any physical improvements. As the Housing Element is a mandatory element of the General Plan, it must be consistent with it. The Housing Element includes an inventory of sites that are adequate to accommodate the City's assigned share of regional housing need, but it does not propose development projects.

Future development would follow the City's standard procedures for review, including public notice, environmental review, and consideration of design and neighborhood context. The identified opportunity sites could be developed in the future with or without the Housing Element. New residential development would be required to comply with all applicable plans and regulations including the General Plan and the City's Municipal Code. All development projects are subject to environmental review as appropriate in compliance with CEQA prior to approval. Project and site-specific concerns would be evaluated and addressed as development projects for specific sites are proposed. As such, impacts related to conflicts with land use plans, policies, and regulations would be **less than significant**.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **12. MINERAL RESOURCES.** Would the project: | | | | |
| a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☒ |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☐ | ☒ |

The City has been associated with petroleum resource development dating back to its founding in 1911. The City is partially underlain by the El Segundo Oil Field, where over 14 million barrels of oil and condensate were produced locally between 1935 and 1992. Production has steadily declined since 1967.

According to the Department of Conservation, there are no active mines in El Segundo and the City is not shown as containing mineral resources.

Regulations and responsible agencies exist at the state level with regard to mineral resources and include:

- Surface Mining and Reclamation Act of 1975
- Division of Oil, Gas, and Geothermal Resources
- Division of Mines and Geology

**Checklist Discussion**

**a), b)** ***No Impact*.**

No portion of the City is delineated as a mineral resource or mineral resource recovery site in the City's General Plan. There are no active mines or mineral resource extraction occurring in the City and all of the Housing Element sites are currently developed with land uses that are not related to mining or mineral extraction. Due to lack of resources available and the urban nature of the City, **no impact** would occur.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **13. NOISE.** Would the project result in: | | | | |
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☐ | ☒ | ☐ |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☒ | ☐ |

**Noise Fundamentals**

Sound is described in terms of amplitude (i.e., loudness) and frequency (i.e., pitch). The standard unit of sound amplitude measurement is the decibel (dB). The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted dB scale (dBA) provides this compensation by emphasizing frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound audible at such a level that the sound becomes an undesirable by-product of society's normal day-to-day activities. Sound becomes unwanted when it interferes with normal activities, causes actual physical harm, or results in adverse health effects. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance);
- Interference effects (e.g., communication, sleep, and learning interference);
- Physiological effects (e.g., startle response); and
- Physical effects (e.g., hearing loss).

The definition of noise as unwanted sound implies that it has an adverse effect, or causes a substantial annoyance, to people and their environment. However, not every unwanted audible sound interferes with normal activities, causes harm, or has adverse health effects. For unwanted audible sound (i.e., noise) to be considered adverse, it must occur with sufficient frequency and at such a level that these adverse impacts are reasonably likely to occur.

**Vibration Fundamentals**

Vibration can result from a source (e.g., train operations, motor vehicles, machinery equipment, etc.) causing the adjacent ground to move and creating vibration waves that propagate through the soil to the foundations of nearby buildings. This effect is referred to as groundborne vibration. The peak particle velocity (PPV) or the root mean square (RMS) velocity is usually used to describe vibration levels. PPV is defined as the maximum instantaneous peak of the vibration level, while RMS is defined as the square root of the average of the squared amplitude of the vibration level. PPV is typically used for evaluating potential building damage, while RMS velocity in decibels (VdB) is typically more suitable for evaluating human response.

**Environmental Setting**

Noise in El Segundo comes from transportation sources, including freeways, arterials, and roadways; Los Angeles International Airport; and non-transportation sources, such as industrial activities, commercial activities, and various community activities. The City is also bounded to the north by Interstate 105 (I-105). The noise environment in El Segundo is dominated by airport and vehicular traffic including vehicular generated noise along I-105, Imperial Highway, Pacific Coast Highway, and other primary and secondary arterials. In addition, a number of other sources contribute to the total noise environment. These noise sources include construction activities, power tools and gardening equipment, loudspeakers, auto repair, radios, children playing and dogs barking.

***Regulatory Setting***

Various private and public agencies have established noise guidelines and standards to protect citizens from potential hearing damage and other adverse physiological and social effects associated with noise. Federal, state, regional, and local guidelines include the following:

- Federal Transit Administration and Federal Railroad Administration Standards
- Federal Aviation Administration Standards
- California Noise Control Act
- California Code of Regulations
- City of El Segundo General Plan
- City of El Segundo Municipal Code

**Checklist Discussion**

**a), b)** ***Less Than Significant Impact.***

The proposed project is an update to the City of El Segundo Housing Element. The Housing Element includes an inventory of sites that are adequate to accommodate the City's assigned share of regional housing need, but it does not propose development projects. As no specific development projects are proposed by the project, no specific noise and vibration impacts can be evaluated. Indirect construction activity associated with future potential development could possibly result in temporary increases in noise levels. All construction activities would continue to be required to comply with the City's noise ordinance and undergo project-level CEQA review to analyze impacts related to noise when more specific project details are known. Such compliance would reduce noise levels associated with construction activities.

Noise sources associated with potential future development would include those typical of suburban areas (e.g., mechanical equipment, dogs/pets, landscaping activities, weekly garbage collection, cars parking). These noise sources are typically intermittent and short in duration and would be comparable to existing sources of noise experienced at surrounding residential uses. As most of the identified opportunity sites are located in established residential and mixed-manufacturing and residential districts with existing noise sources, potential increases would be below established thresholds for consideration of a significant impact.

Temporary construction activities as a result of future development could result in excessive groundborne vibration or groundborne noise. The exact nature of potential future construction that could occur is not known at this time; thus, construction noise levels cannot be estimated. However, all construction activities would be required to comply with the City's noise ordinance and discretionary projects would undergo project-level CEQA review to analyze impacts related to noise when more specific project details are known. Such compliance would reduce noise groundborne vibration and noise levels associated with construction activities. Impacts would be **less than significant.**

**c)** ***Less Than Significant Impact.***

Los Angeles International Airport is located adjacent to the City's northern border across Imperial Highway. The Los Angeles County Airport Land Use Commission (ALUC) prepared the Los Angeles County Airport Land Use Plan (ALUP), revised on December 1, 2004. The ALUP provides for the orderly expansion of Los Angeles County's public use airports and the areas surrounding them. It is also intended to provide for the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards. In formulating the ALUP, the Los Angeles County ALUC established provisions for safety, noise insulation, and the regulation of building height in areas adjacent to each of the county's public airports.

The project is the adoption of the City of El Segundo Housing Element 2021-2029 Update. The General Plan Housing Element is a policy document that addresses the housing need in the City; no actual development of land is proposed as part of the Housing Element. The project would not result in the approval of any physical improvements. As all areas of the City are essentially built-out, all future development would be infill and/or replacement of existing uses. As future development would only occur on sites currently or previously developed, impacts resulting from construction of new housing on the candidate sites would be similar as under current conditions.

Therefore, neither adoption of the Housing Element update nor any future development within the urban/developed core would result in potential impacts associated with airport noise that do not currently exist and this impact would be less than significant.

**Mitigation Measures.**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with the Incorporated Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **14. POPULATION AND HOUSING**. Would the project: | | | | |
| a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☐ | ☒ |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

**Environmental Setting**

According to 2020 Department of Finance (DOF) estimates, the City has a total of 7,463 dwelling units. The 2000 Census reported that the City of El Segundo's population was 16,033 persons, marking a population increase of over five percent since the 1990 Census. This growth rate was slightly less than the seven percent for Los Angeles County as a whole. Cities surrounding El Segundo, such as Manhattan Beach and Redondo Beach, experienced growth patterns similar to El Segundo, with decreases in population in the 1970s and modest increases in the 1980s. The 2010 Census reported that the population of El Segundo had increased to 16,654, representing an increase in the population of approximately four percent for the ten-year period from 2000 to 2010.

As of 2020, the Department of Finance (DOF) determined that the City's population numbered 16,777, an increase of less than one percent in the ten years since the 2010 U.S. Census. This rate of growth is lower than the rate of growth for Los Angeles County and in the middle of the spectrum in comparison to El Segundo's adjacent communities.

***Regulatory Setting***

Regulations and plans exist at state, regional, and local levels related to populations and housing and include:

- California Government Code Section 65583 and 655849(a)(1)
- Senate Bill 375
- Southern California Association of Governments Connect SoCal
- Regional Housing Needs Assessment

**Checklist Discussion**

**a)** ***No Impact.***

The project is the adoption of the City of El Segundo Housing Element 2021-2029. The General Plan Housing Element is a policy document that addresses the housing need in the City; no actual development is proposed as part of the Housing Element. The Housing Element contains housing goals intended to encourage housing to meet the City's housing needs. The expectation is that as growth occurs consistent with the existing General Plan, housing would be provided to serve all income levels of the city, including both moderate- and low-income residents. The project would not result in the approval of any physical improvements. Although the project does not propose development projects itself, it identifies opportunity sites that are adequate to accommodate from 548 to 792 new housing units.

The City's population in 2020 was 16,777. The SCAG 2016-2040 RTP/SCS Final Growth Forecast by jurisdiction estimates the City to increase to 17,000 by 2035 and 17,300 by 2040. Based on the persons per household rate of 2.4 used by SCAG in the 2016-2040 RTP/SCS Final Growth Forecast, the development of 548 to 792 housing units would generate 1,316 to 1,901 new residents for a total City population ranging from 18,093 to 18,678 residents.

Although the Housing Element would result in a higher population than estimated by SCAG, the increased residential density of the future development of the Housing Element is in response to SCAG RHNA housing numbers distributed for the City. State housing law requires that the RHNA be consistent with the development pattern of the SCS (Connect SoCal) but does not specify any other requirements between the two plans.

Therefore, the Housing Element Update demonstrates that the state-mandated share of housing for the City can be accommodated and is consistent with development levels anticipated by regional and local planning documents. The Housing Element, as a policy document accommodates rather than inducing population growth and **no impact** would occur.

**b)** ***No Impact.***

The project is the adoption of the City of El Segundo Housing Element 2021-2029. The General Plan Housing Element is a policy document that addresses the housing needs in the City. No actual development is proposed as part of the Housing Element Update. Government Code Section 65863 (No Net Loss Law) ensures development opportunities remain available throughout the planning period to accommodate a jurisdiction's regional housing need allocation (RHNA), especially for lower- and moderate- income households. Implementing the Housing Element would not result in any displacement. Therefore, **no impacts** would occur.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **15. PUBLIC SERVICES.** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: | | | | |
| a) Fire protection? | ☐ | ☐ | ☒ | ☐ |
| b) Police protection? | ☐ | ☐ | ☒ | ☐ |
| c) Schools? | ☐ | ☐ | ☒ | ☐ |
| d) Parks? | ☐ | ☐ | ☒ | ☐ |
| e) Other public facilities? | ☐ | ☐ | ☒ | ☐ |

**Environmental Setting**

***Fire Protection***

The El Segundo Fire Department (ESFD) provides fire protection and emergency medical services in the City. The ESFD maintains 14 firefighters on duty 24 hours a day, 7 days a week. The City has two fire stations: Fire Station 1, located at 314 Main Street and Fire Station 2, located at 2261 E. Mariposa Avenue. Fire Station 1 houses ESFD headquarters and six fighters responding on Engine 31, Rescue 31 and Battalion 31. Additionally, Fire Administration, Fire Prevention and Environmental Safety personnel work out of Fire Station 1, making it an important facility for fire and medical response, as well as other business services related to the Fire Department. Fire Station 2 has eight firefighters respond out of the station and staff Engine 32, Truck 32 and Rescue 32. The City is divided into two districts for fire response, with Pacific Coast Highway as the dividing line. Station 1 responds to calls west of Pacific Coast Highway and Station 2 responds east of Pacific Coast Highway. Depending on the nature of the emergency request, units may cross over into the other district and coordinate resources to assist in response activities.

***Police Protection***

The El Segundo Police Department (ESPD) provides police protection in the City. The department's headquarters are located at 348 Main Street at the Civic Center Complex. The ESPD has an Administrative Services Bureau and a Field Operations Bureau. The Administrative Bureau manages multiple Divisions in the ESPD, including investigative, training, community engagement, and police records. The Field Operations Bureau consists of the Patrol Division and the Special Operations Division. The City is divided into two geographic patrol areas bisected by Pacific Coast Highway. The area west of Pacific Coast Highway is designated the West Command and the area east of Pacific Coast Highway is designated the East Command.

***Schools***

Schools in the City are administered by the El Segundo Unified School District, which provides kindergarten through twelfth grade public education services in El Segundo. Based on information in the school district's Board of Education Goals for Our Future: 2020-2040, the District does not have any issues with capacity or inadequate facilities.

State Assembly Bill (AB) 2926 authorized school districts to assess all new development a fee to offset. impacts proposed projects might have on the school facilities. Whenever possible, the Districts have requested that developers provide full impact mitigation on development. The establishment of special tax districts, full cost recovery agreements or the provision of relocatable classrooms in lieu of fees are just a few examples of such mitigation measures.

***Parks***

The City of El Segundo's Community Services Department includes the Parks and Facilities division, which is responsible for the developed parkland in the City. The City provides a wide variety of attractions and amenities including more than 26 recreational facilities, including 15 parks, athletic fields, recreational water amenities, a skate park, dog park and community garden. Additionally, the Department provides the recreation classes, special events, sports league information, older adult social activities, youth drama auditions and performance dates and performs landscape and tree maintenance year-round, provides public transportation, volunteer opportunities and community service programs. These parks and amenities are shown in **Table 9, El Segundo Recreational Facilities.** Additionally, the City owns the Lakes at El Segundo, an executive nine-hole golf course and two-story lighted driving range, complete with a pro shop, cafe and banquet facilities. Per the City's Rec and Parks Department, the City's parks currently provide approximately 3.5 acres of park space per 1,000 residents, which is within the State of California Parks Department standard of 3.0 acres per 1,000 residents.

**Table 9**
**El Segundo Recreational Facilities**

| Park | Address | Amenities |
|---|---|---|
| Acacia Park | 600 Block of West Acacia Avenue | Grass Play Area, Park, Picnic Tables, Pool, Restrooms, Water Fountain |
| Campus El Segundo | 2201 East Mariposa | Athletic Field, Available to Rent, Restrooms, Smoke-free, Soccer Fields, Water Fountain |
| Candy Cane Park | 100 Block of Whiting Street | Grass Play Area, Kid-friendly, Park, Playground |
| Checkout Building | 401 Sheldon Street | Accessible, Available to Rent, Facility, Parking, Pool, Restroom with Showers, Restrooms, Water Fountain |
| City of El Segundo Wiseburn Unified School District Aquatics Center | 2240 East Grand Avenue | Accessible, Available to Rent, Facility, Parking, Pool, Restroom with Showers, Restrooms, Water Fountain |
| Constitution Park | Washington Street between Sycamore Street & Maple Avenue | Grass Play Area, Park |
| El Segundo Dog Park | East Imperial Avenue between Sheldon Street and McCarthy court | Dog Friendly, Dog Water Fountain, Park, Smoke-free, Water Fountain |
| Freedom Park | Illinois Street between Mariposa Avenue and Holly Avenue | Grass Play Area, Park, Pet-friendly |
| George Brett Field | Northeast corner of Recreation Park | Athletic Field, Available to Rent, Ball field, Restrooms, Smoke-free |
| George E. Gordon Clubhouse | 300 East Pine Avenue | Air Conditioning, Available to Rent, Facility, Restrooms, Smoke-free, Water Fountain |
| Hilltop Park | Corner of Maryland Street and Grand Avenue | Available to Rent, BBQ Grill, Park, Picnic Tables, Playground, Pool, Restrooms, Water Fountain |

**Table 9**
**El Segundo Recreational Facilities**

| Park | Address | Amenities |
|---|---|---|
| Holly Valley Park | Corner of West Holly Avenue and Valley Street | Park, Picnic Tables, Playground |
| Imperial Strip & Memory Tree Row | | Grass Play Area, Park, Pet-friendly |
| Imperial Strip & Memory Tree Row | Imperial Avenue between Hillcrest Avenue and Center Street | |
| Independence Park | Washington Street between Walnut Avenue and Sycamore Avenue | Park |
| Joslyn Center | 339 Sheldon Street | Accessible, Air Conditioning, Facility, Parking, Pool Table, Restrooms, TV / Movie Room, Water Fountain |
| Kansas Park | Corner of Kansas Avenue and Holly Avenue | Grass Play Area, Park, Picnic Tables, Playground |
| Library Park | 600 Block Main Street | Gazebo, Grass Play Area, Park, Water Fountain |
| Recreation Park | 401 Sheldon Street | Accessible, Bag-O Courts, Ball field, Basketball Court, BBQ Grill, Dog Water Fountain, Fire Pit, Grass Play Area, Horseshoes, Park, Parking, Pickleball, Picnic Tables, Ping Pong Table, Playground, Pool, Restrooms, Shuffleboard, Smoke-free, Tennis Courts, Volleyball, Water Fountain |
| Recreation Park Softball Field | Holly Avenue and Eucalyptus Drive | Grass Play Area, Park |
| Richmond Steet Field | Corner of Virginia Street and Mariposa Avenue | Athletic Field, Available to Rent, Ball field, Water Fountain |
| Stevenson Field | Holly Avenue and Eucalyptus Drive | Athletic Field, Available to Rent, Ball field, Restrooms |
| Sycamore Park | Corner of Sycamore Avenue and California Street | BBQ Grill, Grass Play Area, Park, Picnic Tables, Playground, Water Fountain |
| Teen Center & Skate Park | 405 Grand Avenue | Accessible, Available to Rent, Basketball Court, Facility, Fitness Center, Kid-friendly, Parking, Pool Table, Restrooms, Skate Park, Smoke-free, TV / Movie Room, Water Fountain |
| Urho Saari Swim Stadium – The Plunge | 219 West Mariposa | Available to Rent, Facility, Pool, Restroom with Showers, Restrooms, Smoke-free, Water Fountain |
| Washington Park | Washington Street between Maple Avenue and Mariposa Avenue | Grass Play Area, Park, Picnic Tables, Playground |

Source: City of El Segundo Rec and Parks, 2021

***Other Public Facilities***

The City has one library, the El Segundo Public Library, located at 111 West Mariposa Avenue. In addition to printed materials, the Library has a digital library, history room, photo archives, event rooms, and a

cultural development program. On November 19, 2019, the El Segundo City Council adopted Ordinance 1594 establishing a Public Art or In-Lieu Fee Requirement and a Cultural Development Fund. The requirement applies to certain commercial and industrial developments with a project cost exceeding $2,000,000.

Regulatory Setting

Regulations and policies exist the state and local level with regard to public services and include:

- California Mutual Aid Plan
- Senate Bill 50
- Quimby Act and Assembly Bill 1359
- City of El Segundo General Plan

**Checklist Discussion**

**a)** ***Less Than Significant Impact.***

The Housing Element is a policy document that does not authorize specific development projects. However, implementation of the programs contained in the Housing Element could result in new housing that addresses the City's RHNA allocation and the City's policies addressing a range of housing needs including affordable housing. While the Housing Element update would not directly introduce new structures, future infill development and redevelopment could continue to occur to accommodate future demands.

The ESFD estimates fire protection needs based on growth as projected in the City's General Plan and Housing Element. It is anticipated that as new development and service levels would be consistent with existing projections. Additionally, as part of the planning and development review process, new residential development projects would be evaluated by the ESFD to determine the level of and demand for fire protection services that would be generated by each project. Therefore, impacts to fire protection services will be **less than significant**.

**b)** ***Less Than Significant Impact.***

The General Plan Housing Element is a policy document that addresses housing need in the City and does not include any specific development of land. Therefore, adoption would not, in itself, create increased demand for City of ESPD services. The possible increase in population that may occur from adoption of the Housing Element would not increase the demand for law enforcement protection service to the extent that new law enforcement protection facilities would be required. The demand for law enforcement services in El Segundo is determined not only by the needs of residents but also by employment in the City. Future residential development projects, consistent with the City's housing needs would be evaluated by the ESPD to determine the level of and demand for police protection services that would be generated by each project. Therefore, impacts to fire protection services will be **less than significant.**

**c)** ***Less Than Significant Impact.***

Implementation of the programs contained in the Housing Element should result in new housing that addresses the City's RHNA allocation and the City's policies addressing a range of housing needs including affordable housing. Planning for future school facilities is the responsibility of the school districts. The environmental effects of expansion, construction, and operation of additional school facilities would be evaluated by the El Segundo Unified School District.

In accordance with state law pursuant to Government Code Section 65996 and SB 50, California legislation holds that an acceptable method of offsetting a project's effect on the adequacy of school facilities is payment of a school impact fee prior to issuance of a building permit. Once paid, the school impact fees would serve as mitigation for any project-related impacts to school facilities. As such, the City is legally prohibited from imposing any additional mitigation related to school facilities, as payment of the school impact fees constitutes full and complete mitigation. Therefore, future development at identified opportunity sites would not result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities. Impacts related to schools would be **less than significant**.

**d)** ***Less Than Significant Impact.***

The General Plan Housing Element is a policy document that addresses housing need in the City and does not include any specific development of land. Future development to meet projected population would be infill in established neighborhoods. The project would potentially increase residents in the City. At least a portion of these residents would patronize the various public parks and recreation facilities in the City. In 2010, the City adopted Resolution No. 4687 to establish development impact fees that require payments for new development projects to provide funding to offset the costs of the City to provide police, fire, library, and parks services and facilities. Pursuant to this Development Impact Fee Program, developers of residential projects resulting from the Housing Element would pay a fair share of impact fees based on the fee category and adopted Development Impact Fee rates. As such, with payment of the required development impact fees related to parks and recreation in combination, residential development resulting from the Housing Element would meet the anticipated demand for neighborhood and regional parks or other recreational facilities. Therefore, impacts would be **less than significant.**

**e)** ***Less Than Significant Impact.***

The General Plan Housing Element is a policy document that addresses housing need in the City and does not include any specific development of land. Library services are provided by City and the library is funded by the City. The City would continue to fund the El Segundo Library from taxes collected for that purpose. Impacts from potential future development on the library will be **less than significant**.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **16. RECREATION.** Would the project: | | | | |
| a) 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? | ☐ | ☐ | ☒ | ☐ |
| b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? | ☐ | ☐ | ☒ | ☐ |

**Environmental Setting**

Please refer to Environmental Setting above Section 15 – Parks.

**Checklist Discussion**

**a), b)** ***Less Than Significant Impact.***

Please refer to discussion above Section 15.d – Parks.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **17. TRANSPORTATION.** Would the project: | | | | |
| a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit roadway, bicycle and pedestrian facilities? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☒ | ☐ |
| d) Result in inadequate emergency access? | ☐ | ☐ | ☒ | ☐ |

The following information summarized in this section of the IS/ND is based on the *City of El Segundo 2021 Housing Element Transportation Analysis*, November 2021. This report is incorporated by reference and is provided in Appendix A of this IS/ND.

**Environmental Setting**

***Existing Street System***

Regional access to the study area is provided by the El Segundo Freeway (I-105), the San Diego Freeway (I-405), Pacific Coast Highway (CA-1) and Imperial Highway. Local access within the City is provided by several major streets, including Aviation Boulevard, Douglas Street, Nash Street, Continental Boulevard, Pacific Coast Highway, Washington Street, California Street, Center Street, Sheldon Street, Main Street, Virginia Street, Vista Del Mar, Imperial Avenue, Maple Avenue, Mariposa Avenue, Grand Avenue, El Segundo Boulevard, and Rosecrans Avenue. Major streets serving the study area include Pacific Coast Highway and Aviation Boulevard in the north-south direction. Regional access to and from the study area is provided by I-105 (El Segundo Freeway) north of the city.

***Transit Service***

The project study area is served by a variety of public transit options, including local and regional bus lines, as well as the LA Metro rail system. The Metro 125 and Metro 232 local bus routes contains multiple stops on Rosecrans Avenue, Pacific Coast Highway, Grand Avenue, and other adjoining major streets in the city of El Segundo. Torrance Transit (Route 8), Beach Cities Transit Line (Route 109), and Metro Rail C (Green) Line also serves the area.

***Existing Bicycle and Pedestrian Facilities***

The City of El Segundo provides marked, Class-II bicycle lanes along Rosecrans Avenue east of Pacific Coast Highway, Grand Avenue, and Imperial Highway. The study area is a mature network of streets and extensive pedestrian facilities, including sidewalks, crosswalks, and pedestrian safety features.

Approximately 10- to 16-foot sidewalks are provided on arterials throughout the study area. Narrower sidewalks are present on most collector and local streets in the study area.

***Regulatory Setting***

Regulations and policies exist at the state, regional, and local levels as follows:

- Senate Bill 743
- CEQA Guidelines Section 15064.7l
- South Bay Bicycle Master Plan
- City of El Segundo General Plan Circulation Element

**Checklist Discussion**

**a)** ***Less Than Significant Impact.***

The Housing Element was reviewed for consistency with the El Segundo Circulation Element and the South Bay Bicycle Master Plan.

The Circulation Element is the City's mobility planning document aimed at providing a safe, convenient, and cost-efficient circulation system. It lays out location of routes, operational policies, and operating levels of service for the City's existing transportation system. The Circulation Element identifies a system capable of responding to planned growth that is consistent with the policies. The Circulation Element identifies physical improvements that would be needed to attain the Plan's goals and objectives, as well as alternative techniques -such as transportation system and transportation demand management- to improve the City's circulation system. The Housing Element's proposed land use was reviewed and compared to existing and future conditions resulting from the Housing Element, including circulation and pedestrian, bicycle, and transit accessibility. The Circulation Element considers public transit as an appropriate alternative for the City under the conditions that housing and/or employment is concentrated. The Housing Element is consistent with the reviewed goals and policies of the Circulation Element.

The South Bay Bicycle Master Plan is a plan that strives to create a bicycle-oriented South Bay region in which bicycling is a safe, convenient, attractive, and viable transportation option for all levels of bicycling abilities. The Plan outlines the goals, objectives, and policies that can make the streets safer for bicyclists and everyone utilizing the streets, including expanding the bikeway network by approximately 21 miles with best design practices, and increase bicycle education and awareness for all road users. The Housing Element meets the goals and objectives set forth in the Bicycle Master Plan and would not conflict with the City's ability to implement the proposed facilities. The bicycle points of access in the Master Plan will be provided through proposed Class-II bicycle lanes along Rosecrans Avenue and El Segundo Boulevard, as well as Class-III bicycle lanes along Grand Avenue and bike friendly design along Imperial Highway. The Housing Element would not preclude implementation of any goals, policies and projects and so would be consistent with The South Bay Bicycle Master Plan.

A project/plan would not be shown to result in an impact merely based on whether a project/plan would not implement an adopted plan, ordinance or policy. Rather, it is the intention of this threshold test to ensure that proposed development does not conflict with nor preclude the City from implementing adopted plans, ordinances or policies. Furthermore, under CEQA, a project/plan is considered consistent

with an applicable plan if it is consistent with the overall intent of the plan and would not preclude the attainment of its primary goals. A project/plan does not need to be in perfect conformity with each and every policy. Finally, any inconsistency with an applicable plan, ordinance or policy is only a significant impact under CEQA if the plan, ordinance, or policy was adopted for the purpose of avoiding or mitigating an environmental effect and if the inconsistency itself would result in a direct physical impact on the environment. The Housing Element features and location (primarily in the center of the City) generally support multimodal transportation options and would be consistent with policies, plans, and programs that support alternative transportation, including the Circulation Element and the South Bay Bicycle Master Plan. Therefore, implementation of the Housing Element would have a **less than significant impact.**

**b)** ***Less Than Significant Impact.***

The project is the adoption of the City of El Segundo Housing Element 2021-2029. The project does not propose any specific development projects as the Housing Element only identifies opportunity sites that are feasible for development. These sites are located on developed lots and would not change the existing street grid if developed.

The majority of the sites are served by a variety of public transit options, including local and regional bus lines (Metro 125 and Metro 232 local bus routes contains multiple stops on Rosecrans Avenue, Pacific Coast Highway, Grand Avenue, and other adjoining major streets in the city of El Segundo), Torrance Transit (Route 8), Beach Cities Transit Line (Route 109), and Metro Rail C (Green) Line as well as the LA Metro rail system.

Inasmuch as the Housing Element Update could indirectly result in residential development and improvement, the development would occur primarily in residential and mixed-use areas of the City designated in the General Plan for housing or mixed-use. Therefore, development within these sites and their associated transportation impacts have already been accounted for in association with the adopted land use plan and Circulation Element. In addition, any future development projects supported by the Housing Element Update would be evaluated at the project proposal stage and subject to the state, regional, and local plans, and the policies therein. Therefore, impacts would be **less than significan**t.

**c), d)** ***Less Than Significant Impact.***

The General Plan Housing Element does not include any specific development of land. Any new development proposed under the project would require that access locations be designed to City standards and to provide adequate sight distance, sidewalks, crosswalks, and pedestrian movement controls that meet the City's requirements to protect pedestrian safety. Street trees and other potential impediments to adequate driver and pedestrian visibility would be required to be minimal and the City would require that pedestrian entrances separated from vehicular driveways provide access from the adjacent streets. As a result, the Housing Element would not substantially increase hazards or conflicts due to a geometric design feature, or result in inadequate emergency access. Therefore, implementation of the Housing Element would have a **less than significant impact.**

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **18. TRIBAL CULTURAL RESOURCES.** Consultation with a California Native American tribe that has requested such consultation may assist a lead agency in determining whether the project may adversely affect tribal cultural resources, and if so, how such effects may be avoided or mitigated. Whether or not consultation has been requested, would the project cause a substantial adverse change in a site, feature, place, cultural landscape, sacred place, or object, with cultural value to a California Native American tribe, which is any of the following: | | | | |
| a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| i) 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), or | ☐ | ☐ | ☐ | ☒ |
| ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☐ | ☐ | ☒ |

**Environmental Setting**

Assembly Bill 52 (AB 52, Gatto. Native Americans: California Environmental Quality Act) and CEQA Public Resources Code Section 21080.31, subdivisions (b), (d)), requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project.

California Government Code Section 65352.3 (adopted pursuant to the requirements of Senate Bill (SB) 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan, or to designate open space that includes Native American Cultural Places. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005), "the intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to cultural places."

Regulatory Setting

The regulation that guides the consideration and treatment of tribal cultural resources is:

- Assembly Bill 52
- Senate Bill 18

**Checklist Discussion**

**a) i), ii)** ***No Impact.***

The Housing Element is a policy document consistent with the General Plan. The project is the adoption of the City of El Segundo Housing Element 2021-2029. The project would not result in the approval of any physical improvements. The Housing Element will not, in and of itself, result in impacts to tribal cultural resources. Therefore, **no impact** would occur.

Pursuant to Assembly Bill 52, California tribes now have the ability to establish, through a formal notice letter, a standing request to consult with a lead agency regarding any proposed project subject to CEQA in the geographic area with which the tribe is traditionally and culturally affiliated. The Native American Heritage Commission has authority to verify the tribes' cultural affiliation. A lead agency must provide written notification to requesting tribes on its notice list within 14 days of a decision to undertake a project or a determination that a project application is complete. Notice to the tribes must include a brief project description, the project location, and the lead agency's contact information. A tribe then has 30 days to request consultation. If the tribe does not respond in that period or writes to decline consultation, the lead agency has no further obligation. The City of El Segundo typically initiates consultation with the Gabrielino-Tongva Tribe, Gabrielino/Tongva Nation, Gabrielino Tongva Indians of California Tribal Council, Gabrielino/Tongva San Gabriel Band of Mission Indians, and San Gabriel Band of Mission Indians—Kizh Nation and their designated tribal representatives. On October 21, 2021, the City sent letters to the above listed tribes to elicit input in the Housing Element update and requested information regarding tribal cultural resources within the City. The City did not receive any requests for consultation on the project.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **19. UTILITIES AND SERVICE SYSTEMS.** Would the project: | | | | |
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | ☐ | ☐ | ☒ | ☐ |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☒ | ☐ |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☒ | ☐ |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ |

**Environmental Setting**

***Water***

Water service in the City is provided by the City of El Segundo's Water Division, which is a partner of the West Basin Municipal Water District (WBMWD). The WBMWD provides wholesale potable water to 17 cities, serving approximately 900,000 people. According to the West Basin Municipal Water District's 2015 Urban Water Management Plan (UWMP), water supply in the City in 2020 consists of: 19% groundwater; 52% imported water; 12% recycled water; 17% water conservation savings; and less than 1% desalinated water. The City has an Urban Water Management Plan, which it updates every 5 years. The City's UWMP must be updated every 5 years, and the City is in the process of preparing the 2020 UWMP.

***Wastewater***

Wastewater in the City is treated by the Sanitation District of Los Angeles County (the Sanitation District) at two facilities: the Hyperion Treatment Plant (HTP) and the Joint Water Pollution Control Plant (JWPCP). The City of El Segundo has an agreement with the City of Los Angeles that permits an average flow of 2.75 MGD of wastewater treatment and disposal capacity. Before discharge, the treated wastewater is

disinfected with hypochlorite and sent to the Pacific Ocean through a network of outfalls. These outfalls extend 2 miles off the Palos Verdes Peninsula to a depth of 200 feet. The JWPCP must comply with its current National Pollutant Discharge Elimination System (NPDES) Permit, which regulates the plant's discharges. The City has a System Evaluation and Capacity Assurance Plan and Rehabilitation and Replacement Program that evaluates the City's existing sewer system and recommends improvements to the system to serve the City's future needs.

Senate Bill 1087 also mandates priority sewage collection and treatment service to housing developments providing units affordable to lower-income households.

***Dry Utilities***

Southern California Edison (SCE) and Southern California Gas Company (SoCalGas) provide electricity and natural gas services in the City.

***Solid Waste***

Solid waste disposal in the City is provided by EDCO, a private company. EDCO provides residential and commercial pickup, including green waste disposal, recycling, and bulky item pickup. In 2011, AB 341 was adopted establishing a policy goal that 75% of statewide solid waste should be reduced, recycled, or composted by 2020. This is an expansion of previous state goals to divert 50% of community-wide waste. This measure complies with state goals of waste reduction.

**Checklist Discussion**

**a), b), c), d), e)** ***Less Than Significant Impact.***

The Housing Element itself does not propose specific developments nor does it conflict with any other element of the General Plan. Given the built-out character of El Segundo, most residential areas are already served with water and wastewater infrastructure and solid waste services. Existing water delivery, wastewater collection infrastructure and solid waste disposal is available to all properties located in the residential sites inventory.

The City of El Segundo projected water supply for 2035 is 17,750-acre feet per year (AFY), and the current projected demand for water supply in 2035 during a single dry year is 17,250 AFY. Implementation of the Housing Element would result in an additional net water demand ranging from 80.3 to 116.8 AFY, which would be withing the single dry year supply.

The City of El Segundo sewer flow is 2.66 mgd of which 1.17 mgd is conveyed to the Hyperion Plant with the remaining volume conveyed to other facilities of the Sanitation District of Los Angeles County. The City of El Segundo's capacity is 2.75 mgd; therefore, the remaining capacity on the system is 0.9 mgd. Implementation of the Housing Element would result in an additional net wastewater generation ranging from 0.06 to 0.08 mgd.

Therefore, the City has adequate water and wastewater capacity to accommodate the RHNA of 548 to 792 new housing units identified in the Housing Element. Any new development in the City would continue to comply with all provisions of the NPDES program as well as federal, state, and local management and reduction statutes and regulations related to solid waste. The City has established specific standards for potential improvements and facilities required to serve new development, including curb/gutter and

drainage facilities, sidewalks, paved streets, landscaping, undergrounding utilities, and water and sewer service. Such improvements are required as a condition of the subdivision map, or if there is no required map, improvements are required as part of the building permit process. Therefore, implementation of the Housing Element would have a **less than significant impact.**

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **20. WILDFIRE:** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | |
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☒ |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☐ | ☒ |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☐ | ☐ | ☐ | ☒ |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☐ | ☒ |

**Environmental Setting**

The City of El Segundo is completely developed with urban uses and is not located in a Very High Fire Hazard Severity Zone. The closest State-designated fire hazard zone is at the Ballona Wetlands, more than 2.5 miles from the City and open space areas around the Inglewood Oil Fields and Kenneth Hahn State Recreation Area, more than 5 miles away from the City. Both Very High Fire Hazard Severity Zones are separated from the City by urbanized development, including Los Angeles International Airport and I-405.

***Regulatory Setting***

Regulations exist at federal, state, and local levels with regard to wildfire include:

- Los Angeles County 2019 All-Hazards Mitigation Plan
- City of El Segundo General Plan

**Checklist Discussion**

**a), b), c), d)** ***No Impact.***

According to CAL FIRE, the City of El Segundo is not located in a Very High Fire Hazard Severity Zone. The closest State-designated fire hazard zone is at the Ballona Wetlands, more than 2.5 miles from the City and open space areas around the Inglewood Oil Fields and Kenneth Hahn State Recreation Area, more than 5 miles away from the City. None of the Housing Element sites are located within or near a Very High Fire Hazard Severity Zone. Therefore, there would be **no impact** related to wildfire and emergency

response or evacuation plans, exposure to pollutant concentrations, exacerbated fire risk, or flooding or landslides as a result of post-fire slope instability.

**Mitigation Measures**

None required.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **21. MANDATORY FINDINGS OF SIGNIFICANCE.** Would the project: | | | | |
| a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☐ | ☐ | ☒ |
| b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | ☐ | ☐ | ☒ | ☐ |
| c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☐ | ☒ | ☐ |

**Checklist Discussion**

**a)** ***No Impact.***

The Housing Element is a General Plan policy document that addresses housing need in the City; no actual development or rezoning/re-designation of land is proposed as part of the Housing Element. The Housing Element does not authorize any development. Therefore, its adoption would not significantly degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major periods of California history or prehistory. Therefore, **no impact** would occur.

**b)** ***Less Than Significant Impact.***

The proposed project involves the adoption of the City's General Plan Housing Element, which guides future housing. No specific development projects would occur as a result of the Housing Element; and no redesignation/rezoning of land is proposed. Therefore, adoption of the Housing Element, in itself, would not result in cumulative impacts. Therefore, impacts would be **less than significant**.

**c)** ***Less Than Significant Impact.***

Future development supported by the Housing Element would be required to comply with numerous required measures related to human safety and the quality of the environment, as described throughout this document. Therefore, adoption of the Housing Element 2021-2029 would result in no environmental effects that would cause substantial direct or indirect adverse effects on human beings and impacts would be **less than significant**.

**Mitigation Measures**

None required.

**DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT**
**DIVISION OF HOUSING POLICY DEVELOPMENT**
2020 W. El Camino Avenue, Suite 500
Sacramento, CA 95833
(916) 263-2911 / FAX (916) 263-7453
www.hcd.ca.gov

December 8, 2021

Michael Allen, Director
Development Services Department
City of El Segundo
350 Main Street
El Segundo, CA 90245

Dear Michael Allen:

**RE: City of El Segundo's 6th Cycle (2021-2029) Draft Housing Element**

Thank you for submitting the City of El Segundo's (City) draft housing element received for review on October 11, 2021. Pursuant to Government Code section 65585, subdivision (b), the California Department of Housing and Community Development (HCD) is reporting the results of its review. Our review was facilitated by a conversation on December 6, 2021 with you; Paul Samoras, Principal Planner; your consultants Veronica Tam, Jamie Power and Gena Guisar. In addition, HCD considered comments from Josh Albrekston pursuant to Government Code section 65585, subdivision (c).

The draft element addresses many statutory requirements; however, revisions will be necessary to comply with State Housing Element Law (Article 10.6 of the Gov. Code). The enclosed Appendix describes the revisions needed to comply with State Housing Element Law.

As a reminder, the City's 6th cycle housing element was due October 15, 2021. As of today, the City has not completed the housing element process for the 6th cycle. The City's 5th cycle housing element no longer satisfies statutory requirements. HCD encourages the City to revise the element as described above, adopt, and submit to HCD to regain housing element compliance.

For your information, pursuant to Assembly Bill 1398 (Chapter 358, Statutes of 2021), if a local government fails to adopt a compliant housing element within 120 days of the statutory deadline (October 15, 2021), then any rezoning to accommodate the regional housing needs allocation (RHNA), including for lower-income households, shall be completed no later than one year from the statutory deadline. Otherwise, the local government's housing element will no longer comply with State Housing Element Law, and HCD may revoke its finding of substantial compliance pursuant to Government Code section 65585, subdivision (i).

Public participation in the development, adoption and implementation of the housing element is essential to effective housing planning. Throughout the housing element process, the City should continue to engage the community, including organizations that represent lower-income and special needs households, by making information regularly available and considering and incorporating comments where appropriate.

Several federal, state, and regional funding programs consider housing element compliance as an eligibility or ranking criteria. For example, the CalTrans Senate Bill (SB) 1 Sustainable Communities grant; the Strategic Growth Council and HCD's Affordable Housing and Sustainable Communities programs; and HCD's Permanent Local Housing Allocation consider housing element compliance and/or annual reporting requirements pursuant to Government Code section 65400. With a compliant housing element, the City will meet housing element requirements for these and other funding sources.

HCD appreciates the hard work and cooperation of the housing element update team during the review. We are committed to assist the City in addressing all statutory requirements of State Housing Element Law. If you have any questions or need additional technical assistance, please contact Shawn Danino, of our staff, at shawn.danino@hcd.ca.gov.

Sincerely,

Paul McDougall
Senior Program Manager

Enclosure

**APPENDIX**
**CITY OF EL SEGUNDO**

The following changes are necessary to bring the City's housing element into compliance with Article 10.6 of the Government Code. Accompanying each recommended change, we cite the supporting section of the Government Code.

Housing element technical assistance information is available on HCD's website at http://www.hcd.ca.gov/community-development/housing-element/housing-element-memos.shtml. Among other resources, the housing element section contains HCD's latest technical assistance tool, Building Blocks for Effective Housing Elements (Building Blocks), available at http://www.hcd.ca.gov/community-development/building-blocks/index.shtml and includes the Government Code addressing State Housing Element Law and other resources.

## A. Housing Needs, Resources, and Constraints

1. *Affirmatively further[ing] fair housing in accordance with Chapter 15 (commencing with Section 8899.50) of Division 1 of Title 2…shall include an assessment of fair housing in the jurisdiction. (Gov. Code, § 65583, subd. (c)(10)(A).)*

   Outreach: Outreach specifically related to affirmatively furthering fair housing (AFFH) is foundational to a complete analysis and formulating appropriate goals and actions to overcome patterns of segregation and foster more inclusive communities. The element should summarize outreach efforts and relate this input to all components of the AFFH analysis and modify or add goals and actions as appropriate. Further, the element mentions a regional analysis of impediments to fair housing choice (AI) which includes outreach but could also tailor and summarize that outreach relative to El Segundo's fair housing issues and formulate appropriate programmatic response.

   Enforcement: The element summarizes various laws and court rulings, but it should also discuss the City's compliance with existing fair housing laws as well as any past or current fair housing lawsuits, findings, settlements, judgements, or complaints.

   Identified Sites and AFFH: The element provides information regarding the proportion of sites by income group according to various concentrations of socio-economic characteristics. In addition, the element should address the number of units by income group, magnitude of impact on local patterns, any isolation of the RHNA by income group and address the placement of the sites such as concentrations of sites in key areas and corridors.

   Local Data and Knowledge: The element must include local data, knowledge, and other relevant factors to discuss and analyze any unique attributes about the City related to fair housing issues. The element should complement federal, state, and regional data with local data and knowledge where appropriate to capture emerging trends and issues, including utilizing knowledge from local and regional advocates and service providers.

Other Relevant Factors: The element must include other relevant factors that contribute to fair housing issues in the jurisdiction. For instance, the element should analyze historical land use, zoning, governmental and nongovernmental spending including transportation investments, demographic trends, historical patterns of segregation, or other information that may have impeded housing choices and mobility.

Contributing Factors: Some contributing factors do not appear connected to the analysis of fair housing issues. For example, the element identifies substandard housing as an issue and the cost of repairs as a contributing factor to fair housing issues, but it also states only a very small portion of the City's housing stock is in need of rehabilitation (p. 25). The element should re-assess and prioritize contributing factors upon completion of an analysis and make revisions as appropriate.

Goals, Actions, Metrics, and Milestones: The element must be revised to add or modify goals and actions based on the outcomes of a complete analysis. Goals and actions must specifically respond to the analysis and to the identified and prioritized contributing factors to fair housing issues and must be significant and meaningful enough to overcome identified patterns and trends. Actions must have specific commitment, metrics, and milestones as appropriate and must address housing mobility enhancement, new housing choices and affordability in high opportunity areas, place-based strategies for community preservation and revitalization and displacement protection.

2. *Include an analysis of population and employment trends and documentation of projections and a quantification of the locality's existing and projected needs for all income levels, including extremely low-income households. (Gov. Code, § 65583, subd. (a)(1).)*

   Extremely Low-income (ELI) Households: The element incudes some basic information regarding ELI households such as the number of households (p. 15) and projected housing needs (p. 49). However, given the unique and disproportionate needs of ELI households, the element must include analysis to better formulate policies and programs. For example, the element should analyze tenure, cost burden, overcrowding and other household characteristics then examine the availability of resources to determine gaps in housing needs. For additional information, see the Building Blocks at http://www.hcd.ca.gov/community-development/building-blocks/housing-needs/extremely-low-income-housing-needs.shtml.

3. *An inventory of land suitable and available for residential development, including vacant sites and sites having realistic and demonstrated potential for redevelopment during the planning period to meet the locality's housing need for a designated income level, and an analysis of the relationship of zoning and public facilities and services to these sites. (Gov. Code, § 65583, subd. (a)(3).)*

   Sites Inventory: While the element lists sites by various factors (Table 5-4), it must also list sites by anticipated affordability level (i.e., lower, moderate, above moderate).

As noted in the element, several sites have a pending project that is under active consideration with anticipated affordability by the City. Instead of a site based on densities, the element should utilize this pending project toward the RHNA based on the proposed number of units and affordability based on actual or anticipated rents, sales prices or other mechanisms ensuring affordability (e.g., deed restrictions).

For your information, pursuant to Government Code section 65583.3, the City must submit an electronic sites inventory with its adopted housing element. The City must utilize standards, forms, and definitions adopted by HCD. This is especially important for determining sites that have been utilized in multiple planning periods and are subject to by-right provisions. Please see HCD's housing element webpage at https://www.hcd.ca.gov/community-development/housing-element/index.shtml#element for a copy of the form and instructions. The City can reach out to HCD at sitesinventory@hcd.ca.gov for technical assistance.

Realistic Capacity: The element must include a methodology to calculate the residential capacity on identified sites. If utilizing minimum densities, no analysis is required. The element states minimum densities were utilized (p. 51), however, some calculations appear incorrect, and the element should be revised as appropriate.

Suitability of Nonvacant Sites: While the element identifies nonvacant sites to accommodate the regional housing need for lower-income households, it must further describe the methodology used to determine the additional development potential within the planning period. The methodology must consider factors including the extent to which existing uses may constitute an impediment to additional residential development, past experience with converting existing uses to higher density residential development, the current market demand for the existing use, an analysis of any existing leases or other contracts that would perpetuate the existing use or prevent redevelopment of the site for additional residential development, development trends, market conditions, and regulatory or other incentives or standards to encourage additional residential development on these sites.

To address this requirement, the element states sites were selected for proximity to opportunities (e.g., schools and parks), mixed-use potential, obsolete uses that have redevelopment potential and consolidation potential. The element also includes general descriptions of existing use, including age of structure. However, first, the element should also discuss market conditions, development trends and past experience with converting existing uses. This discussion should relate to the uses identified in the inventory and may utilize information from the surrounding area. Second, the element should include more discussion of the existing uses and whether the uses are an impediment. For example, in some cases, the element describes a site as older or with open parking. The element could also describe whether the use is operating, marginal, under lease, vacant, under-utilized. Finally, the element should discuss the proposed regulatory framework and planned incentives and how that can encourage additional development on nonvacant sites.

In addition, because the housing element relies upon nonvacant sites to accommodate more than 50 percent of the RHNA for lower-income households, it must demonstrate

existing uses are not an impediment to additional residential development and will likely discontinue in the planning period. (Gov. Code, § 65583.2, subd. (g)(2).) Absent findings (e.g., adoption resolution) based on substantial evidence, the existing uses will be presumed to impede additional residential development and will not be utilized toward demonstrating adequate sites to accommodate the RHNA.

Small Sites: Sites smaller than half an acre are deemed inadequate to accommodate housing for lower-income households unless it is demonstrated, with sufficient evidence, that sites are suitable to accommodate housing for lower-income households. While the element broadly mentions potential for consolidation, it must include analysis to demonstrate the potential for consolidation. For example, the analysis could describe the City's role or track record in facilitating past lot consolidation, common ownership, policies, or incentives offered or proposed to encourage and facilitate lot consolidation or other conditions rendering parcels suitable and ready-for-lot consolidation.

Environmental Constraints: While the element generally describes a few environmental conditions within the City, it must relate those conditions to identified sites and describe any other known environmental or other conditions that could impact housing development on identified sites in the planning period.

Infrastructure: The element generally describes infrastructure but, it must also clarify whether there is sufficient total water capacity (existing and planned) to accommodate the regional housing need or add or modify programs, if necessary.

In addition, water and sewer service providers must establish specific procedures to grant priority water and sewer service to developments with units affordable to lower-income households. (Gov. Code, § 65589.7.) Local governments are required to immediately deliver the housing element to water and sewer service providers. The element should discuss compliance with these requirements and if necessary, add or modify programs to establish a written procedure by a date early in the planning period. For additional information and sample cover memo, see the Building Blocks at http://www.hcd.ca.gov/community-development/building-blocks/other-requirements/priority-for-water-sewer.shtml.

Accessory Dwelling Units (ADUs): The element projects 80 ADUs over the planning period based on ADUs permitted since January 2018: 13 in 2018, 13 in 2019 and 8 (as of November) in 2020. However, these figures differ from HCD records: 4 in 2018, 15 in 2019 and none reported in 2020. The City should reconcile these figures and adjust ADU assumptions if necessary.

4. *An analysis of potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels, including the types of housing identified in paragraph (1) of subdivision (c), and for persons with disabilities as identified in the analysis pursuant to paragraph (7), including land use controls, building codes and their enforcement, site improvements, fees and other exactions required of developers, and local processing and permit procedures... (Gov. Code, § 65583, subd. (a)(5).)*

Land Use Controls: The element must identify and analyze all relevant land use controls impacts as potential constraints on a variety of housing types. The analysis should analyze land use controls independently and cumulatively with other land use controls. The analysis should specifically address requirements related to heights and multifamily parking. The analysis should address any impacts on cost, supply, housing choice, affordability, timing, approval certainty and ability to achieve maximum densities and include programs to address identified constraints.

Processing and Permit Procedures: While the element includes information about processing times, it should also describe the procedures for a typical single-family and multifamily development. The analysis should address the approval body, the number of public hearings if any, approval findings and any other relevant information. The analysis should address impacts on housing cost, supply, timing, and approval certainty. For example, the element should identify and analyze approval findings for impacts on approval certainty, the presence of processes or guidelines to promote certainty and add or modify programs as appropriate.

Fees and Exaction: While the element lists various planning fees, it must specifically analyze the fees for a conditional use permit and include programs to address identified constraints as appropriate.

Zoning, Development Standards and Fees: The element mentions zoning and development standards are available on the City's website but should also address whether fees are posted on the City's website and add a program to address this requirement, if necessary.

Housing for Persons with Disabilities: The element briefly mentions a reasonable accommodation procedure for providing exception in zoning and land use for persons with disabilities. However, the element should describe the process and decision-making criteria such as approval findings and analyze any potential constraints on housing for persons with disabilities.

## B. Housing Programs

1. *Identify actions that will be taken to make sites available during the planning period with appropriate zoning and development standards and with services and facilities to accommodate that portion of the city's or county's share of the regional housing need for each income level that could not be accommodated on sites identified in the inventory completed pursuant to paragraph (3) of subdivision (a) without rezoning, and to comply with the requirements of Government Code section 65584.09. Sites shall be identified as needed to facilitate and encourage the development of a variety of types of housing for all income levels, including multifamily rental housing, factory-built housing, mobilehomes, housing for agricultural employees, supportive housing, single-room occupancy units, emergency shelters, and transitional housing. (Gov. Code, § 65583, subd. (c)(1).)*

   As noted in Finding A3, the element does not include a complete site analysis, therefore, the adequacy of sites and zoning were not established. Based on the results

of a complete sites inventory and analysis, the City may need to add or revise programs to address a shortfall of sites or zoning available to encourage a variety of housing types. In addition, the element should be revised as follows:

- *Program 5 (Provision of Adequate Sites):* The Program should be amended to ensure compliance with all of the by-right requirements provided in Government Code section 65583.2, subdivisions (h) & (i), including clarifying by-right to permit multifamily development without discretionary action and residential only or residential performance standard requirements. In addition, the Program should consider a date earlier in the planning period for developing objective design standards to align with rezoning by October 2022.
- *Program 7 (Lot Consolidation)*: The Program currently discusses the potential for an incentive package and commits to develop a strategy by 2024. However, the Program should clearly commit to establish an incentive package, implement a strategy, and implement alternative actions if the Program is not successful by a date certain early in the planning period. The Program should also commit to implement the strategy earlier in the planning period than October 2024 (e.g., within one year).
- *Program 3 (Accessory Dwelling Units)*: The Program should commit to pursue available funding more frequently (e.g., annually) and to specify a time to complete adjustments (e.g., within 6 months) if production and affordability is not occurring as assumed in the element.
- *Sites Identified in Prior Planning Periods*: The element must include a program for vacant sites identified in two or more consecutive planning periods' housing elements or nonvacant sites identified in a prior housing element, that are currently identified to accommodate housing for lower-income households. The program must be implemented within the first three years of the planning period and commit to zoning that will meet the density requirements for housing for lower-income households and allow by-right approval for housing developments that include 20 percent or more of its units affordable to lower-income households. (Gov. Code, § 65583.2, subd. (c).)
- *Replacement Housing Requirements*: The housing element must include a program to provide replacement housing. (Gov. Code, § 65583.2, subd. (g)(3).) The replacement housing program must adhere to the same requirements as set forth in Government Code section 65915, subdivision (c)(3).

2. *The housing element shall contain programs which assist in the development of adequate housing to meet the needs of extremely low-, very low-, low- and moderate-income households. (Gov. Code, § 65583, subd. (c)(2).)*

   Program 4 (Inclusionary Housing and Affordable Housing Strategy): The Program should commit to support applications for funding and proactively and annually reach out to developers of housing affordable to lower income, including ELI and special needs households, as part of facilitating affordable housing development through incentives and technical assistance.

3. *Address and, where appropriate and legally possible, remove governmental and nongovernmental constraints to the maintenance, improvement, and development of housing, including housing for all income levels and housing for persons with disabilities. The program shall remove constraints to, and provide reasonable accommodations for housing designed for, intended for occupancy by, or with supportive services for, persons with disabilities. (Gov. Code, § 65583, subd. (c)(3).)*

   As noted in Finding A4, the element requires a complete analysis of potential governmental and non-governmental constraints. Depending upon the results of that analysis, the City may need to revise or add programs and address and remove or mitigate any identified constraints.

   In addition, the element includes Program 7 (Municipal Code Amendments) to amend zoning for group homes for seven or more persons. This Program should specifically commit to allowing these uses in all residential zones and procedures that will promote objectivity and approval certainty (e.g., not a conditional use permit). Also, Program 7 should consider zoning amendments for emergency shelters, supportive housing, and low barrier navigation centers earlier in the planning period (e.g., within one year).

4. *Promote and affirmatively further fair housing opportunities and promote housing throughout the community or communities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability, and other characteristics protected by the California Fair Employment and Housing Act (Part 2.8 (commencing with Section 12900) of Division 3 of Title 2), Section 65008, and any other state and federal fair housing and planning law. (Gov. Code, § 65583, subd. (c)(5).)*

   As noted in Finding A1, the element does not contain programs that satisfy the AFFH requirements for specific and meaningful actions to overcome fair housing issues. Based on a complete analysis, the element must add or revise programs.

## C. Quantified Objectives

*Establish the number of housing units, by income level, that can be constructed, rehabilitated, and conserved over a five-year time frame. (Gov. Code, § 65583, subd. (b)(1 & 2).)*

The element must include quantified objectives to establish an estimate of housing units by income category that can be constructed, rehabilitated, and conserved over the planning period. While the element includes objectives for construction and conservation, the element must also include rehabilitation objectives.

## D. Public Participation

*Local governments shall make a diligent effort to achieve public participation of all economic segments of the community in the development of the housing element, and the element shall describe this effort. (Gov. Code, § 65583, subd.(c)(8).)*

While the City made an effort to include the public through meetings and a survey, moving forward, the City should employ additional methods for public outreach efforts in the future, particularly to include lower-income and special needs households and neighborhoods with higher concentrations of lower-income households. For example, the City could conduct targeted stakeholder interviews or establish a committee representative of lower-income households in future public outreach efforts. In addition, while the element has summarized comments, it must also describe how they were considered and incorporated into the element. For additional information, see the Building Blocks at http://www.hcd.ca.gov/community-development/building-blocks/getting-started/public-participation.shtml.

| | HCD Comment | Revision | Page |
|---|---|---|---|
| A1. Outreach | Outreach specifically related to affirmatively furthering fair housing (AFFH) is foundational to a complete analysis and formulating appropriate goals and actions to overcome patterns of segregation and foster more inclusive communities. The element should summarize outreach efforts and relate this input to all components of the AFFH analysis and modify or add goals and actions as appropriate. Further, the element mentions a regional analysis of impediments to fair housing choice (AI) which includes outreach but could also tailor and summarize that outreach relative to El Segundo's fair housing issues and formulate appropriate programmatic response. | Added to fair housing outreach and enforcement programs. | 85 |
| A1. Enforcement | The element summarizes various laws and court rulings, but it should also discuss the City's compliance with existing fair housing laws as well as any past or current fair housing lawsuits, findings, settlements, judgements, or complaints. | Statement on compliance added. | C-2 |
| A1. Identified Sites and AFFH | The element provides information regarding the proportion of sites by income group according to various concentrations of socio-economic characteristics. In addition, the element should address the number of units by income group, magnitude of impact on local patterns, any isolation of the RHNA by income group and address the placement of the sites such as concentrations of sites in key areas and corridors. | Sites inventory discussion added. | C-70 |
| A1. Local Data and Knowledge | The element must include local data, knowledge, and other relevant factors to discuss and analyze any unique attributes about the City related to fair housing issues. The element should complement federal, state, and regional data with local data and knowledge where appropriate to capture emerging trends and issues, including utilizing knowledge from local and regional advocates and service providers. | Additional narrative and data added. | C-67 |
| A1. Other Relevant Factors | The element must include other relevant factors that contribute to fair housing issues in the jurisdiction. For instance, the element should analyze historical land use, zoning, governmental and nongovernmental spending including transportation investments, demographic trends, historical patterns of segregation, or other information that may have impeded housing choices and mobility. | Additional narrative and data added, including historical knowledge. | C-67 |
| A1. Contributing Factors | Some contributing factors do not appear connected to the analysis of fair housing issues. For example, the element identifies substandard housing as an issue and the cost of repairs as a contributing factor to fair housing issues, but it also states only a very small portion of the City's housing stock is in need of rehabilitation (p. 25). The element should re-assess and prioritize contributing factors upon completion of an analysis and make revisions as appropriate. | Edited for clarity. | C-71 |
| A1. Goals, Actions, Metrics, and Milestones | The element must be revised to add or modify goals and actions based on the outcomes of a complete analysis. Goals and actions must specifically respond to the analysis and to the identified and prioritized contributing factors to fair housing issues and must be significant and meaningful enough to overcome identified patterns and trends. Actions must have specific commitment, metrics, and milestones as appropriate and must address housing mobility enhancement, new housing choices and affordability in high opportunity areas, place- based strategies for community preservation and revitalization and displacement protection. | Additional actions added; location-based strategies included. | 85 |
| A2. ELI Households | The element incudes some basic information regarding ELI households such as the number of households (p. 15) and projected housing needs (p. 49). However, given the unique and disproportionate needs of ELI households, the element must include analysis to better formulate policies and programs. For example, the element should analyze tenure, cost burden, overcrowding and other household characteristics then examine the availability of resources to determine gaps in housing needs. For additional information, see the Building Blocks at http://www.hcd.ca.gov/community-development/building-blocks/housing- needs/extremely-low-income-housing-needs.shtml. | Narrative and data added. | 21 |

| | | | |
|---|---|---|---|
| A3. Sites Inventory | While the element lists sites by various factors (Table 5-4), it must also list sites by anticipated affordability level (i.e., lower, moderate, above moderate). As noted in the element, several sites have a pending project that is under active consideration with anticipated affordability by the City. Instead of a site based on densities, the element should utilize this pending project toward the RHNA based on the proposed number of units and affordability based on actual or anticipated rents, sales prices or other mechanisms ensuring affordability (e.g., deed restrictions). For your information, pursuant to Government Code section 65583.3, the City must submit an electronic sites inventory with its adopted housing element. The City must utilize standards, forms, and definitions adopted by HCD. This is especially important for determining sites that have been utilized in multiple planning periods and are subject to by-right provisions. Please see HCD's housing element webpage at https://www.hcd.ca.gov/community-development/housing-element/index.shtml#element for a copy of the form and instructions. The City can reach out to HCD at sitesinventory@hcd.ca.gov for technical assistance. | Affordability previously included, additional narrative included. Electronic inventory IP. | 55, 67 |
| A3. Realistic Capacity | The element must include a methodology to calculate the residential capacity on identified sites. If utilizing minimum densities, no analysis is required. The element states minimum densities were utilized (p. 51), however, some calculations appear incorrect, and the element should be revised as appropriate. | Revised. | 56 |
| A3. Suitability of Nonvacant Sites | While the element identifies nonvacant sites to accommodate the regional housing need for lower-income households, it must further describe the methodology used to determine the additional development potential within the planning period. The methodology must consider factors including the extent to which existing uses may constitute an impediment to additional residential development, past experience with converting existing uses to higher density residential development, the current market demand for the existing use, an analysis of any existing leases or other contracts that would perpetuate the existing use or prevent redevelopment of the site for additional residential development, development trends, market conditions, and regulatory or other incentives or standards to encourage additional residential development on these sites. To address this requirement, the element states sites were selected for proximity to opportunities (e.g., schools and parks), mixed-use potential, obsolete uses that have redevelopment potential and consolidation potential. The element also includes general descriptions of existing use, including age of structure. However, first, the element should also discuss market conditions, development trends and past experience with converting existing uses. This discussion should relate to the uses identified in the inventory and may utilize information from the surrounding area. Second, the element should include more discussion of the existing uses and whether the uses are an impediment. For example, in some cases, the element describes a site as older or with open parking. The element could also describe whether the use is operating, marginal, under lease, vacant, under-utilized. Finally, the element should discuss the proposed regulatory framework and planned incentives and how that can encourage additional development on nonvacant sites. In addition, because the housing element relies upon nonvacant sites to accommodate more than 50 percent of the RHNA for lower-income households, it must demonstrate existing uses are not an impediment to additional residential development and will likely discontinue in the planning period. (Gov. Code, § 65583.2, subd. (g)(2).) Absent findings (e.g., adoption resolution) based on substantial evidence, the existing uses will be presumed to impede additional residential development and will not be utilized toward demonstrating adequate sites to accommodate the RHNA. | | |
| A3. Small Sites | Sites smaller than half an acre are deemed inadequate to accommodate housing for lower-income households unless it is demonstrated, with sufficient evidence, that sites are suitable to accommodate housing for lower-income households. While the element broadly mentions potential for consolidation, it must include analysis to demonstrate the potential for consolidation. For example, the analysis could describe the City's role or track record in facilitating past lot consolidation, common ownership, policies, or incentives offered or proposed to encourage and facilitate lot consolidation or other conditions rendering parcels suitable and ready-for-lot consolidation. | Narrative added. | 69 |

| | | | |
|---|---|---|---|
| A3. Environmental Constraints | While the element generally describes a few environmental conditions within the City, it must relate those conditions to identified sites and describe any other known environmental or other conditions that could impact housing development on identified sites in the planning period. | | |
| A3. Infrastructure | The element generally describes infrastructure but, it must also clarify whether there is sufficient total water capacity (existing and planned) to accommodate the regional housing need or add or modify programs, if necessary. In addition, water and sewer service providers must establish specific procedures to grant priority water and sewer service to developments with units affordable to lower-income households. (Gov. Code, § 65589.7.) Local governments are required to immediately deliver the housing element to water and sewer service providers. The element should discuss compliance with these requirements and if necessary, add or modify programs to establish a written procedure by a date early in the planning period. For additional information and sample cover memo, see the Building Blocks at http://www.hcd.ca.gov/community-development/building-blocks/other- requirements/priority-for-water-sewer.shtml. | | |
| A3. ADUs | The element projects 80 ADUs over the planning period based on ADUs permitted since January 2018: 13 in 2018, 13 in 2019 and 8 (as of November) in 2020. However, these figures differ from HCD records: 4 in 2018, 15 in 2019 and none reported in 2020. The City should reconcile these figures and adjust ADU assumptions if necessary. | No change needed. | NA |
| A4. Land Use Controls | The element must identify and analyze all relevant land use controls impacts as potential constraints on a variety of housing types. The analysis should analyze land use controls independently and cumulatively with other land use controls. The analysis should specifically address requirements related to heights and multifamily parking. The analysis should address any impacts on cost, supply, housing choice, affordability, timing, approval certainty and ability to achieve maximum densities and include programs to address identified constraints. | Added. | 47 |
| A4. Processing and Permit Procedures | While the element includes information about processing times, it should also describe the procedures for a typical single-family and multifamily development. The analysis should address the approval body, the number of public hearings if any, approval findings and any other relevant information. The analysis should address impacts on housing cost, supply, timing, and approval certainty. For example, the element should identify and analyze approval findings for impacts on approval certainty, the presence of processes or guidelines to promote certainty and add or modify programs as appropriate. | Additional info provided. | 48 |
| A4. Fees anf Exaction | While the element lists various planning fees, it must specifically analyze the fees for a conditional use permit and include programs to address identified constraints as appropriate. | Clarified. | 45 |
| A4. Zoning, Development Standards, and Fees | The element mentions zoning and development standards are available on the City's website but should also address whether fees are posted on the City's website and add a program to address this requirement, if necessary. | Clarified. | 45 |
| A4. Housing for Persons with Disabilities | The element briefly mentions a reasonable accommodation procedure for providing exception in zoning and land use for persons with disabilities. However, the element should describe the process and decision- making criteria such as approval findings and analyze any potential constraints on housing for persons with disabilities. | Reasonable accommodation info added. | 44 |
| B1. Housing Programs | As noted in Finding A3, the element does not include a complete site analysis, therefore, the adequacy of sites and zoning were not established. Based on the results of a complete sites inventory and analysis, the City may need to add or revise programs to address a shortfall of sites or zoning available to encourage a variety of housing types. In addition, the element should be revised as follows: | Revised. | 78-81 |
| B2. Housing Programs | Program 4 (Inclusionary Housing and Affordable Housing Strategy): The Program should commit to support applications for funding and proactively and annually reach out to developers of housing affordable to lower income, including ELI and special needs households, as part of facilitating affordable housing development through incentives and technical assistance. | Revised. | 79 |

| | | | |
|---|---|---|---|
| B3. Housing Programs | As noted in Finding A4, the element requires a complete analysis of potential governmental and non-governmental constraints. Depending upon the results of that analysis, the City may need to revise or add programs and address and remove or mitigate any identified constraints. In addition, the element includes Program 7 (Municipal Code Amendments) to amend zoning for group homes for seven or more persons. This Program should specifically commit to allowing these uses in all residential zones and procedures that will promote objectivity and approval certainty (e.g., not a conditional use permit). Also, Program 7 should consider zoning amendments for emergency shelters, supportive housing, and low barrier navigation centers earlier in the planning period (e.g., within one year). | Added. | 84 |
| B4. Housing Programs | As noted in Finding A1, the element does not contain programs that satisfy the AFFH requirements for specific and meaningful actions to overcome fair housing issues. Based on a complete analysis, the element must add or revise programs. | Revised. | 85 |
| C. Quantified Objectives | The element must include quantified objectives to establish an estimate of housing units by income category that can be constructed, rehabilitated, and conserved over the planning period. While the element includes objectives for construction and conservation, the element must also include rehabilitation objectives. | Revised. | 87 |
| D. Public Participation | While the City made an effort to include the public through meetings and a survey, moving forward, the City should employ additional methods for public outreach efforts in the future, particularly to include lower-income and special needs households and neighborhoods with higher concentrations of lower-income households. For example, the City could conduct targeted stakeholder interviews or establish a committee representative of lower-income households in future public outreach efforts. In addition, while the element has summarized comments, it must also describe how they were considered and incorporated into the element. For additional information, see the Building Blocks at http://www.hcd.ca.gov/community-development/building-blocks/getting-started/public- participation.shtml. | Revised. | 87 |

# CITY OF EL SEGUNDO
# HOUSING ELEMENT UPDATE

January 2022

**Development Services Department**
350 Main Street
El Segundo, CA 90245 (310) 524-2380

# TABLE OF CONTENTS


1. Introduction ..... 1
   - A. California State Housing Element Law ..... 3
   - B. Organization of the Housing Element ..... 3
   - C. Relationship to Other General Plan Elements ..... 4
   - D. Public Participation ..... 4
   - E. Sources of Information ..... 5
2. Community Profile ..... 6
   - A. Population ..... 6
   - B. Household Characteristics ..... 11
3. Housing Characteristics ..... 24
   - A. Housing Growth ..... 24
   - B. Housing Type and Tenure ..... 24
   - C. Age and Condition of Housing Stock ..... 26
   - D. Housing Costs ..... 26
   - E. Assisted Rental Housing At-Risk of Conversion ..... 32
4. Housing Constraints ..... 33
   - A. Market Constraints ..... 33
   - B. Environmental Constraints ..... 35
   - C. Governmental Constraints ..... 36
5. Housing Opportunities ..... 51
   - A. Availability of Sites for Housing ..... 51
   - B. Opportunities for Energy Conservation ..... 71
6. Housing Plan ..... 75
   - A. Housing Goals and Policies ..... 75
   - B. Housing Programs ..... 77
   - C. Summary of Quantified Objectives ..... 87

APPENDIX A: HOUSING ACCOMPLISHMENTS ..... A-1
APPENDIX B: PUBLIC PARTICIPATION ..... B-1
A. Mailing List ..... B-1
B. Outreach Materials ..... B-4
C. Summary of Public Comments ..... B-11
APPENDIX C: ASSESSMENT OF FAIR HOUSING ..... C-1
A. Introduction and Overview of AB 686 ..... C-1
B. Assessment of Fair Housing Issues ..... C-1


# LIST OF TABLES


Table 2-1: Population Growth Trends ..... 6
Table 2-2: El Segundo Age Distribution ..... 7
Table 2-3: School Enrollment by Grade - El Segundo Unified School District ..... 8
Table 2-4: School Enrollment by Grade – Vistamar School ..... 9
Table 2-5: El Segundo Racial and Ethnic Change 2000 to 2018 ..... 9
Table 2-6: Jobs Held by El Segundo Residents ..... 10
Table 2-7: El Segundo Household Characteristics ..... 11
Table 2-8: Average Household Size ..... 12

Table 2-9: Income Distribution – 2018 ..... 14
Table 2-10: Housing Assistance Needs of Lower Income Households – 2017 ..... 15
Table 2-11: El Segundo Special Needs Groups ..... 16
Table 2-12: El Segundo Disability Status of Non-Institutional Persons ..... 18
Table 2-13: Inventory of Homeless Services and Facilities in the South Bay Region ..... 23
Table 3-1: Housing Growth Trends in El Segundo and Neighboring Communities ..... 24
Table 3-2: El Segundo Comparative Housing Unit Mix in 2010-2020 ..... 25
Table 3-3: El Segundo Household Size by Tenure ..... 25
Table 3-4: El Segundo Elderly Householders by Tenure by Age ..... 25
Table 3-5: Age of Housing Stock ..... 26
Table 3-6: Median Home Sales Prices (Regional Comparison) October 2020 ..... 27
Table 3-7: 2018 Median Housing Rental Rates ..... 27
Table 3-8: Tenure by Number of Units in Structure ..... 28
Table 3-9: Median Rents in El Segundo November 2020 ..... 29
Table 3-10: Housing Affordability Matrix (2020) ..... 31
Table 4-1: Disposition of Home Purchase and Improvement Loan Applications ..... 35
Table 4-2: El Segundo Residential Development Standards ..... 39
Table 4-3 El Segundo Housing Types Permitted by Zoning District ..... 41
Table 4-4: El Segundo Planning Fees ..... 46
Table 4-5: El Segundo Residential Development Impact Fees ..... 46
Table 5-1: Regional Housing Needs Assessment (RHNA) 2021-2029 ..... 52
Table 5-2: Potential Accessory Dwelling Units (ADUs) ..... 52
Table 5-3: Entitled Projects ..... 53
Table 5-4: Candidate Sites for Rezoning ..... 56
Table 5-5: Lot Consolidation and Income Level Distribution ..... 67
Table 5-6: Comparison of Sites Inventory and RHNA ..... 70
Table 6-1: Fair Housing Actions ..... 85
Table 6-2: 2021-2029 Quantified Objectives ..... 87

# LIST OF FIGURES

Figure 1-1: Regional Location Map ..... 2
Figure 2-1: Median Household Income – 2018 ..... 13
Figure 5-1: Sites Inventory Map ..... 68

# 1. INTRODUCTION

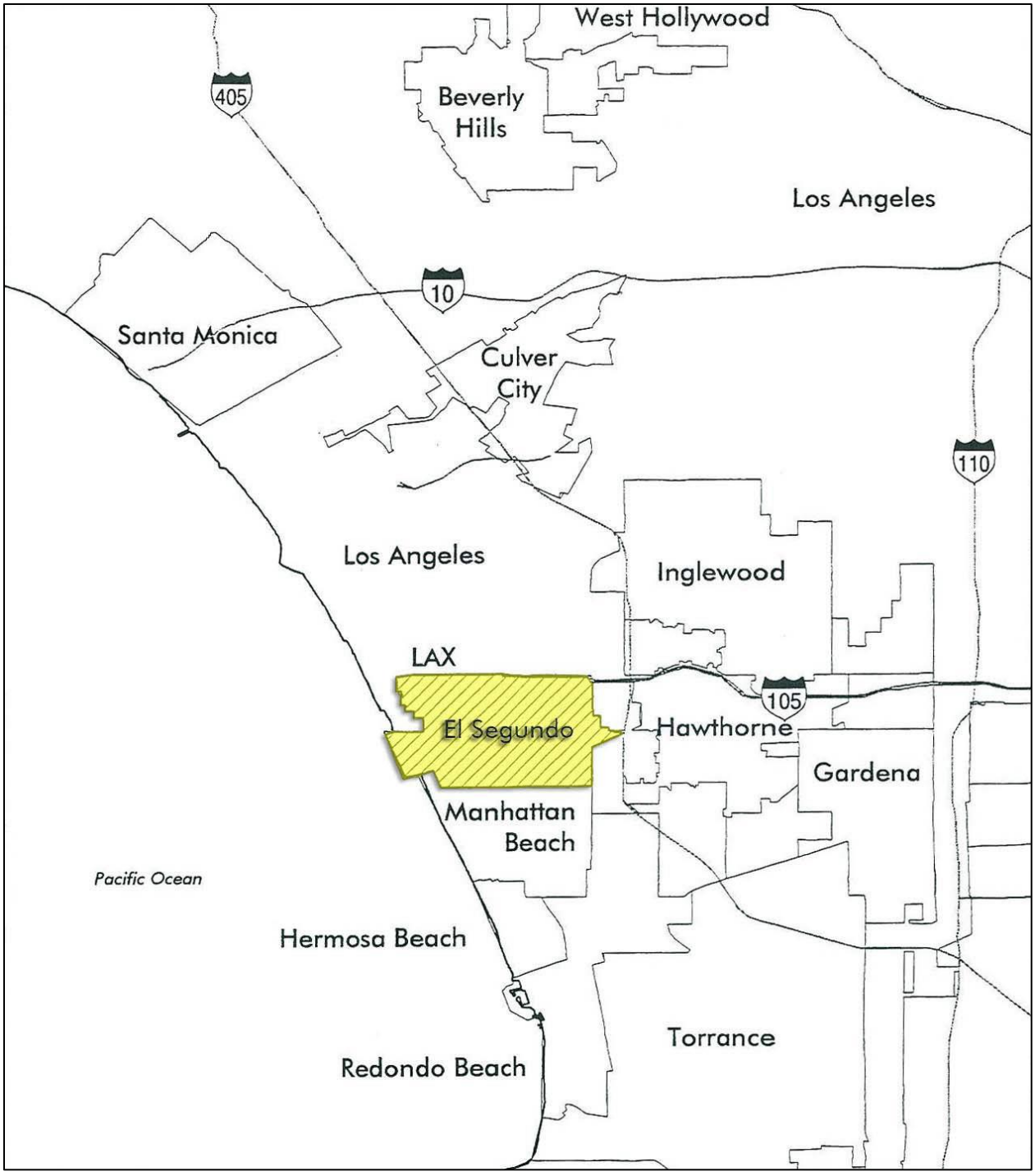
The City of El Segundo was incorporated in 1917 and is located in the South Bay Region of Los Angeles County, approximately 20 miles southwest of downtown Los Angeles (see Figure 1-1). The City occupies an area of 5.46 square miles, and is home to 16,777 residents according to 2020 Department of Finance (DOF) estimates. The City is bordered on the north by the Los Angeles International Airport; on the west by the Pacific Ocean; to the south by the city of Manhattan Beach; and to the east by the 405 Freeway. These barriers isolate El Segundo's residential and downtown communities from other South Bay communities. Figure 1-1 depicts El Segundo's regional location and City boundaries respectively.

According to DOF estimates, there were a total of 7,463 dwelling units in the City in 2020. All of the residential population is located west of Pacific Coast Highway on approximately 532.8 acres of land. The office/industrial/commercial areas east of Pacific Coast Highway include a broad range of businesses including aerospace, computer related companies, and travel related companies; several of these are Fortune 500 companies.

The City's stock of 7,463 dwelling units is characterized by a relatively even balance between single and multi-family residences; 2020 DOF estimates document a majority of the City's dwelling units (55.7%) are renter-occupied. Similar to other communities in the South Bay area, home prices have increased dramatically since adoption of the current Housing Element making both owner occupied and rental housing units less affordable. However, compared with neighboring jurisdictions, El Segundo still provides a range of housing opportunities to the varied income levels of residents in the community.

This 2021-2029 Housing Element of El Segundo's General Plan sets forth the City's strategy to preserve and enhance the community's residential character, expand housing opportunities for all economic segments, and provide guidance and direction for local government decision-making in all matters relating to housing.

**Figure 1-1: Regional Location Map**



## A. CALIFORNIA STATE HOUSING ELEMENT LAW

California State Housing Element Law (Government Code §§ 65580, *et seq.*) establishes the requirements for Housing Elements of the General Plan. Specifically, Government Code § 65588 requires that local governments periodically review and revise the Housing Element of their General Plans according to a statutory timeline.

El Segundo's Housing Element was last updated in 2013 for the 2013-2021 planning period and as part of the fifth update cycle for jurisdictions within the Southern California Association of Governments ("SCAG") region. The Element sets forth a strategy to address the City's identified housing needs, including specific implementing programs and activities. This sixth cycle update of the Housing Element is an eight-year plan, extending from October 15, 2021 to October 15, 2029. Other General Plan elements typically address a 10- to 20-year planning horizon.

### 1. Regional Housing Needs Assessment

In accordance with Government Code § 65584, projected housing needs for each city and county in the Southern California region are prepared by SCAG under a process known as the Regional Housing Needs Assessment (RHNA). RHNA allocates regional housing needs by income level among member jurisdictions.

California law established the planning period for the current RHNA from June 30, 2021 to October 15, 2029. SCAG's allocation for El Segundo is 492 units. The 492 housing units for El Segundo are out of the anticipated total construction need of 1,341,928 units in the SCAG region (812,060 of which are in the Los Angeles County). The allocation of 492 units for El Segundo is broken down into the four categories as follows: 189 very low income households, 88 low income households, 84 moderate income households, and 131 above moderate income households.

## B. ORGANIZATION OF THE HOUSING ELEMENT

The Housing Element sets forth housing goals and policies for El Segundo to address the City's existing and projected needs. Specific housing programs to implement these goals and policies will be identified in the Housing Program section of the updated document. The updated El Segundo Housing Element will be comprised of the following major components:

1. An assessment of past housing achievements.
2. An analysis of the City's population, household and employment base, and the characteristics of the City's housing stock.
3. An updated evaluation of housing need.
4. Preparation of an inventory of potential housing sites in the community.

a. An examination of governmental and non-governmental constraints on the production, maintenance, and affordability of housing.

b. Preparation of a Housing Program to address El Segundo's identified housing needs, including housing goals, policies and programs.

5. An assessment of fair housing.

## C. RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

The City of El Segundo General Plan is comprised of the following ten elements: 1) Land Use; 2) Economic Development; 3) Circulation; 4) Housing; 5) Open Space and Recreation; 6) Conservation; 7) Air Quality; 8) Noise; 9) Public Safety; and 10) Hazardous Materials and Waste Management. The Housing Element complements the other General Plan elements. As portions of the General Plan are amended in the future, the Housing Element will be reviewed to ensure internal consistency is maintained. Pursuant to California law, the City will be updating the Safety Element to address recent changes regarding high fire hazards and severe weather conditions.

## D. PUBLIC PARTICIPATION

Government Code § 65583 (c)(7) states that, "[t]he local government shall make diligent effort to achieve public participation of all economic segments of the community in the development of the housing element, and the program shall describe this effort."

As part of this Housing Element update, the City conducted multiple outreach activities to solicit public input. These included:

- April 13, 2021 - Community meeting to obtain input on housing needs and suggestions for programs and policies
- City webpage on Housing Element Update (https://www.elsegundo.org/housing-element)
- Community Survey through Mentimeter
- YouTube Video regarding Housing Element Update (https://youtu.be/SC9DJxxGQq8)
- Social media postings (Facebook, Twitter, Instagram, YouTube, and City website)
- June 14, 2021 – Joint Planning Commission and City Council meeting to discuss the selection of sites for RHNA

- September 30, 2021 – Planning Commission meeting to discuss the Draft Housing Element

All meetings were advertised through social media, postcards to agencies and organizations that serve low and moderate income and special needs residents, local businesses, nonprofit organizations, and religious facilities. Notices of meetings were also published in El Segundo Herald. The Housing Element responded to public comments by continuing to adjust the sites inventory after each public meeting.

The Draft Housing Element has been available for public review since September 27, 2021.

## E. SOURCES OF INFORMATION

The Housing Element needs assessment is based primarily on the sources listed below:

1. SCAG Certified 2014-2018 American Community Survey data (5-year estimates)
2. 2015-2019 ACS data (5-year estimates)
3. City of El Segundo Municipal Code, Title 15 (Zoning Regulations), 2020
4. SCAG Regional Housing Needs Assessment, 2020
5. Comprehensive Housing Affordability Strategy (CHAS) data (based on the 2013-2017 ACS), 2020.
6. California Department of Housing and Community Development (HCD) Affirmatively Furthering Fair Housing (AFFH) Data Viewer, 2021.

# 2. COMMUNITY PROFILE

Assuring the availability of adequate housing for all social and economic sectors of the present and future population is an important goal for El Segundo. To achieve this goal requires an assessment of the housing needs of the community and region. This section discusses the demographic, socio-economic, and housing characteristics of the City of El Segundo in an effort to determine the specific housing needs of the City and its residents.

## A. POPULATION

### 1. Population Growth Trends

The 2000 Census reported that the City of El Segundo's population was 16,033 persons, marking a population increase of over five percent since the 1990 Census. This growth rate was slightly less than the seven percent for Los Angeles County as a whole. Cities surrounding El Segundo, such as Manhattan Beach and Redondo Beach, experienced growth patterns similar to El Segundo, with decreases in population in the 1970s and modest increases in the 1980s. The 2010 Census reported that the population of El Segundo had increased to 16,654, representing an increase in the population of approximately four percent for the ten-year period from 2000 to 2010.

As of 2020, the Department of Finance (DOF) determined that the City's population numbered 16,777, an increase of less than one percent in the ten years since the 2010 U.S. Census. This rate of growth is lower than the rate of growth for Los Angeles County and in the middle of the spectrum in comparison to El Segundo's adjacent communities as shown in Table 2-1.

**Table 2-1: Population Growth Trends**

| Jurisdiction | 2000 | 2010 | 2020 | Change | |
|---|---|---|---|---|---|
| | | | | 2000-2010 | 2010-2020 |
| **El Segundo** | **16,033** | **16,654** | **16,777** | **3.90%** | **0.74%** |
| Hawthorne | 84,112 | 84,293 | 86,903 | 0.20% | 3.10% |
| Hermosa Beach | 18,556 | 19,506 | 19,614 | 5.10% | 0.55% |
| Inglewood | 112,580 | 109,673 | 111,971 | -2.60% | 2.10% |
| Manhattan Beach | 33,852 | 35,135 | 35,250 | 3.80% | 0.33% |
| Redondo Beach | 63,261 | 66,748 | 66,994 | 5.50% | 0.37% |
| Los Angeles County | 9,519,338 | 9,818,605 | 10,172,951 | 3.10% | 3.61% |

Source: 2000 and 2010 U.S. Census; DOF E-1 Population Estimates, January 2020.

## 2. Age Characteristics

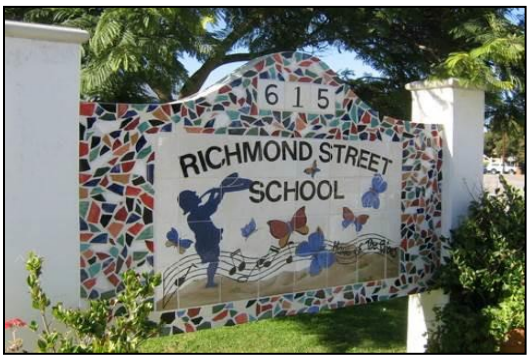
Age distribution is an important indicator in determining the future demand of certain types of housing. Traditional assumptions indicate that the young adult population (20 to 34 years old) has a trend of choosing apartments, low to moderate cost condominiums, and smaller single-family units. The adult population (35 to 65 years old) is the primary market for moderate to high-end apartments, condominiums, and larger single-family homes. This age group traditionally has higher incomes and larger household sizes. The senior population (65 years and older) generates demand for low to moderate cost apartments and condominiums, group quarters, and mobile homes. Table 2-2 shows the age distribution of the population of the City of El Segundo from 2000 to 2018, and the proportionate age distribution of all Los Angeles County residents in 2018.

**Table 2-2: El Segundo Age Distribution**

| Age Group | 2000 | | 2010 | | 2018 | | |
|---|---|---|---|---|---|---|---|
| | Persons | % of Total | Persons | % of Total | Persons | % of Total | LA County % of Total |
| Under 5 | 956 | 6.0% | 831 | 5.0% | 1,274 | 7.6% | 6.2% |
| 5-9 | 1,069 | 6.6% | 920 | 5.5% | 1002 | 5.9% | 6.0% |
| 10-14 | 1,037 | 6.4% | 1,180 | 7.1% | 1,047 | 6.2% | 6.2% |
| 15-19 | 856 | 5.3% | 1,140 | 6.8% | 978 | 5.8% | 6.5% |
| 20-24 | 715 | 4.4% | 768 | 4.6% | 701 | 4.2% | 7.3% |
| 25-34 | 2,855 | 18.0% | 2,511 | 15.1% | 2,435 | 14.4% | 15.9% |
| 35-44 | 3,348 | 21.8% | 2,671 | 16.0% | 2,505 | 14.9% | 13.8% |
| 45-54 | 2,444 | 15.2% | 3,076 | 18.5% | 2,829 | 16.7% | 13.6% |
| 55-64 | 990 | 6.9% | 1,879 | 11.3% | 2,128 | 12.6% | 11.7% |
| 65-74 | 794 | 4.9% | 888 | 5.3% | 1,185 | 7.0% | 7.2% |
| 75+ | 735 | 4.5% | 790 | 4.7% | 766 | 4.5% | 5.6% |
| **Total** | **16,033** | **100.0%** | **16,654** | **100.0%** | **16,850** | **100.0%** | **100.0%** |
| Median Age | 36.4 | | 39.2 | | 38.7 | | 36.2 |
| Source: 2000 and 2010 Census; ACS 2014-2018 (5-Year Estimates), Table S0101. | | | | | | | |

As shown in Table 2-2, the 2018 American Community Survey (ACS) indicated median age in El Segundo of 38.7 years is slightly higher than the County median age of 36.2 years. While the City has seen a drop in the young adult (age 25-34) and mid-adult (age 35-44) populations, the City witnessed proportional and numeric growth during the last 20 years in its older-adult populations (age 45-64). These increases are likely attributed to the previous existing young adult populations continuing to live in El Segundo. Additionally, the City encourages housing options that allow residents to remain in the community as they age.

These characteristics of an employment center with comparatively modest housing costs have resulted in stable neighborhoods and a tightening of the housing market in El Segundo. El Segundo is a predominantly renter-occupied community, with approximately 56 percent of all households occupied by renters (Table 2-3). Associated with growth in the young and mid-adult populations, this may be an indication of the potential need for increasing first-time homebuyer opportunities in the City.




Between 2010 and 2018, there was a 30 percent increase in the City's early school age population (age 0-9 years) and decrease of nearly 13 percent in population for children ages 10 to 19. This trend typically reflects a population with younger families. Enrollment statistics provided by the California Department of Education for the El Segundo Unified School District are provided in Table 2-3. Table 2-4 provides enrollment data at Vistamar School.

**Table 2-3: School Enrollment by Grade - El Segundo Unified School District**

| Grade | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| K | 237 | 264 | 284 | 260 | 256 | 304 |
| 1 | 219 | 181 | 222 | 236 | 211 | 219 |
| 2 | 219 | 225 | 188 | 226 | 228 | 204 |
| 3 | 238 | 217 | 241 | 198 | 222 | 228 |
| 4 | 213 | 241 | 232 | 254 | 297 | 228 |
| 5 | 235 | 219 | 252 | 239 | 255 | 211 |
| 6 | 278 | 286 | 252 | 284 | 278 | 283 |
| 7 | 263 | 287 | 278 | 268 | 280 | 277 |
| 8 | 276 | 262 | 291 | 274 | 267 | 279 |
| 9 | 300 | 334 | 317 | 329 | 318 | 325 |
| 10 | 318 | 298 | 319 | 316 | 321 | 326 |
| 11 | 345 | 314 | 287 | 315 | 301 | 320 |
| 12 | 336 | 343 | 306 | 275 | 319 | 298 |
| **Total** | **3,477** | **3,471** | **3,469** | **3,474** | **3,453** | **3,502** |

Source: California Department of Education, 2020.

**Table 2-4: School Enrollment by Grade – Vistamar School**

| Grade | 2013 | 2020 |
|---|---|---|
| 9 | 53 | 56 |
| 10 | 69 | 69 |
| 11 | 81 | 77 |
| 12 | 59 | 67 |
| **Total** | **262** | **269** |
| Source: Vistamar School, 2013; California Department of Education, 2020. | | |

## 3. Race and Ethnicity

Table 2-5 shows the changes in the racial/ethnic composition of El Segundo between 2000 and 2018. There were several dramatic shifts in the years between 2000 and 2018. The most notable of these changes were increases in the Other/Two or More Races and Black populations, although these groups represent just about 13.3 percent of the City's total population. El Segundo's ethnic composition continues to be predominately White at 64.0 percent of the population. However, this represents a decrease from 2000 when the White population comprised 79.7 percent of the population total.

**Table 2-5: El Segundo Racial and Ethnic Change 2000 to 2018**

| Race/Ethnicity | 2000 | | 2010 | | 2018 | | Change 2000-2010 | | Change 2010-2018 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Persons | % of Total | Persons | % of Total | Persons | % of Total | # | % | # | % |
| White (Non-Hispanic) | 12,356 | 79.7% | 11,515 | 69.1% | 10,780 | 64.0% | -841 | -6.8% | -735 | -6.4% |
| Hispanic/Latino | 1,765 | 11.4% | 2,609 | 15.7% | 2,178 | 12.9% | 844 | 47.8% | -431 | -16.5% |
| Asian/Pac. Isldr. (Non-Hispanic) | 1,052 | 6.8% | 1,457 | 8.7% | 1,638 | 9.7% | 405 | 38.5% | 181 | 12.4% |
| Black (Non-Hispanic) | 181 | 1.2% | 321 | 1.9% | 628 | 3.7% | 140 | 77.3% | 307 | 95.6% |
| Am. Indian (Non-Hispanic) | 52 | 0.3% | 40 | 0.2% | 21 | 0.1% | -12 | -23.1% | -19 | -47.5% |
| Other/Two or More Races (Non-Hispanic) | 87 | 0.6% | 712 | 4.3% | 1,605 | 9.5% | 625 | 718.1% | 893 | 125.4% |
| **Total** | **15,493** | **100.0%** | **16,654** | **100.0%** | **16,850** | **100.0%** | **1,161** | **7.5%** | **196** | **1.2%** |
| Source: 2000, and 2010 U.S. Census; ACS 2014-2018 (5-Year Estimates), Table DP05. | | | | | | | | | | |

El Segundo's ethnic make-up does not reflect the racial diversification that is occurring elsewhere in Los Angeles County. A greater proportion of the City's residents are White, compared to 26.3 percent of the County, while persons from the Hispanic and Black groups comprise a smaller proportion of the City's population than they do County-wide (48.5 percent Hispanic and 7.9 percent Black). The distribution of the American Indian population is nearly equal to that of the County (0.2 percent American Indian) but the Other Races/Two or More Races population of 9.5 percent is higher than the countywide population of 2.5 percent.

## 4. Employment

As shown in Table 2-6, the 2014-2018 American Community Survey (ACS) reports that there were 9,801 El Segundo residents in the labor force, representing a labor force participation rate of 73.5 percent of persons ages of 16 and over. A majority of the City's residents are employed in management, business, science, and arts occupations (55.7 percent) or in sales and office occupations (20.6 percent). The unemployment rate reported in the ACS was 8.0 percent, compared to the countywide unemployment rate of 6.8 percent.

A general measure of the balance of a community's employment opportunities with the needs of its residents is through a "jobs-housing balance" test. A balanced community would have a match between employment and housing opportunities so that most of the residents could also work in the community. Comparing the number of jobs in El Segundo in 2020 (over 70,000) to the 2018 ACS population estimates (16,850) indicates a high job-population ratio of approximately 4.2:1.[1] This is reflective of the large employment base in El Segundo. Large employers include the Chevron Refinery as well as major aerospace corporations such as the Aerospace Corporation, Boeing Corporation and Raytheon. In addition, El Segundo is a community whose daytime population far exceeds the nighttime population due to the large employment base in the City. The City's large employment base relative to the small number of housing units indicate that there may be a need to continually seek ways to add housing in the community. According to SCAG, the City's employment base was estimated at 48,300 in 2016 and is projected to reach 52,400 by 2045.[2]

**Table 2-6: Jobs Held by El Segundo Residents**

| Job Category | Number | Percent |
|---|---|---|
| Management, Business, Science, and Arts | 5,005 | 55.7% |
| Service Occupations | 926 | 10.3% |
| Sales and Office Occupations | 1,851 | 20.6% |
| Natural Resources, Construction, and Maintenance Occupations | 508 | 5.6% |
| Production, Transportation, and Material Moving Occupations | 703 | 7.8% |
| **Total Employed Persons** | **8,993** | **100.0%** |
| Total Persons in Labor Force (16 years and over) | 9,801 | -- |
| Source: ACS 2014-2018 (5-Year Estimates), Table DP03. | | |

1 El Segundo Chamber of Commerce Community & Business Directory, 2020.
2 Southern California Association of Governments (SCAG) Demographics and Growth Forecast, 2020.

## B. HOUSEHOLD CHARACTERISTICS

Information on household characteristics is an important indicator of housing needs in a community. Income and affordability are best measured at the household level, as are the special needs of certain groups, such as large-family households or female-headed households.

### 1. Household Composition and Size

The Bureau of the Census defines a "household" as all persons who occupy a housing unit, which may include single persons living alone, families related through marriage or blood, or unrelated persons sharing living quarters. Persons living in retirement or convalescent homes, dormitories, or other group living situations are not considered households. The characteristics of the households in a city are important indicators of the type of housing needed in that community.

Table 2-7 below describes the household characteristics for El Segundo. According to the 2014-2018 ACS, there were 6,639 households in the City of El Segundo, about 62.4 percent of which were family households. This proportion is less than that of Los Angeles County, where 66.8 percent of all households consisted of families. Single-person households represent the second largest household group in the City, comprising about 29.6 percent of all households. The remaining 8.0 percent of households fall into the unrelated non-family household category, which consist of unrelated persons living together.

**Table 2-7: El Segundo Household Characteristics**

| Household Type | 2000 | | 2010 | | 2018 | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| Total Population | 16,033 | 100.0% | 16,654 | 100.0% | 16,850 | 100.0% |
| In Group Quarters | 23 | 0.1% | 66 | 0.4% | 36 | 0.2% |
| Total Households | 7,060 | 100.0% | 7,085 | 100.0% | 6,639 | 100.0% |
| Average Household Size | 2.27 | | 2.34 | | 2.53 | |
| Families | 3,908 | 55.3% | 4,105 | 57.9% | 4,145 | 62.4% |
| Single Households | 2,420 | 34.2% | 2,254 | 31.8% | 1,963 | 29.6% |
| Unrelated Non-Family Households | 732 | 10.3% | 726 | 10.2% | 752 | 8.0% |
| Source: 2000 and 2010 U.S. Census; ACS 2014-2018 (5-Year Estimates), Tables DP02 and B09019. | | | | | | |

Household size is an important indicator of a source of population growth. A city's average household size can depend on household trends such as a trend towards larger families will increase the city's average household size over time while, average household size will often decline in communities where the population is aging.

Between 2010 and 2018, the average persons per household in El Segundo increased slightly from 2.34 to 2.53 persons per household. The average household size in the City is significantly less than

the estimates for the County of Los Angeles (3.00 persons per household in 2018) and is fairly comparable with the relatively small average household sizes of all of El Segundo's neighboring communities. Average household size in nearby cities is shown in Table 2-8.

**Table 2-8: Average Household Size**

| City | Persons Per Household |
|---|---|
| **El Segundo** | **2.53** |
| Hawthorne | 2.96 |
| Hermosa Beach | 2.19 |
| Inglewood | 2.96 |
| Manhattan Beach | 2.63 |
| Redondo Beach | 2.45 |
| Los Angeles County | 3.00 |
| Source: ACS 2014-2018 (5-Year Estimates), Table DP02. | |

## 2. Overcrowding

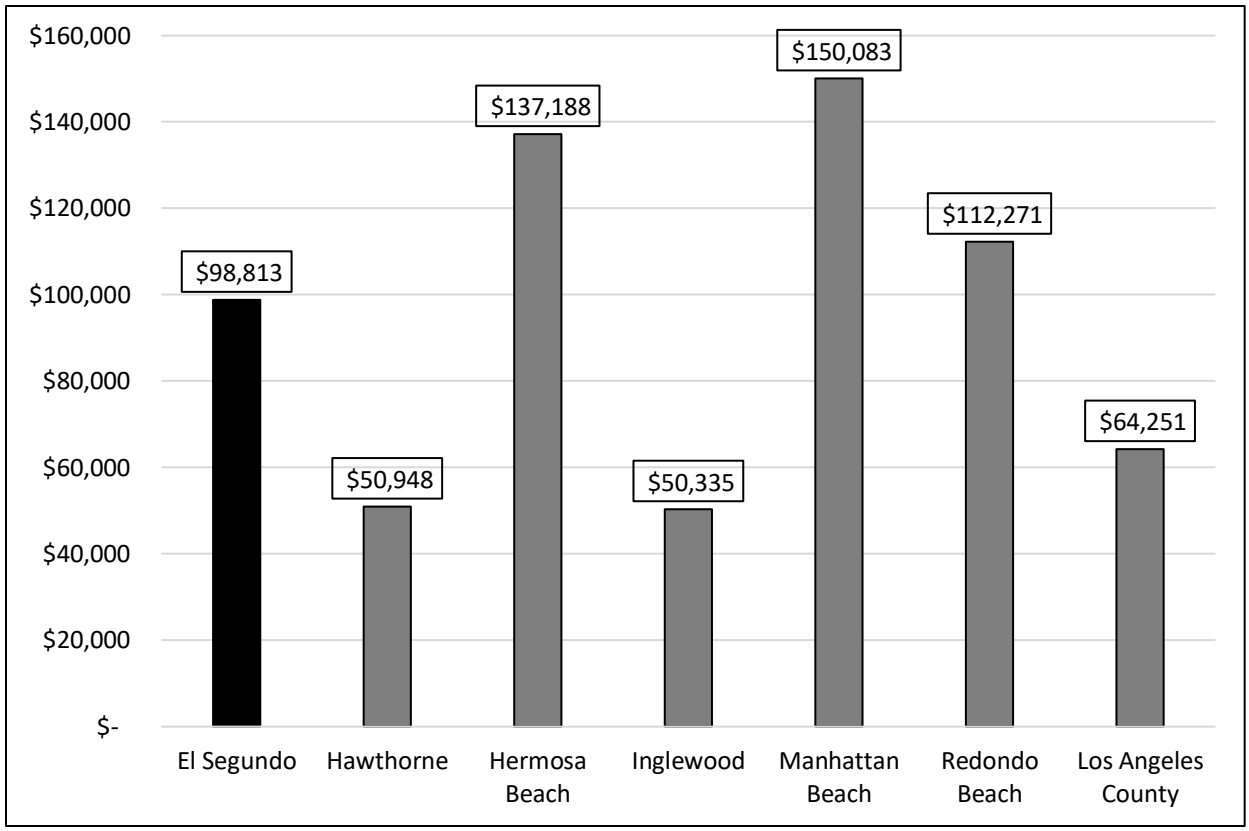
The federal government defines an overcrowded household as one with more than one occupant per room, excluding bathrooms, kitchens, hallways, and porches. Overcrowding in households results from either a lack of affordable housing (which forces more than one household to live together) and/or a lack of available housing units of adequate size.

According to the 2014-2018 ACS, 3.1 percent (207 households) of households in El Segundo were living in overcrowded conditions, compared to 11.4 percent Countywide. Approximately 1.4 percent of households in the City were considered severely overcrowded. Overcrowding among renter-households was more prevalent than among owner-households. Of the total 207 overcrowded households, 136 were renter-occupied households. In contrast, of the total overcrowded households, only 34.3 were owner-occupied households. The ACS indicates that 96.9 percent of the households in El Segundo have less than 1.00 person per room; therefore, overcrowding of households does not appear to be a primary issue for the City.

## 3. Household Income and Income Distribution

Income is a major factor in evaluating the affordability of housing in a community. According to the 2014-2018 ACS the median household income in El Segundo was $98,813 per year, which is significantly more than the County median household income of $64,251 per year. In comparison with its neighbors, the median household income in El Segundo was higher than that of Hawthorne and Inglewood; somewhat lower than Redondo Beach; and significantly lower than Hermosa Beach and Manhattan Beach. Figure 2-1 shows that El Segundo's median household income was nearly double that of neighboring communities Hawthorne and Inglewood but lower that of neighboring beach communities.

**Figure 2-1: Median Household Income – 2018**




Source: ACS 2014-2018 (5-Year Estimates), Table S1901.

To facilitate the analysis of income distribution among households in communities, the Health and Safety Code groups households into categories by income. Income categories are determined as a percentage of the Area Median Income (AMI) and then adjusted for household size in the following manner:

- Extremely Low Income – 0 to 30 percent AMI
- Very Low Income – 31 to 50 percent of the AMI
- Low Income – 51 to 80 percent of the AMI
- Moderate Income – 81 to 120 percent of the AMI
- Above Moderate Income – above 120 percent of the AMI

The ACS does not collect information on the number of households belonging to each of the income categories described above. However, the Southern California Association of Governments (SCAG), in preparing the Regional Housing Needs Assessment (RHNA), has developed income distribution data for its member jurisdictions (Table 2-9). As shown below, between 2014 and 2018, approximately 25 percent of the City's households earned lower incomes, while approximately 16 percent earned moderate incomes. During this same period, Los Angeles County as a whole had a higher proportion of lower income households (41 percent).

**Table 2-9: Income Distribution – 2018**

| Income Group | El Segundo | L.A. County |
|---|---|---|
| Very Low Income | 13% | 26% |
| Low Income | 12% | 15% |
| Moderate Income | 15% | 16% |
| Above Moderate | 61% | 43% |
| Total | 100% | 100% |
| Source: SCAG RHNA Calculator, March 2021, based on 2014-2018 ACS. | | |

## 4. Housing Affordability and Overpayment

The HUD Comprehensive Housing Affordability Strategy (CHAS) provides detailed information on housing needs by income level for different types of households in El Segundo. Detailed CHAS data based on the 2013-2017 ACS data is displayed in (Table 2-10). Housing problems considered by CHAS include:

- Units with physical defects (lacking complete kitchen or bathroom);
- Overcrowded conditions (housing units with more than one person per room);
- Housing cost burden, including utilities, exceeding 30 percent of gross income; or
- Severe housing cost burden, including utilities, exceeding 50 percent of gross income.

The types of problems vary according to household income, type, and tenure. Some highlights include:

- In general, renter-households had a higher level of housing problems (44.3 percent) compared to owner-households (35.5 percent).
- Large family renter-households had the highest level of cost burden regardless of income level (49.7 percent).
- Very low income and low-income households had the highest incidence of housing problems (79.7 percent and 72.3 percent, respectively).

## Table 2-10: Housing Assistance Needs of Lower Income Households – 2017

| Household by Type, Income, and Housing Problem | Renters | | | | Owners | | | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | Elderly | Small Families | Large Families | Total Renters | Elderly | Small Families | Large Families | Total Owners | |
| **Extremely Low (0-30% HAMFI)** | 85 | 150 | 50 | 455 | 50 | 40 | 0 | 105 | 560 |
| % with any housing problem | -- | -- | -- | 78.0% | -- | -- | -- | 38.1% | 70.5% |
| % with cost burden >30% | 35.3% | 80.0% | 100.0% | 75.8% | 28.0% | 25.0% | 0.0% | 38.1% | 68.8% |
| % with cost burden > 50% | 0.0% | 80.0% | 100.0% | 64.8% | 8.0% | 25.0% | 0.0% | 28.6% | 58.0% |
| **Very Low Income (31-50% HAMFI)** | 50 | 280 | 4 | 400 | 165 | 15 | 25 | 215 | 615 |
| % with any housing problem | -- | -- | -- | 93.8% | -- | -- | -- | 53.5% | 79.7% |
| % with cost burden >30% | 60.0% | 100.0% | 100.0% | 93.8% | 50.9% | 100.0% | 100.0% | 53.5% | 78.9% |
| % with cost burden >50% | 30.0% | 78.6% | 100.0% | 75.0% | 32.7% | 100.0% | 100.0% | 48.8% | 65.9% |
| **Low Income (51-80% HAMFI)** | 95 | 260 | 0 | 575 | 105 | 25 | 15 | 165 | 740 |
| % with any housing problem | -- | -- | -- | 76.5% | -- | -- | -- | 57.6% | 72.3% |
| % with cost burden >30% | 52.6% | 82.7% | 0.0% | 73.9% | 37.1% | 80.0% | 100.0% | 54.6% | 70.3% |
| % with cost burden > 50% | 0.0% | 0.0% | 0.0% | 7.8% | 13.3% | 80.0% | 100.0% | 39.4% | 14.9% |
| **Moderate Income (81-100% HAMFI)** | 125 | 105 | 20 | 460 | 65 | 110 | 35 | 260 | 720 |
| % with any housing problem | -- | -- | -- | 46.7% | -- | -- | -- | 59.6% | 51.4% |
| % with cost burden >30% | 28.0% | 9.5% | 0.0% | 39.1% | 36.9% | 54.6% | 71.4% | 59.6% | 45.9% |
| % with cost burden > 50% | 0.0% | 9.5% | 0.0% | 2.2% | 30.8% | 36.4% | 71.4% | 38.5% | 15.3% |
| **Above Moderate Income (100%+ HAMFI)** | 105 | 925 | 75 | 1,790 | 455 | 1,305 | 155 | 2,215 | 4,005 |
| % with any housing problem | -- | -- | -- | 14.0% | -- | -- | -- | 14.7% | 14.4% |
| % with cost burden >30% | 0.0% | 6.0% | 26.7% | 5.0% | 4.4% | 13.7% | 9.7% | 14.0% | 10.0% |
| % with cost burden > 50% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.3% | 0.0% | 0.9% | 0.5% |
| **Total Households** | 460 | 1,720 | 149 | 3,680 | 840 | 1,495 | 230 | 2,960 | 6,640 |
| % with any housing problem | -- | -- | -- | 44.3% | -- | -- | -- | 24.5% | 35.5% |
| % with cost burden >30% | 31.5% | 39.5% | 49.7% | 38.5% | 21.6% | 19.0% | 34.8% | 24.0% | 31.9% |
| % with cost burden > 50% | 3.3% | 20.4% | 36.2% | 17.7% | 11.0% | 6.0% | 28.4% | 10.8% | 14.6% |

Note: This table presents the percent of households with housing problems by tenure, income, and household type. For example, 78.0 percent of the extremely low income renter-households had housing problems compared to 38.1 percent of the extremely low income owner-households with housing problems. Data presented in this table are based on special tabulations from sample Census data. The number of households in each category usually deviates slightly from the 100% total due to the need to extrapolate sample data out to total households. Interpretations of these data should focus on the proportion of households in need of assistance rather than on precise numbers.
Elderly Households = 1- to 2-person households with elderly persons aged 62+
Small Families = 2- to 4-person family households
Large Families = 5+ person family households
Other non-family households are not included in this table.

Source: HUD Comprehensive Housing Affordability Strategy (CHAS), based on 2013-2017 ACS data.

## 5. Special Needs Groups

Certain segments of the population may have particular difficulties in finding decent, affordable housing due to their special needs. These special needs groups, as defined by State housing element law, include the elderly, disabled persons, large households, female-headed households, farm workers, extremely low-income households and the homeless. In addition, military households are a group with special housing needs in El Segundo. Table 2-11 summarizes the numbers of households/persons in each of these special needs groups in the City of El Segundo.

**Table 2-11: El Segundo Special Needs Groups**

| Special Needs Groups | Number of Households or Persons | Owners | | Renters | | Percent of Total Households/ Persons |
|---|---|---|---|---|---|---|
| | | No. | % | No. | % | |
| Households that Include at Least One Senior (person age 65 or over) | 1,448 | -- | -- | -- | -- | 21.8% |
| Senior-Headed Households | 1,277 | 877 | 68.7% | 400 | 31.3% | 19.2% |
| Senior Living Alone | 461 | 232 | 50.3% | 229 | 49.7% | 6.9% |
| Persons with Disabilities | 1,306 | -- | -- | -- | -- | 7.8% |
| Large Households* | 390 | 226 | 57.9% | 164 | 42.1% | 5.8% |
| Single-Parent Households | 417 | -- | -- | -- | -- | 6.3% |
| Female-Headed Households with Children (no husband present) | 318 | -- | -- | -- | -- | 4.8% |
| Farmworkers** | 12 | -- | -- | -- | -- | 0.1% |
| Armed Forces*** | 29 | -- | -- | -- | -- | 0.2% |
| People Living in Poverty | 1,306 | -- | -- | -- | -- | 7.8% |
| Homeless | 47 | -- | -- | -- | -- | 0.3% |

Notes:
*=ACS 2012-2016 (5-Year Estimates), Table B25009. ACS 2014-218 (5-Year Estimates) data not available.
**=All farming, fishing, and forestry occupations.
***= Percentage of population 16 years and over.
-- = Data not available.
Single-Parent Households: A single-parent household is headed by either a male or female householder, no spouse present but have children under the age of 18.
Female Headed Households with Children: A single parent household whose householder is a female.
Sources: ACS 2014-2018 (5-Year Estimates), Tables DP02, DP03, S2501, S2502, and S1701; Los Angeles Homeless Services Authority (LAHSA), 2020 Homeless Count by Community/City.

## SENIORS

The ACS shows that roughly 19.2 percent of the City's households were headed by elderly persons age 65 and above. Of these approximately 1,277 households, 461 consisted of elderly persons living alone (Table 2-11). Members of this subpopulation of the elderly may have special needs for assistance with finances, household maintenance, and other routine activities. This is particularly true of persons aged 75 and older who are more likely to be among the "frail elderly."

The 2014-2018 ACS also indicates that there were at least 158 persons age 65 and over living below the poverty level. This indicates that there may be a need for additional affordable senior housing. CHAS data shown in Table 2-10 indicates that housing problems were an issue for elderly both renter and owner lower income households, with 60.0 percent of very low income renter and 50.9 percent of very low income owner households experiencing a housing cost burden. In all income categories, more elderly renter-households (31.5 percent) experienced a housing cost burden than owner-households (21.6 percent).

### Resources

The special needs of seniors can be met through a range of services, including congregate care, rent subsides, shared housing, and housing rehabilitation assistance. According to Community Care Licensing Division records, one adult day care facility with a capacity to serve 40 persons and two adult residential facilities with a capacity to serve 10 persons are also located in the City. Senior residents also have access to various classes, programs, activities, and services, such as transportation and outreach coordination, at the Joslyn Community Center.

Park Vista is a 97-unit senior housing project for seniors capable of independent living. Rents are restricted to levels of affordable to very low income households, and occupancy is limited to El Segundo residents with incomes that fall below moderate income levels. Discussions with management at Park Vista indicate that there is a need for further affordable senior housing facilities as there are extensive waiting lists for such facilities in the City with an approximate waiting time of one and a half to two years. Additionally, management at Park Vista indicated that there is a need for assisted living facilities in the City.

## PERSONS WITH DISABILITIES

Physical and mental disabilities can hinder access to traditionally designed housing units as well as potentially limit the ability to earn adequate income. As shown in Table 2-12, the 2014-2018 ACS indicates that approximately 7.8 percent of El Segundo's population has some form of work or mobility/self-care difficulty.

Cognitive difficulties were the most common amongst residents under 65 years of age. Of the disabled population aged 65 years and older, ambulatory and independent living difficulties were the most common. The ACS estimates that 357 residents aged 65 years and older experience a hearing or vision difficulty, compared to only 258 residents under 65 years old.

Although no current comparisons of disability with income, household size, or race/ethnicity are available, it is reasonable to assume that a substantial portion of disabled persons would be within the federal Housing Choice Voucher Program (commonly known as Section 8) [Title 24 of the Housing

and Urban Development Act Part 982] income limits, especially those households not in the labor force. Furthermore, most lower income disabled persons are likely to require housing assistance.

Their housing need is further compounded by design and location requirements, which can often be costly. For example, special needs of households with wheelchair-bound or semi-ambulatory individuals may require ramps, holding bars, special bathroom designs, wider doorways, lower cabinets, elevators, and other interior and exterior design features.

There are no zoning or building regulations or special approval procedures that unfairly inhibit or discourage the development of housing for disabled persons. The City's Development Services Department implements the provisions of the California Building Code and the regulations of the Americans with Disabilities Act (ADA) in their routine application and enforcement of building code requirements.

**Table 2-12: El Segundo Disability Status of Non-Institutional Persons**

| Disability Type | Less than 65 Years Old | Percent of Total Population* | 65+ Years Old | Percent of Total Population* |
|---|---|---|---|---|
| With a hearing difficulty | 167 | 0.99% | 235 | 1.40% |
| With a vision difficulty | 91 | 0.54% | 122 | 0.73% |
| With a cognitive difficulty | 363 | 2.16% | 153 | 0.91% |
| With an ambulatory difficulty | 178 | 1.06% | 295 | 1.75% |
| With a self-care difficulty | 41 | 0.24% | 88 | 0.52% |
| With an independent living difficulty | 164 | 0.98% | 238 | 1.42% |
| **Total with disability** | **746** | **4.44%** | **560** | **3.33%** |

* = Noninstitutionalized population.
Note: Some residents have more than one disability.

Source: ACS 2014-2018 (5-Year Estimates), Table S1810.

## Persons with Developmental Disabilities

A recent change in California law requires that the Housing Element discuss the housing needs of persons with developmental disabilities. As defined by Welfare and Institutions Code § 4512, "developmental disability" means

> "a disability that originates before an individual attains 18 years of age; continues, or can be expected to continue, indefinitely; and constitutes a substantial disability for that individual. [T]his term shall include intellectual disability, cerebral palsy, epilepsy, and autism. This term shall also include disabling conditions found to be closely related to intellectual disability or to require treatment similar to that required for individuals with an intellectual disability, but shall not include other handicapping conditions that are solely physical in nature."[3]

[3] Welfare and Institutions Code § 4512 as amended by SB 816, effective January 1, 2014.

This definition also reflects the individual's need for a combination and sequence of special, interdisciplinary, or generic services, individualized supports, or other forms of assistance that are of lifelong or extended duration and are individually planned and coordinated.

The Census does not record developmental disabilities. According to the U.S. Administration on Developmental Disabilities, an accepted estimate of the percentage of the population that can be defined as developmentally disabled is 1.5 percent. This equates to 253 persons in the City of El Segundo with developmental disabilities, based on the 2014-2018 ACS population. According to the State's Department of Developmental Services, as of June 2020, the Westside Regional Center, serving the Los Angeles region from Malibu to El Segundo, served 7,834 residents with developmental disabilities. Most of these individuals were residing in a private home and 66 percent of these persons with developmental disabilities were under the age of 21.

Many developmentally disabled persons can live and work independently within a conventional housing environment. More severely disabled individuals require a group living environment where supervision is provided. The most severely affected individuals may require an institutional environment where medical attention and physical therapy are provided. Because developmental disabilities exist before adulthood, the first issue in supportive housing for the developmentally disabled is the transition from the person's living situation as a child to an appropriate level of independence as an adult.

**Resources**

Housing options for persons with disabilities include three community care facilities. Combined, these facilities offer a capacity of 50 beds. Residents with disabilities can also benefit from a range of services offered by various agencies throughout Los Angeles County and South Bay region, such as, the Westside Regional Center, Ability First, Team of Advocates for Special Kids, and the Disabled Resources Center.

## LARGE HOUSEHOLDS

According to the 2012-2016 ACS, only 5.8 percent of all households in the City of El Segundo consisted of large households (Table 2-11). In contrast to many communities where large households consist predominately of renters, 58.0 percent of all large households in El Segundo were owner-households.

Large households are defined as those with five or more members. A large family household is a household with five or more related members. The special needs of this group are based on the limited availability of adequately sized, affordable housing units. Because of housing stock limitations, and the fact that large families often have lower incomes, they are frequently subjected to overcrowded living conditions. The increased strain which overcrowding places on housing units only serves to accelerate the pace of unit deterioration.

According to the 2014-2018 ACS, approximately 42.9 percent of the City's housing stock is comprised of three or more-bedroom units. Therefore, the City has more than an adequate supply of housing units to accommodate the needs of its large family households.

**Resources**

Large households in El Segundo can benefit from the general housing programs and services offered by the City. The Section 8 Housing Choice Vouchers program also extends assistance to large households with overcrowding and cost burden issues.

## SINGLE-PARENT HOUSEHOLDS

A single-parent household is headed by either a male or female householder, no spouse present but have children under the age of 18. Single-parent households often require special consideration and assistance due to their greater need for affordable and accessible day care, health care, and other supportive services. In particular, female-headed households with children tend to have lower-incomes than other types of households, a situation that limits their housing options and access to supportive services.

Among the single-parent households, female-headed households tend to have more need for housing assistance, compared to male-headed households; female-headed households often have lower incomes. The 2014-2018 ACS indicates that there are 777 female-headed households in the City of El Segundo, 318 of which have children under the age of 18. These numbers account for approximately 11.7 percent and 4.8 percent respectively of all households in the City.

**Resources**

El Segundo's single-parent households can benefit from the City's general affordable housing programs for lower income households including Housing Choice Vouchers. Single-parent households in El Segundo can also benefit from various services offered by the City, especially child care services. The El Segundo Teen Center offers year-round recreational and special interest classes to youth and teen residents. Additional opportunities for youth of all ages include various aquatic, drama, arts and craft, exercise and fitness, and sports programs.

A number of service agencies located in areas surrounding El Segundo provide services including emergency and transitional shelter, food distribution, vouchers for various needs, and rental and utility assistance that can benefit lower income single-parent households living in poverty or who are at risk of becoming homeless.

## FARMWORKERS

Farmworkers are traditionally defined as persons whose primary incomes are earned through seasonal agricultural work. Farmworkers have special housing needs because they earn lower incomes than many other workers and move throughout the season from one harvest to the next. The 2014-2018 ACS reported that less than one percent (12 persons) of the City of El Segundo's residents were employed in farming, forestry, and fishing occupations.

Regionally, according to the USDA Census on agricultural population, there were 413 farms in Los Angeles County and 3,266 farmworkers.

**Resources**

Due to El Segundo's urban setting and nominal farmworker population, the special housing needs of this group can generally be addressed through overall programs for housing affordability.

## MILITARY PERSONNEL

According to the 2014-2018 ACS, there were 29 persons in the labor force employed in military occupations (Table 2-11). The U.S. Air Force base in El Segundo directly employs approximately 6,300 individuals (military, civilian and contractor), the majority of whom are military personnel.

### Resources

Housing for base personnel is provided by Tierra Vista, including four unique neighborhoods at or near Fort MacArthur and San Pedro, approximately 22 miles south-east of Los Angeles Air Force Base. There are currently a total of 592 units, including two-, three- and four-bedroom units to accommodate all military ranks and their families. The four neighborhoods and number of units offered at each include:

- Fort MacArthur—356 two, three- and four-bedroom apartments/townhomes, and 20 three- and four-bedroom single-family homes
- Pacific Heights I—91 three- and four-bedroom single-family homes
- Pacific Heights II—74 three- and four-bedroom single-family homes
- Pacific Crest—71 three- and four-bedroom single-family homes

## RESIDENTS LIVING BELOW THE POVERTY LEVEL

Families with incomes below the poverty level, typically with extremely low and very low incomes, are at greatest risk of becoming homeless and typically require special programs to assist them in meeting their rent and mortgage obligations so as to not become homeless. The 2014-2018 ACS identified 7.8 percent of all El Segundo residents as living below the poverty level (Table 2-11). Approximately 5.0 percent of family households in the City were living in poverty, while 7.9 percent of families with children were living below the poverty level. These households need assistance with housing subsidies, utility and other living expense subsidies, and other supportive services.

### Resources

There are limited opportunities to address the housing needs of persons living with incomes below the poverty level in El Segundo. However, the needs of this special needs group are taken into consideration and are generally addressed through the City's overall programs for housing affordability.

A number of service agencies located in areas surrounding El Segundo provide services including emergency and transitional shelter, food distribution, vouchers for various needs, and rental and utility assistance that can benefit lower income single-parent households living in poverty or are at risk of becoming homeless.

## EXTREMELY LOW INCOME HOUSEHOLDS

Extremely low income (ELI) households earning 30 percent or less than the area median income may be exposed to housing problems at a higher rate. As shown in Table 2-13, 68 percent of ELI households experience one or more housing problem and 67 percent are cost burdened. ELI renter-households experience housing problems at a higher rate than ELI owners; 70 percent of ELI renters are cost burdened compared to only 57.6 percent of owners.

**Table 2-13: Housing Problems and Cost Burden of ELI Households**

| | Owner | Renter | Total |
|---|---|---|---|
| With one or more Housing Problem | 57.6% | 72.5% | 68.1% |
| Cost Burdened | 57.6% | 70.0% | 67.3% |
| **Total Households** | **165** | **400** | **565** |
| Source: HUD CHAS Data (based on 2014-2018 ACS), 2021. | | | |

**Resources**

As discussed above, there are limited opportunities to address housing needs for ELI households in El Segundo. The Housing Choice Voucher (HCV) program represents a significant resource for addressing ELI housing needs. Specifically, HUD policy requires dedicating the majority of new vouchers to ELI households. For additional assistance, see the resources outlined above under *Residents Living Below the Poverty Level.*

**HOMELESS**

According to the 2020 Los Angeles County Homeless Services Authority (LAHSA) Homeless Count, the overall homeless population in Los Angeles County was 54,291 persons. The same study estimated that there were 47 homeless persons in El Segundo (Table 2-11). All 47 homeless persons in El Segundo were unsheltered. The City saw a significant increase in homeless persons since 2019, when there were only 18 unsheltered persons.

**Resources**

There are no emergency shelters or transitional housing facilities in the City of El Segundo. The closest shelters are located five miles away in Redondo Beach or in nearby Lawndale. However, the Salvation Army continues to provide the Police Department with nominal funding on an ad hoc basis to assist homeless persons that come through El Segundo. These funds are used to provide fast food coupons, and bus fare, which would allow transportation to overnight facilities. Since they are located outside of El Segundo, any resident homeless population would seek emergency or transitional shelter in an outside jurisdiction such as Redondo Beach, Lawndale, Long Beach, Carson or San Pedro. Table 2-14 lists some of the key service providers for homeless persons in the South Bay region capable of servicing the needs of homeless persons in El Segundo.

### Table 2-14: Inventory of Homeless Services and Facilities in the South Bay Region

| Organization | Services Provided |
|---|---|
| 1736 Family Crisis Center<br>(562) 388-7652<br>(310) 370-5902 | Provides beds for up to 15 women with children under 18 who are victims of domestic violence. Shelter for adolescents at risk of becoming homeless is also provided. Services include referrals to homeless shelters and outpatient counseling. Stays of up to 6 months are permitted. |
| Harbor Interfaith Shelter<br>663 W 10th Street<br>San Pedro, CA 90731<br>(310) 831-0589 | Provides 20 single-bedroom units for families and children for up to 90 days. Provides food services to the public. |
| People Assisting the Homeless (PATH)<br>(323) 644-2200 | Provides services including employment programs, outreach, eviction prevention, and interim housing. |
| The Good Seed<br>1230 Pine Avenue<br>Long Beach, CA 90813<br>(855) 968-8452 | Provides supportive housing, job training, comprehensive services, and individual planning to youths aged 18 to 25 experiencing homelessness. |
| St. Margaret's Center<br>10217 S. Inglewood Avenue<br>Lennox, CA 90304<br>(310) 672-2208 | Provides advocacy, counseling services, emergency food, immigration services and utility bill assistance to individuals in the South Bay area. |
| U.S. Veterans Initiative<br>733 Hindry Avenue<br>Inglewood, CA 90304<br>(310) 486-0025 | Provides services, including case management, employment assistance, job placement, counseling, and drug and alcohol free housing to veterans experiencing homelessness |

# 3. HOUSING CHARACTERISTICS

The Census defines a housing unit as a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other person in the building and which have direct access from the outside of the building or through a common hall. A community's housing stock is the compilation of all its housing units.

## A. HOUSING GROWTH

According to the Department of Finance (DOF) Housing Estimates, there are 7,463 dwelling units in El Segundo, an increase of 53 units (0.72 percent) since 2010. This growth rate is significantly lower than the housing growth rate for the County of Los Angeles (4.2 percent). A comparison of housing growth trends for El Segundo and neighboring cities is provided in Table 3-1. According to the DOF, during the same period, El Segundo's population is estimated to have grown by 123 persons (0.74 percent). There has been a slight increase in the average household size from 2.34 in 2010 to 2.35 in 2020.

**Table 3-1: Housing Growth Trends in El Segundo and Neighboring Communities**

| Jurisdiction | Housing Units | | Change 2010-2020 |
|---|---|---|---|
| | 2010 | 2020 | |
| **El Segundo** | **7,410** | **7,463** | **0.72%** |
| Hawthorne | 29,869 | 30,634 | 2.56% |
| Hermosa Beach | 10,162 | 10,092 | -0.69% |
| Inglewood | 38,429 | 38,688 | 0.67% |
| Manhattan Beach | 14,929 | 15,032 | 0.69% |
| Redondo Beach | 30,609 | 30,892 | 0.92% |
| City of Los Angeles | 1,413,995 | 1,517,755 | 7.34% |
| Los Angeles County | 3,445,076 | 3,590,574 | 4.22% |
| Sources: 2010 U.S. Census; DOF E-5 Population and Housing Estimates, January 2020. | | | |

## B. HOUSING TYPE AND TENURE

Error! Reference source not found. provides the breakdown of the City's housing stock in 2010 and 2020 by unit type. As shown, while single-family detached homes remain the predominant housing type. During the ten year period, there was a slight decrease in the proportion of single-family detached homes, while all other home types, single-family attached and multi-family housing, increased slightly proportionately. Due to the scarcity of vacant residential land in the City, most of the housing unit growth has been accommodated through redeveloping existing lower density residential, and particularly of smaller multi-family projects with 2-4 units. As indicated previously, in 2018, the proportion of owner-occupied households in El Segundo (44.3 percent) is significantly lower than that of renter-occupied households (55.7 percent). Table 3-3 and Table 3-4 indicate household sizes by tenure in El Segundo and elderly households by tenure and age.

### Table 3-2: El Segundo Comparative Housing Unit Mix in 2010-2020

| Housing Type | 2010 | | 2020 | |
|---|---|---|---|---|
| | No. of Units | % of Total | No. of Units | % of Total |
| Single-Family | | | | |
| Detached | 3,174 | 42.8% | 3,195 | 42.8% |
| Attached | 354 | 4.8% | 366 | 4.9% |
| Total | 3,528 | 47.6% | 3,561 | 47.7% |
| Multi-Family | | | | |
| 2-4 Units | 767 | 10.4% | 789 | 10.6% |
| 5+ Units | 3,100 | 41.8% | 3,098 | 41.5% |
| Total | 3,867 | 52.2% | 3,887 | 52.1% |
| Mobile Homes | 15 | 0.2% | 15 | 0.2% |
| **Total Housing Units** | **7,410** | **100.00%** | **7,463** | **100.0%** |
| ***Total Occupied*** | ***7,085*** | ***95.6%*** | ***7,111*** | ***95.3%*** |
| Owner-occupied* | 3,139 | 44.3% | 3,150 | 44.3% |
| Renter-occupied* | 3,946 | 55.7% | 3,961 | 55.7% |
| Vacancy Rate | 4.4% | | 4.7% | |

* = ACS 2010 and 2018 (5-Year Estimates).
Sources: DOF E-5 City/County Population and Housing Estimates, 2010-2020; ACS 2010 and 2018 (5-Year Estimates), Table DP04.

### Table 3-3: El Segundo Household Size by Tenure

| | 1- 4 Persons | | 5+ Persons | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| Owner | 2,703 | 43.0% | 226 | 58.0% | 2,929 | 43.9% |
| Renter | 3,580 | 57.0% | 164 | 42.0% | 3,744 | 56.1% |
| **Total*** | **6,283** | **94.2%** | **390** | **5.8%** | **6,673** | **100.0%** |

* = Percent of total households
Source: ACS 2012-2016 (5-Year Estimates), Table B25009.

### Table 3-4: El Segundo Elderly Householders by Tenure by Age

| Householder Age | Owners | Renters | Total |
|---|---|---|---|
| 65-74 years | 554 | 221 | 775 |
| 75 plus years | 323 | 179 | 502 |
| **Total** | **877** | **400** | **1,277** |

Source: ACS 2014-2018 (5-Year Estimates), Table S2502.

## C. AGE AND CONDITION OF HOUSING STOCK

Table 3-5 shows the age of the housing stock in El Segundo. In general, housing over 30 years old is usually in need of some major rehabilitation, such as a new roof, foundation work, plumbing, etc. The majority (about 88.8 percent) of El Segundo's housing units were constructed before 1990. This represents a significant proportion of the City's housing stock and indicates that preventative maintenance will be essential to ward off widespread housing deterioration. Some households, such as seniors who have owned their homes for many years and have relatively low house payments, may just be able to afford their monthly housing costs. For such households, the cost of major repairs or renovation may be impossible.

The Development Services Department maintains statistics pertaining to the condition of the City's housing stock. According to the Development Services Department, there are relatively few substandard dwellings in the City. In 2014-2021, 538 residential violations of the El Segundo Municipal Code property maintenance standards were reported. Most building violations are related to property maintenance issues, such as trash and debris or overgrown vegetation. Some violations related to the illegal conversion of garages and accessory structures to dwellings and single-family to multi-family unit conversions. The City estimates that only a very small portion of the City's housing stock (less than one percent) is in need of substantial rehabilitation. No housing units within the City are in need of replacement.

**Table 3-5: Age of Housing Stock**

| Structures Built | Number | Percent |
|---|---|---|
| 2014 or later | 15 | 0.2% |
| 2010 to 2013 | 66 | 0.9% |
| 2000 to 2009 | 364 | 5.2% |
| 1990 to 1999 | 335 | 4.8% |
| 1980 to 1989 | 933 | 13.4% |
| 1970 to 1979 | 902 | 12.9% |
| 1960 to 1969 | 1,039 | 14.9% |
| 1950 to 1959 | 1,909 | 27.4% |
| 1940 to 1949 | 744 | 10.7% |
| 1939 or earlier | 668 | 9.6% |
| Total | 6,975 | 100.0% |

Source: ACS 2014-2018 (5-Year Estimates), Table DP04.

## D. HOUSING COSTS

### 1. Housing Prices

In October 2020, the median sales price for single-family homes, condos, and new homes was $1,466,00. Since October 2019, the median home price in El Segundo increased by 67.4 percent.

Geographical comparisons of housing prices are shown in Table 3-6. The median sales prices of homes in El Segundo was above those in Hawthorne ($730,000), Inglewood ($720,000), and Redondo Beach ($1,076,000) and exceeded the Countywide median of $715,000. Median home prices remained below those in Hermosa Beach ($1,650,000) and far below those in Manhattan Beach ($2,850,000).

**Table 3-6: Median Home Sales Prices (Regional Comparison) October 2020**

| Jurisdiction | Single Family Homes, Condos, and New Homes | | |
|---|---|---|---|
| | # of Sales | Median Sale Price | % Change from 2019 |
| **El Segundo** | **14** | **$1,466,000** | **67.4%** |
| Hawthorne | 44 | $730,000 | -6.1% |
| Hermosa Beach | 21 | $1,650,000 | -1.7% |
| Inglewood | 43 | $720,000 | 20.0% |
| Manhattan Beach | 53 | $2,850,000 | 48.1% |
| Redondo Beach | 99 | $1,079,000 | -1.9% |
| Co. of Los Angeles | 7,602 | $715,000 | 15.3% |
| Source: Corelogic.com California Home Sale Activity by City, October 2020. | | | |

## 2. Housing Rental Rates

The median contract rent for El Segundo according to the 2014- 2018 ACS was $1,785 per month. This was lower than the median rent in Manhattan Beach ($2,499), Hermosa Beach ($2,143), and Redondo Beach ($1,987) but higher than the median in Hawthorne ($1,188), Inglewood ($1,267), the City of Los Angeles ($1,376), and Los Angeles County ($1,390) (Table 3-7).

The ACS also indicated that nearly 12 percent of the City's housing stock were renter-occupied single-family detached homes and 2.2 percent were renter-occupied were attached units (includes condominiums or townhouses). Renter-occupied multifamily units (2 or more units) accounted for 41.7 percent of the total housing stock (Table 3-8).

**Table 3-7: 2018 Median Housing Rental Rates**

| Jurisdiction | Median Gross Rent |
|---|---|
| **El Segundo** | $1,785 |
| Hawthorne | $1,188 |
| Hermosa Beach | $2,143 |
| Inglewood | $1,267 |
| Manhattan Beach | $2,499 |
| Redondo Beach | $1,987 |
| City of Los Angeles | $1,376 |
| County of Los Angeles | $1,390 |
| Source: ACS 2014-2018 (5-Year Estimates), Table DP04. | |

**Table 3-8: Tenure by Number of Units in Structure**

| Tenure by Units in Structure | Number | Percent |
|---|---|---|
| **Total Housing Units** | **6,639** | **---** |
| ***Owner-Occupied*** | ***2,938*** | ***44.3%*** |
| 1-unit detached | 2,276 | 34.3% |
| 1- unit attached | 209 | 3.2% |
| 2 units | 31 | 0.8% |
| 3 - 4 units | 25 | 0.4% |
| 5 or more units | 397 | 6.0% |
| Other Unit Types | 0 | 0.0% |
| ***Renter-Occupied*** | ***3,701*** | ***55.8%*** |
| 1-unit detached | 790 | 11.9% |
| 2-units attached | 143 | 2.2% |
| 2 units | 157 | 2.4% |
| 3 – 4 units | 669 | 10.1% |
| 5 or more units | 1,942 | 29.3% |
| Other Unit Types | 0 | 0.0% |
| Source: ACS 2014-2018 (5-Year Estimates), Table B25032. | | |

A review of Zillow, Craigslist, and Westside Rentals, a rental real estate service; indicates that rental rates in El Segundo are fairly comparable to those in immediate coastal neighboring cities. A summary of the rental rate ranges by unit size is shown below in Table 3-9, as compiled from a recent review of the sources listed above. In November 2020, 135 units were listed for rent in El Segundo. Rents for these housing units ranged from $1,100 for a one-bedroom unit to $10,263 for a four-bedroom unit. These rent ranges are based on the City's vacant rental units only and not all rental units in general. This rent survey was an attempt to approximate the cost of rental housing in the City. The median rent level in El Segundo ranged from $1,825 for a studio to $5,995 for a four-bedroom unit.

A sample of rental unit availability in Hermosa Beach and Manhattan Beach from Westside Rentals reveals that rental housing opportunities are more plentiful in comparison to El Segundo. However, El Segundo had a much narrower monthly rental rate range in comparison. Rent ranged from $1,300 for a studio apartment to $60,000 for a four-bedroom home in Hermosa Beach, while Manhattan Beach rental prices ranged from $1,500 for a one-bedroom apartment to $100,000 for a five-bedroom home.

**Table 3-9: Median Rents in El Segundo November 2020**

| Bedroom | Number Listed | Median Rent | Average Rent | Rent Range |
|---|---|---|---|---|
| Studio | 15 | $1,825 | $1,885 | $1,300-$2,580 |
| 1 | 32 | $2,000 | $1,999 | $1,100-$2,500 |
| 2 | 68 | $2,663 | $2,727 | $1,900-$4,500 |
| 3 | 13 | $3,300 | $3,589 | $2,900-$4,800 |
| 4+ | 7 | $5,995 | $6,220 | $4,200-$10,263 |
| Total | 135 | $2,550 | $2,725 | $1,100-$10,263 |

Note: Some rental units may have been advertised on more than one rental website.
Sources: Zillow, 11/6/2020 (50 listings); Craigslist, 11/6/2020 (28 listings); Westside Rentals, 11/6/2020 (57 listings).

## 3. Housing Costs and Affordability

The costs of home ownership and renting can be compared to a household's ability to pay for housing to determine the general affordability of a community's housing stock. HUD conducts annual household income surveys to determine the maximum affordable housing payments that could be made. In evaluating affordability, it should be noted that the maximum affordable price refers to the maximum amount that could be paid by households in the top of their respective income category. Households in the lower end of each category have less available income and therefore may experience some level of overpayment.

Table 3-10 shows the annual income for extremely low, very low, low, and moderate-income households by the size of the household and the maximum affordable housing payments based on the federal standard of 30 percent of household income. From these income and housing cost limits, the maximum affordable home prices and rents are determined. The table also shows the maximum amounts that households at different income levels can pay for housing each month (e.g., rent, mortgage and utilities) without exceeding the 30 percent housing cost-to-income ratio. The maximum affordable payments can be compared to current market prices for single-family homes, condominiums, and apartments to determine what types of housing opportunities a household can afford.

Comparison of these maximum affordable housing costs with the sales price data shown previously in Table 3-6, indicates that not even moderate income households (up to 120 percent AMI) would be able to afford single-family homes sold in El Segundo. It should be noted however that asking prices can often be higher than actual sales prices. At a maximum affordable purchase price of about $347,334, it is not likely that low income households (80 percent AMI) could afford even a small condominium unit. The high price of single-family housing indicates that the opportunities for home ownership in the City are limited for lower and moderate income groups. In addition, the down payment and closing costs may still represent a significant obstacle to home purchase.

Table 3-6 and Table 3-7 suggest that larger low-income households are able to afford lower priced one- and two-bedroom apartments in El Segundo. Extremely low and very low-income households (50 percent AMI) may experience limited affordability for rental units in El Segundo. Rental options

exist for moderate-income households (120 percent AMI) in El Segundo; however even moderate-income households may struggle to find appropriately priced rentals.

The Housing Element acknowledges that opportunities to accommodate housing affordable to lower income households in El Segundo are limited. This is based on surveys conducted to determine rental rates for apartment units in El Segundo (Table 3-7) as well as information gathered to determine for-sale housing costs (single-family homes, condominiums, and new homes). Similar to other cities in this region of the South Bay (Redondo Beach, Manhattan Beach, Hermosa Beach), El Segundo's housing rental and for-sale costs remain relatively high because of the desirability of the City's location.

The City is pursuing a number of initiatives to expand affordable housing opportunities. These include entering an Exclusive Negotiating Agreement (ENA) with Many Mansions to serve as the City's Affordable Housing Services Provider to develop and manage affordable units, services, and programs. Many Mansions will prepare an Affordable Housing Strategic Plan for City Council consideration in December 2021.

### Table 3-10: Housing Affordability Matrix (2020)

| Household | Annual Income[1] | Affordable Costs (All Costs) | Estimated Utility Allowance, Taxes & Insurance[2] | | Affordable Rent | Affordable Home Price |
|---|---|---|---|---|---|---|
| | | | Utilities | Taxes, Ins., HOA (Ownership) | | |
| **Extremely Low-Income (0-30% AMI)** | | | | | | |
| 1-Person | $23,700 | $593 | $151 | $207 | $442 | $61,790 |
| 2-Person | $27,050 | $676 | $166 | $237 | $510 | $72,096 |
| 3-Person | $30,450 | $761 | $190 | $266 | $571 | $80,244 |
| 4-Person | $33,800 | $845 | $223 | $296 | $622 | $86,069 |
| 5-Person | $36,550 | $914 | $264 | $320 | $650 | $86,953 |
| **Very Low Income (31-50% AMI)** | | | | | | |
| 1-Person | $39,450 | $986 | $151 | $345 | $836 | $129,241 |
| 2-Person | $45,050 | $1,126 | $166 | $394 | $960 | $149,182 |
| 3-Person | $50,700 | $1,268 | $190 | $444 | $1,077 | $166,966 |
| 4-Person | $56,300 | $1,408 | $223 | $493 | $1,185 | $182,427 |
| 5-Person | $60,850 | $1,521 | $264 | $532 | $1,257 | $191,020 |
| **Low Income (51-80% AMI)** | | | | | | |
| 1-Person | $63,100 | $1,578 | $151 | $552 | $1,427 | $230,524 |
| 2-Person | $72,100 | $1,803 | $166 | $631 | $1,637 | $265,026 |
| 3-Person | $81,100 | $2,028 | $190 | $710 | $1,837 | $297,157 |
| 4-Person | $90,100 | $2,253 | $223 | $788 | $2,030 | $327,179 |
| 5-Person | $97,350 | $2,434 | $264 | $852 | $2,170 | $347,334 |
| **Moderate Income (81-120% AMI)** | | | | | | |
| 1-Person | $64,900 | $1,623 | $151 | $568 | $1,472 | $238,233 |
| 2-Person | $74,200 | $1,855 | $166 | $649 | $1,689 | $274,020 |
| 3-Person | $83,500 | $2,088 | $190 | $731 | $1,897 | $307,435 |
| 4-Person | $92,750 | $2,319 | $223 | $812 | $2,096 | $338,527 |
| 5-Person | $100,150 | $2,504 | $264 | $876 | $2,240 | $359,325 |

Assumptions: 2020 income limits; 30% of household income spent on housing; LACDA utility allowance; 35% of monthly affordable cost for taxes and insurance; 10% down payment; and 3% interest rate for a 30-year fixed-rate mortgage loan. Taxes and insurance apply to owner costs only; renters do not usually pay taxes or insurance.

Sources: California Department of Housing and Community Development 2020 Income Limits; Los Angeles County Development Authority (LACDA), 2020 Utility Allowance Schedule; Veronica Tam & Associates, 2020.

## E. ASSISTED RENTAL HOUSING AT-RISK OF CONVERSION

California law requires the Housing Element to identify, analyze and propose programs to preserve housing units that are currently restricted to low-income housing use and will become unrestricted and possibly lost as low income housing. Based on review of Federal and State subsidized housing inventories, and confirmed by interviews with City staff, there are no "Assisted Housing Projects" at risk in El Segundo, as defined by Government Code § 65583 (A) (8).

The City owns Park Vista, a 97-unit senior housing project developed in 1984 using City funds. The project is operated and regulated by the non-profit El Segundo Senior Citizens Housing Corporation. The Articles of Incorporation for the corporation require units in Park Vista to be available only to low income seniors in perpetuity. The City has no plans to convert this affordable housing project to market-rate housing.

# 4. HOUSING CONSTRAINTS

Market conditions, environmental conditions, and governmental programs and regulations affect the provision of adequate and affordable housing. Housing Element law requires a city to examine potential and actual governmental and non-governmental constraints to the development of new housing and the maintenance of existing units for all income levels. Market, governmental, and environmental constraints to housing development in El Segundo are discussed below.

## A. MARKET CONSTRAINTS

### 1. Construction Costs

One cost factor associated with residential building is the cost of building materials, which can comprise a significant portion of the sales price of a home. An indicator of construction costs is Building Valuation Data compiled by the International Code Council (ICC). The unit costs compiled by the ICC include structural, electrical, plumbing, and mechanical work, in addition to interior finish and normal site preparation. The data is national and does not consider regional differences and does not include the price of the land upon which the building is built. The national average for development costs per square foot for apartments and single-family homes in August 2020 are as follows:

- Type I or II, Multi-Family: $130.52 to $168.94 per sq. ft.
- Type V Wood Frame, Multi-Family: $113.88 to $118.574 per sq. ft.
- Type I or II, One and Two Family Dwelling: $136.62 to $157.40 per sq. ft.
- Type V Wood Frame, One and Two Family Dwelling: $123.68 to $131.34 per sq. ft.

The unit costs for residential care facilities generally range between $143.75 and $199.81 per square foot. These costs are exclusive of the costs of land and soft costs, such as entitlements, financing, etc. The City's ability to mitigate high construction costs is limited without direct subsidies. Another factor related to construction cost is development density. With an increase in the number of units built in a project, overall costs generally decrease as builders can benefit from the economies of scale.

Variations in the quality of materials, type of amenities, labor costs and the quality of building materials could result in higher or lower construction costs for a new home. Pre-fabricated factory built housing, with variation on the quality of materials and amenities may also affect the final construction cost per square foot of a housing project. Furthermore, the unit volume - that is the number of units being built at one time - can change the cost of a housing project by varying the economies of scale. Generally, as the number of units under construction at one time increases, the overall costs decrease. With a greater number of units under construction, the builder is often able to benefit by making larger orders of construction materials and pay lower costs per material unit.

Density bonuses granted to a project can serve to reduce per unit building costs and thus help mitigate this constraint. The granting of a density bonus provides the builder with the opportunity to create more housing units and therefore more units for sale or lease than would otherwise be allowed without the bonus. Since greater units can potentially increase the economy of scale, the bonus units could potentially reduce the construction costs per unit. This type of cost reduction is of particular benefit

when density bonuses are used to provide affordable housing. Allowances for manufactured housing in residential zones also addresses housing cost constraints by avoiding the use of costly building materials and construction techniques that can drive up the costs of housing.

## 2. Land Costs

The price of raw land and any necessary improvements is a key component of the total cost of housing. The diminishing supply of land available for residential construction combined with a fairly steady demand for such development has served to keep the cost of land high and rising in southern California. In addition, the two factors which most influence land holding costs are the interest rate on acquisition and development loans, and government processing times for plans and permits. The time it takes to hold land for development increase the overall cost of the project. This cost increase is primarily due to the accruement of interest on the loan, the preparation of the site for construction and processing applications for entitlements and permits.

Due to its desirable location, land costs in El Segundo are high. High land costs in this area of the South Bay are a constraint to the construction of affordable housing. Residentially designated vacant land in El Segundo is virtually non-existent. A Zillow search showed two lots available for sale in neighboring communities (Inglewood and Playa del Rey) for approximately $1 million for 0.12 acre.

## 3. Availability of Mortgage and Rehabilitation Financing

The availability of financing affects a person's ability to purchase or improve a home. Interest rates are determined by national policies and economic conditions, and there is little that local government can do to affect these rates. Jurisdictions can, however, offer interest rate write-downs to extend home purchasing opportunities to a broader economic segment of the population. In addition, government-insured loan programs may be available to reduce mortgage down payment requirements.

Under the Home Mortgage Disclosure Act (HMDA), lending institutions are required to disclose information on the disposition of loan applications and the income, gender, and race of loan applicants.

As shown in Table 4-1, a total of 621 households applied for loans, either conventional or government-backed, to purchase homes in El Segundo in 2017. Approval rates were higher for government-backed purchase loans with an approval rate of 77 percent, in comparison to only 45 percent of conventional loan applications being approved. However, 36 percent of conventional purchase loans were either withdrawn or closed for incompleteness. The approval rate was 67 percent for refinance loans and 71 percent for home improvement loans. Given the high rates of approval for home purchase, refinance, and improvement loans, financing was generally available to El Segundo residents.

**Table 4-1: Disposition of Home Purchase and Improvement Loan Applications**

| Loan Type | Total Applications | % Originated | % Approved Not Accepted | % Denied | % Other |
|---|---|---|---|---|---|
| Government Backed Purchase | 213 | 74.65% | 2.35% | 7.04% | 15.96% |
| Conventional Purchase | 11 | 45.45% | 0.00% | 18.18% | 36.36% |
| Refinance | 48 | 58.33% | 8.33% | 14.58% | 18.75% |
| Home Improvement | 349 | 67.05% | 4.30% | 11.75% | 16.91% |
| **Total** | **621** | **68.60%** | **3.86%** | **10.47%** | **17.07%** |

Note: Percent Other includes loan applications that were either withdrawn or closed for incompleteness.
Source: www.LendingPatterns.com, 2017.

### 4. Timing and Density

Housing growth in the City has been limited due to the lack of vacant residentially designated land. Multi-family land was developed primarily prior to the incorporation of the City under County standards and are at or above the City's allowable densities. The majority of the recent residential construction activities have been the recycling of single-family homes and construction of Accessory Dwelling Units (ADU). Pending projects (see Housing Resources section) tend to reach the high end of the density range.

Time lapse between project entitlement and building permit issuance can be a constraint to housing development. Typically, this time lapse can be about three to six months and primary a function of developer's ability to respond quickly to needed corrections for construction documents. However, the City allows developers to submit building permit applications for projects -at their own risk- concurrently with the entitlements. This can shorten the time lapse to as little as 2-4 weeks, with building permits issued shortly after entitlement approval. Building permit can be applied online through the City's website.

## B. ENVIRONMENTAL CONSTRAINTS

As a City with a variety of both large and mid-size industrial, commercial and manufacturing uses, numerous environmental related factors are present which pose constraints to residential development within El Segundo. Historically, less than 25 percent of the land within the City has been used for residential development. The remaining land has been used primarily for a mixture of light and heavy industrial purposes, including oil refineries, aircraft and space vehicle manufacturing, a United States Air Force Base, chemical production, research and development uses, retail, large scale corporate offices, restaurants, and hotels. The development invested in these properties is substantial, making conversion to residential uses economically infeasible. When sufficient amounts of these properties have become available for redevelopment, the City has permitted residential uses in a mixed-use environment west of Pacific Coast Highway, provided that infrastructure issues could be successfully addressed, and residential uses could be buffered from non-residential uses.

In comparison to other areas in Los Angeles County, the City of El Segundo is heavily affected by traffic, air quality, odor and safety issues related to flight operations at Los Angeles International

Airport. Those residential areas located near the northern boundaries of the City are particularly subject to these impacts. The Circulation, Air Quality, and Noise Elements of the City's General Plan all contain policies that seek to minimize the negative effects upon these residential areas, and help ensure the protection of area residents.

Many of the industries operating in El Segundo use hazardous materials in their operations and have sites that are contaminated by toxins. Since heavy industry is a significant land use in the City, hazardous materials use and management is a serious consideration. Heavy manufacturing comprises about 30 percent of the City's area. Additionally, heavy industrial uses are located immediately adjacent to the City's western boundary, which include the Hyperion Treatment Plant and Scattergood Power Generation Station. Housing opportunities are limited near or adjacent to these heavy industrial uses. Although industries in El Segundo generate a diverse mix of hazardous waste, heavy industrial uses within the City must conform to the policies of the Hazardous Materials Element of the General Plan.

Despite the environmental constraints discussed above, they have had no significant impact on the City's ability to construct and maintain housing in those areas and zones in the City where residential development is currently permitted, including non-residential zones. Further, the ability to construct and maintain housing at maximum densities has not been affected by environmental constraints. Established residential areas and several non-residentially zoned areas in the City are buffered from industrial uses and, as previously noted, the City has implemented policies in its General Plan that address and minimize the negative effects these uses may have on residential areas of the City. Finally, none of the parcels included in the Vacant and Underutilized Parcel Inventory of this element (see Appendix) are significantly constrained environmentally. All of the listed parcels are supported by existing infrastructure and can be developed with units based on permitted densities. Furthermore, there are no wetlands, flood plains, earthquake zones, or other natural hazards areas in the City that would constrain residential development in the City.

## C. GOVERNMENTAL CONSTRAINTS

Housing affordability is affected by factors in both the private and public sectors. In the public sector, additional city government requirements can contribute to the reduction of the affordability and availability of new housing although the intent of local legislative action is to maintain or improve the quality of life within a community. Necessary land use controls, site improvement requirements, building codes, fees, and other local programs intended to improve the urban environment can add cost and perhaps time delays to the construction of new housing projects.

### 1. Compliance with Transparency in Development Regulations

The El Segundo City website provides a full array of information regarding development regulations and procedures under the Development Services Department webpages:

- Apply for a building permit
- Planning application
- Zoning Code
- Plan check
- Building safety
- Report a code violation

- Planning
- Record requests
- Maps

Specifically, the City offers online building permit application.

## 2. Land Use Controls

The Land Use Element of El Segundo General Plan sets forth the City's policies for regulation of land uses within the City's jurisdiction. These policies, together with zoning regulations for implementing the General Plan, establish the location, amount and distribution of land to be allocated for various land uses within the City. The El Segundo General Plan and El Segundo Municipal Code ("ESMC") provide for a range of residential land use development densities as follows:

a) Single-Family Residential (R-1) (8 du/ac) – a maximum of one dwelling unit per parcel with a minimum parcel size of 5,000 square feet (ESMC §15-4A-2; Land Use Element Objective LU 3-1, Policy LU3-1.1, Policy LU3-1.2).

   An accessory dwelling unit (ADU) or junior accessory dwelling unit (JADU) is permitted by right throughout any zone where residential uses are permitted. In no case may an R-1 property proposed to be used for a second dwelling unit consist of more than one lot. Attached ADUs must not be 50 percent or more of the total floor area of the combined dwellings. Detached ADUs must not exceed 1,200 square feet (ESMC §15-4E-3).

b) Two-Family Residential (R-2) (12 du/acre) – up to 2 units per lot with a minimum of 7,000 square feet required per lot (ESMC §15-4B-2 and Land Use Element Objective LU 3-2 and Housing Element Policy 3.2).

   Third and/or fourth ADUs are permitted in the R-2 Zone. One ADU or 25 percent of the existing multi-family dwelling units, whichever is greater, is permitted. Two detached ADUs are allowed per lot with an existing multi-family dwelling. Attached ADUs must not be 50 percent or more of the total floor area of the combined dwellings. Detached ADUs must not exceed 1,200 square feet (ESMC §15-4E-3; Housing Element Policies 3.7 and 4.1).

c) Multi-Family Residential (R-3) (18 du/acre, 27 du/acre) – Multi-family residential with up to 27 dwelling units per acre. On property of 15,000 square feet or less, one unit for every 1,613 square feet is allowed. A fraction of a lot greater than 1,075 square feet will allow an additional unit (ESMC §15-4C-5).

   On property greater than 15,000 square feet in size, one unit for every 2,420 square feet of lot area is allowed. A fraction of a lot greater than 1,613 square feet will allow an additional unit (ESMC §15-4C-5).

d) Neighborhood Commercial (C-2) – residential uses as an accessory use on the floor above street level only with a maximum density of 10 units per acre (ESMC §15-5B-3 and Housing Element Policy 4.1).

e) Downtown Commercial (C-RS) – residential uses as an accessory use on the floor above street level only, above a ground floor use, with a maximum density of 10 dwelling units per acre (ESMC §15 5A-3 and Housing Element Policy 4.1).

f) Downtown Specific Plan (DSP) – The DSP regulates 25.8 acres within the City's downtown area. The majority of the lots within the DSP are 25-feet wide by 140-feet deep and 3,500 square feet in area. The DSP does not permit the development of any new residential units except owner and/or tenant occupied units at the ratio of one per legal building site or business establishment (whichever is greater) up to a density of 10 dwelling units per acre (above ground floor commercial use). (Housing Element Policy 4.1).

g) Medium Density Residential (MDR) – In addition to the residential categories described above, the MDR zone is used as a type of "floating zone" which can be activated within certain areas of the Smoky Hollow Specific Plan and used in place of the base zone regulations. If the MDR zone is activated, R-3 zoning standards will apply (ESMC §15 7A-2, §15 7A-3 and Ordinance No. 1573).

The Land Use Element of the General Plan documents the residential build out in the City at 7,674 residential units. By 2020, it was estimated that there were 7,463 residential units in the City, 211 units less than the projected build-out. Based on just residentially designated land, the City does not offer adequate capacity for the Regional Housing Needs Assessment (RHNA) for the 6th cycle Housing Element.

## SMOKY HOLLOW SPECIFIC PLAN AREA

The Smokey Hollow Specific Plan was updated in 2018. Smoky Hollow is a light industrial/manufacturing region located in central El Segundo, generally bounded by Standard Street to the west, El Segundo Boulevard to the south, Pacific Coast Highway to the east, and Grand Avenue to the north. The project area encompasses approximately 94.3 acres. Residential units other than accessory caretaker units are not permitted in the Smoky Hollow Specific Plan area. The Plan includes a Medium Density Residential (MDR) Overlay Zone. The MDR Overlay Zone is considered a "floating zone" that can be activated once a need is identified. The MDR Overlay Zone may be used in place of current Smoky Hollow Specific Plan zoning designations.

## DOWNTOWN SPECIFIC PLAN

In 2000, the City adopted a Downtown Specific Plan in order to enhance the Downtown environment. The Plan area is a small, distinct district approximately two blocks by five blocks in size and is currently developed with commercial, residential and public uses. Future development is anticipated to be similar in nature. The current zoning allows for a maximum of 276 dwelling units within the Plan area. This equates to one unit per 25 foot wide lot (12.5 dwelling units per acre), not including the Civic Center site. As of September 2021, there are approximately 83 residential units in the Plan area. The City's residential sites inventory includes a number of properties in the Downtown Specific Plan area with a total capacity of 26 units.

## DENSITY BONUS

The City complies with Government Code §56915 regarding density bonus requirements. This Housing Element includes a program to amend the ESMC to comply with the State Density Bonus law.

## 3. Residential Development Standards

The City's residential development standards are within and typical of the range of standards of other nearby cities. The density, setback, and other standards regulating residential development within the City are in concert with those being used by other surrounding municipalities. The ESMC limits all residential building heights to 32 feet and two stories. Residential development standards for the City of El Segundo are as summarized below in Table 4-2.

### Table 4-2: El Segundo Residential Development Standards

| Zone | Min. Lot Area | Min. Front Setback | Min. Rear Setback | Min. Side Setbacks | Max. Height | Parking Requirements | Max. Lot Coverage |
|---|---|---|---|---|---|---|---|
| R-1 | 5,000 s.f. | 22 ft./30 ft. total when combined with rear yard | 5 ft. | 3 - 6 ft. 10 % Modulation Required | 32 ft./2 stories for pitched roofs 26 ft./2 stories for flat roofs | 2 spaces/unit & 1 additional space for du >3,500 sf[3] | 40 - 60%[1] |
| R-2 | 7,000 s.f. | 20 ft./30 ft. when combined with rear yard | 5 ft. | 3 - 5 ft. 10% Modulation Required | 32 ft./2 stories for pitched roofs 26 ft./2 stories for flat roofs | 2 spaces/unit & 1 additional space for du >3,500 sf[3] | 50% |
| R-3 | 7,000 s.f. | 15 ft. | 10 ft. | 3 - 5 ft. 10% | 32 ft./2 stories for pitched roofs 26 ft./2 stories for flat roofs | 2 spaces/unit plus 1 visitor space/3 units | 53% |
| MDR (SHSP)[3] | 7,000 s.f. | 15 ft.[4] | 10 ft. | 3-5 ft. 10%[4] | 32 ft./2 stories for pitched roofs 26 ft./2 stories for flat roofs | 2 spaces/unit plus 1 visitor space/3 units | 53% |

Notes:

1. Lot coverage permitted varies according to specific conditions on the site.
2. The ESMC requires covered parking for each housing type as follows:
   a. Single-family dwelling – fully enclosed two-car garage for each home;
   b. Two-family dwelling – fully enclosed two-car garage per unit;
   c. Multiple-family dwelling – enclosed in a carport (excluding guest parking spaces which are allowed to be uncovered). Multiple-family dwellings include apartments, condominiums and townhouses.
3. Designated as "floating zone."
4. The setback along Grand Avenue shall be 30 ft. minimum for properties east of Kansas Street, whether it is for a front or side yard.

Source: City of El Segundo Municipal Code.

The City's residential development standards (building setbacks, height requirements, parking and lost coverage standards) as shown in Table 4-2 above, do not act as a constraint on the development of housing in the City. Furthermore, they allow the achievement of the maximum allowable density permitted by the respective zoning designation, including up to 27 units per acre in the R-3 Zone.

The ESMC allows the Planning Commission to approve a 20 percent reduction in the number of required parking spaces for any use in any zone in the City. The City used to allow tandem parking spaces for properties in its R-3 Zones; however, the City eliminated the allowance for tandem spaces in the R-3 Zone after observing over time that these tandem spaces were mostly utilized by residents for purposes other than parking vehicles. Residents made use of tandem parking spaces for storage or for habitable uses, which resulted in numerous illegal conversions and nuisance complaints.

While tandem parking may not be appropriate citywide, allowing tandem parking for affordable housing projects could serve to enhance the financial feasibility of affordable housing in El Segundo. The City will consider reducing certain development standards (such as parking requirements) for income-restricted residential units. Examples of reduced parking requirements for residential uses may include allowing tandem parking, allowing compact parking spaces, and reducing the number of enclosed parking spaces.

Housing development potential in El Segundo based on existing zoning is limited. As part of this Housing Element update, the City is proposing to create a Housing Overlay (O) and a Mixed Use Overlay (MU-O) that allow up to 40 units per acre and 50 units per acre, respectively. These new zoning designations offer new opportunity in the City and require new development standards for implementation. This Housing Element includes a program action to ensure appropriate development standards (parking, height, setbacks, lot coverage, etc.) are feasible to allow the achievement of maximum density on site.

## 4. Provisions for a Variety of Housing Types

Housing element law requires jurisdictions to identify available sites in appropriate zoning districts with development standards that encourage the development of a variety of housing types for all income levels, including multi-family rental housing, factory-built housing, mobile homes, emergency shelters, and transitional housing.

In addition to single-family dwellings, the City offers a variety of housing opportunities that are available to residents of all economic segments, as well as some of the more vulnerable members of the community, including lower income households, seniors, and the homeless. These housing opportunities include multi-family dwellings, mobile homes, second units, and a number of special needs housing options. The following discussion outlines how the City provides for these types of housing:

### Table 4-3 El Segundo Housing Types Permitted by Zoning District

| Residential Use | Zone District | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | R-1 | R-2 | R-3 | MDR | DSP | C-2 | CRS | SH-W | SH-E |
| Single-Family Detached | P | P | P | P | -- | -- | -- | -- | -- |
| Single-Family Attached | P | P | P | P | P | P | P | -- | -- |
| 2-4 Dwelling Units | -- | -- | P | P | -- | P[1] | P[1] | -- | -- |
| 5 + Dwelling Units | -- | -- | P | P | -- | P[1] | P[1] | -- | -- |
| Manufactured Homes | P | P | P | P | -- | -- | -- | -- | -- |
| Mobile-Homes | CUP | CUP | -- | -- | -- | -- | -- | -- | -- |
| 2nd Dwelling Unit | P | P | -- | -- | -- | -- | -- | -- | -- |
| Caretaker Unit | -- | -- | -- | -- | -- | -- | -- | P | P |
| Residential Care < 6[2] | P | P | P | P | -- | -- | -- | -- | -- |
| Senior Citizen Housing | -- | -- | CUP | CUP | -- | -- | -- | -- | -- |
| Live/ Work | -- | -- | -- | P | -- | -- | -- | -- | -- |

P=Permitted by Right in Zoning District; CUP=Conditional Use Permit Required; -- = Not Permitted

Notes:

1. Maximum number of units is dependent upon the density allowed in each zone, based upon General Plan density and size of parcel.
2. The City permits licensed residential care facilities with fewer than six persons by right (California Welfare and Institutions Code Sections 5115 and 5116) in all residential zones in the City. Furthermore, residential care and group homes in residential zones are not restricted by distance requirements.

Source: City of El Segundo Municipal Code.

**Multi-Family Rental Housing:** Multiple-family housing is the predominant dwelling type in the City. The Department of Finance (DOF) estimated that in 52 percent of the total housing units were multi-family in 2020. The total number of multi-family housing units has remained stable over the previous decade as single and two family homes in the R-3 Zone, are replaced with new multiple-family units in two-story apartment buildings. The City's zoning regulations provides for multiple-family units in the R-3, C-2, and CRS zones as well as the MDR zone of the Smoky Hollow Specific Plan (SHSP) area.

**Mobile Homes/Manufactured Housing:** The City provides for mobile or manufactured homes within its residential zoning districts if they meet specific standards. Both mobile homes and manufactured housing units must be certified according to the National Manufactured Housing Construction and Safety Standards Act of 1974 and cannot have been altered in violation of applicable law. The units must also be installed on a permanent foundation in compliance with all applicable building regulations and the Health and Safety Code.

**Second, Third and Fourth Units:** The City's zoning regulations provide for ADUs or JADUs in any zone where residential uses are permitted. ADUs and JADUs are restricted to the following densities:

- One ADU or JADU per lot within a proposed or existing single-family dwelling or existing accessory structure;
- One detached or attached to an accessory structure ADU that may be combined with one JADU per lot with a proposed or existing single-family dwelling;

- Multiple ADUs within the portions of existing multi-family dwelling structures that are not used as livable space, provided each unit complies with State building standards for dwellings;

- One ADU or 25 percent of the existing multi-family dwelling units, whichever is greater, within an existing multi-family dwelling;

- Two detached ADUs per lot with an existing multi-family dwelling.

**Residential Care Facilities:** A community residential care facility is defined as a facility licensed for 24 hour care pursuant to the Community Care Facilities Act. In accordance with California law, the ESMC permits licensed residential care facilities with fewer than six persons by right in all residential zones. Furthermore, residential care facilities and group homes are not restricted by distance requirements in these zones. However, the ESMC does not explicitly address the provision of residential care facilities for seven or more persons. This Housing Element includes a program to address large residential care facilities.

**Emergency Shelters:** California law requires that local jurisdictions strengthen provisions for addressing the housing needs of the homeless, including the identification of a zone or zones where emergency shelters are allowed as a permitted use without discretionary approval. Health and Safety Code § 50801(e) defines emergency shelters as housing with minimal supportive services for homeless persons that is limited to occupancy of six months or fewer by a homeless person. There are currently no emergency shelters for the homeless within the City.

The City amended the Municipal Code to permit emergency shelters in the Light Manufacturing (M1) zones through Ordinance 1497. The M1 zone is compatible with emergency shelter uses and is located in close proximity to personal services (e.g., shopping centers, banks, etc.) and transit opportunities (Green Line stations, bus routes, and transit stops). The typical industrial uses found in this zone are "clean" industrial uses such as research and development firms, engineering and architectural design firms, and office uses with nearby restaurants and other such amenities located close by. Overall, 90 parcels totaling 257acres are zoned M1 and adequate to accommodate the City's unsheltered homeless population of 47 persons as of 2020 Point-in-Time Count by the Los Angeles Homeless Services Authority. However, amendments to the ESMC are needed to remove the separation requirements pertaining to uses other than another shelter. State law allows local jurisdictions to establish a 300-foot distance requirement from another shelter only.

Furthermore, AB 139 requires the City to base the needs for emergency shelter on the:

- Most recent homeless point-in-time count conducted before the start of the planning period;
- Number of beds available on a year-round and seasonal basis;
- Number of shelter beds that go unused on an average monthly basis within a one-year period; and
- percentage of those in emergency shelters that move to permanent housing solutions.

AB 139 also requires that parking for emergency shelters be based on staffing level only. The City will amend the ESMC to comply with State law requirements on emergency shelters.

**Low Barrier Navigation Center (LBNC):** AB 101 requires jurisdictions to permit Low Barrier Navigation Centers that meet specified requirements by-right in mixed use zones and other nonresidential zones permitting multifamily residential development. The bill also imposes a timeline for cities to act on an application for the development of a Low Barrier Navigation Center. The provisions of AB 101 are effective until 2026. The City will amend the ESMC to address the provision of LBNC.

**Transitional Housing:** "Transitional housing" means buildings configured as rental housing developments, but operated under program requirements that require the termination of assistance and recirculating of the assisted unit to another eligible program recipient at a predetermined future point in time that shall be no less than six months from the beginning of the assistance (Government Code § 65582 (h)). There are currently no transitional housing facilities within the City.

Government Code § 65583, transitional housing constitutes a residential use and therefore local governments cannot treat it differently from other types of residential uses (e.g., requiring a use permit when other residential uses of similar function do not require a use permit). This Housing Element includes a program to amend the ESMC to address the provision of transitional housing.

**Supportive Housing:** "Supportive housing" means housing with no limit on length of stay, that is occupied by the target population, and that is linked to an onsite or offsite service that assists the supportive housing resident in retaining the housing, improving his or her health status, and maximizing his or her ability to live and, when possible, work in the community (Government Code Section 65582 (f)).

"Target population" means persons with low incomes who have one or more disabilities, including mental illness, HIV or AIDS, substance abuse, or other chronic health condition, or individuals eligible for services provided pursuant to the Lanterman Developmental Disabilities Services Act (Welfare and Institutions Code § 4500, *et seq.*) and may include, among other populations, adults, emancipated minors, families with children, elderly persons, young adults aging out of the foster care system, individuals exiting from institutional settings, veterans, and homeless people (Government Code Section 65582 (g)).

Furthermore, additional amendments to the City's Zoning Code are required to address AB 2162, which streamlines affordable housing developments that include 100 percent affordable developments that include a percentage of supportive housing units, either 25 percent or 12 units whichever is greater, on sites that are zoned for residential use. Such supportive housing, if located within ½ mile from transit, is not subject to minimum parking requirements. This Housing Element includes a program to address the provision of supportive housing.

**Single Room Occupancy (SRO) Housing:** The ESMC does not contain specific provisions for SRO units. The City is currently in the process of amending the ESMC to conditionally permit SRO units in the Multi-family Residential (R-3) Zone. The City would also establish appropriate development standards in the ESMC for SRO units.

**Farmworker/Employee Housing:** Under California Health and Safety Code § 17021.6, farmworker housing up to 12 units or 36 beds must be considered an agricultural use and permitted in any zoning district that permits agricultural uses. The ESMC was amended in 2014 to remove agriculture as a permitted use in the Open-Space (O-S) Zone.

Additionally, California Health and Safety Code § 17021.5 covers the provision of employee housing. Specifically, employee housing for six or fewer employees is to be treated as a single-family structure and permitted in the same manner as other dwellings of the same type in the same zone. The City amended the ESMC to comply with State law regarding employee housing during the 2013-2021 Housing Element cycle.

## HOUSING FOR PERSONS WITH DISABILITIES

**Land Use Controls:** Welfare and Institutions Code § 5115 and 5116 declare that mentally and physically disabled persons are entitled to live in normal residential surroundings. The use of property for the care of six or fewer persons with disabilities is a residential use for the purposes of zoning. A State-authorized or certified family care home, foster home, or group home serving six or fewer persons with disabilities or dependent and neglected children on a 24-hour-a-day basis is considered a residential use that is permitted in all residential zones. The City has not established any distance requirement between any facilities. This Housing Element includes a program to amend the ESMC to address the provision of residential care facilities for seven or more persons.

**Definition of Family:** The ESMC defines "family" as "an individual or two (2) or more persons living together as a single household in a dwelling unit." This definition does not constrain the development of housing for persons with special needs.

**Building Codes:** The City enforces Title 24 of the California Code of Regulations that regulates the access and adaptability of buildings to accommodate persons with disabilities. Furthermore, Government Code § 12955.1 requires that 10 percent of the total dwelling units in multi-family buildings without elevators consisting of three or more rental units or four or more condominium units are subject to the following building standards for persons with disabilities:

- The primary entry to the dwelling unit must be on an accessible route unless exempted by site impracticality test;
- At least one powder room or bathroom must be located on the primary entry level served by an accessible route;
- All rooms or spaces located on the primary entry level must be served by an accessible route. Rooms and spaces located on the primary entry level and subject to this chapter may include, without limitation, kitchens, powder rooms, bathrooms, living rooms, bedrooms, or hallways;
- Common use areas must be accessible; and
- If common tenant parking is provided, accessible parking is required.

The City has not adopted unique restrictions that would constrain the development of housing for persons with disabilities. Compliance with provisions of the Code of Regulations, California Building Code, and federal Americans with Disabilities Act (ADA) is assessed and enforced by the Building Division of the Community Development Department as a part of the building permit submittal.

**Reasonable Accommodation:** Both the Federal Fair Housing Act and the California Fair Employment and Housing Act direct local governments to make reasonable accommodations (i.e., modifications or exceptions) in their zoning regulations when such accommodations may be necessary to afford disabled persons an equal opportunity to use and enjoy a dwelling. For example, it may be reasonable to accommodate requests from persons with disabilities to waive a setback requirement or

other standard of the zoning regulations to ensure that homes are accessible for the mobility impaired. Whether a particular modification is reasonable depends on the circumstances.

In 2011, the City adopted Reasonable Access Accommodation regulations to provide an administrative review process for reasonable accommodation requests. In addition, the ESMC contains an administrative adjustment process to request deviations from the standards and number of parking spaces. One of the primary reasons for this request is to address reasonable accommodation needs. Furthermore, the ESMC also provides for an administrative process to grant adjustments for minor exceptions for nonconforming uses and structures. The City has utilized this section of the ESMC to issue an approval for a house to exceed the allowable lot coverage with an addition that involved a tower to house an elevator shaft in a single-family home for a disabled resident.

The reasonable accommodation procedures are located in the Zoning Code, which is Title 15 of the El Segundo Municipal Code (ESMC). In summary, the reasonable accommodation process is administrative in nature. It involves submittal of a written request, review by the Development Services Director, and issuance of an approval letter. The ESMC was recently amended by Ordinance 1629, which has not yet been codified. Ordinance 1629 reorganized certain chapters in the Zoning Code, including those addressing reasonable accommodation procedures. In the amended ESMC, this topic is addressed in Chapter 15-22 (Administrative Determinations, Administrative Use Permits and Adjustments), specifically section 15-22-4(A)(7), which permits Adjustments to any development standard to make reasonable accommodations for disabled persons. The process/procedures for reviewing and approving Adjustment requests for reasonable accommodations can be found in the amended ESMC in Chapter 15-23 (Director Discretionary Decisions). However, Ordinance 1629 inadvertently removed reasonable accommodation from the fast-tracking processing. This is an oversight and this Housing Element includes a zoning text amendment to expressly indicate that reasonable accommodation is processed with an Administrative Adjustment.

## 5. Development and Planning Fees

The City collects various fees from developers to cover the costs of processing permits and providing necessary services and infrastructure. Certain of these fees are typically collected upon filing of an application for development projects that require discretionary approval. City development and impact fees are posted on the City's website on the Planning Division webpage at https://www.elsegundo.org/government/departments/development-services/planning-division.

Development in Single Family Residential (R-1), Two Family Residential (R-2) and Multi-Family Residential (R-3) Zones does not require entitlements except for the subdivision of land, residential condominiums, and site plan review for developments involving more than 10 residential units. Table 4-4 provides a listing of development entitlement fees the City charges for residential development. Entitlements and fees for those entitlements, other than for subdivisions of land, condominiums, and site plan review are limited primarily in the Medium Density Residential (MDR) Zone. In addition, there may be other fees assessed depending upon the circumstances of the development. For example, the builder may need to pay an encroachment fee for sidewalks, curbs, and gutters if their installation is needed. The fees listed in Table 4-4 are those entitlement fees that are typically charged for residential development.

All residential projects involving 10 or fewer units go through ministerial review and involve only issuance of building (and related grading permits). While the fee for Conditional Use Permits is the

largest planning fee, no residential development is required to go through either Administrative Use Permits or Conditional Use Permits. Therefore these processes or fees are not constraints to residential development.

**Table 4-4: El Segundo Planning Fees**

| Fee Type | Fee |
|---|---|
| Administrative Use Permit | $3,235 |
| Lot Line Adjustment | $1,359 |
| Lot Merger | $1,359 |
| Conditional Use Permit | $11,438 |
| Tentative Parcel Map Review | $5,212 |
| Tentative Tract Map Review[1] | $5,212 |
| Variance Review | $7,453 |
| Zone Text Amendment/Zone Change | Deposit |
| Site Plan Review | Deposit |

Note:
1. Plus $269 per lot for every lot over 4.

Source: City of El Segundo Planning Division, 2020.

## 6. Development Impact Fees

Development impact fees are also collected for development projects. In accordance with California law, these are collected at the time the City issues certificates of occupancy. For example, for any new construction greater than 500 square feet there is a school fee collected. However, there are no "Quimby" (parkland dedication), art or childcare fees required for any new development projects. Impact fees charged by the City (fire, police, library and traffic) are required for new and expanded development and the fees must be paid before the City issues a certificate of occupancy. These fees are shown in Table 4-5. Solid waste collection is currently without cost to single-family residences; there is a fee for all other uses. Residents are charged a utility users tax (electric, gas, phone and water).

**Table 4-5: El Segundo Residential Development Impact Fees**

| Land Use | Police | Library | Fire | Parks | Traffic Mitigation | Total* |
|---|---|---|---|---|---|---|
| SFR, Two-Family | $986 | $1,233 | $431 | $1,662 | $116/unit | $4,312 |
| Multi-Family | $1,314 | $1,640 | $572 | $2,209 | $69/unit | $5,735 |
| Caretaker | $852 | $1,064 | $371 | $1,433 | -- | $3,720 |

* Excludes traffic mitigation fees.

Notes:
1. Residential Development fees are calculated on a per dwelling basis.
2. Fee schedule is effective January 1, 2015.

Source: City of El Segundo Planning Division, 2021.

Generally, overall fees (including both planning fees and development impact fees) total approximately $4,312 per single-family unit and $5,735 per multi-family unit. The combined costs of all fees for

residential projects are low because the City requires only minimal processing of applications for new single and multi-family residences. In addition, there are no special discretionary entitlement requirements for these types of projects (such as the need to obtain a conditional use permit). New residential projects submitted to the City for review and approval are typically "Code-compliant" projects thus eliminating the need and costs to obtain a variance from site development standards.

## 7. Building Codes and Enforcement

In addition to land use controls, local building codes affect the cost and quality of construction of new housing units. El Segundo implements the provisions of the 2019 California Building Code (after January 1, 2023, it will enforce the 2022 California Building Code as amended by the ESMC) which establishes minimum construction standards and which contains accessibility standards for the disabled for multi-family housing. These minimum standards cannot be revised to be less stringent without sacrificing basic safety considerations and amenities. No major reductions in construction costs are anticipated through revisions to local building codes. The City has adopted several local amendments to the California Building Code but all of the amendments are related to health and safety improvements for the City's commercial uses. No amendments for residential uses were adopted. Working within the framework of the existing codes, however, the City will continue to implement planning and development techniques that lower costs and facilitate new construction where possible. Enforcement of all City codes is handled by the appropriate departments and is typically coordinated by the Development Services Department. The Planning Division enforces zoning regulations.

## 8. Local Processing and Permit Procedures

Generally, local processing times are quite comparable to those experienced in neighboring communities. Currently it takes approximately four to six weeks to review and process non-discretionary plans. Minor permits are issued in a much shorter time frame including "over-the-counter" approval and permit issuance for small interior and exterior alterations and the installation of household utilities such as water heaters. Additionally, the City allows separate grading and foundation permits before it issues building permits. City Council approval is required for zone changes, general plan amendments, specific plan amendments, zone text amendments and development agreements. Presented below are descriptions of processing procedures for typical single- and multi-family projects, including the type of permit, level of review, decision-making criteria and design review requirements.

**Ministerial level.** All residential projects involving 10 or fewer units go through ministerial review and involve only issuance of building (and related grading permits), except for those projects involving discretionary applications/permits discussed below. Generally, local processing times for building and grading permits are quite comparable to those experienced in neighboring communities. Currently it takes approximately 30 days to review and process non- discretionary plans. Minor permits are issued in a much shorter time frame including "over-the-counter" approval and permit issuance for small interior and exterior alterations and the installation of household utilities such as water heaters. Additionally, the City allows separate grading and foundation permits before it issues building permits.

Planning Commission review and approval is required for discretionary permits such as Site Plan Review and Subdivisions.

The City requires a Site Plan Review permit/application for Single or Multi-Family residential projects involving more than 10 residential units (ESMC Chapter 15-25 – Site Plan Review). Subdivision

permits/applications are not required by the City, but they are discretionary permits requiring Planning Commission review/approval. Only one public hearing is required before the Planning Commission for the review and approval of these types of discretionary permits. Once the City receives a complete application, the review and approval process takes approximately 6-8 weeks.

City Council approval is required for zone changes, general plan amendments, specific plan amendments, zone text amendments and development agreements for projects regardless of size or number of units. The number of hearings/meetings for these types of discretionary permits is three: one public hearing by the Planning Commission, one public hearing by the City Council, and one public meeting by the City Council (consent agenda). Presented below are descriptions of processing procedures for typical single- and multi-family projects, including the type of permit, level of review, decision-making criteria and design review requirements. Once the City receives a complete application, the review and approval process takes approximately 8-12 weeks.

The Planning Commission and City Council public hearing process, which was recently reorganized, is described in ESMC Chapter 15-28 (See Ordinance 1629 pages 48-53).

**Subdivision and Site Plan Review.** The findings for Subdivision applications are found in ESMC Section 14-1-6. These findings are consistent with the State Subdivision Map Act (Government Code Section 66474). Given that the City is built-out and the lot sizes are relatively small, subdivision requests, particularly those involving condominium units are approved routinely as long as the physical development conforms to all applicable development standards of the zone in which it is proposed. Requirements for off-site improvements and/or dedications are minimal, due to the fact that sidewalks, roadway, and utility infrastructure is largely in place and consistent with the City's General Plan requirements.

The findings for Site Plan Review applications are found in ESMC Section 15-25-4 (See ordinance 1629 page 45 of 57). These findings generally ensure that a proposed project is consistent with the General Plan, the applicable ESMC development standards, and the general welfare of the City. They are not intended to inhibit development, but rather ensure that new development has beneficial impact on the community. Given that the City is built-out and the lot sizes are relatively small, site plan review requests would be approved routinely as long as the physical development conforms to all applicable development standards of the zone in which it is proposed. Requirements for off-site improvements and/or dedications are minimal, due to the fact that sidewalks, roadway, and utility infrastructure is largely in place and consistent with the City's General Plan requirements.

To facilitate residential development, the City may consider a ministerial subdivision process for projects involving 10 or fewer units.

### SINGLE-FAMILY DWELLINGS (R-1)

A single-family dwelling development requires approximately two to three weeks to approve from the time an applicant presents building plans to Development Services Department until a Building Permit is granted for the unit. A typical single-family dwelling only requires a building permit that conforms to all applicable development standards of the zone in which it is proposed. There is no other discretionary review required to issue the building permit unless a subdivision of land is involved. A subdivision of land is subject to the requirements of the Subdivision Map Act and the ESMC regulations regarding subdivisions. There are no design review requirements for single-family dwellings in El Segundo.

**MULTI-FAMILY DWELLINGS (CONDOMINIUMS OR TOWNHOMES) (R-2, R-3)**

A multiple-family dwelling development (apartments or condominiums) requires approximately four to six weeks to approve from the time an applicant presents building plans to Development Services Department until a Building Permit is granted for the unit. A condominium project in El Segundo only requires a building permit if it conforms to all applicable development standards of the zone in which it is proposed. All condominium projects, however, do require a subdivision map. This process normally requires 6 to 8 weeks from the time the applicant submits a complete tentative map application until itis approved by the Planning Commission. There are no other discretionary review requirements. There are no design review requirements for multi-family development projects in El Segundo.

A multi-family residential project involving up to 10 units in El Segundo only requires a building permit if it conforms to all applicable development standards of the zone in which it is proposed (ministerial approval). This only requires approximately 30 working days to approve from the time an applicant presents building plans to Development Services Department until a Building Permit is granted for the unit. All condominium projects (regardless of size or number of units), however, do require a subdivision map. In addition, as mentioned above, all residential development projects involving more than 10 units require a Site Plan Review permit/application. The subdivision and Site Plan Review process normally requires 6 to 8 weeks from the time the applicant submits a complete application until it is approved by the Planning Commission. There are no design review requirements for multi-family development projects in El Segundo.

**CARETAKER AND ABOVE-GROUND FLOOR UNITS**

Caretaker units are permitted in conjunction with proposed development in the City's Smoky Hollow Specific Plan West (SH-W) and East (SH-E) zones. Above-ground floor units are permitted in the City's CRS, DSP, C-2, zones. Similar to multiple-family dwelling development, these units require approximately four to six weeks to approve from the time an applicant presents building plans to Development Services Department until a building permit is granted for the unit. If the unit is to be owner-occupied, a subdivision map is required to be processed which usually requires 6 to 8 weeks from the time the applicant submits a complete tentative map application until it is approved by the Planning Commission. There are no design review requirements for caretaker units or above-ground floor units in El Segundo, except in the Downtown Specific Plan (DSP). In addition, in 2010, the City enacted new parking regulations for caretaker units, reducing the required number of parking spaces from two spaces to one space. Residential units in the DSP Zone require 0.5 spaces per unit. The parking requirement was updated in 2017 through Ordinance 1549. Ordinance 1549 also removed the requirement that the occupant of the residential unit had to be the owner of the property or the owner of the business on the ground level.

## 9. On/Off-Site Improvement Requirements

The City is a completely built-out community with subdivision level on and off-site improvement requirements (such as street dedication requirements) already established on almost all major arterial, secondary, and local streets in the community. Where both sides of the street are served equally in residential areas, the common right-of-way width is 60 feet with a 36-foot pavement width. In multi-family areas where street parking is permitted, a minimum of 40 feet of right-of-way is required.

## 10. Coastal Zone

Approximately 50 acres within the City lies within the coastal zone. The area is a narrow strip, approximately 0.8 of mile wide and 200 yards in length. All of this area is zoned and has a land use designation of Heavy Industrial (M-2) and Open Space (O-S). The coastal zone is completely developed with a major electrical power generating station owned by El Segundo Power/Dynergy, a Marine Petroleum Transfer Terminal, owned by Chevron, and a Chevron automobile service station. Currently there is no residential development within the coastal zone. The General Plan, Zoning Code, and Local Coastal Plan do not allow residential development within the coastal zone. No changes are anticipated in the future which would allow the development of new residential uses in this area.

# 5. HOUSING OPPORTUNITIES

This section of the Housing Element evaluates the potential for additional residential development that could occur in El Segundo and discusses opportunities for energy conservation in residential development.

## A. AVAILABILITY OF SITES FOR HOUSING

### 1. Regional Housing Needs Allocation (RHNA)

State law requires that a community provide an adequate number of sites to allow for and facilitate production of the City's regional share of housing. To determine whether the City has sufficient land to accommodate its share of regional housing needs for all income groups, the City must identify "adequate sites." Government Code § 65583 provides that adequate sites are those with appropriate zoning and development standards, with services and facilities, needed to facilitate and encourage the development of a variety of housing for all income levels. Compliance with this requirement is measured by the jurisdiction's ability to provide adequate land to accommodate the RHNA. SCAG is responsible for allocating the RHNA to individual jurisdictions within the region.

#### AB 1233 ANALYSIS

During the 5th Cycle Housing Element period, the City's RHNA was 69 units including 18 very low income units, 11 low income units, 12 moderate income units, and 28 above moderate income units. To accommodate the lower income RHNA, the City relied upon the 504 E. Imperial Avenue Specific Plan which initially included the development of 46 affordable income units. The 2013-2021 Housing Element committed to identifying replacement site should the number of affordable units provided in this Specific Plan fall short of the need to accommodate the RHNA. Ultimately, no lower income units were included as part of the 540 E. Imperial Avenue Specific Plan. In exchange, the City received an in-lieu payment of $5.3 million. The City is retaining Many Mansions to develop and implement the City's affordable housing strategy with this fund and other available resources. Pursuant to AB 1233, the City must carry forward the 29-unit lower income shortfall to the 6th cycle RHNA.

#### 6TH CYCLE RHNA

For the 2021-2029 Housing Element update, the City is allocated a RHNA of 492, including 189 very low income and 88 low income units. The 2014-2021 shortfall requires the City to accommodate an additional 18 very low income and 11 low income units, for a total of 521 units. The City's RHNA is shown by income level in Table 5-1.

While the Housing Element covers the planning period of October 15, 2021 through October 15, 2029, the RHNA planning period is slightly different – June 30, 2021 through October 15, 2029 (i.e., 2021-2029 RHNA).

**Table 5-1: Regional Housing Needs Assessment (RHNA) 2021-2029**

| Income Category | 5th Cycle Carryover | 6th Cycle RHNA | Total RHNA | Percent |
|---|---|---|---|---|
| Extremely/Very Low Income* | 18 | 189 | 207 | 39.7% |
| Low Income* | 11 | 88 | 99 | 19.0% |
| Moderate Income | 0 | 84 | 84 | 16.1% |
| Above Moderate Income | 0 | 131 | 131 | 25.1% |
| **Total** | **29** | **492** | **521** | **100.0%** |

Note: The City has a RHNA allocation of 207 very low income units (inclusive of extremely low income units). Pursuant to State law (AB 2634), the City must project the number of extremely low income housing needs based on Census income distribution or assume 50% of the very low income units as extremely low. Assuming an even split, the City's RHNA allocation of 207 very low income units may be divided into 104 very low and 103 extremely low income units. However, for purposes of identifying adequate sites for the RHNA allocation, State law does not mandate the separate accounting for the extremely low income category.
* Includes the 5th Cycle Housing Element shortfall of 18 extremely/very low and 11 low income units.
Source: Southern California Association of Governments (SCAG), 6th Cycle Final RHNA Allocation Plan, 2021.

## 2. Accessory Dwelling Units (ADUs)

New State laws passed since 2017 have substantially relaxed the development standards and procedures for the construction of Accessory Dwelling Units (ADUs). In response to AB 881, the City amended the ADU ordinance in 2019 to comply with new State law, including allowing for Junior ADUs. The City reviewed its Housing Element progress reports and determined that those reports contained only partial records. The City reviewed its permit records and confirmed the following ADU permitting trend:

- 2018 – 15 ADUs
- 2019 – 13 ADUs
- 2020 – 21 ADUs

The City's ADU permit records averaged to 16 units annually. However, conservatively the City projects an average of 10 ADUs annually. This Housing Element includes a program to proactively facilitate ADU development. Based on annual averages and increased City efforts, the City conservatively anticipates 80 ADUs during the eight-year planning period from 2021 and 2029. Affordability of the potential ADUs, shown in Table 5-2 is based on SCAG's Regional Accessory Dwelling Unit Affordability Analysis as approved by HCD.

**Table 5-2: Potential Accessory Dwelling Units (ADUs)**

| Income Category | ADUs | SCAG ADU Affordability |
|---|---|---|
| Extremely Low | 12 | 15.0% |
| Very Low | 2 | 2.0% |
| Low | 34 | 43.0% |
| Moderate | 5 | 6.0% |
| Above Moderate | 27 | 34.0% |
| **Total** | **80** | **100.0%** |

Source: SCAG Regional Accessory Dwelling Unit Affordability Analysis, 2020.

## 3. Entitled Projects

### 203 Richmond Street

The 203 Richmond Street project was approved by the Planning Commission on July 8, 2021. The project consists of one 0.24-acre parcel (4136-024-017) located at the, now closed, City jail and accompanying surface parking. The project includes the development of three above moderate income units. The 203 Richmond Street project is located in the Downtown Specific Plan (DSP) with an allowed density of 12.5 units per acre. The site is bordered by DSP-zoned parcels to the north, east, and south, and R-3 zoned parcels to the west. This project is expected to be completed within the 6th cycle Housing Element planning period. The 203 Richmond Street project is detailed in Table 5-3.

### 209 Richmond Street

This project is comprised of one market rate (above moderate) unit to be constructed at 209 Richmond Street. The Planning Commission approved the project on July 8, 2021. The project consists of two parcels (4136-024-008, 4136-024-009) totaling 0.16 acres. The project is located in the DSP zone and is currently used for retail. This project is detailed in Table 5-3.

**Table 5-3: Entitled Projects**

| Parcel Number | Acres | Address | Zone | Allowed Density | Existing Use | Affordability | Total Capacity |
|---|---|---|---|---|---|---|---|
| 4136-024-017 | 0.24 | 203 Richmond St | DSP | 12.5 | Old City Jail/ Open-air parking lot | Above Moderate | 3 |
| 4136-024-008; 4136-024-009 | 0.16 | 209 Richmond St | DSP | 12.5 | Retail (Haydenshapes Surfboards) | Above Moderate | 1 |

## 4. Residential Sites Inventory

An important component of the El Segundo Housing Element is the identification of sites for future housing development, and an evaluation of the adequacy of those sites in fulfilling the City's share of regional housing needs. To accomplish this, all city parcels were surveyed to determine their development capacity. Due to the lack of vacant and underutilized sites in El Segundo, the City has selected candidate sites for rezoning. Each site was analyzed in light of the development standards for its proposed zoning designation. All parcels in El Segundo were evaluated through a process of elimination based on required criteria set by the State (HCD).

### Methodology for Identifying Sites

The following methodology was used to select candidate rezone sites in the City:

- The analysis was conducted by a combination of the City's GIS system, Google Earth, a windshield field survey
- Sites with newer buildings or existing multi-family housing not likely to be redeveloped within the next 8 years were screened out.
- Sites without a realistic development capacity and site suitability were screened out.

- The City uses the following criteria to determine realistic capacity and site suitability according to:
  - City's zoning code and policy
  - Lot size
  - Environmental constraints and adequate infrastructure
  - Development trends
- Sites were analyzed based on proximity to existing high opportunity areas (schools, parks, retail, services, transit, etc.), mixed-used potential, sites with obsolete uses (sites for lease) that have the potential for redevelopment, and substandard or irregular lots that could be consolidated.

The sites were selected based on the following criteria:

1. Within ¼ mile from school
2. Within ¼ mile from parks
3. Within ¼ mile from religious institution
4. Within ¼ mile from healthcare facility
5. Within ¼ mile from grocery store
6. Within ¼ mile from fire station
7. ¼ mile from police department

**CANDIDATE REZONE SITES**

The City has selected 20 candidate rezone sites. The sites will be rezoned as housing overlay (O) and mixed-use overlay (MU-O) sites. Currently, the sites are zoned for commercial, parking, residential, and office uses. A complete list of the current and proposed general plan and zoning designations are included in . In Table 5-5, parcels are grouped based on the potential for consolidation and the potential income distribution of RHNA sites.

Sites 15-20 are part of the Pacific Coast Commons Specific Plan (PCCSP), scheduled for public hearings in February-March 2021. The City expects the PCCSP to be adopted during the 6th Cycle Housing Element planning period. The PCCSP includes approximately 6.4 gross acres and allows for up to 263 new housing units and 11,252 square feet of new commercial/retail uses. The Specific Plan proposed five new land use districts, including two mixed-use districts allowing residential development, PCC Mixed-Use 1 (PCC MU-1) and PCC Mixed-Use 2 (PCC MU-2). The PCCSP proposes to include about 32 lower income units as part of the project.

The housing overlay (O) allows residential units to be built at a minimum density of 30 units per acre and a maximum density of 40 units per acre, while the MU-O allows a minimum density of 40 units per acre and a maximum density of 50 units per acre. Potential units were calculated based on the minimum density allowed. The candidate rezone sites can accommodate a total of 590 units on 13 acres of land. Table 5-5 shows potential units by income category. Of the 590 units, 182 would be very low income, 82 low income, 93 moderate income, and 233 above moderate income.

## REUSING SITES FROM 5TH CYCLE HOUSING ELEMENT

There are no vacant sites in the sites inventory. While some nonvacant sites included in the list of candidate sites for rezoning have been previously identified in the 5th cycle Housing Element, these sites are being proposed for rezone and therefore are considered "new" sites. These rezone sites are subject to by-right approval if the project includes 20 percent lower income units.

## REPLACEMENT OF EXISTING LOWER INCOME UNITS ON SITE

All sites identified for rezoning are currently developed with nonresidential uses. No existing units are present on the candidate sites.

## Table 5-4: Candidate Sites for Rezoning

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Existing non-res. sf/ Proposed FAR non-res. | Description | Total Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4135-017-900 | 0.64 | 210 Penn St | Multi-Family Residential | R-3 | Overlay | O | 30 | 40 | 2,500/ NA | Manufacturing use in R-3 zone; potential for residential development.; Surrounded by residential on north, east and west.<br>Lot size can accommodate affordable housing with minimum density of 30 du/ac.<br>Former manufacturing use, but building currently vacant. Site currently listed for sale and has been on market for over 1 year. Within R-3 zone; potential for residential development; Surrounded by residential on north, east and west. Lot size can accommodate affordable housing with minimum density of 30 du/ac. Site meets 3 of 7 public service/amenities criteria: 1/4 mile from school, park, healthcare and religious facility. | 19 |
| 2 | 4135-022-025 | 0.31 | 817 E Franklin Ave | Parking | P | Overlay | O | 30 | 40 | NA | Open parking; underutilized site that has potential for a 0.90 acre parcel after consolidation with 3 other parcels (4135-022-026;-027;-028).<br>Open parking; underutilized site that has potential for a 0.90 acre parcel after consolidation with 3 other parcels (4135-022-026;-027;- | 9 |

## Table 5-4: Candidate Sites for Rezoning

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Existing non-res. sf/ Proposed FAR non-res. | Description | Total Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | 028). All 4 lots to be consolidated under one ownership. Consolidated lot could accommodate very low and low income units with min. density of 40 du/ac. Housing to the west and north, park to the east. (Year Built: 1961); Site meets 3 of 7 public services/amenities criteria: 1/4 mile from school, park, healthcare and religious facility.<br><br>Housing to the west and north, park to the east.<br><br>The existing use is 60 years old (Year Built: 1961). | |
| 3 | 4135-022-026 | 0.16 | Maryland St/ Franklin Ave | Parking | P | Overlay | O | 30 | 40 | NA | Open parking; underutilized site that has potential for a 0.90 acre parcel after consolidation with 3 other parcels (4135-022-025;-027;-028).<br><br>Open parking; underutilized site that has potential for a 0.90 acre parcel after consolidation with 3 other parcels (4135-022-025;-027;-028). All 4 lots to be consolidated under one ownership. Consolidated lot could accommodate very low and low income units with min. density of 40 du/ac. Housing to the west and north, park to the east. (Year Built: 1972); Site meets 3 of 7 public services/amenities criteria: | 4 |

## Table 5-4: Candidate Sites for Rezoning

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Existing non-res. sf/ Proposed FAR non-res. | Description | Total Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | 1/4 mile from school, park, healthcare and religious facility.<br>Housing to the west and north, park to the east.<br>The existing use is 49 years old (Year Built: 1972). | |
| 4 | 4135-022-027 | 0.16 | Maryland St/ Franklin Ave | Parking | P | Overlay | O | 30 | 40 | NA | Open parking; underutilized site that has potential for a 0.90 acre parcel after consolidation with 3 other parcels (4135-022-025;-026;-028).<br>Consolidated lot could accommodate very low and low income units with min. density of 40 du/ac.<br>Housing to the west and north, park to the east.<br>The existing use. is 62 years old (Year Built: 1959).<br>Site meets 3 of 7 public services/amenities criteria: 1/4 mile from school, park, healthcare and religious facility. | 4 |
| 5 | 4135-022-028 | 0.16 | Maryland St/ Franklin Ave | Parking | P | Overlay | O | 30 | 40 | NA | Open parking; underutilized site that has potential for a 0.90 acre parcel after consolidation with 3 other parcels (4135-022-025;-026;-027). Consolidated lot could accommodate very low and low | 4 |

## Table 5-4: Candidate Sites for Rezoning

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Existing non-res. sf/ Proposed FAR non-res. | Description | Total Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | income units with min. density of 40 du/ac.<br>Housing to the west and north, park to the east.<br>The existing bldg. is 62 years old (Year Built: 1959).<br>Site meets 3 of 7 public services/amenities criteria: 1/4 mile from school, park, healthcare and religious facility. | |
| 6 | 4135-022-035 | 2.84 | 205 Lomita | Multi-Family Residential | R-3 | Mixed Use Overlay | MU-O | 40 | 50 | 10,824/ 185,565 | Larger site that could accommodate very low and low income units with min. density of 40 du/ac. St. Anthony's Church parking, school, and daycare facility; Church could divest a portion of their property, or propose affordable housing on-site.<br>The existing bldg. is 100 years old (Year Built: 1921).<br>Site meets 3 of 7 public services/amenities criteria: 1/4 mile from school, park, and religious facility. | 113 |
| 7 | 4135-023-023 | 0.48 | 717 E Grand Ave | Multi-Family Residential | R-3 | Mixed Use Overlay | MU-O | 40 | 50 | 5,735/ 31,501.6 | Hilltop Christian Pre-school; located across the street from park; potential for residential development.<br>The existing bldg. is 64 years old (Year Built 1957). | 19 |

## Table 5-4: Candidate Sites for Rezoning

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Existing non-res. sf/ Proposed FAR non-res. | Description | Total Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Site was in 5th cycle RHNA.<br>Site meets 3 of 7 public services/ amenities criteria: 1/4 mile from school, park, and religious facility. | |
| 8 | 4136-017-046 | 0.56 | 361 Richmond St | Downtown Specific Plan | DSP | Mixed Use Overlay | MU-O | 40 | 50 | 4,318/ 36,770.6 | Lot size could accommodate very low and low income units with min. density of 40 du/ac; St. Michael's Church site with school and schoolyard-church could divest a portion of their property and still have a functioning church with Parking available on the south and west; located across the alleyway from multi-family complexes.<br>The existing bldg. is 59 years old (Year Built: 1962).<br>This was in 5th cycle RHNA.<br>Site meets all 7 of 7 public services/amenities criteria: ¼ mile from school, park, religious facility, healthcare, grocery, fire and police station. Requires historic assessment. | 22 |
| 9 | 4139-017-004 | 0.27 | 1755 E Sycamore Ave | Corporate Office | CO | Mixed Use Overlay | MU-O | 40 | 50 | 8,025/ 17,660 | Site has potential for lot consolidation with lot (4139-017-040) resulting in 2.09 acre site that could accommodate very low and low income units with min. density of 40 du/ac. | 10 |

## Table 5-4: Candidate Sites for Rezoning

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Existing non-res. sf/ Proposed FAR non-res. | Description | Total Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Recent development trends indicate strong market for mixed use redevelopment for site location with similar uses. Lot consolidation likely as both lots owned by same owner. Office building (including Bank of America) with onsite open parking; located near multifamily residential; surrounded by corporate offices; across the street from hotel; walking distance from a park; potential for residential redevelopment.<br>The existing bldg. is 64 years old (Year Built: 1957).<br>Site meets 3 of 7 public services/amenities criteria: 1/4 mile from park, religious, and healthcare facilities. | |
| 10 | 4139-017-040 | 1.83 | 835 N Pacific Coast Highway | Corporate Office | CO | Mixed Use Overlay | MU-O | 40 | 50 | 10,283/ 119,300.9 | Site has potential for lot consolidation with 4139-017-004 lot resulting in 2.09-acre site that would accommodate very low and low income units with min. density of 40 du/ac. Recent development trends indicate strong market for mixed use redevelopment for site location with similar uses. Lot consolidation likely as both lots owned by same owner. Fast food restaurant with onsite parking; located next to residential. | 72 |

## Table 5-4: Candidate Sites for Rezoning

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Existing non-res. sf/ Proposed FAR non-res. | Description | Total Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | The existing building is 41 years old (Year Built: 1980).<br><br>Site meets 3 of 7 public services/amenities criteria: 1/4 mile from park, religious, and healthcare facilities. | |
| 11 | 4139-017-043 | 0.87 | 1804 E Sycamore Ave | General Commercial | C-3 | Mixed Use Overlay | MU-O | 40 | 50 | 8,552/ 56,570.2 | Site has potential to accommodate affordable housing (very low income units with min. density of 40 du/ac.) and mixed use development. Recent development trends indicate strong market for mixed use redevelopment for site location with similar uses. Currently underutilized Hotel use (Travelodge) near multi-family housing and corporate office buildings; fronts a main street.<br><br>The existing bldg. is 65 years old (Year Built: 1956).<br><br>Site meets 3 of 7 public service/amenities criteria: 1/4 mile from park, religious, and healthcare facilities. | 34 |
| 12 | 4139-018-001 | 0.68 | 703 N Pacific Coast Highway | General Commercial | C-3 | Mixed Use Overlay | MU-O | 40 | 50 | 7,270/ 44,692.1 | Lot has potential for consolidation with 2 other lots (4139-018-002;-003) to create a 1.3-acre site that could accommodate affordable housing with min. density of 40 du/ac.; and mixed uses. Recent development trends indicate strong | 28 |

## Table 5-4: Candidate Sites for Rezoning

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Existing non-res. sf/ Proposed FAR non-res. | Description | Total Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | market for mixed use redevelopment for site location with similar uses.<br><br>Existing bldg. is 64 years old (Year Built: 1957), is vacant on Street View and is addressed as 807 N Sepulveda Blvd. Parking lot is shared with 739 Sepulveda to the north.<br><br>Site meets 5 of 7 public service/amenities criteria: ¼ mile from school, park, religious facility, grocery, fire and police station. | |
| 13 | 4139-018-002 | 0.33 | 739 N Pacific Coast Highway | General Commercial | C-3 | Mixed Use Overlay | MU-O | 40 | 50 | NA/ 21,366.9 | Open parking lot; Lot has potential for consolidation with 2 other lots ( 4139-018-001;-003) to create a 1.3-acre site that could accommodate affordable housing with min. density of 40 du/ac.; and mixed uses. Recent development trends indicate strong market for mixed use redevelopment for site location with similar uses. Located in same center as grocery store (757 N Sepulveda). Recent development trends indicate strong market for mixed use redevelopment for site location with similar uses.<br><br>Site meets 5 of 7 public service/amenities criteria: 1/4 mile | 13 |

## Table 5-4: Candidate Sites for Rezoning

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Existing non-res. sf/ Proposed FAR non-res. | Description | Total Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | from school, park, religious facility, grocery, fire and police station. | |
| 14 | 4139-018-003 | 0.33 | 755 N PCH | General Commercial | C-3 | Mixed Use Overlay | MU-O | 40 | 50 | 2,476/ 21,438.3 | Lot has potential for consolidation with 2 other lots (4139-018-001;-002) to create a 1.3-acre site that could accommodate affordable housing with min. density of 40 du/ac.; and mixed uses. Restaurant located in area with offices and some multifamily housing.<br>Existing bldg. is 58 years old (Year Built: 1963).<br>Site meets 5 of 7 public service/amenities criteria: 1/4 mile from school, park, religious facility, grocery, fire and police station. | 8 |
| 15 | 4139-025-075 | 0.22 | PCH/ Holly Ave | General Commercial | C-3 | Mixed Use Overlay | MU-O | 40 | 50 | NA/ 5,756 | This is a pending project site. Lot has potential for consolidation with 3 other lots (4139-025-073;-074;-076) to create 1.50 acre lot that could accommodate proposed 120 units.<br>Site meets 4 of 7 public service/amenities criteria: 1/4 mile from park, healthcare, grocery, and fire station. | 8 |
| 16 | 4139-025-073 | 0.59 | Indiana St / E Holly Ave | General Commercial | C-3 | Mixed Use Overlay | MU-O | 40 | 50 | NA | This is a pending project site. Lot has potential for consolidation with 3 other lots (4139-025-074;-075;-076) to create 1.50 acre lot that | 23 |

## Table 5-4: Candidate Sites for Rezoning

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Existing non-res. sf/ Proposed FAR non-res. | Description | Total Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | could accommodate proposed 120 units; and lot split to create separate lot for existing Aloft Hotel.<br>Site meets 4 of 7 public service/amenities criteria: 1/4 mile from park, healthcare, grocery, and fire station. | |
| 17 | 4139-025-074 | 0.42 | Indiana St /E Holly Ave | General Commercial | C-3 | Mixed Use Overlay | MU-O | 40 | 50 | NA | This is a pending project site. Lot has potential for consolidation with 3 other lots (4139-025-073;-075;-076) to create 1.50 acre lot that could accommodate proposed 120 units.<br>Site meets 4 of 7 public service/amenities criteria: 1/4 mile from park, healthcare, grocery, and fire station. | 34 |
| 18 | 4139-025-076 | 0.29 | E Holly Ave / N PCH | General Commercial | C-3 | Mixed Use Overlay | MU-O | 40 | 50 | NA | This is a pending project site. Lot has potential for consolidation with 3 other lots (4139-025-073;-074;-075) to create 1.50 acre lot that could accommodate proposed 120 units.<br>Existing bldg is 42 years old (Year Built 1949).<br>Site meets 4 of 7 public service/amenities criteria: 1/4 mile from park, healthcare, grocery, and fire station. | 23 |

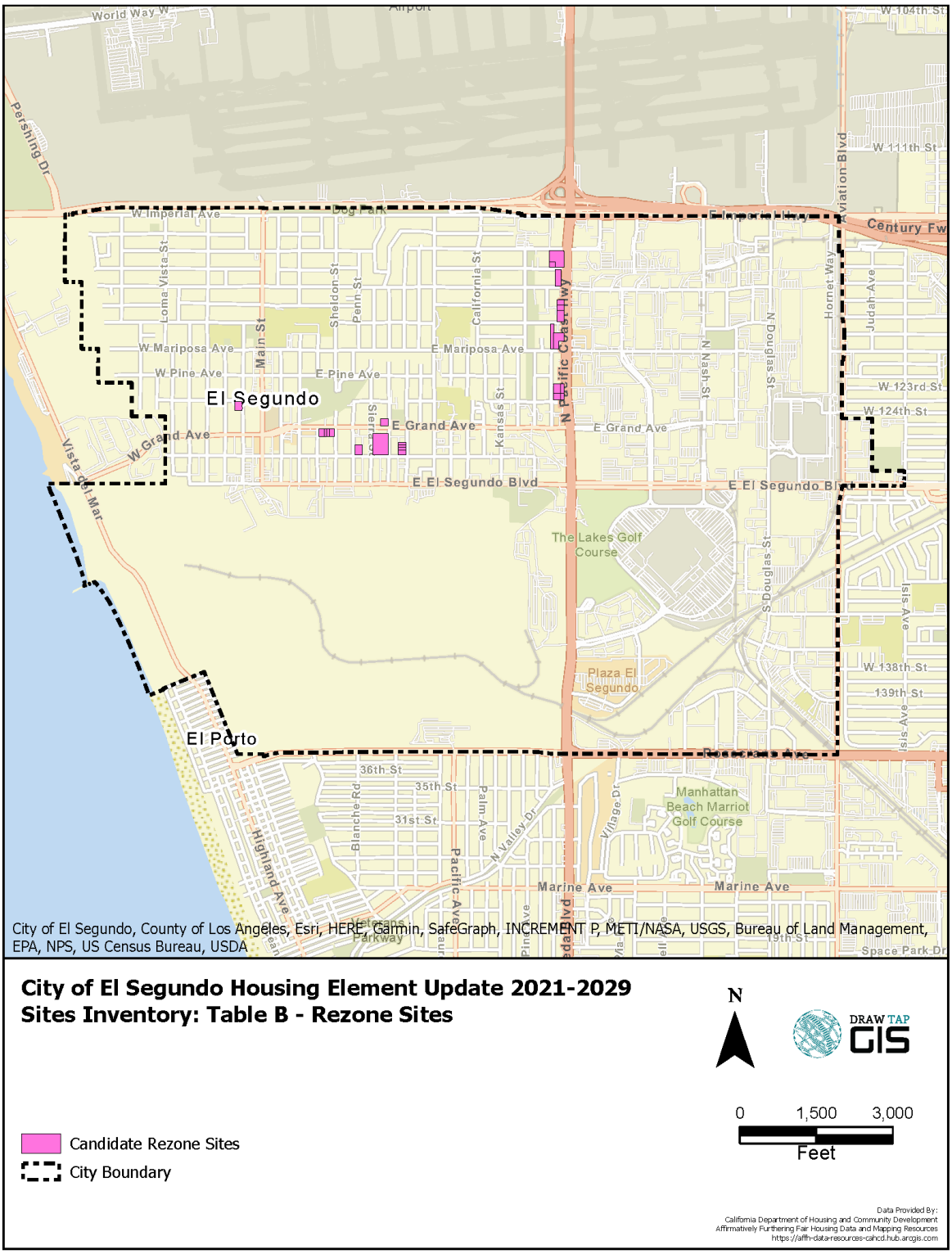
## Table 5-4: Candidate Sites for Rezoning

| Site ID | Parcel Number | Acres | Address | Current GP | Current Zone | Proposed GP | Proposed Zone | Min. Density | Max. Density | Existing non-res. sf/ Proposed FAR non-res. | Description | Total Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | 4139-024-057 | 0.67 | E Mariposa/ N PCH | Parking | P | Mixed Use Overlay | MU-O | 40 | 50 | NA | This is a pending project site. Lot has potential for consolidation with 1 other lot (4139-024-058) to create 1.8 acre site that could accommodate affordable housing with min. density of 40 du/ac. Site meets 5 of 7 public service/amenities criteria: 1/4 mile from park, religious facility, healthcare, grocery, and fire station. | 54 |
| 20 | 4139-024-058 | 1.11 | E Mariposa/ N PCH | Parking | P | Mixed Use Overlay | MU-O | 40 | 50 | NA/ 2,223 | This is a pending project site. Lot has potential for consolidation with 1 other lot (4139-024-057) to create 1.8-acre site that could accommodate affordable housing with min. density of 40 du/ac.<br>Site meets 5 of 7 public service/amenities criteria: 1/4 mile from park, religious facility, healthcare, grocery, and fire station. | 89 |
| **Total** | | **13.0** | | | | | | | | | | **590** |

### Table 5-5: Lot Consolidation and Income Level Distribution

| Consol. | Parcel Number | Acres | Address | Lower Income | Moderate Income | Above Moderate Income | Total Capacity |
|---|---|---|---|---|---|---|---|
| 1 | 4135-017-900 | 0.6 | 210 Penn St | 9 | 10 | 0 | 19 |
| 2 | 4135-022-025 | 0.3 | 817 E Franklin Ave | 3 | 6 | 0 | 9 |
| | 4135-022-026 | 0.2 | Maryland St/ Franklin Ave | 4 | 0 | 0 | 4 |
| | 4135-022-027 | 0.2 | Maryland St/ Franklin Ave | 4 | 0 | 0 | 4 |
| | 4135-022-028 | 0.2 | Maryland St/ Franklin Ave | 4 | 0 | 0 | 4 |
| 3 | 4135-022-035 | 2.8 | 205 Lomita | 75 | 38 | 0 | 113 |
| 4 | 4135-023-023 | 0.5 | 717 E Grand Ave | 16 | 3 | 0 | 19 |
| 5 | 4136-017-046 | 0.6 | 361 Richmond St | 10 | 0 | 12 | 22 |
| 6 | 4139-017-004 | 0.3 | 1755 E Sycamore Ave | 10 | 0 | 0 | 10 |
| | 4139-017-040 | 1.8 | 835 N Pacific Coast Highway | 57 | 0 | 15 | 72 |
| 7 | 4139-017-043 | 0.9 | 1804 E Sycamore Ave | 14 | 20 | 0 | 34 |
| 8 | 4139-018-001 | 0.7 | 703 N Pacific Coast Highway | 11 | 10 | 7 | 28 |
| | 4139-018-002 | 0.3 | 739 N Pacific Coast Highway | 13 | 0 | 0 | 13 |
| | 4139-018-003 | 0.3 | 755 N PCH | 7 | 6 | 0 | 13 |
| 9 | 4139-025-075 | 0.2 | PCH/ Holly Ave | 3 | 0 | 5 | 8 |
| | 4139-025-073 | 0.6 | Indiana St / E Holly Ave | 4 | 0 | 19 | 23 |
| | 4139-025-074 | 0.4 | Indiana St /E Holly Ave | 4 | 0 | 30 | 34 |
| | 4139-025-076 | 0.3 | E Holly Ave / N PCH | 4 | 0 | 19 | 23 |
| | 4139-024-057 | 0.7 | E Mariposa/ N PCH | 6 | 0 | 48 | 54 |
| | 4139-024-058 | 1.1 | E Mariposa/ N PCH | 11 | 0 | 78 | 89 |
| **Total** | | **14.0** | | **264** | **93** | **233** | **590** |

## Figure 5-1: Candidate Rezone Sites Inventory Map



## SMALL LOT DEVELOPMENT AND LOT CONSOLIDATION

Of particular interest in El Segundo is the large number of very small residentially-zoned parcels in the City. While it may be possible to build housing on a very small parcel, the nature and conditions necessary to construct the units often render the provision of affordable housing infeasible. For example, assisted housing developments utilizing State or federal financial resources typically include 50-80 units. Despite this, there are opportunities in the City where lot consolidation could provide greater potential for the development of units that would be affordable to lower-income households. To facilitate lot consolidation, the City has expanded Program 7 during the 2013-2021 Housing Element to facilitate development on small lot sites as well as underutilized sites. This includes the granting of development incentives (such as modified parking, lot coverage, open space, and setback standards) to encourage development of these lots. Consolidation of lots will also be encouraged through the on-going identification of those lots in the City's inventory that offer the best possibility for consolidation to achieve greater building density and affordability.

Lot consolidation group #1 as indicated in Table 5-5 contains four lots which are all open parking areas under one ownership. Lot consolidation group #7 consists of two lots containing a bank and small motel. Although the two lots are under different ownership, the size and configuration of each lot in relation to the other is conducive to consolidation. More specifically, the small motel lot is wrapped on two sides by the larger bank lot, which together form an efficient rectangle. The motel contains overflow rooms for a slightly larger, but underutilized motel across the street (which is also in the sites inventory). These uses and the condition of the existing buildings are similar to pending projects in the city, demonstrating an existing market trend and therefore, a higher likelihood of redevelopment as a residential use. Lot consolidation group #9 consists of three lots containing an abandoned commercial building that is currently for sale/lease, a small restaurant, and an open parking lot which are all under one ownership. These uses and the condition of the existing buildings are similar to pending projects in the city, demonstrating an existing market trend and therefore, a higher likelihood of redevelopment as a residential use. Lot consolidation group #10 consists of six lots that are currently part of a pending development application.

## LOT CONSOLIDATION TREND AND REDEVELOPMENT POTENTIAL

The City is primarily built out and many existing parcels are small. Therefore, residential development often involves consolidating small lots to facilitate a large development.

The Pacific Coast Commons project involves consolidation and reconfiguration of 16 legal lots into 6 ground lots for the purpose of developing 231 above moderate and 32 affordable units (29 low and 3 very low). The residential density of this project is approximately 90 units per acre. The project involves a Vesting Tentative Tract Map (among other entitlements) to implement the above-described lot consolidation/reconfiguration. The project will be scheduled for a public hearing before the Planning Commission in February/March and subsequently the City Council in March/April 2022.

The 1160-1170 East Mariposa Avenue project, not included in the City's sites inventory, involves consolidation of 5 lots into 1 (1.44-acre) lot and addition of six new residential units to a neighborhood shopping center. Staff has met with the property owner to review a proposed site plan and discussed potential reduction in parking requirements to accommodate the project. Similarly, the Civic Center redevelopment (300-block of Main Street) involves some lot consolidation/reconfiguration, but it is still at the early stages of an RFP. The City is considering the designation of the Civic Center property as surplus and opening the opportunity for affordable housing through a mixed use project.

The Downtown Specific Plan is currently being updated. One of the goals of this update is to provide for additional housing in the City. Through the process the City will identify (strategic) sites where additional residential density could be accomplished. The City is in the early stages of public outreach and existing conditions analysis.

The City has also seen interest in the 703 North PCH site from a local developer. Staff has recently met with a local developer regarding the 0.7-acre property. The developer is considering purchasing the property and potentially developing a high-density mixed use (commercial and residential) project similar to the Pacific coast Commons Specific Plan.

### COMPARISON OF SITES INVENTORY AND RHNA

The City can accommodate 674 additional housing units through ADUs, entitled projects, and its inventory of candidate rezone sites. This capacity is more than adequate to accommodate the City's 2021-2029 RHNA of 492 units and the carryover of 29 units from the 5th cycle. The combination of ADUs, entitled projects, and candidate rezone sites can accommodate a total of 312 lower income units, 98 moderate income units, and 264 above moderate income units. The sites inventory provides a lower income buffer of 6 units, or 2% of the RHNA. Table 5-6 provides a summary of the City's available sites and RHNA status.

**Table 5-6: Comparison of Sites Inventory and RHNA**

| | Lower | Moderate | Above Moderate | Total |
|---|---|---|---|---|
| 6th Cycle RHNA | 277 | 84 | 131 | 492 |
| Overall RHNA (Including 5th Cycle Carryover) | 306 | 84 | 131 | 521 |
| ADUs | 48 | 5 | 27 | 80 |
| Entitled Projects | 0 | 0 | 4 | 4 |
| Candidate Rezone Sites | 264 | 93 | 233 | 590 |
| **Total** | **312** | **98** | **264** | **674** |
| Surplus/Shortfall | +6 | +14 | +133 | +182 |
| | 2% | 17% | 102% | 35% |
| Note: HCD recommends a Housing Element sites inventory buffer of 15 to 30% above the required RHNA, especially when accommodating the lower income RHNA. | | | | |

## 5. Availability of Infrastructure and Services

As the City is an urbanized community, all sites identified in the Housing Element have access to water and sewer services. The City's potable water is supplied by the West Basin Municipal Water District. According to the City's most recent 12-month water consumption figures, El Segundo utilizes approximately 9,000 acre feet of potable water annually. Sewer flow from the City's residential area, west of Pacific Coast Highway, goes to the Hyperion Plant in the City of Los Angeles for treatment. Sewer flow from the commercial area of the City, east of Pacific Coast Highway, goes to the County Sanitation District for treatment. El Segundo's residential area's most recent 12-month sewer flow figures to Hyperion Plant average approximately 1.3 MGD. The City's agreement with the City of Los Angeles permits an average flow of 2.75 MGD of sewer treatment and disposal capacity in the Hyperion system. Small housing development can be accommodated through potential offsite water

and/or sewer improvements without making much difference to overall citywide demand. Therefore, adequate remaining capacity is available to accommodate the City's RHNA obligations of 521 units through 2029.

The City will provide a copy of the adopted 2021-2029 Housing Element to its water and sewer service providers, reaffirming their policy to provide priority allocation to affordable housing developments, as required by State law, should a rationing system is instituted.

# B. OPPORTUNITIES FOR ENERGY CONSERVATION

As residential energy costs rise, increasing utility costs reduce the affordability of housing. The City has many opportunities to directly affect energy use within its jurisdiction. Title 24 of the California Code of Regulations Code sets forth mandatory energy standards for new development and requires adoption of an "energy budget." The following are among the alternative ways to meet these energy standards:

> **Alternative 1:** The passive solar approach, which requires proper solar orientation, appropriate levels of thermal mass, south facing windows, and moderate insulation levels.
>
> **Alternative 2:** Generally requires higher levels of insulation than Alternative 1, but has no thermal mass or window orientation requirements.
>
> **Alternative 3:** Also is without passive solar design but requires active solar water heating in exchange for less stringent insulation and/or glazing requirements.

In turn, the home building industry must comply with these standards while localities are responsible for enforcing the energy conservation regulations. Some additional opportunities for energy conservation include various passive design techniques. Among the range of techniques that could be used for purposes of reducing energy consumption are the following:

- Locating the structure on the northern portion of the sunniest portion of the site;
- Designing the structure to admit the maximum amount of sunlight into the building and to reduce exposure to extreme weather conditions; and
- Locating indoor areas of maximum usage along the south face of the building and placing corridors, closets, laundry rooms, power core, and garages along the north face to the building to serve as a buffer between heated spaces and the colder north face.

## 6. Insulation and Weatherproofing

Most homes in El Segundo are greater than 30 years old. Therefore, to conserve the heat generated by older heating units and minimize the heat loss ratio, the earlier-built homes in El Segundo can be insulated in the attic space and exterior walls. Windows and exterior doors, in these less recent homes, can be fitted with air-tight devices or caulking, or can be replaced with the more energy efficient (dual pane) windows and doors that now available.

## 7. Natural Lighting

Daytime interior lighting costs can be significantly reduced or eliminated with the use of properly designed and located skylights. Skylights/solar tubes can be easily installed at reasonable expense in existing houses, thereby substantially reducing electricity costs and energy consumption.

## 8. Solar Energy

Implementing solar energy strategies, noted above, is a practical, cost effective, and environmentally sound way to heat and cool a home. In California, with its plentiful year-round sunshine, the potential uses of solar energy are numerous. With proper building designs, this resource provides for cooling in the summer and heating in the winter; it can also heat water for domestic use and swimming pools and generate electricity.

Unlike oil or natural gas, solar energy is an unlimited resource which will always be available. Once a solar system is installed, the only additional costs are for the maintenance or replacement of the system itself. The user is not subject to unpredictable fuel price increases. Moreover, solar energy can be utilized without any serious safety or environmental concerns.

Solar heating and cooling systems are of three general types: passive, active, or a combination thereof. In passive solar systems, the building structure itself is designed to collect the sun's energy, then store and circulate the resulting heat similar to a green house. Passive buildings are typically designed with a southerly orientation to maximize solar exposure, and constructed with dense materials such as concrete or adobe to better absorb the heat. Properly placed windows and overhanging eaves also contribute to keeping a house cool.

Active systems collect and store solar energy in panels attached to the exterior of a house. This type of system utilizes mechanical fans or pumps to circulate the warm/cool air, while heated water can flow directly into a home's hot water system.

Although passive systems generally maximize use of the sun's energy and are less costly to install, active systems have greater potential application to both cool and heat the house and provide hot water. This may mean lower energy costs for El Segundo residents presently dependent on conventional fuels. The City should also encourage the use of passive solar systems in new residential construction to improve energy efficiency for its citizens.

## 9. Water Conservation

Simple water conservation techniques can save a family thousands of gallons of water per year, plus many dollars in water and associated energy consumption costs. Many plumbing products are now available which eliminate unnecessary water waste by restricting the volume of water flow from faucets, showerheads, and toilets. In this regard, the City will continue to require the incorporation of low flow plumbing fixtures into the design of all new residential units.

The use of plant materials in residential landscaping that are well adapted to the climate in the El Segundo area, and the use of ample mulch to retain soil moisture, can measurably contribute to water conservation by reducing the need for irrigation, much of which is often lost through evaporation. A family can also save water by simply fixing dripping faucets and using water more conservatively. In addition, such conservation practices save on gas and electricity needed to heat water and the sewage

system facilities needed to treat it. By encouraging residents to conserve water and retrofit existing plumbing fixtures with water saving devices, the City can greatly reduce its water consumption needs and expenses.

## 10. Energy Audits

The Southern California Edison Company provides energy audits to local residents on request. Many citizens are not aware of this program. The City can aid in expanding this program by supplying the public with pertinent information regarding the process including the appropriate contacts. Energy audits are extremely valuable in pinpointing specific areas in residences, which are responsible for energy losses. The inspections also result in specific recommendations to remedy energy inefficiency.

## 11. New Construction

The City of El Segundo will continue to require the incorporation of energy conserving (i.e., Energy Star) appliances, fixtures, and other devices into the design of new residential units. The City will also continue to review new subdivisions to ensure that each lot optimizes proper solar access and orientation to the extent possible. The City will also continue to require the incorporation of low flow plumbing fixtures into the design of all new residential units.

## 12. South Bay Environmental Services Center

The South Bay Environmental Services Center (SBESC) partners with local agencies, including the City of El Segundo and local utility providers. The SBESC acts as a central clearinghouse for energy efficiency information and resources. The purpose of the organization is to help significantly increase the availability of information and resources to the people in the South Bay region to help them save water, energy, money, and the environment. The SBESC assists public agencies, businesses, and residents of the South Bay to best utilize the many resources available to them through a wide variety of statewide and local energy efficiency and water conservation programs. It recently expanded their services through implementation of an Energy Efficiency Plus (EE+) program to deliver energy savings to local public agencies, including the City of El Segundo.

## 13. Green Building Program

The City implements a Green Building Program that encourages homeowners and building professionals to incorporate green building design in construction activities through the use of "green" building materials. This can be accomplished by referencing the City's Home Remodeling Green Building Guidelines and implementing green measures into a home remodeling project.

Green buildings are sited, designed, constructed and operated to enhance the wellbeing of occupants, and to minimize negative impacts to the community and the natural environment.

The five components of green design included in the program are:

- Implementing sustainable site planning;
- Safeguarding water and water efficiency;
- Ensuring energy efficiency and employing renewable energy;
- Using conservation of materials and resources; and
- Providing indoor environmental quality

## 14. Environmental Action Plan and El Segundo Environmental Committee

The El Segundo Environmental Committee addresses a broad range of environmental issues facing the City of El Segundo. The Environmental Committee reviews existing City environmental programs and recommends new green policies and programs to the City Council. El Segundo has many accomplishments and has received awards for its accomplishments in the areas of conservation and environmental sustainability.

# 6. HOUSING PLAN

## A. HOUSING GOALS AND POLICIES

This section of the Housing Element includes the housing goals and policies of the City of El Segundo currently in the adopted Housing Element. The City intends to continue to implement these goals to address a number of important housing-related issues. Some policies, however, have been modified from the adopted Housing Element to address current housing issues, the new RHNA, and requirements of State Housing Element Law applicable to the current planning period. These revised policies are presented in this section.

The following five major issue areas are addressed by the goals and policies of the current Housing Element. These same goals are proposed to be carried over to this Housing Element. Several policies, however, have been changed or updated to reflect current housing issues and these are presented in this section.

- Conserving and improving the condition of the existing affordable housing stock;
- Assisting in the development of affordable housing;
- Providing adequate sites to achieve a diversity of housing;
- Removing governmental constraints, as necessary; and
- Affirmatively furthering fair housing.

### CONSERVING EXISTING AFFORDABLE HOUSING STOCK

According to the 2014-2018 ACS, about 90 percent of El Segundo's housing units are more than 30 years old, the age at which a housing unit will typically begin to require major repairs. This represents a significant proportion of the City's housing stock, and indicates that programs which assist with preventive maintenance may be necessary to avoid housing deterioration.

**GOAL 1: PRESERVE AND PROTECT THE EXISTING HOUSING STOCK BY ENCOURAGING THE REHABILITATION OF DETERIORATING DWELLING UNITS AND THE CONSERVATION OF THE CURRENTLY SOUND HOUSING STOCK.**

**Policy 1.1:** Continue to promote the use of rehabilitation assistance programs to encourage property owners to rehabilitate owner-occupied and rental housing where feasible.

**Policy 1.2:** Encourage investment of public and private resources to foster neighborhood improvement.

**Policy 1.3:** Encourage the maintenance of sound owner-occupied and renter-occupied housing.

**Policy 1.4:** Continue to promote sound attenuation improvements to the existing housing stock.

## ASSISTING IN THE DEVELOPMENT OF AFFORDABLE HOUSING

There is a range of household types in El Segundo that need housing to fit their particular circumstances. For example, the housing needs assessment indicates there may be a need for additional senior housing in El Segundo. The City seeks to expand the range of housing opportunities, including those for low- and moderate income first-time homebuyers, seniors on fixed incomes, extremely low-, very low-, low, and moderate-income residents, the disabled, military personnel, and the homeless.

**GOAL 2: PROVIDE SUFFICIENT NEW, AFFORDABLE HOUSING OPPORTUNITIES IN THE CITY TO MEET THE NEEDS OF GROUPS WITH SPECIAL REQUIREMENTS, INCLUDING THE NEEDS OF LOWER AND MODERATE- INCOME HOUSEHOLDS.**

**Policy 2.1:** Provide regulations, as required by California Law, to facilitate additional housing and develop programs to serve special needs groups (including persons with developmental disabilities).

**Policy 2.2:** Facilitate the creation of affordable housing opportunities for extremely low, very low and low- income households.

**Policy 2.3:** Provide an allowance in the City's zoning regulations, as required by California Law, to permit transitional/supportive housing facilities as residential uses and emergency shelters in commercial zones.

## PROVIDING ADEQUATE SITES

Provision of adequate sites through land use planning and development regulations to accommodate the City's housing needs is a key purpose of the Housing Element.

**GOAL 3: PROVIDE OPPORTUNITIES FOR NEW HOUSING CONSTRUCTION IN A VARIETY OF LOCATIONS AND A VARIETY OF DENSITIES.**

**Policy 3.1:** Provide for the construction of adequate housing in order to meet the goals of the Regional Housing Needs Assessment (RHNA).

**Policy 3.2:** Facilitate the development of properties designated for multi-family use that currently contains single-family development for multi-family residential development.

**Policy 3.3:** Facilitate development on vacant and underdeveloped property designated as residential or mixed use to accommodate a diversity of types, prices and tenure.

**Policy 3.4:** Permit accessory dwelling units pursuant to State law.

## REMOVING GOVERNMENTAL CONSTRAINTS

In addition to the private sector, actions by the City and other governmental regulations can have an impact on the price and availability of housing. Land use controls, site improvement requirements, building codes, fees, and other local programs intended to improve the overall quality of housing may serve as a constraint to housing development.

**GOAL 4: REMOVE GOVERNMENTAL CONSTRAINTS ON HOUSING DEVELOPMENT.**

**Policy 4.1:** Continue to allow second units, condominium conversions, caretaker units and second floor residential use in commercial zones as specified in the El Segundo Municipal Code.

**Policy 4.2:** Continue to allow factory-produced housing according to the El Segundo Municipal Code.

**Policy 4.3:** Facilitate timely development processing for residential construction projects and expedite the project review process.

**Policy 4.4:** Facilitate provision of infrastructure to accommodate residential development.

### AFFIRMATIVELY FURTHERING FAIR HOUSING

In order to make adequate provision for the housing needs of all segments of the community, the City must ensure equal and fair housing opportunities are available to all residents.

**GOAL 5: PROVIDE HOUSING OPPORTUNITIES INCLUDING OWNERSHIP AND RENTAL, FAIR-MARKET AND ASSISTED, IN CONFORMANCE WITH OPEN HOUSING POLICIES AND FREE OF DISCRIMINATORY PRACTICES.**

**Policy 5.1:** Disseminate and provide information on fair housing laws and practices to the community.

**Policy 5.2:** Promote City efforts to provide equal opportunity housing for existing and projected demands in El Segundo.

## B. HOUSING PROGRAMS

The goals and policies contained in the City's Housing Element address El Segundo's identified housing needs and are being implemented through a series of on-going housing programs and activities. The housing programs introduced on the following pages include past programs that are currently in operation and new programs which have been added to address the City's unmet housing needs and to fulfill the requirements of California Housing Element law.

### CONSERVING AND IMPROVING EXISTING AFFORDABLE HOUSING

**PROGRAM 1: HOUSING REHABILITATION**

Due to the lack of funding, the City suspended its two residential rehabilitation assistance programs:

- Minor Home Repair Program (MHR): This program provides loans and grants for low-income property owners, zero interest deferred loans (due upon sale or transfer of ownership).
- Residential Sound Insulation Program (RSI): This program provides eligible property owners a means of having improvements made to their residential property to reduce the impacts of noise from Los Angeles International Airport (LAX) to the interior habitable portions of the residence(s).

**Objectives and Timeline:**

- In 2022, assess specific housing rehabilitation needs, including if certain neighborhoods should be targeted for assistance due to age of housing stock and existing conditions.
- In 2023 and annually thereafter, identify appropriate funding sources to reinstate residential rehabilitation assistance programs.

**Funding Source:** To be determined

**Responsible Agency:** Development Services Department/Housing Division

### PROGRAM 2: CODE COMPLIANCE INSPECTION PROGRAM

The Building Safety Division of El Segundo maintains statistics pertaining to Code compliance inspections and monitors housing conditions throughout the City. The Building Safety Division responds to violations brought to its attention on a case-by-case basis. Although Code violations in the City are limited, early detection and resolution are essential in preventing the deterioration of residential neighborhoods.

**Objectives and Timeline:**

- Continue to conduct inspections on a complaint basis through the City's Building Safety Division.

**Funding Source:** General Fund

**Responsible Agency:** Development Services Department/Building and Safety Division

## ASSIST IN THE PRODUCTION OF AFFORDABLE HOUSING

### PROGRAM 3: ACCESSORY DWELLING UNITS (ADU)

The City amended its ADU ordinance in 2020 to comply with recent changes to State law and has experienced increased interest and ADU construction activities. ADUs represent an important potential resource for affordable housing in El Segundo. To facilitate ADU development, the City will consider the following:

- Provide technical and resources guides online and pre-approved plans.
- Pursue State funding available to assist lower- and moderate-income homeowners in the construction of ADUs and/or to provide grants in exchange for deed restriction as low-income use.
- Conduct increased outreach and education on ADU options and requirements.

**Objectives and Timeline:**

- Develop incentives and tools to facilitate ADU construction by the end of 2023, with the goal of achieving 80 ADUs in eight years.
- In 2022, update City website to provide information of ADU resources, such as grants available to homeowners for ADU construction from the California Housing Finance Agency (CalHFA).

- Beginning in 2022 and annually thereafter, pursue available funding to facilitate ADU construction, including affordable ADUs.
- Monitor ADU construction trends in 2024 to determine if adjustments to incentives and tools are necessary to meet the City's projected goal. Make necessary adjustments to incentives and tools within six months.

**Funding Source:** General Fund

**Responsible Agency:** Development Services Department/Planning Division

**PROGRAM 4: INCLUSIONARY HOUSING ORDINANCE AND AFFORDABLE HOUSING STRATEGY**

The City seeks to proactively encourage and facilitate the development of affordable housing for lower income households, particularly those with special needs including seniors, large households, extremely low-income (ELI) households, and households with persons who have disabilities (including developmental disabilities). To facilitate affordable housing development, the City will:

- Provide technical assistance with Federal and State funding applications;
- Offer streamlined processing of permit applications;
- Waive or defer development fees;
- Consider reducing certain development standards (such as parking requirements); and/or
- Provide financial assistance to nonprofit developers to the extent possible.

The City is currently developing an inclusionary housing ordinance to include a 15 to 20 percent requirement with a potential in-lieu fee option. Once established, the ordinance will have the potential of creating affordable housing opportunities in the community and generating potential in-lieu fees to be deposited into the City's Affordable Housing Fund. As of 2020, the City had allocated $5.3 million to the Affordable Housing Fund.

On April 19, 2021, the City entered into an agreement with a consultant to assist in the City in the development of an Inclusionary Housing policy/ordinance. As of December 2021, the following tasks were completed:

- Conducted research on inclusionary housing policies in the South Bay region and statewide.
- Initiated community outreach, including contacting local for-profit developers, real estate brokers, and housing-related non-profit groups.
- Conducted a study session with the Planning Commission.
- Completed financial feasibility analysis for various development types.

A study session with the City Council is planned for February/March 2022 and a community workshop is planned for March/April. Policy recommendations are anticipated to be available in April 2022.

On February 16, 2021, the El Segundo City Council agreed to enter into an Exclusive Negotiating Agreement (ENA) with Many Mansions to serve as the City's Affordable Housing Services Provider to develop and manage affordable housing units, services, and programs. Many Mansions will be developing an Affordable Housing Strategic Plan to assist the City in meeting the needs of lower- and moderate-income residents and state-mandated affordable housing goals. On October 5, 2021, the City Council entered into a contract with Many Mansions to provide the following services:

- Finalize the City's affordable housing goals and objectives.
- Recommend strategies to remove constraints and/or increase affordable housing.
- Create a list of high priority neighborhoods and/or sites based on the Housing Element, City recommendations, and Many Mansions' expertise as an affordable housing developer.
- Solicit community feedback via a City-approved community engagement plan that includes at least two community workshops.
- Develop an Affordable Housing Strategic Plan (AHSP) with an emphasis on fulfilling the 6th cycle RHNA, with the target of presenting the plan to City Council by June 30, 2022.
- Work with the City to identify properties with the potential for affordable housing development and existing rental properties that may be suitable for acquisition, rehabilitation, and conversion to City-restricted affordable housing projects.
- Assist the City with the ongoing monitoring and administration of affordable and/or senior housing units.

**Objectives and Timeline:**

- Establish the Inclusionary Housing program by summer 2022.
- Develop Affordable Housing Strategic Plan by the June 30, 2022 and implement the Affordable Housing Strategic Plan utilizing the services of Many Mansions.
- Establish written procedures to streamline affordable housing pursuant to SB 35 by the end of 2022.
- Continue to facilitate affordable housing development through incentives and technical assistance.

**Funding Source:** Affordable Housing Fund

**Responsible Agency:** Development Services Department/Housing Division

## PROVIDING ADEQUATE SITES

A key element in satisfying the housing needs of all segments of the community is the provision of adequate sites for all types, sizes and prices of housing. Both the general plan and zoning regulations identify where housing may be located, thereby affecting the supply of land available for housing. The Housing Element is required to identify adequate sites to address the City's share of regional housing needs (RHNA).

### PROGRAM 5: PROVISION OF ADEQUATE SITES

For the 6th cycle Housing Element, the City has been assigned a RHNA of 492 units (189 very low income, 88 low income, 84 moderate income, and 131 above moderate income units). In addition, the City has incurred a carryover of 29 lower income units (18 very low and 11 low income units) from the 5th cycle Housing Element. The City relied on the 540 E. Imperial Avenue Specific Plan to accommodate the 5th cycle lower income RHNA. However, this project ultimately did not include any affordable units. Therefore, the City has a total RHNA obligation of 521 units (207 very low income, 99 low income, 84 moderate income, and 131 above moderate income units).

Based on pipeline projects and projected ADUs, the City is able to accommodate 84 units, with a shortfall of 437 units (193 very low income, 65 low income, 79 moderate income, and 100 above

moderate income units). To accommodate this shortfall, the City has identified 19 candidate properties for rezoning/upzoning (see Table 5-4). The sites will be rezoned as housing overlay (O) at 30-40 units per acre and mixed-use overlay (MU-O) at 40-50 units per acre. Combined, these candidate sites can accommodate up to 590 units. Consistent with the requirements of Government Code § 65863, rezoning and upzoning for the lower income RHNA shortfall must meet the following minimum State requirements:

- Permit owner-occupied and rental multi-family uses by-right for developments in which 20 percent or more of the units are affordable to lower income households. By-right means local government review must not require a conditional use permit (CUP), planned unit development permit, or other discretionary review or approval.
- Accommodate a minimum of 16 units per site;
- Require a minimum density of 20 units per acre; and
- At least 50 percent of the lower income need must be accommodated on sites designated for residential use only or on sites zoned for mixed uses that accommodate all of the very low and low income housing need, if those sites:
    - Allow 100 percent residential use, and
    - require residential use occupy 50 percent of the total floor area of a mixed-use project.

While State law requires the rezoned sites for lower income RHNA to have a floor of 20 units per acre, all units used to meet the City's lower income RHNA will comply with the standards above and are proposed overlay (O) sites with a minimum density of 30 units per acre.

**Objectives and Timeline:**

- By October 15, 2022, rezone adequate sites to accommodate the 29-unit RHNA shortfall carry over from the 5th cycle Housing Element.
- By October 15, 2022, amend the ESMC to provide by right approval of projects on rezoned sites for lower income RHNA if the project provides 20 percent of the units as affordable housing for lower income households.
- By October 15, 2024, rezone adequate sites for the 6th cycle RHNA shortfall (193 very low income, 65 low income, 79 moderate income, and 100 above moderate income units).
- By October 15, 2024, update Downtown Specific Plan to include additional opportunities for residential development.
- By October 15, 2022, develop objective design standards for residential development consistent with SB 330.

**Funding Source:** General funds

**Responsible Agency:** Development Services Department/Planning Division

**PROGRAM 6: MONITORING OF NO NET LOSS (SB 166)**

To ensure that the net future housing capacity is maintained to accommodate the City's RHNA figures, pursuant to AB 1397, the City will continue to maintain an inventory of adequate housing sites for each income category. This inventory details the amount, type, size and location of vacant land, recyclable properties and parcels that are candidates for consolidation to assist developers in

identifying land suitable for residential development. In addition, the City will continuously and at least annually monitor the sites inventory and the number of net units constructed in each income category. If the inventory indicates a shortage of adequate sites to accommodate the remaining regional housing need, the City will identify alternative sites so that there is no net loss of residential capacity pursuant to Government Code Section 65863.

To facilitate annual evaluation, the City will implement a formal ongoing project-by-project procedure pursuant to Government Code Section 65863 which will evaluate identified capacity in the sites inventory relative to projects or other actions potentially reducing density and identifying additional sites as necessary. This procedure and annual evaluation will address non-residentially or mixed use zoned land to determine whether these sites are being developed for uses other than residential. If a shortfall in sites capacity occurs, the City will identify replacement sites within six months.

**Objectives and Timeline:**

- By October 15, 2022, develop a formal ongoing procedure to evaluate identified capacity and identify additional sites as necessary
- Continue to perform project-by-project evaluation to determine if adequate capacity remains for the remaining RHNA.

**Funding Source:** General fund

**Responsible Agency:** Development Services Department/Planning Division

**PROGRAM 7: LOT CONSOLIDATION**

The City facilitates the development of new units on small lots either through the consolidation of small lots or through the development of incentives to encourage development of these lots. Consolidation of lots will be encouraged through the on-going identification of those lots in the City's inventory that offer the best possibility for consolidation to achieve greater building density and affordability. Incentives to encourage development on small lots may include the development of a "package" of incentives (such as modified development standards for small lots including parking, lot coverage, open space, and setback reductions) targeting projects that include very low and extremely low-income units.

**Objectives and Timeline:**

- Continue to facilitate the redevelopment of underutilized sites by annually contacting the development community through various outreach methods, such as promoting opportunities and incentives on the City's website, meeting with developers, and participating in local forums (City forums, Chamber of Commerce, or local real estate brokers' events).
- By October 15, 2024, develop strategies to encourage the development and consolidation of small lots, specifically for affordable housing.

**Funding Source:** General funds

**Responsible Agency:** Development Services Department/Planning Division

## REMOVING GOVERNMENTAL AND OTHER CONSTRAINTS

### PROGRAM 8: EL SEGUNDO MUNICIPAL CODE (ESMC) AMENDMENTS

As part of the City's SB 2 grant-funded planning efforts, the City is currently in the process of amending the ESMC to address the following:

**Density Bonus:** The ESMC does not currently include Density Bonus regulations. The State has recently passed several bills that change the State Density Bonus law. These include:

- **AB 1763 (Density Bonus for 100 Percent Affordable Housing)** – Density bonus and increased incentives for 100 percent affordable housing projects for lower income households.
- **SB 1227 (Density Bonus for Student Housing)** - Density bonus for student housing development for students enrolled at a full-time college, and to establish prioritization for students experiencing homelessness.
- **AB 2345 (Increase Maximum Allowable Density)** - Revised the requirements for receiving concessions and incentives, and the maximum density bonus provided.

**Transitional Housing:** The City is in the process of amending the ESMC to allow transitional housing in all zones where residential uses are permitted, subject to the same development standards and permitting processes as the same type of housing in the same zone.

**Single Room Occupancy (SRO) Housing:** The City is currently in the process of amending the ESMC to address the provision of SRO or micro units.

In addition, other revisions to the ESMC are necessary:

**Residential Care Facilities for Seven or More:** The ESMC does not currently address the provision of large residential care facilities (for seven or more persons). The City will amend the ESMC to accommodate and facilitate the development of this use type.

**Emergency Shelters:** The City amended the ESMC to permit emergency shelters in the Light Manufacturing (M1) zones by right without discretionary review. However, the ESMC contains provisions that are not consistent with State law:

- **Separation Requirement -** State law allows a maximum 300-foot separation requirement from another emergency shelter only. No other separation requirements are allowed. However, the ESMC includes additional separation requirements from residentially zoned property, schools, parks and open space, and childcare facilities.
- **Parking Standards –** ESMC requires one parking space per three bed, plus one space per employee. AB 139 limits parking requirements for emergency shelters based on the number of employees only and not to exceed the requirements for other uses in the same zone.

**Low Barrier Navigation Center (LBNC):** AB 101 requires cities to allow a Low Barrier Navigation Center development by right in areas zoned for mixed uses and nonresidential zones permitting multifamily uses if it meets specified requirements. A "Low Barrier Navigation Center" is defined as "a Housing First, low-barrier, service-enriched shelter

focused on moving people into permanent housing that provides temporary living facilities while case managers connect individuals experiencing homelessness to income, public benefits, health services, shelter, and housing." Low Barrier shelters may include options such as allowing pets, permitting partners to share living space, and providing storage for residents' possessions.

**Supportive Housing:** Pursuant to State law supportive housing is a residential use and should be permitted in the same manner as similar uses in the same zone. Furthermore, AB 2162 requires supportive housing projects of 50 units or fewer to be permitted by right in zones where multi-family and mixed-use developments are permitted, when the development meets certain conditions. The bill also prohibits minimum parking requirements for supportive housing within ½ mile of a public transit stop.

**Employee Housing:** Pursuant to State Employee Housing Act, employee housing for six or fewer employees is required to be treated as a single-family structure and permitted in the same manner as other dwellings of the same type in the same zone. The City will consider amending the ESMC to comply with State law regarding employee housing.

**Reasonable Accommodation:** Recent City amendment to the ESMC inadvertently removed reasonable accommodation from the Administrative Adjustment process that can fast tracks approval requests for flexibility in zoning/development standard in order to accommodate the housing needs of persons with disabilities. The ESMC will be amended to address this clerical error.

**Objectives and Timeline:**

- By June 2022, complete ESMC revisions to address density bonus, SRO, and transitional housing as part of the City's SB 2 grant efforts.
- By the end of 2023, complete ESMC revisions to address provisions for residential care facilities (for seven or more persons), emergency shelters, low barrier navigation centers, supportive housing, employee housing, and reasonable accommodation.
- By the end of 2023, consider an administrative subdivision process for projects with ten or fewer units.

**Funding Source:** General funds; SB 2

**Responsible Agency:** Development Services Department/Planning Division

## AFFIRMATIVELY FURTHER FAIR HOUSING

### PROGRAM 9: FAIR HOUSING PROGRAM

The City will undertake a number of actions to affirmatively further fair housing. These actions are outlined in Table 6-1.

**Table 6-1: Fair Housing Actions**

| Fair Housing Issue | Contributing Factors | Meaningful Action |
|---|---|---|
| **Fair Housing Enforcement and Outreach**<br><br>**Housing Mobility** | Insufficient fair housing monitoring and limited outreach capacity<br><br>• Lack of monitoring<br>• Lack of a variety of media inputs<br>• Lack of marketing community meetings | • Annually review changes in State and federal laws to ensure that all laws, programs and activities affirmatively further fair housing in accordance with state law.<br>• Annually participate in regional efforts to address fair housing issues and monitor emerging trends/issues in the housing market. Also, participate in the update of the five-year update of the Regional Analysis of Impediments to Fair Housing Choice.<br>• By June 2022, develop interest list for update on fair housing and affordable housing projects. On an ongoing basis, contact interest list with updates.<br>• Update the City website semi-annually with affordable housing projects and resources.<br>• By the end of 2022, include fair housing information on the City's website, including up-to-date fair housing laws, services, and information on filing discrimination complaints.<br>• On an ongoing basis, utilize non-traditional media (i.e., social media, City website) in outreach and education efforts in addition to print media and notices.<br>• When considering specific plan or rezoning proposals, evaluate whether the change in zoning will help achieve fair housing goals. Specifically, incorporate additional housing opportunities in the Downtown Specific Plan update to be completed by 2024.<br>• Continue advertising and providing programs related to fair housing including the Home Delivered Meals program, Senior In-Home Care program, and Juvenile Diversion program.<br>• As part of the Affordable Housing Strategic Plan (see Program 4), conduct community outreach with an emphasis on outreaching to special needs populations and households impacted by disproportionate needs in the northern and eastern areas of the City. Specifically, conduct at least two community workshops in 2022. |
| **Place-Based Strategy for** | Concentration of protected persons (persons with disabilities, LMI households, children in | • As part of the Affordable Housing Strategic Plan (June 2022), engage in dialogues with affordable housing providers to learn if there are actions the City can take to support their continued operation. |

### Table 6-1: Fair Housing Actions

| Fair Housing Issue | Contributing Factors | Meaningful Action |
|---|---|---|
| **Community Improvements**<br><br>**Housing Mobility** | families or single-parent families)<br><br>• Location and type of affordable housing-concentration of HCVs<br>• Proximity of lower income households to resources (i.e., shopping centers, transit). | • Implement actions included in Program 4 regarding affordable housing funding and the Inclusionary Housing Policy.<br>• As opportunities arise, collaborate with other jurisdictions to create a new countywide source of affordable housing.<br>• As opportunities arise, collaborate with transit providers to help ensure that members of protected classes can access jobs in employment centers. |
| | Substandard housing conditions<br><br>• Age of housing stock<br>• Cost of repairs/ rehabilitation | • By the end of 2022, amend the Zoning Ordinance to comply with State laws regarding special needs groups (see Program 8).<br>• Prioritize specific neighborhoods for public improvement. Specifically target the northern and eastern tracts where there are higher concentrations of aging housing units. |
| **Anti-Displacement** | Displacement risk in areas with special needs populations and disproportionate housing needs<br><br>• Displacement risk due to economic pressures<br>• Increasing rents<br>• HCV recipient concentration | • Focus fair housing outreach and education in areas with high displacement risk (tracts with higher rates of renter overpayment and tracts in the proximity of other sensitive communities). Specifically target the northwestern corner of the City where renters, including overpaying renters, are most highly concentrated.<br>• Expand outreach and education on recent State laws (SB 329 and SB 222) supporting source of income protection for publicly assisted low income households (HCVs). |

## C. SUMMARY OF QUANTIFIED OBJECTIVES

The following summarizes the City's quantified objectives for the 2021-2029 Housing Element planning period.

**Table 6-2: 2021-2029 Quantified Objectives**

| | Units/Households Assisted |
|---|---|
| **Housing Production** | |
| Extremely Low Income | 103 |
| Very Low Income | 104 |
| Low Income | 99 |
| Moderate Income | 84 |
| Above Moderate Income | 131 |
| Total Units to be Constructed | 521 |
| **Rehabilitation** | |
| Extremely Low Income | 10 |
| Very Low Income | 10 |
| Low Income | 20 |
| Moderate Income | 0 |
| Above Moderate Income | 0 |
| Total Households to be Assisted | 40 |
| **Conservation** | |
| Extremely Low Income | 48 |
| Very Low Income | 49 |
| Low Income | 0 |
| Moderate Income | 0 |
| Above Moderate Income | 0 |
| Total Units to be Conserved | 97 |

# APPENDIX A: HOUSING ACCOMPLISHMENTS

| Table A-1 Review of Past Accomplishments | | |
|---|---|---|
| **Program** | **2013-2021 Objectives** | **Effectiveness and Continued Appropriateness** |
| **GOAL 1:** Preserve and protect the existing housing stock by encouraging the rehabilitation of deteriorating dwelling units and the conversion of the currently sound housing stock. | | |
| **Program 1 – Housing Rehabilitation** | • **Program 1a. Minor Home Repair (MHR)** – Annually consult with HUD to identify and pursue potential funding opportunities and funding sources that may be available and appropriate to reinstate the MHR program.<br>• **Program 1b. Residential Sound Insulation Program (RSI)** –Assist approximately 150 households annually. | **Effectiveness:**<br>• **Program 1a –** The City continues to identify potential funding sources to implement the MHR Program. As of 2019, a funding source has not been identified.<br>• **Program 1b –** The RSI Program was suspended in 2018 due to lack of funding. However, the City assisted approximately 600 households during the planning period prior to the suspension of the program.<br>**Continued Appropriateness:** The 2021-2029 Housing Element includes a program to pursue funding for rehabilitation assistance. |
| **Program 2 – Code Compliance Inspection Program** | • Continue to conduct inspections on a complaint basis through the City's Building Safety Division. | **Effectiveness:** The City continues to implement the Code Compliance Inspection Program in response to complaints.<br>**Continued Appropriateness:** This program is continued in the 2021-2029 Housing Element. |
| **GOAL 2:** Provide sufficient new, affordable housing opportunities in the City to meet the needs of groups with special requirements, including the needs of lower and moderate- income households. | | |
| **Program 3 – Second Units on R-1 Zoned Parcels** | • Continue to facilitate the development of second units on R-1 zoned parcels.<br>• Maintain a list of eligible properties for second units on the City's website. | **Effectiveness:** The City issued 19 Accessory Dwelling Unit (ADU) permits in 2018 and 40 in 2019. The City has exceeded their objective of facilitating the development of 8 second units during the planning period. |

| Table A-1 Review of Past Accomplishments | | |
|---|---|---|
| **Program** | **2013-2021 Objectives** | **Effectiveness and Continued Appropriateness** |
| | • Monitor and annually evaluate the effectiveness of the second unit ordinance and remove any potential constraints, if any.<br>• Facilitate the development of one second unit per year, for a total of 8 second units during the Housing Element planning period. | The City El Segundo amended the ADU ordinance in 2020 in compliance with State law.<br>**Continued Appropriateness:** The 2021-2029 Housing Element includes a program to facilitate ADU production. |
| **Program 4 – Affordable Housing Incentives** | • Proactively encourage and facilitate on an ongoing basis the development efforts of non- profit organizations for the construction of affordable housing for lower income households, particularly those with special needs including large households, seniors, extremely low-income (ELI) households, and households with persons who have disabilities or developmental disabilities.<br>• Specifically, facilitate the development of five affordable housing units during the 2013-2021 Housing Element planning period. | **Effectiveness:** The City is currently developing an inclusionary housing ordinance to include a 15-20% requirement and potential in-lieu fee option.<br>In February 2021, the City entered into a contract with Many Mansions as the City's Affordable Housing Services Provider to fulfill its affordable housing needs per the RHNA goals.<br>El Segundo has established an affordable housing fund to fund activities under the Housing Division and Affordable Housing Services Provider. As of 2020, the City had allocated $5.3 million to the affordable housing fund.<br>**Continued Appropriateness:** The program in continued in the 2021-2029 Housing Element. |
| **GOAL 3:** Provide opportunities for new housing construction in a variety of locations and a variety of densities in accordance with the land use designations and policies in the Land Use Element. | | |
| **Program 5 – Provision of Adequate Sites** | • Continue to provide a variety of incentives to facilitate the development of vacant and underutilized properties, including the waiver or deferment of fees, reduced parking requirements and priority processing for affordable housing projects. | **Effectiveness:** In 2017, the City worked with the El Segundo Unified School District (ESUSD) to permit the development of a former school site. Permits issued included provision for 6 affordable units. However, this project ultimately did not include any affordable units and the developer provided the City with an in-lieu fee of $5.3 million. This fund has |

| Table A-1 Review of Past Accomplishments | | |
|---|---|---|
| **Program** | **2013-2021 Objectives** | **Effectiveness and Continued Appropriateness** |
| | • Maintain an annually updated residential sites inventory on the City's website.<br>• Annually monitor the adequacy of the City's residential sites inventory, particularly for sites adequate to facilitate lower income housing.<br>• Should cumulative development on the City's vacant and underutilized sites (particularly on the mixed use/nonresidential sites) impact the City's continued ability to meet its RHNA, identify alternative approaches to replenish the City's sites capacity.<br>• Continue to collaborate with the El Segundo Unified School District to pursue a residential project with an affordable component that will satisfy El Segundo's lower-income RHNA, with anticipated entitlement by the end of 2015. | been deposited into the City's Affordable Housing Fund.<br><br>In 2019, the City prepared a study on the R-3 Zone (high density residential) and concluded that most structures were either new, condos, or built at a density of 35 units per acre.<br><br>The City is currently exploring alternatives and continues to review the inventory to confirm the provision of adequate sites.<br><br>**Continued Appropriateness:** As part of the 2021-2029 Housing Element development, the City conducted an extensive assessment of available sites for the RHNA. The 2021-2029 Housing Element includes a program to rezone and upzone properties for the RHNA. |
| **Program 6 – Facilitate Development on Underutilized Sites on Small Lots** | • Continue to facilitate the redevelopment of underutilized sites by annually contacting the development community through various outreach methods, such as promoting opportunities and incentives on the City's website, meeting with developers, and participating in local forums (City forums, Chamber of Commerce, or local real estate brokers' events).<br>• Develop strategies to encourage the development and consolidation of small lots, specifically for affordable housing. | **Effectiveness:** El Segundo has facilitated approximately three lot consolidations per year throughout the planning period. The City has exceeded the one lot consolidation program objective.<br><br>**Continued Appropriateness:** This program continues to be appropriate for the new sites identified for the 6th cycle RHNA. |

| Table A-1 Review of Past Accomplishments | | |
|---|---|---|
| **Program** | **2013-2021 Objectives** | **Effectiveness and Continued Appropriateness** |
| | • Facilitate one lot consolidation project for a total of five units during the 2013-2021 Housing Element planning period. | |
| **GOAL 4:** Remove governmental constraints on housing development. | | |
| Program 7 – Zoning Revisions | • **Program 7a. Density Bonus – C**onsider amending the ESMC to include density bonus provisions, consistent with California law.<br>• **Program 7b. Emergency Shelters –** Consider amending the ESMC to permit emergency shelters in the Medium Manufacturing (MM) and Light Manufacturing (M1) zones by right without discretionary review. no later than October 1, 2014, pursuant to State law.<br>• **Program 7c. Transitional Housing –** Consider amendments to the ESMC to allow transitional housing in all zones where residential uses are permitted, subject to the same development standards and permitting processes as the same type of housing in the same zone.<br>• **Program 7d. Supportive Housing –** Consider amendments to the ESMC to allow supportive housing in all zones where residential uses are permitted, subject to the same development standards and permitting processes as the same type of housing in the same zone.<br>• **Program 7e. Single Room Occupancy (SRO) Housing –** Consider amendments to the ESMC to | **Effectiveness:** In 2019, the City amended the ADU ordinance in the ESMC in compliance with AB 881.<br>As of 2019, the City is in the process of amending the ESMC to allow over 200 units, including affordable units, on lots currently developed as surface parking in commercial zones. However, this amendment is not expected to be completed during the planning period.<br>No other zoning amendments have been made during the planning period.<br>**Continued Appropriateness:** This program will be updated to include new changes to State law. |

| Table A-1 Review of Past Accomplishments | | |
|---|---|---|
| **Program** | **2013-2021 Objectives** | **Effectiveness and Continued Appropriateness** |
| | conditionally permit SRO units in the Multi-family Residential (R-3) Zone and establishment of appropriate development standards in the zoning regulations for SRO units.<br>• **Program 7f. Farmworker/Employee Housing –** Consider amending the ESMC to remove agriculture as a permitted use in the Open-Space (O-S) Zone and to comply with State law regarding employee housing within one year of the adoption of the Housing Element. | |
| **GOAL 5:** Provide housing opportunities including ownership and rental, fair-market and assisted, in conformance with open housing policies and free of discriminatory practices. | | |
| **Program 8 – Fair Housing Program** | • Continue providing fair housing services with the Housing Rights Center through participation in the Urban County program coordinated by the Los Angeles County Community Development Commission.<br>• Inform public of the availability of fair housing services by distributive fair housing information at Development Services Department public counters and City website.<br>• Continue to implement the City's Reasonable Accommodations regulations and promote its availability to interested parties on an ongoing basis. | **Effectiveness:** The City continues to provide fair housing services to El Segundo residents. The City is still under contract with the Housing Rights Center to provide these services.<br>Information about fair housing services is available on the City's website and at the Development Services Department counter.<br>**Continued Appropriateness:** This program will be expanded to address the requirements to affirmatively furthering fair housing. |

### Cumulative Impact of Addressing Special Needs

Due to limited funding and staffing capacity, the City was unable to make meaningful progress in address the housing needs of special needs populations. Also, the City has not yet make the ESMC revisions to address the provision of special needs housing, with the exception of accommodating homeless shelters. The 540 East Imperial Specific Plan was originally planned as a senior housing development with 46 units set aside as housing affordable to lower income households. However, the final project did not include any affordable units. Instead, an in-lieu fee of $5.3 million was paid. This fee allows the City to procure the service of Many Mansions to serve as the City's affordable housing provider. Overall, the City expects to make significant progress in addressing special needs during the 6th cycle Housing Element planning period.

**Table 6-2 2013-2021 El Segundo Quantified Objectives**

| Housing Goals | 2013 to 2021 | Progress 2020 | |
|---|---|---|---|
| **Housing Production** | **Number of Units Allocated** | **Units[1]** | **Percent Achieved** |
| Extremely Low Income | 9 | 0 | 0.0% |
| Very Low Income | 9 | 0 | 0.0% |
| Low Income | 11 | 0 | 0.0% |
| Moderate Income | 12 | 30 | 250.0% |
| Above Moderate Income | 28 | 29 | 103.6% |
| Total Units | 69 | 59 | 85.5% |
| **Rehabilitation[2]** | | | |
| Extremely Low Income | 58 | 51 | 87.9% |
| Very Low Income | 40 | 56 | 140.0% |
| Low Income | 88 | 67 | 76.1% |
| Moderate Income | 297 | 65 | 21.9% |
| Above Moderate Income | 297 | 362 | 121.9% |
| TOTAL | 750 | 600 | 80.0% |
| **Conservation** | | | |
| Extremely Low Income | 48 | 48 | 100.0% |
| Very Low Income | 49 | 49 | 100.0% |
| Low Income | 0 | 0 | 0.0% |
| Moderate Income | 0 | 0 | 0.0% |
| Above Moderate Income | 0 | 0 | 0.0% |

Source: City of El Segundo Planning and Building Department, 2020

Notes:

1. Objective is based on the Imperial School Specific Plan.
2. Residential Sound Insulation program is not based on income qualifications. Therefore, overall objective is distributed according to the City's overall income distribution.
3. Affordable housing units to be conserved (Park Vista).

# APPENDIX B: PUBLIC PARTICIPATION

## A. MAILING LIST

Lori Gangemi, President & CEO
Ability First
1300 E. Green Street
Pasadena, CA 91106

Ruth Schwartz, Executive Director
Shelter Partnership, Inc.
520 S Grand Avenue, Suite 695
Los Angeles, CA 90071

Samuel Bettencourt, Executive Director
Beacon Light Mission
525 North Broad Avenue
Wilmington, CA 90744

El Segundo Chamber of Commerce
427 Main Street
El Segundo, CA 90245

Chancela Al-Mansour, Executive Director
Housing Rights Center
3255 Wilshire Blvd., Suite 1150
Los Angeles, CA 90010

South Bay Children's Health Center
410 Camino Real
Redondo, Beach, CA 90277

St. Margaret's Center
10217 Inglewood Avenue
Lennox, CA 90304

Joel John Roberts, CEO
P.A.T.H.
340 N. Madison Avenue
Los Angeles, CA 90004

Melissa Moore, Ed.D., Superintendent
El Segundo Unified School District
641 Sheldon Ave
El Segundo, CA 90245

Gregory O'Brien, Superintendent
Centinela Valley Union High School Dist.
14901 Inglewood Avenue
Lawndale, CA 90260

Blake Silvers, Superintendent
Wiseburn School District
201 N Douglas Street
El Segundo, CA 90245

Jan Vogel, Executive Director
South Bay Workforce Incentive Board
11539 Hawthorne Blvd, #500
Hawthorne, CA 90250

Boys & Girls Clubs of the South Bay
1220 West 256th Street
Harbor City, CA 90710

Monsignor Gregory Cox, Executive Direct.
Catholic Charities of Los Angeles, Inc.
P.O. Box 15095
Los Angeles, CA 90015-0095

Jane Phillips, Founder & Executive Director
Crown Jewel Club
531 Main Street #1000
El Segundo, CA 90245

Dr. Alice Harris, Executive Direct.
Foodbank of Southern California
1444 San Francisco Avenue
Long Beach, CA 90813

South Bay Latino Chamber of Commerce
13545 Hawthorne Blvd., # 201
Hawthorne, CA 90250

The Salvation Army
125 W. Beryl St.
Redondo Beach, CA 90277

David Garcia, Executive Director
The Society of St. Vincent De Paul
210 North Avenue 21
Los Angeles CA 90031

Jacki Bacharach, Executive Director
South Bay Cities Council of Governments
2355 Crenshaw Blvd, #125
Torrance, CA 90501

Bank of America
835 N Pacific Coast Hwy
El Segundo, CA 90245

CHASE
130 E Grand Ave
El Segundo, CA 90245

Kinecta FCU - Home Loans
1440 Rosecrans Avenue
Manhattan Beach, CA. 90266

Wells Fargo Home Mortgage
2141 Rosecrans Avenue, Suite 4100
El Segundo, CA 90245

Kathy Kelly, CEO
South Bay Association of Realtors
22833 Arlington Ave.
Torrance, California 90501

Sister Anne Tran, Center Director
Good Shepherd Center
1671 Beverly Blvd.
Los Angeles, CA 90026

Providence Little Company of Mary
Community Health
4101 Torrance Blvd
Torrance, CA 90505

Planned Parenthood So. Bay Center
14623 Hawthorne Blvd. #300
Lawndale, CA 90260

Elizabeth Eastlund, Executive Director
Rainbow Services
453 West 7th Street
San Pedro, CA 90731

Social Vocational Services, Inc
15342 Hawthorne Blvd., Suite 403
Lawndale, CA 90260

Elise Buik, President /CEO
United Way of Greater Los Angeles
1150 S. Olive St., Suite T500
Los Angeles, CA 90015

Michael Danneker, Director
Westside Regional Center
5901 Green Valley Circle, Suite 320
Culver City, CA 90230

Mike Rotolo
TG Construction Co., Inc
139 Nevada Street
El Segundo, CA 90245

JRO Construction
952 Manhattan Beach Blvd., Suite 220
Manhattan Beach, CA 90266

Scott Laurie, President/CEO
Olson Company
3010 Old Ranch Parkway #100
Seal Beach, CA 90740

C.A.M. Construction
310 East Imperial Avenue #C
El Segundo, CA 90245

Brad Wiblin, Executive Vice President
Bridge Housing
2202 30th St.
San Diego, CA 92104

Darrell Simien, VP of Community
Development
Habitat for Humanity
18600 Crenshaw Blvd.
Torrance, CA 90504

Laura Archuleta, President/CEO
Jamboree Housing Corporation
17701 Cowan Ave., Suite 200
Irvine, CA 92614

Steve PonTell, President/CEO
National CORE
9421 Haven Ave.
Rancho Cucamonga, CA 91730

Mr. Jery Saunders
Air Force Association
P.O. Box 916
El Segundo, CA 90245

Friends of El Segundo Public Library
111 W. Mariposa Ave.
El Segundo, CA 90245

El Segundo Rotary Club
P.O. Box 85
El Segundo, CA 90245

First Baptist Church
591 East Palm Avenue
El Segundo, CA 90245

Pacific Baptist Church
859 Main St
El Segundo, CA 90245

Father Alexei Smith
St. Andrew Russian Greek Catholic
Church
538 Concord Street
El Segundo, CA 90245

Rev. Robert S. Victoria, Pastor
Saint Anthony's Church
720 East Grand Avenue
El Segundo, CA 90245

Jon Reed, Minister
Hilltop Community Church of Christ
717 East Grand Avenue
El Segundo, CA 90245

El Segundo Christian Church
223 W. Franklin St.
El Segundo, CA 90245

Brandon Cash, Pastor
Oceanside Christian Fellowship
343 Coral Circle
El Segundo, CA 90245

Church of Jesus Christ of Latter- day
Saints
1215 East Mariposa Avenue
El Segundo, CA 90245

Rev. Dr. Dina Ferguson, Rector
St. Michael the Archangel Church
361 Richmond Street
El Segundo, CA 90245

Rob McKenna, Lead Pastor
Bridge South Bay Church
429 Richmond Street
El Segundo, CA 90245

Jehovah's Witnesses
608 East Grand Avenue
El Segundo, CA 90245

St. John's Church
1611 East Sycamore Avenue
El Segundo, CA 90245

Lee Carlile, Pastor
United Methodist Church
540 Main Street
El Segundo, CA 90245

The Bible Church of His Will
2000 E Mariposa Ave
El Segundo, CA 90245

Tierra Vista Communities
2400 South Pacific Ave, Bldg 410, Suite 2
San Pedro, CA 90731

Los Angeles Air Force Base
482 N Aviation Blvd
El Segundo, CA 90245

Los Angeles County Development Authority
700 W Main Street
Alhambra, CA 91801

Los Angeles Homeless Services Authority
811 Wilshire Boulevard #600
Los Angeles, CA 90017

El Segundo Residents Association
425 Lomita Street
El Segundo, CA 90245

Park Vista
615 E. Holly Avenue
El Segundo, CA 90245

El Segundo Herald
500 Center St.
El Segundo, CA 90245

Jenny Davies, President
El Segundo Council Of PTAs
641 Sheldon Street
El Segundo, CA 90245

Donna Mae Ellis, President
El Segundo Woman's Club
P.O. Box 25
El Segundo, CA 90245

Ty Leisher, President
Kiwanis Club
P.O. Box 392
El Segundo, CA 90245

Knights Of Columbus
224-1/2 S. Sepulveda Blvd.
Manhattan Beach CA 90266

Paulette Caudill, President
Road - Reach Out Against Drugs
615 Richmond St.
El Segundo, CA 90245

Tree Musketeers
305 Richmond St
El Segundo, CA 90245

Veronica Dover, CEO/Executive Director
St. Vincent Meals On Wheels
2303 Miramar Street
Los Angeles, CA 90057

American Red Cross
9800 La Cienega Blvd.
Inglewood, CA 90301

Vistamar School
737 Hawaii St.
El Segundo, CA 90245

Rick Schroeder, President
Many Mansions
811 Wilshire Boulevard #1727
Los Angeles, CA 90017

# B. OUTREACH MATERIALS

## Housing Element Update: Community Meeting

**TUESDAY, APRIL 13, 2021**
5:30 PM

The City of El Segundo is in the process of updating the Housing Element for the 2021-2029 Planning Period and would like your participation. This is your chance to learn about the Housing Element Update.

The **Community Meeting** will cover the basics of the Housing Element Update requirements and is intended to identify housing needs that should be addressed.

The **Housing Element** includes goals, policies, programs, and quantified objectives for adequately housing our future population.

Via web browser: https://zoom.us/j/91048484015
Meeting ID: 910 4848 4015

Via telephone: (669) 900-9128

*For more information, please visit http://www.elsegundo.org/housing-element or contact housingelement@elsegundo.org*

# Join us for a Community Meeting to Discuss the Update of the City's Housing Element

The Housing Element is a key component of the City's General Plan.
The City needs your input!

**Where:**

**https://zoom.us/j/91048484015**
**Meeting ID: 910 4848 4015**
**One tap mobile: +16699009128,,91048484015#**
**Dial in: +1 669 900 9128 US**
**Meeting ID: 910 4848 4015**

**When:**

**Tuesday, April 13, 2021**
**at 5:30 p.m.**

For more information about the Housing Element Update process please vist https://www.elsegundo.org/housing-element. If you have any questions, please email us at housingelement@elsegundo.org or call city staff, Paul Samaras, Principal Planner, at (310) 524-2340.

In compliance with the Americans with Disabilities Act, if you need assistance to participate in this meeting, please contact the City Clerk's office at 310-524-2305. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

*City of El Segundo*
*Housing Element Update*

*March 2021*

City of El Segundo - Bulletin Detail Report

GOVDELIVERY

| | |
|---|---|
| Subject: | Reminder: Future of Housing in El Segundo Virtual Workshop April 13 |
| Sent: | 04/12/2021 09:56 AM PDT |
| Sent By: | mghurtado@elsegundo.org |
| Sent To: | Subscribers of Business Stakeholders, ESB - Business & Real Estate News, General City News, H2O Water Billing, Internal - Media/Local News Outlets, Internal - NetPromoter - Business License, Internal - NetPromoter - Water/Residents, Internal--All City Staff, Internal--E Team, or Residents, |

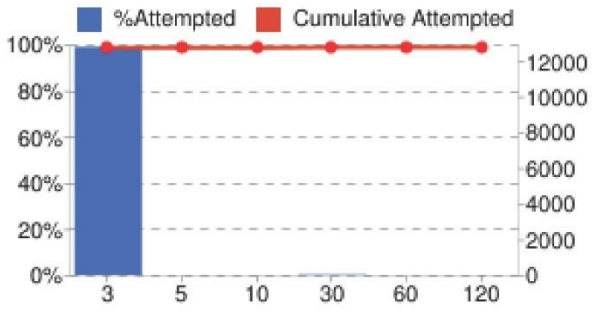
**12,923** Recipients

- ✓ Email
- ✓ SMS
- ✗ Facebook
- ✗ Twitter
- ✓ RSS

**96%** Delivered

0% Pending
4% Bounced
27% Open Rate
4% Click Rate

Email Delivery Stats




| Minutes | Cumulative Attempted |
|---|---|
| 3 | 99% |
| 5 | 99% |
| 10 | 99% |
| 30 | 99% |
| 60 | 99% |
| 120 | 99% |

Delivery Metrics - Details

| | |
|---|---|
| **12,923** | Total Sent |
| **12,402 (96%)** | Delivered |
| **0 (0%)** | Pending |
| **521 (4%)** | Bounced |
| **15 (0%)** | Unsubscribed |

Bulletin Analytics

| | |
|---|---|
| **5,599** | Total Opens |
| **3318 (27%)** | Unique Opens |
| **544** | Total Clicks |
| **469 (4%)** | Unique Clicks |
| **16** | # of Links |

Delivery and performance

*These figures represent all data since the bulletin was first sent to present time.*

| | Progress | % Delivered | Recipients | # Delivered | Opened Unique | Bounced/Failed | Unsubscribes |
|---|---|---|---|---|---|---|---|
| **Email Bulletin** | Delivered | 96.0% | 12,780 | 12,270 | 3318 / 27.0% | 510 | 15 |
| **Digest** | n/a | n/a | 0 | 0 | 0 / 0.0% | 0 | 0 |
| **SMS Message** | Delivered | 92.3% | 143 | 132 | n/a | 11 | n/a |

| Link URL | Unique Clicks | Total Clicks |
|---|---|---|
| https://www.menti.com/tx8cna1uni?utm_medium=email&ut... | 121 | 135 |
| https://youtu.be/SC9DJxxGQq8?utm_medium=email&utm_so... | 91 | 130 |
| https://www.elsegundo.org/government/departments/develo... | 48 | 57 |
| https://www.elsegundo.org/Home/ShowDocument?id=3389&... | 42 | 51 |
| https://content.govdelivery.com/accounts/CAELSEGUNDO/bul... | 20 | 20 |
| https://public.govdelivery.com/accounts/CAELSEGUNDO/subs... | 15 | 19 |
| https://www.elsegundo.org/?utm_medium=email&utm_sourc... | 18 | 18 |
| https://www.instagram.com/elsegundocity/?utm_medium=e... | 15 | 15 |
| https://www.facebook.com/cityofelsegundo/?utm_medium=e... | 15 | 15 |
| https://twitter.com/elsegundocity?utm_medium=email&utm_... | 15 | 15 |
| https://www.elsegundo.org/contacts/default.asp?utm_mediu... | 15 | 15 |
| https://www.linkedin.com/company/cityofelsegundo?utm_me... | 14 | 14 |
| https://subscriberhelp.granicus.com/s/contactsupport?utm_m... | 14 | 14 |
| https://subscriberhelp.granicus.com/?utm_medium=email&u... | 14 | 14 |
| https://public.govdelivery.com/accounts/CAELSEGUNDO/subs... | 14 | 14 |

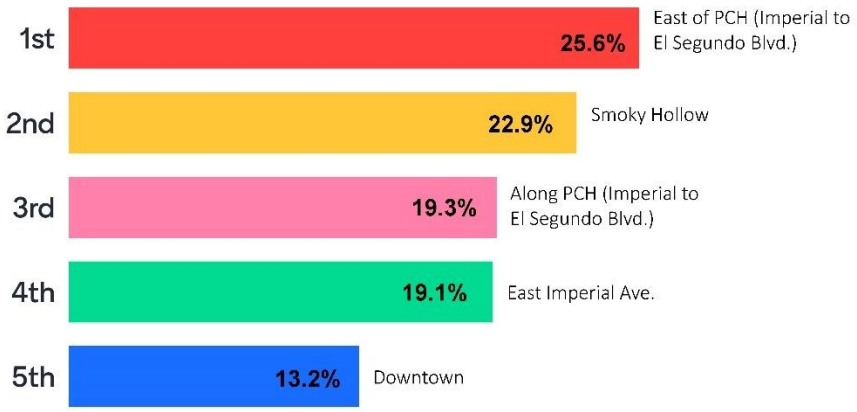
## What three words would you use to describe El Segundo?

Mentimeter

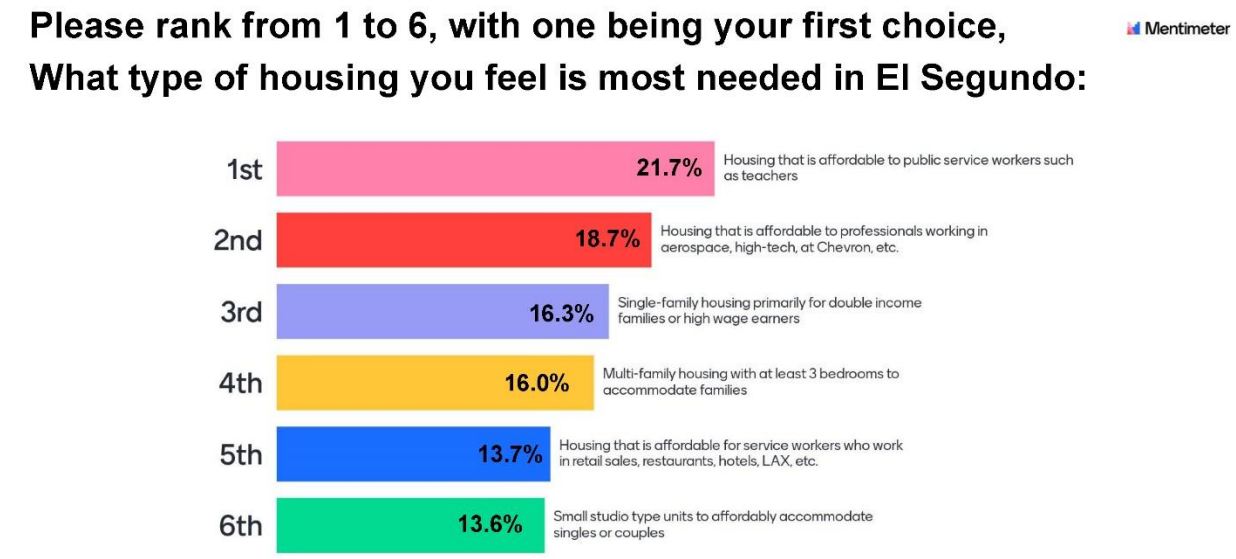
21

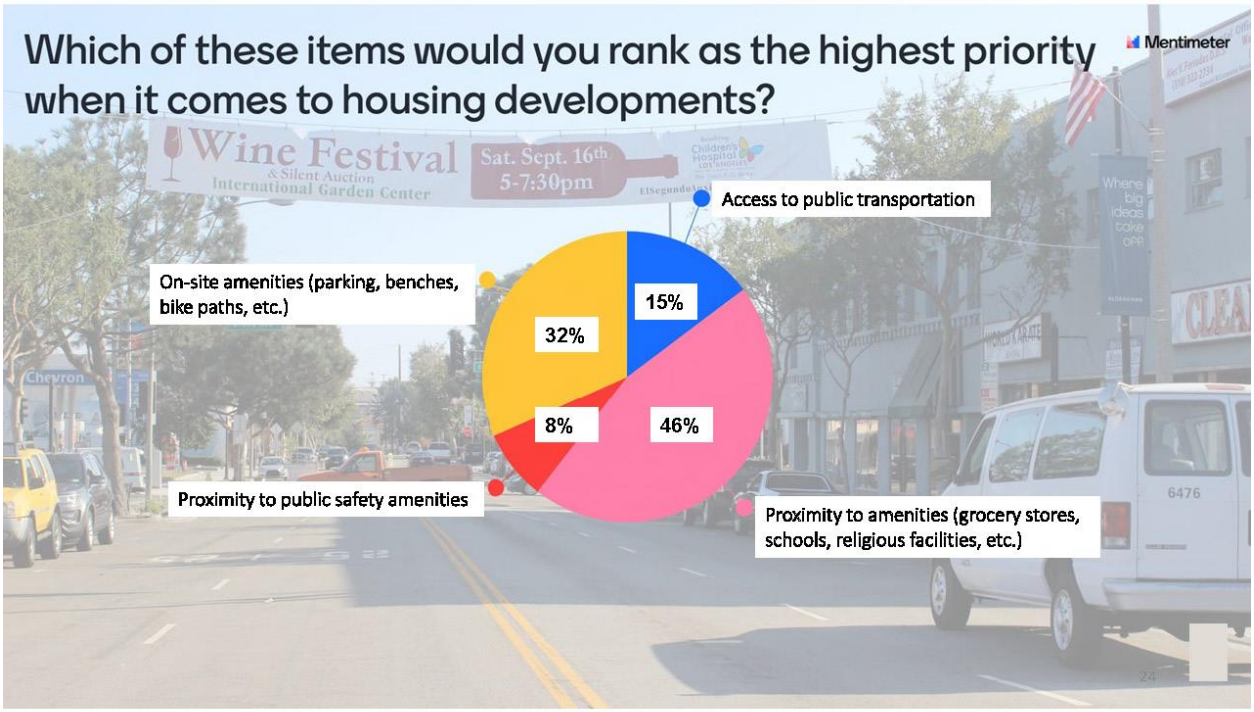
# Protecting the Integrity of R-1 Neighborhoods

Please rank from 1-5, with 1 being your first choice, in what area of El Segundo should new housing be built?



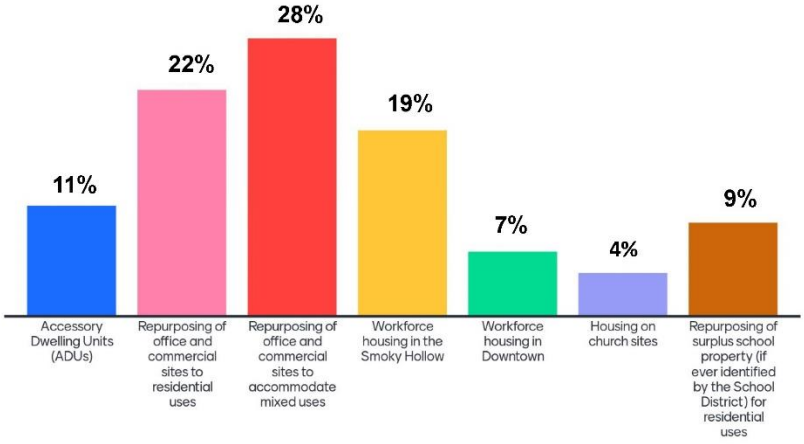

22


Please rank from 1 to 6, with one being your first choice,
What type of housing you feel is most needed in El Segundo:
Mentimeter
1st
21.7%
Housing that is affordable to public service workers such as teachers
2nd
18.7%
Housing that is affordable to professionals working in aerospace, high-tech, at Chevron, etc.
3rd
16.3%
Single-family housing primarily for double income families or high wage earners
4th
16.0%
Multi-family housing with at least 3 bedrooms to accommodate families
5th
13.7%
Housing that is affordable for service workers who work in retail sales, restaurants, hotels, LAX, etc.
6th
13.6%
Small studio type units to affordably accommodate singles or couples


Which of these items would you rank as the highest priority when it comes to housing developments?
Mentimeter
Wine Festival
& Silent Auction
International Garden Center
Sat. Sept. 16th
5-7:30pm
Access to public transportation
On-site amenities (parking, benches, bike paths, etc.)
Proximity to public safety amenities
Proximity to amenities (grocery stores, schools, religious facilities, etc.)
15%
32%
8%
46%

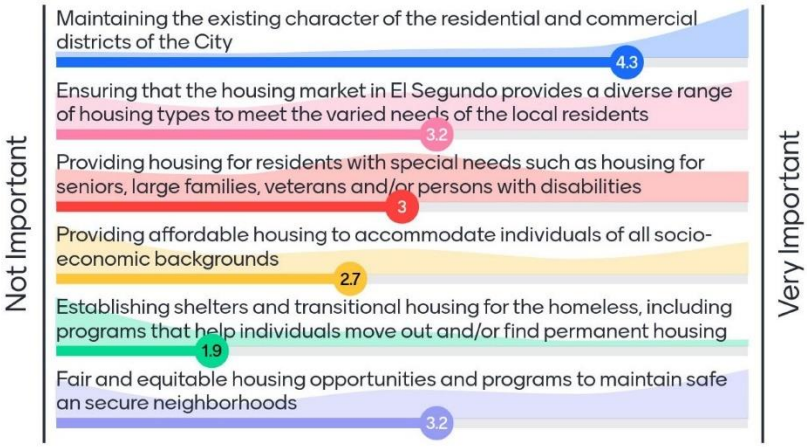
## In your opinion, what housing types would you like to see more of in El Segundo? (Select the Top 3)

Mentimeter

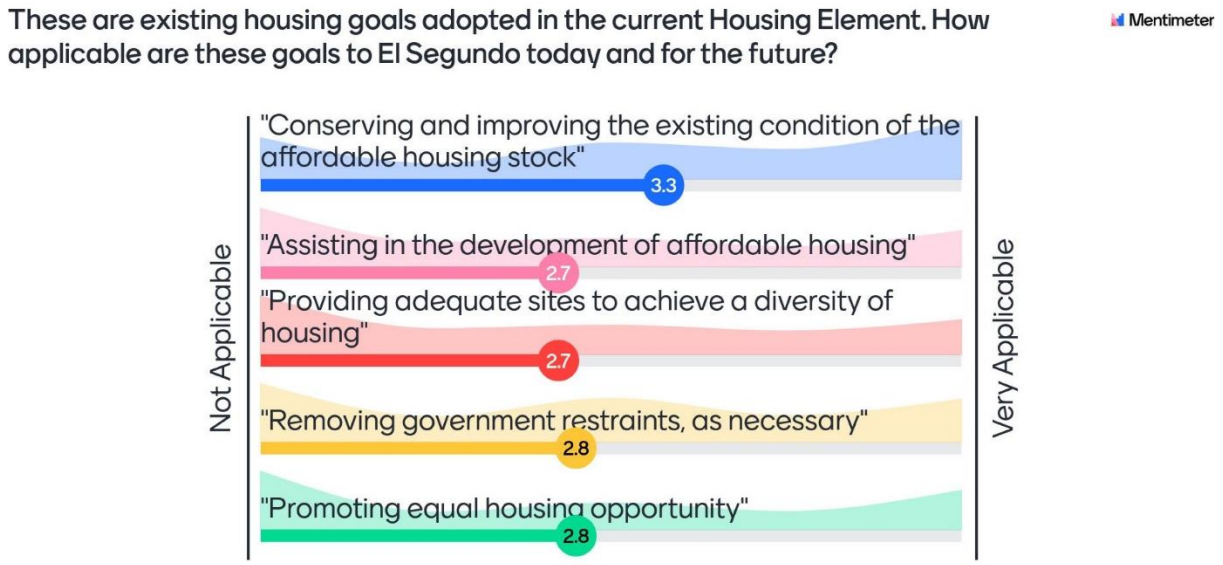



## On a scale of 1 to 5, with 5 being "very important," how important are the following concerns to you?

Mentimeter




26




## C. SUMMARY OF PUBLIC COMMENTS

The April 13, 2021 meeting was attended by 70 attendees. Public comments received are summarized below:

- The City lacks affordable housing, including housing for seniors who can no longer afford to live in the City. The former school site did not include any affordable units.
- Need to attract young adults to move back to El Segundo. Housing costs are too high. Need to provide opportunities for young adults to buy affordable housing.
- Should consider more housing on Rosecrans.
- Increasing density should consider how to alleviate gridlocks in traffic.

June 14, 2021 Meeting:

- Ensure affordable housing option includes the option to purchase.
- Housing for teachers and first responders, and housing for the Air Force Base.
- Support quality affordable housing.

# APPENDIX C: ASSESSMENT OF FAIR HOUSING

## A. INTRODUCTION AND OVERVIEW OF AB 686

In 2017, Assembly Bill 686 (AB 686) introduced an obligation to affirmatively further fair housing (AFFH) into California state law. AB 686 defined "affirmatively further fair housing" to mean "taking meaningful actions, in addition to combating discrimination, that overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity" for persons of color, persons with disabilities, and other protected classes. The Bill added an assessment of fair housing to the Housing Element which includes the following components:

- A summary of fair housing issues and assessment of the jurisdiction's fair housing enforcement and outreach capacity;
- An analysis of segregation patterns, disparities in access to opportunities, and disproportionate housing needs;
- An assessment of contributing factors; and
- An identification of fair housing goals and actions.

The AFFH rule was originally a federal requirement applicable to entitlement jurisdictions, those with populations over 50,000 that can receive HUD Community Planning and Development (CPD) funds directly from HUD. Before the 2016 federal rule was repealed in 2019, entitlement jurisdictions were required to prepare an Assessment of Fair Housing (AFH) or Analysis of Impediments to Fair Housing Choice (AI). AB 686 states that jurisdictions can incorporate findings from either report into the Housing Element.

This analysis of fair housing issues in El Segundo relies on the 2018 Analysis of Impediments to Fair Housing Choice (AI) prepared by the Los Angeles Community Development Authority (LACDA), California Department of Housing and Community Development (HCD) AFFH Data Viewer mapping tool, 2015-2019 American Community Survey (ACS), HUD Comprehensive Housing Affordability Strategy (CHAS) data, HUD AFFH data, and additional local sources of information.

## B. ASSESSMENT OF FAIR HOUSING ISSUES

### 1. Enforcement and Outreach

Federal fair housing laws prohibit discrimination based on race, color, religion, national origin, sex/gender, handicap/disability, and familial status. Specific federal legislation and court rulings include:

- **The Civil Rights Act of 1866** – covers only race and was the first legislation of its kind
- **The Federal Fair Housing Act 1968** – covers refusal to rent, sell, or finance
- **The Fair Housing Amendment Act of 1988** – added the protected classes of handicap and familial status
- **The Americans with Disabilities Act (ADA)** – covers public accommodations in both businesses and in multi-family housing developments

- **Shelly v. Kramer 1948** – made it unconstitutional to use deed restrictions to exclude individuals from housing
- **Jones v. Mayer 1968** – made restrictive covenants illegal and unenforceable

California state fair housing laws protect the same classes as the federal laws with the addition of marital status, ancestry, source of income, sexual orientation, and arbitrary discrimination. Specific State legislation and regulations include:

- **Unruh Civil Rights Act** – extends to businesses and covers age and arbitrary discrimination
- **California Fair Employment and Housing Act (Rumford Act)** – covers the area of employment and housing, with the exception of single-family houses with no more than one roomer/boarder
- **California Civil Code Section 53** – takes measures against restrictive covenants
- **Department of Real Estate Commissioner's Regulations 2780-2782** – defines disciplinary actions for discrimination, prohibits panic selling and affirms the broker's duty to supervise
- **Business and Professions Code** – covers people who hold licenses, including real estate agents, brokers, and loan officers.

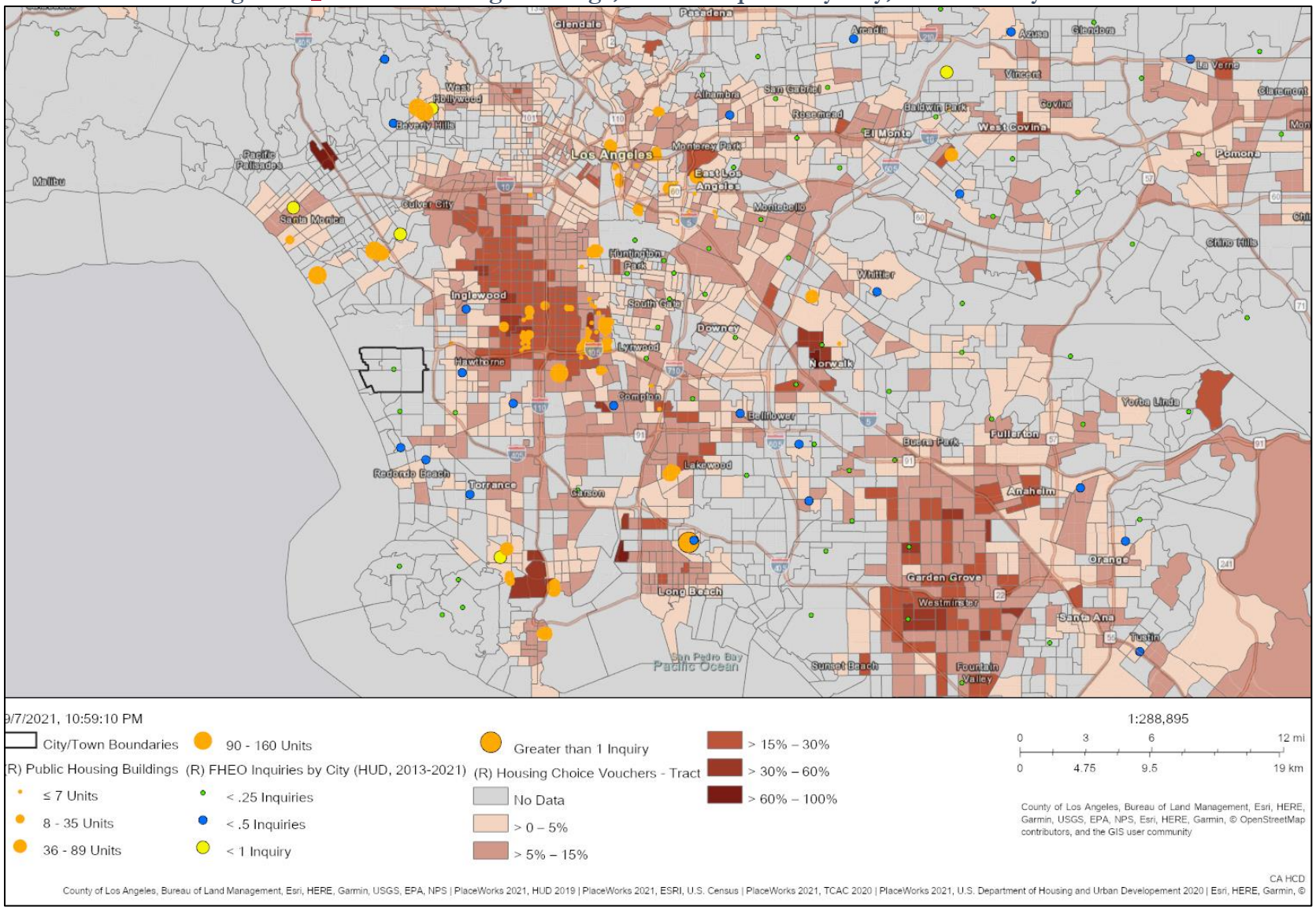
The City has committed to complying with applicable federal and State fair housing laws to ensure that housing is available to all persons without regard to race, color, religion, national origin, disability, familial status, or sex as outlined in the 2018 AI. Further, the Los Angeles County Development Authority (LACDA) prohibits discrimination in any aspect of housing on the basis of race, color, religion, national origin, disability, familial status, or sex.

According to HUD's Office of Fair Housing and Equal Opportunity (FHEO) records, 130 housing discrimination cases were filed in Los Angeles County in 2020, compared to 291 in 2010. In 2020, a majority of cases were related to disability (66%). Another 21% of cases were related to racial bias. The percent of cases related to disability has increased significantly since 2010, when only 36% of cases reported a disability bias. Public housing buildings, FHEO inquiries by City and housing choice voucher (HCV) recipients by tract are shown in Figure C-1. HCVs are most concentrated in the areas east of El Segundo, near Inglewood, the City of Los Angeles, and in the adjacent unincorporated County areas. Public housing buildings are concentrated in the same area. However, there are many public housing buildings scattered throughout the County.

According to the HCD AFFH Data Viewer, there has been only two FHEO inquiries in El Segundo since 2013. Both were unrelated to a specific basis of discrimination. There is no additional discrimination complaint or case data available for the City of El Segundo.

There are no concentrations of renters receiving housing choice vouchers (HCVs) in the City. There are also no public housing buildings in El Segundo.

## Figure C-1: Public Housing Buildings, FHEO Inquiries by City, and HCVs by Tract




Source: HCD AFFH Data Viewer, HUD 2013-2021, 2021.

## 2. Integration and Segregation

### RACE AND ETHNICITY

Ethnic and racial composition of a region is useful in analyzing housing demand and any related fair housing concerns, as it tends to demonstrate a relationship with other characteristics such as household size, locational preferences and mobility.

Dissimilarity indices can be used to measure the evenness of distribution between two groups in an area. Dissimilarity indices are commonly used to measure segregation. The following shows how HUD views various levels of the index:

- <40: Low Segregation
- 40-54: Moderate Segregation
- >55: High Segregation

The following analysis of racial/ethnic segregation also includes racial/ethnic minority population trends, maps of minority concentrated areas over time, and an analysis of the City's sites inventory as it relates to minority (non-White) concentrated areas.

**Regional Trend.** As shown in Table C-1, racial/ethnic minority groups make up 73.7% of the Los Angeles County population. Nearly half of the Los Angeles County population is Hispanic/Latino (48.5%), 26.2% of the population is White, 14.4% is Asian, and 7.8% is Black/African American. El Segundo and the neighboring cities of Hermosa Beach, Manhattan Beach, and Redondo Beach have significantly smaller populations of racial/ethnic minority (non-White) populations compared to the County, while Hawthorne and Inglewood have racial/ethnic minority populations exceeding the countywide average. Of the selected jurisdictions, Inglewood has the largest racial/ethnic minority population (95.5%), and Hermosa Beach has the smallest (22%).

**Table C-1: Racial/Ethnic Composition – L.A. County, El Segundo, and Neighboring Cities**

| Race/Ethnicity | El Segundo | Hawthorne | Hermosa Beach | Inglewood | Manhattan Beach | Redondo Beach | LA County |
|---|---|---|---|---|---|---|---|
| White | 62.0% | 10.3% | 78.0% | 4.5% | 73.3% | 60.3% | 26.2% |
| Black/African American | 3.7% | 24.1% | 1.0% | 39.6% | 0.4% | 3.1% | 7.8% |
| American Indian/ Alaska Native | 0.0% | 0.2% | 0.6% | 0.3% | 0.2% | 0.3% | 0.2% |
| Asian | 10.2% | 7.5% | 5.2% | 2.0% | 13.4% | 13.5% | 14.4% |
| Native Hawaiian/ Pacific Islander | 0.1% | 0.3% | 0.0% | 0.4% | 0.1% | 0.1% | 0.2% |
| Some other race | 0.4% | 0.5% | 0.3% | 0.4% | 0.1% | 0.6% | 0.3% |
| Two+ races | 7.4% | 2.2% | 5.6% | 2.2% | 4.5% | 6.1% | 2.3% |
| Hispanic/Latino | 16.2% | 54.8% | 9.4% | 50.6% | 8.0% | 16.0% | 48.5% |
| Source: 2015-2019 American Community Survey (ACS), 5-Year Estimates. | | | | | | | |

As discussed previously, HUD's dissimilarity indices can be used to estimate segregation levels over time. Dissimilarity indices for Los Angeles County are shown in Table C-2. Dissimilarity indices between non-White and White groups indicate that the County has become increasingly segregated since 1990. Segregation between Black and White communities has decreased, while segregation

between Hispanic and Asian/Pacific Islander communities and White communities has increased. According to HUD's thresholds, all White and non-White communities in Los Angeles County are highly segregated.

**Table C-2: Racial/Ethnic Dissimilarity Trends – Los Angeles County**

| | 1990 | 2000 | 2010 | Current |
|---|---|---|---|---|
| Non-White/White | 56.66 | 56.72 | 56.55 | 58.53 |
| Black/White | 73.04 | 67.40 | 64.99 | 68.24 |
| Hispanic/White | 60.88 | 63.03 | 63.35 | 64.33 |
| Asian or Pacific Islander/White | 46.13 | 48.19 | 47.62 | 51.59 |
| Source: U.S. Department of Housing and Urban Development (HUD) Affirmatively Furthering Fair Housing (AFFH) Database, 2020. | | | | |

Figure C-2 shows that most areas in Los Angeles County have high concentrations of racial/ethnic minorities. Coastal cities, including Santa Monica and Redondo Beach, and the areas surrounding Beverly Hills, West Hollywood, and the Pacific Palisades neighborhood generally have smaller non-White populations. Most block groups in the South Bay, San Gabriel Valley, San Fernando Valley, and central Los Angeles areas have majority racial/ethnic minority populations. El Segundo's racial/ethnic minority populations are comparable to surrounding jurisdictions. Coastal communities north and south of El Segundo tend to have smaller racial/ethnic minority populations, while communities east of El Segundo, such as Hawthorne and Inglewood, have larger concentrations racial/ethnic minorities.

**Local Trend.** According to the 2015-2019 ACS, 38% of the El Segundo population belongs to a racial or ethnic minority group, an increase from 30.5% during the 2006-2010 ACS. In comparison, 73.7% of Los Angeles County residents belong to a racial or ethnic minority group. Since the 2006-2010 ACS, the City has seen a decline in the White, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, and Hispanic populations and increase in the Black/African American population, Asian population, persons of a race not listed ("some other race"), and persons of two or more races (Table C-3).

**Table C-3: Change in Racial/Ethnic Composition (2010-2019)**

| Race/Ethnicity | 2010 | | 2019 | |
|---|---|---|---|---|
| | Persons | Percent | Persons | Percent |
| White | 11,499 | 69.5% | 10,375 | 62.0% |
| Black/African American | 276 | 1.7% | 626 | 3.7% |
| American Indian/Alaska Native | 90 | 0.5% | 0 | 0.0% |
| Asian | 956 | 5.8% | 1,701 | 10.2% |
| Native Hawaiian/Pac. Islander | 26 | 0.2% | 9 | 0.1% |
| Some other race | 21 | 0.1% | 70 | 0.4% |
| Two or more races | 649 | 3.9% | 1,241 | 7.4% |
| Hispanic/Latino | 3,017 | 18.2% | 2,709 | 16.2% |
| **Total** | **16,534** | **100%** | **16,731** | **100.0%** |
| Source: 2015-2019 and 2006-2010 ACS (5-Year Estimates). | | | | |

Because HUD does not provide dissimilarity indices for El Segundo, dissimilarity was calculated based on the 2000 and 2010 decennial census and 2015-2019 ACS. Indices for the City are presented in Table C-4. Dissimilarity between non-White and White communities in El Segundo has worsened since 2000. Based on HUD's definition of the various levels of the index, segregation between Hispanic/White and Asian /White El Segundo residents is low. However, Black and White communities are highly segregated. Compared to the County as a whole, El Segundo is less segregated based on dissimilarity indices.

**Table C-4: Racial/Ethnic Dissimilarity Trends – El Segundo**

| | 2000 | 2010 | 2019 |
|---|---|---|---|
| Non-White/White | 14.35 | 13.48 | 22.87 |
| Black/White | 36.67 | 22.11 | 63.26 |
| Hispanic/White | 23.43 | 15.18 | 33.49 |
| Asian/White | 14.83 | 14.21 | 24.51 |

Source: 2000 and 2010 Decennial Census; 2015-2019 ACS (5-Year Estimates); Veronica Tam & Associates, 2021.

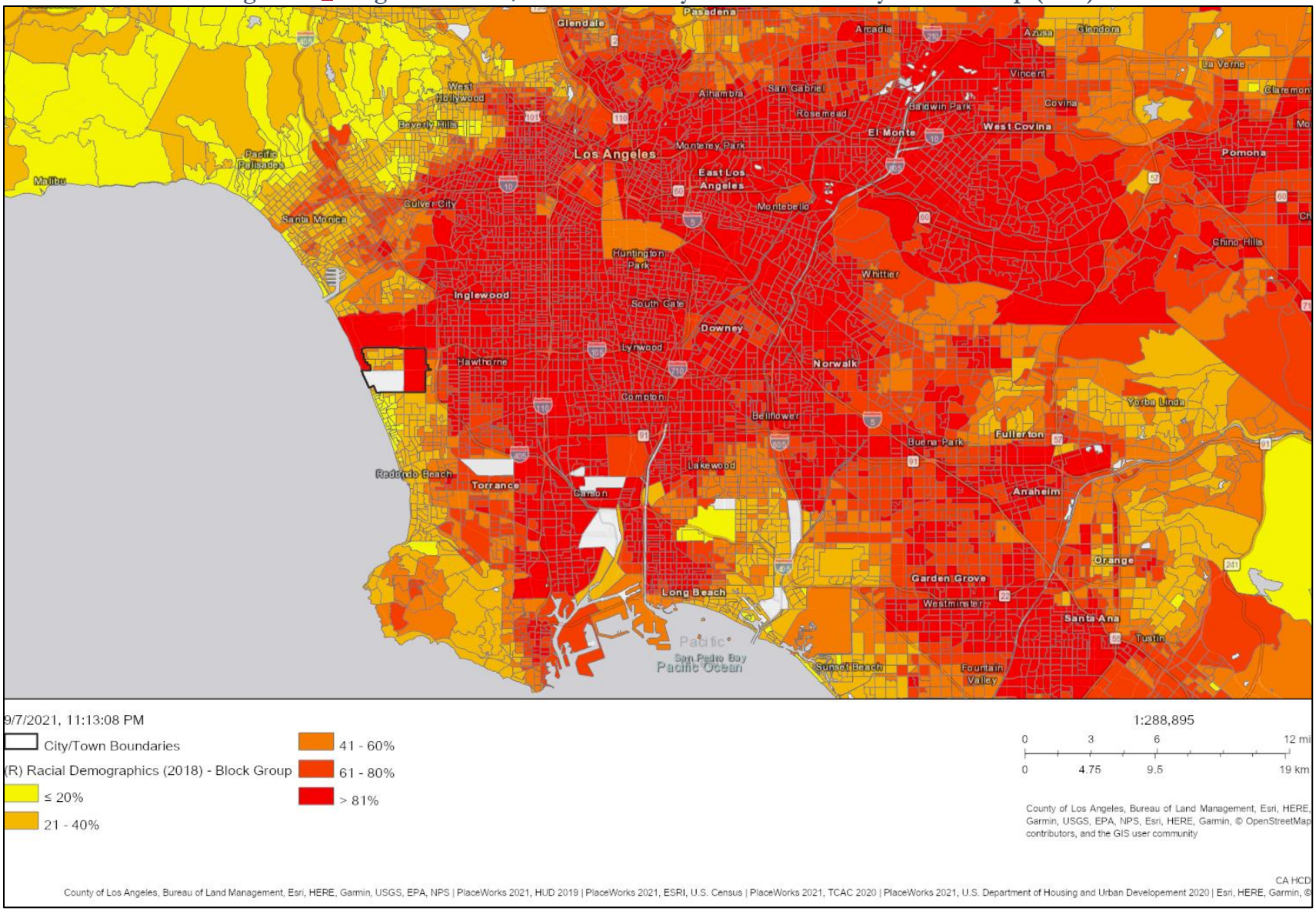
Figure C-3 and Figure C-4 compare racial or ethnic minority concentrations in El Segundo in 2010 and 2018. The eastern side of the City has seen the most significant increase in non-White populations, from less than 20% in 2010 to more than 81% in 2018. Between 21% and 60% of the population belongs to a racial/ethnic minority group in the northeastern corner of the City. Nearly all residential units are located in this section of the City.

**Sites Inventory.** To assess the City's sites inventory used to meet the 2021-2029 RHNA, the distribution of units by income category and non-White block group population are shown in Figure C-4 and Table C-5. This analysis includes units from pending projects and candidate rezone sites. Refer to Chapter 5, Housing Opportunities, of this Housing Element for the complete RHNA strategy. Most units are in block where 21-40% of the population belongs to a racial/ethnic minority group, including all 83.7% of lower income units, 82.8% of moderate income units, and 42.9% of above moderate income units. The block group containing RHNA sites with the largest non-White population has a racial/ethnic minority population of only 46%.

**Table C-5: Distribution of RHNA Units by Racial/Ethnic Minority Population**

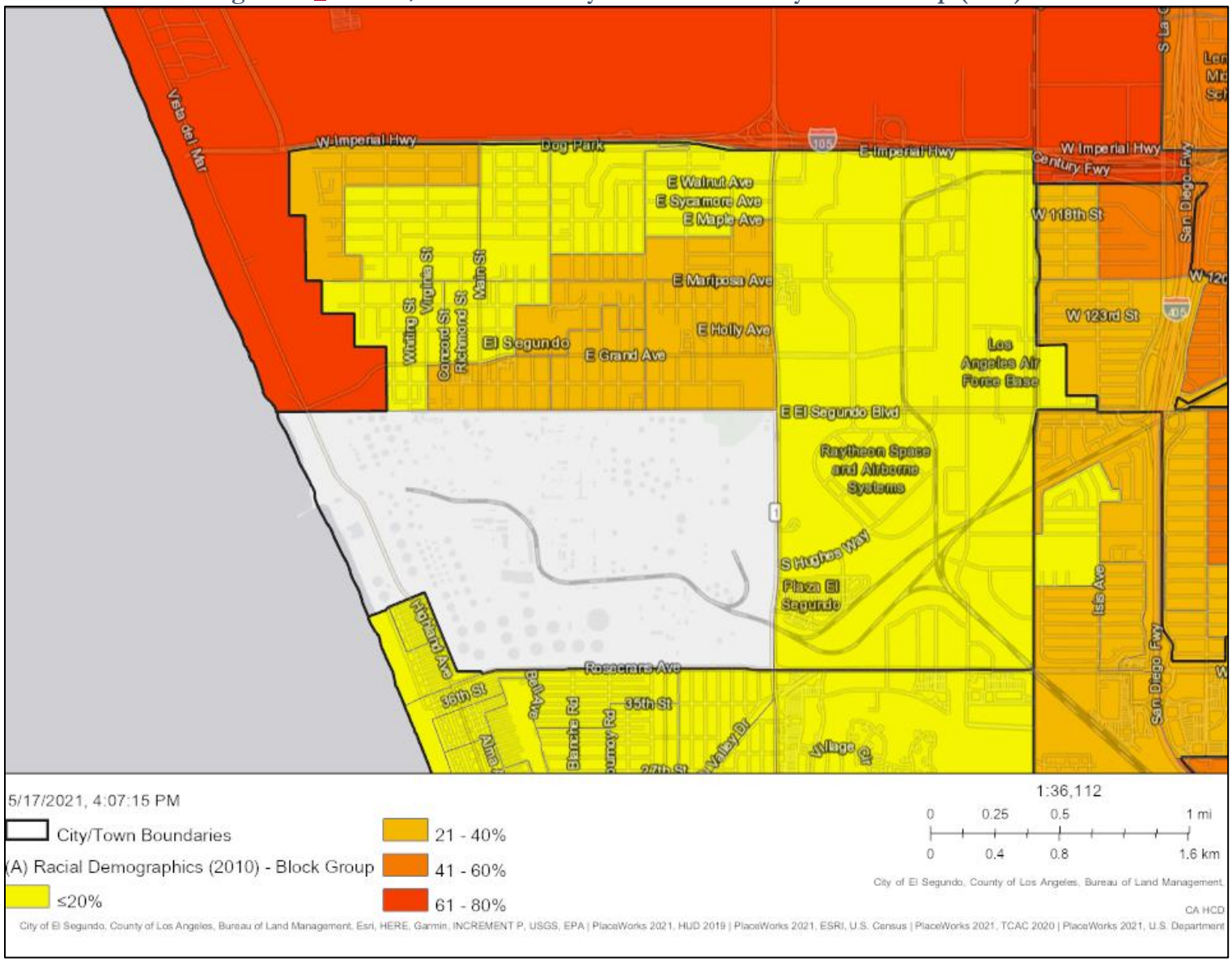
| Racial/Ethnic Minority Population (Block Group) | Lower Income | Moderate Income | Above Mod. Income | Total |
|---|---|---|---|---|
| 21-40% | 83.7% | 82.8% | 42.9% | 67.5% |
| 41-60% | 16.3% | 17.2% | 57.1% | 32.5% |
| **Total** | 264 | 93 | 233 | 590 |

## Figure C-2: Regional Racial/Ethnic Minority Concentrations by Block Group (2018)

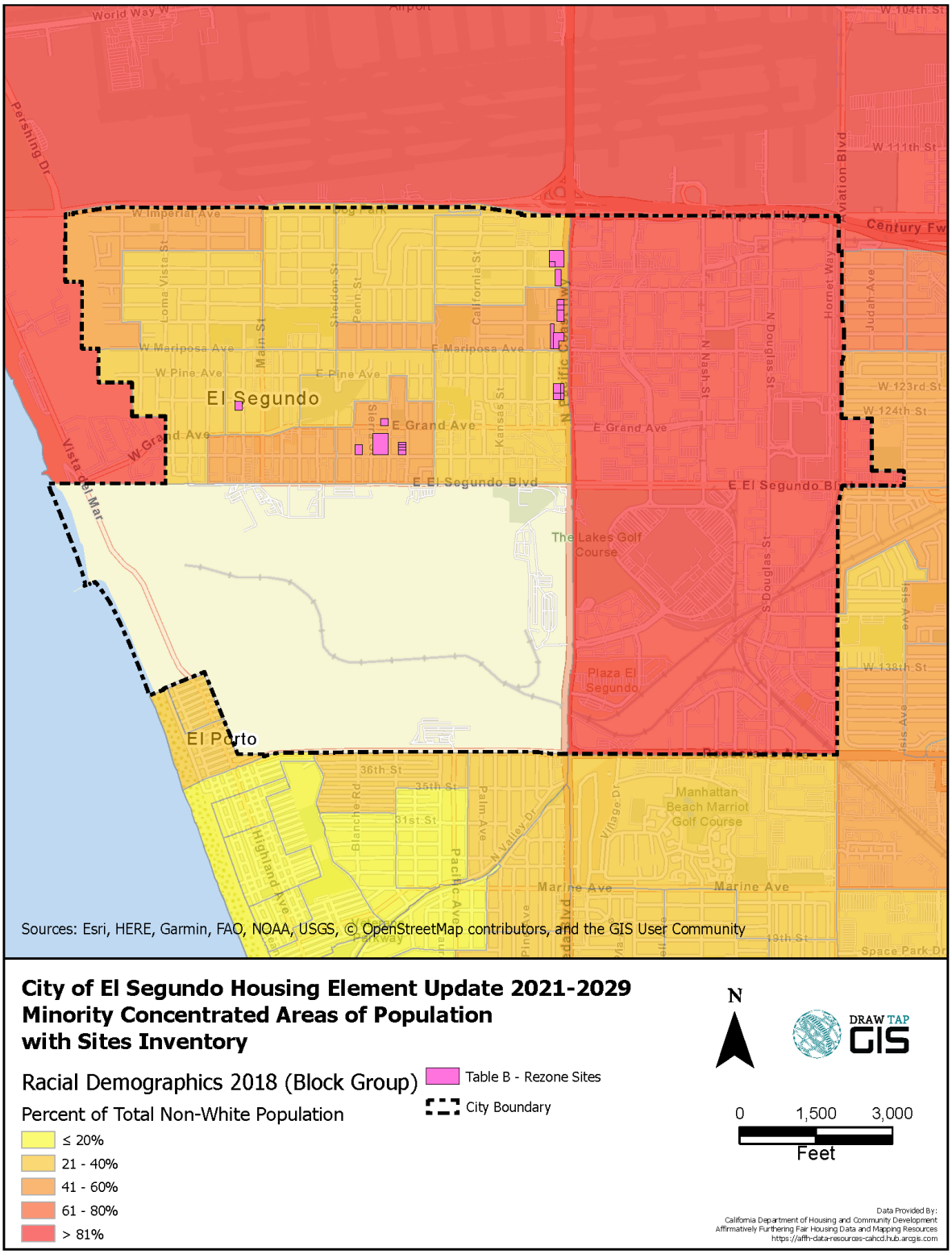



Source: HCD AFFH Data Viewer (2018), 2021.

## Figure C-3: Racial/Ethnic Minority Concentrations by Block Group (2010)



## Figure C-4: Racial/Ethnic Minority Concentrations by Block Group and Sites Inventory (2018)




Source: HCD AFFH Data Viewer (2010-2018), 2021.

## DISABILITY

Persons with disabilities have special housing needs because of their fixed income, the lack of accessible and affordable housing, and the higher health costs associated with their disability.

**Regional Trend.** According to the 2015-2019 ACS, 9.9% of Los Angeles County residents experience a disability. Only 6.2% of the El Segundo population experiences a disability. El Segundo has a smaller population of persons with disabilities compared to the neighboring cities of Hawthorne (9.6%), Hermosa Beach (6.7%), Inglewood (12.5%), and Redondo Beach (6.5%), but larger than Manhattan Beach (5.6%).

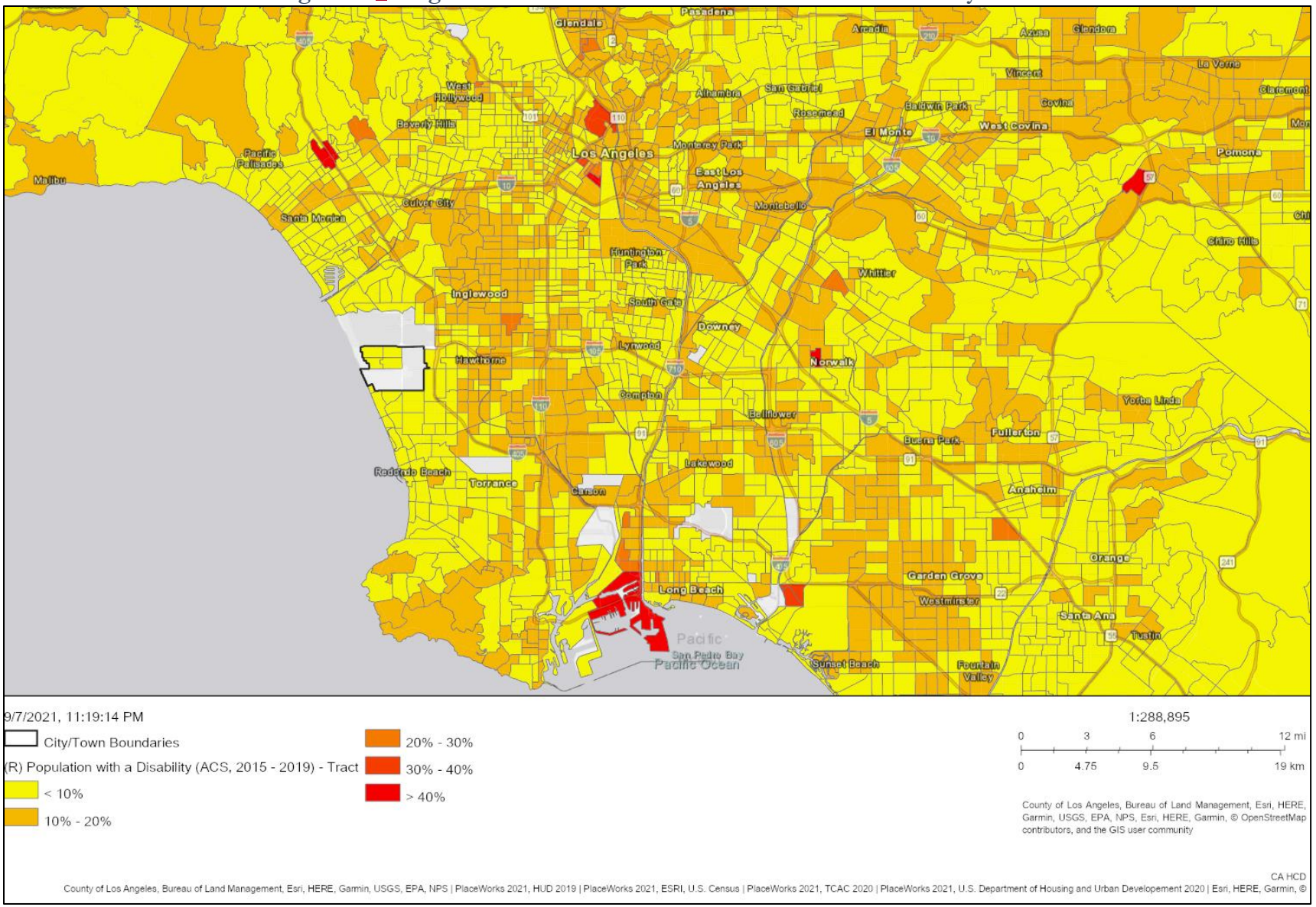
As shown in Figure C-5, less than 20% of the population in most tracts in Los Angeles County experience a disability. Tracts with disabled populations exceeding 20% are not concentrated in one area of the County. Tracts with populations of persons with disabilities exceeding 20% are near the cities of Inglewood, the City of Los Angeles, Long Beach, Norwalk, and Santa Monica. The coastal cities of El Segundo, Manhattan Beach, Hermosa Beach, and Redondo Beach tend to have smaller disabled populations. The concentration of persons with disabilities in El Segundo is comparable to neighboring jurisdictions.

**Local Trend.** All tracts in El Segundo have populations of persons with disabilities below 10% (Figure C-6). Independent living and cognitive difficulties are the most common disability type in El Segundo; 2.7% of the population experiences an independent living difficulty, 2.6% experiences a cognitive difficulty, 2.5% experiences an ambulatory difficulty, 2.2% experiences a hearing difficulty, 1.1% experiences a vision difficulty, and 0.9% experiences a self-care difficulty.

Disabilities are generally more common amongst aging populations. Over 35% of El Segundo residents above the age of 75 experience a disability and 17% of residents between the ages of 65 and 74 experience a disability. Approximately 11% of the population citywide is aged 65 or older.

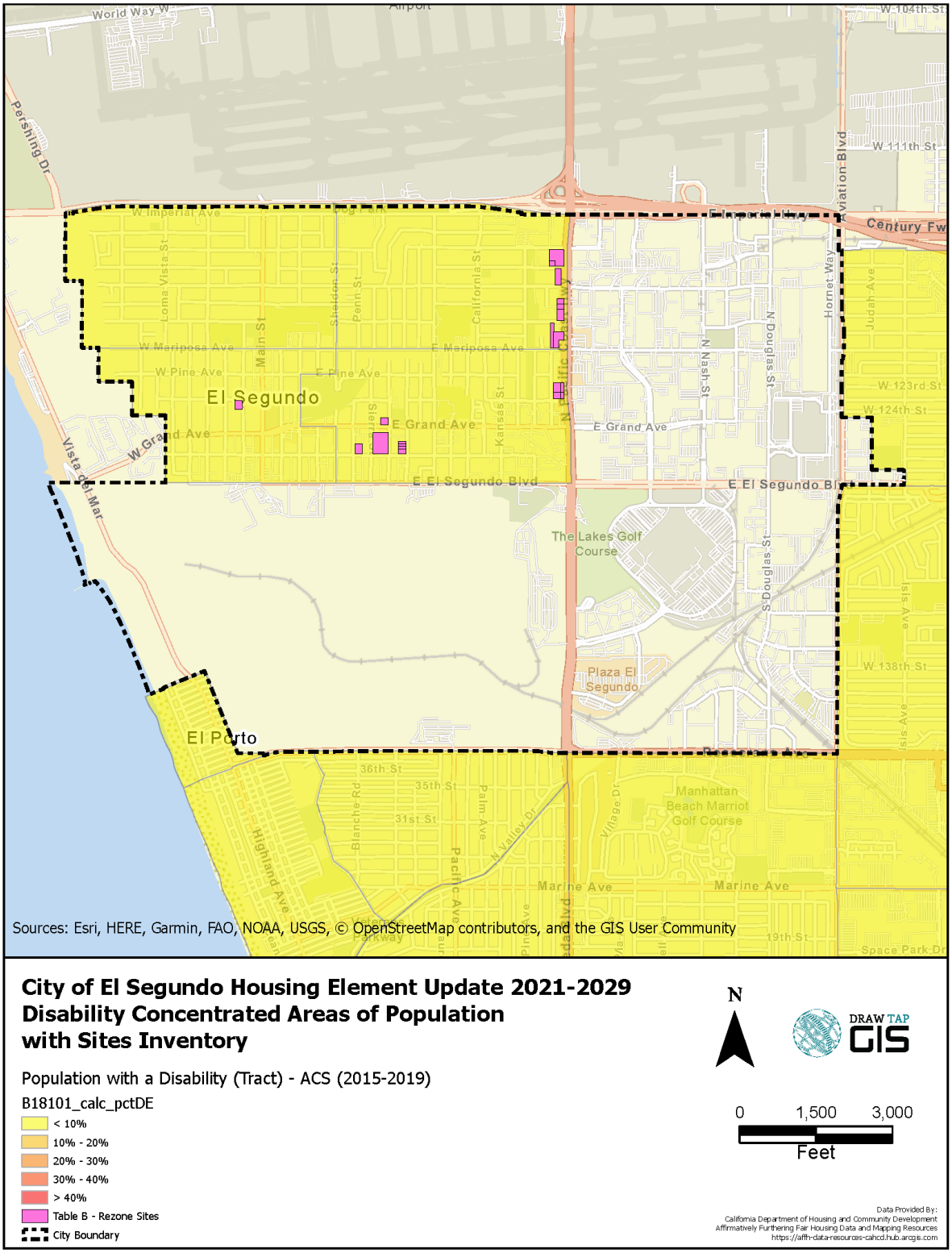
All sites selected to meet the 2021-2029 RHNA are in tracts where less than 10% of the population experiences one or more disabilities.

**Figure C-5: Regional Concentrations of Persons with Disabilities by Tract**




Source: HCD AFFH Data Viewer, 2015-2019 ACS, 2021.

## Figure C-6: Concentrations of Persons with Disabilities by Tract and Sites Inventory




Source: HCD AFFH Data Viewer, 2015-2019 ACS, 2021.

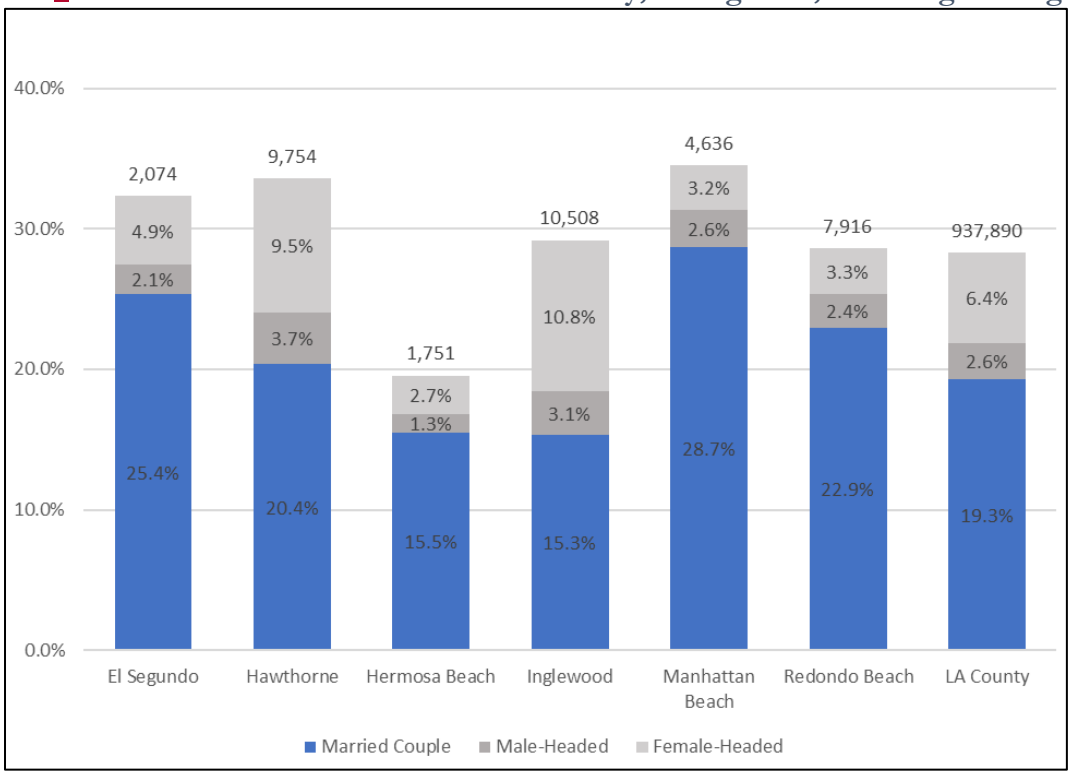
## FAMILIAL STATUS

Familial status refers to the presence of children under the age of 18, whether the child is biologically related to the head of household, and the martial status of the head of households. Families with children may face housing discrimination by landlords who fear that children will cause property damage. Some landlords may have cultural biases against children of the opposite sex sharing a bedroom. Differential treatments such as limiting the number of children in a complex or confining children to a specific location are also fair housing concerns. Single parent households are also protected by fair housing law.

**Regional Trend.** Approximately 32% of El Segundo households are families with one or more child under the age of 18. The City's share of households with children is larger than the County, and the neighboring cities of Hermosa Beach, Inglewood, and Redondo Beach, but smaller than Hawthorne and Manhattan Beach (Figure C-7). Of the selected jurisdictions, Inglewood has the largest proportion of single-parent households representing 13.9% of all households in the City, while only 4% percent of households in Hermosa Beach are single-parent households.

More than 60% of children in most areas around Rolling Hills, Burbank, Redondo Beach, and the Pacific Palisades neighborhood live in married couple households (Figure C-8). Figure C-9 shows percent of children living in single-parent female-headed households by tract. Children in female-headed households are most concentrated in the areas east of El Segundo, including Inglewood, the City of Los Angeles, and unincorporated Los Angeles County communities, and the areas around Long Beach and Lakewood. In general, there are more children living in female-headed households in the central Los Angeles County areas compared to the South Bay, Westside, Gateway, San Fernando Valley, and San Gabriel Valley cities.

**Figure C-7: Households with Children – L.A. County, El Segundo, and Neighboring Cities**



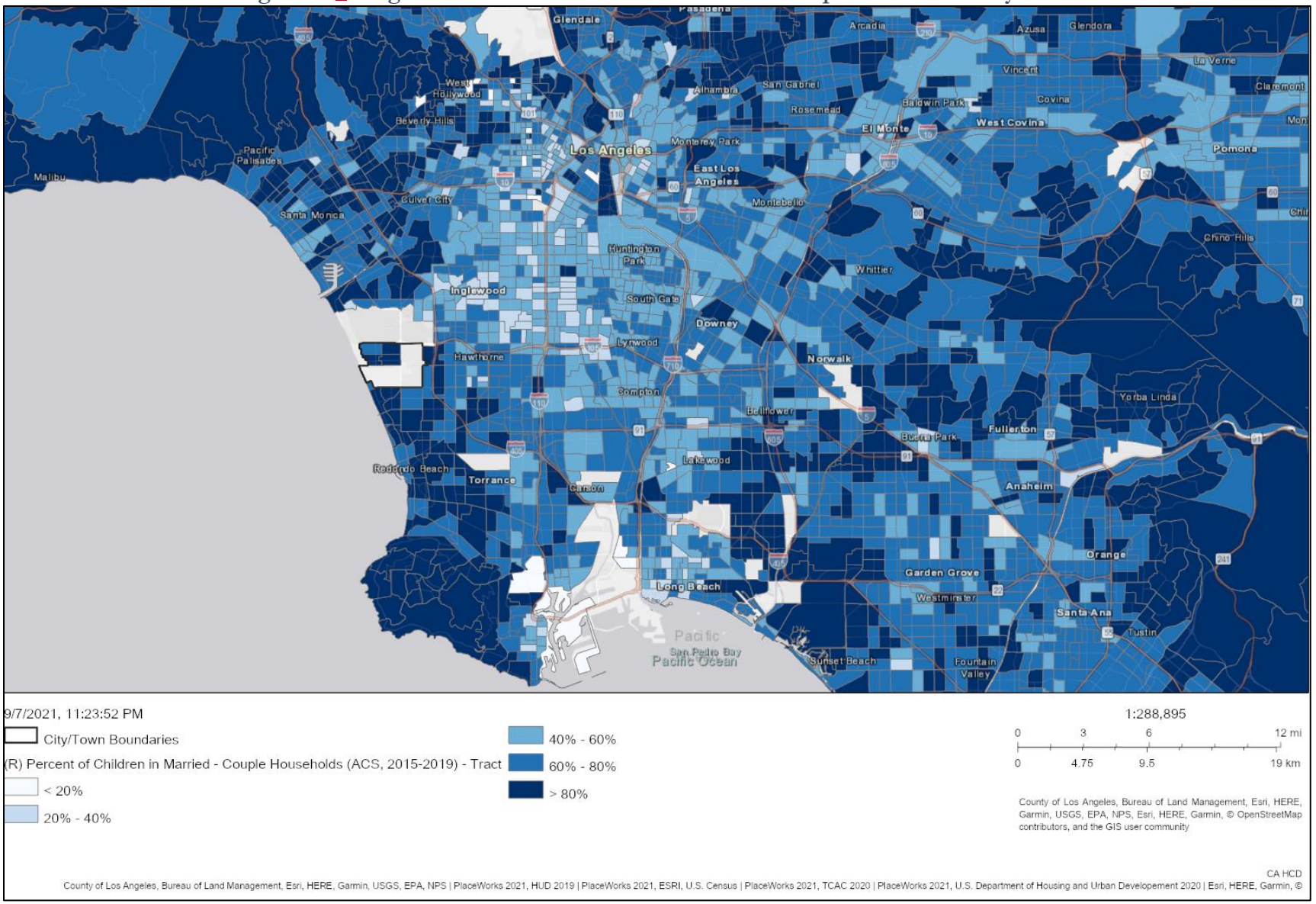

Source: 2015-2019 ACS (5-Year Estimates).

**Local Trend.** El Segundo has seen an increase in households with children since 2010. During the 2006-2010 ACS, there were 1,999 households with children representing 27.5% of all City households. The most recent 2015-2019 ACS estimates there is now only 2,074 households with children in El Segundo representing 32% of all households in the City. Approximately 7% of households in the City are single-parent households including 4.9% female-headed single-parent households. Female-headed households with children require special consideration and assistance because of their greater need for affordable housing and accessible day care, health care, and other supportive services.

As shown in Figure C-10, more than 60% of children live in married couple households in all El Segundo tracts. There are no tracts where more than 20% of children live in single-parent female-headed households according to HCD's AFFH data viewer.

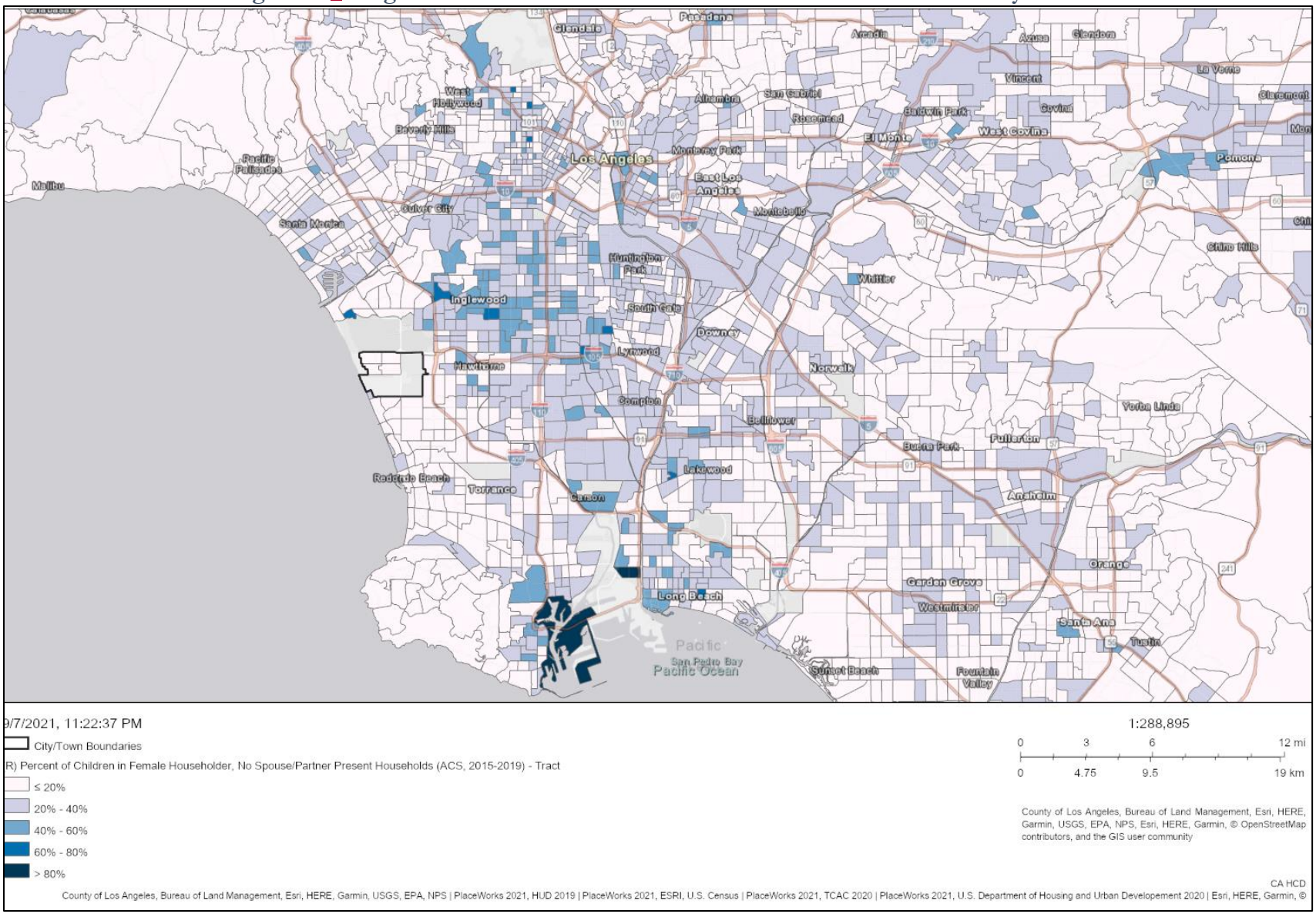
All candidate rezone sites used to meet the City's 2021-2029 RHNA are in tracts where more than 80% of children live in married couple households.

## Figure C-8: Regional Percent of Children in Married Couple Households by Tract



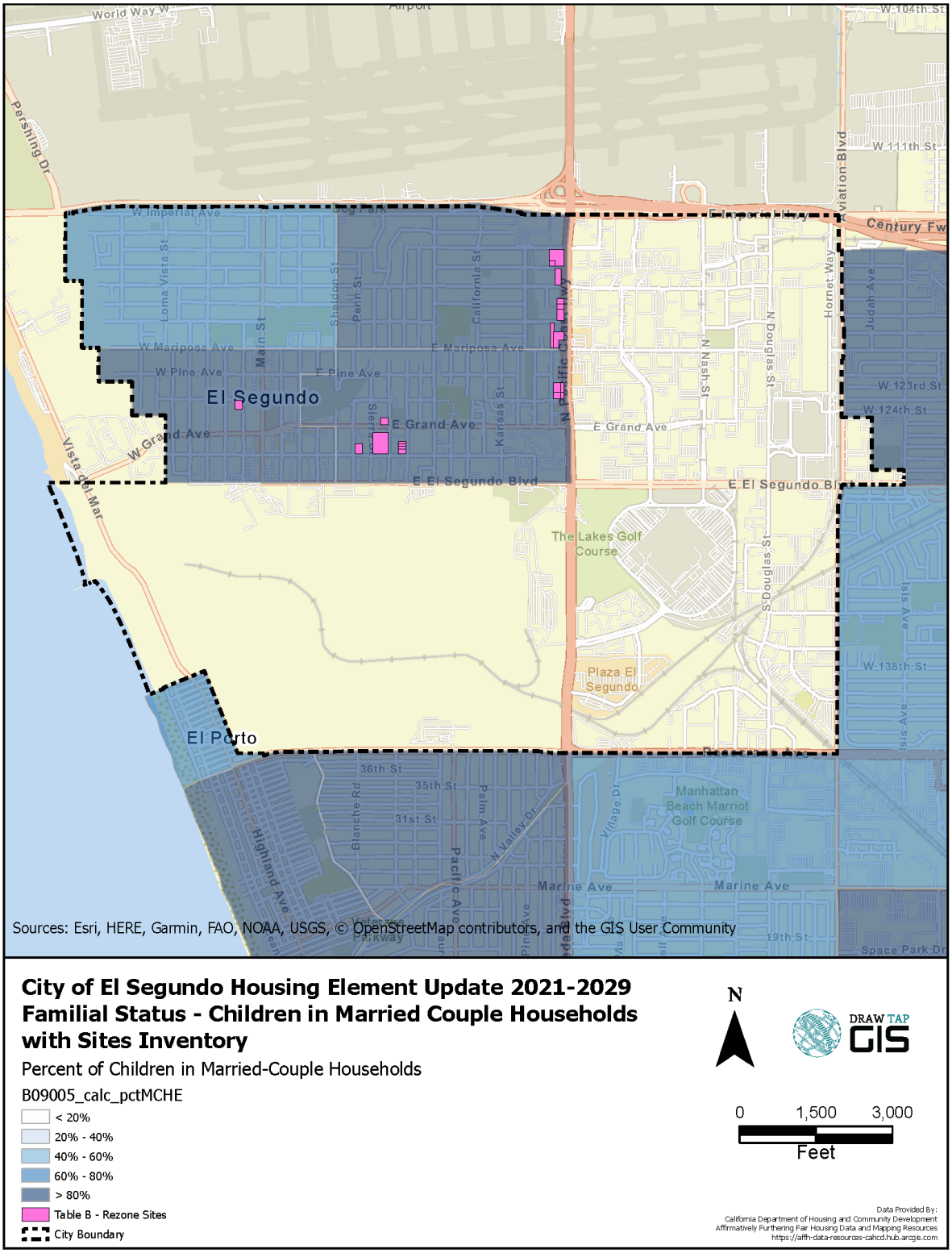

Source: HCD AFFH Data Viewer, 2015-2019 ACS, 2021.

## Figure C-9: Regional Percent of Children in Female-Headed Households by Tract




Source: HCD AFFH Data Viewer, 2015-2019 ACS, 2021.

## Figure C-10: Children in Married Couple Households by Tract and Sites Inventory




Source: HCD AFFH Data Viewer, 2015-2019 ACS, 2021.

## INCOME

Identifying low- or moderate-income (LMI) geographies and individuals is important to overcome patterns of segregation. HUD defines a LMI area as a census tract or block group where over 51% of the population is LMI (based on HUD's income definition of up to 80% of the AMI).

**Regional Trend.** Table C-6 shows that only 24.3% of El Segundo households earn 80% or less than the area median income and are considered lower income, compared to 41.3% Countywide. According to the 2015-2019 ACS, the median household income in El Segundo is $109,577, significantly higher than $68,044 countywide. El Segundo also has a higher median income than the nearby cities of Hawthorne ($54,215) and Inglewood ($54,400), but lower than Hermosa Beach ($136,702), Manhattan Beach ($153,023), and Redondo Beach ($113,499).

**Table C-6: Income Level Distribution**

| Income Category | El Segundo | | Los Angeles County | |
|---|---|---|---|---|
| | Households | Percent | Households | Percent |
| Very Low Income (<50% AMI) | 835 | 12.6% | 859,239 | 26.1% |
| Low Income (50-80% AMI) | 781 | 11.8% | 501,140 | 15.2% |
| Moderate Income (80-120% AMI) | 991 | 14.9% | 532,128 | 16.1% |
| Above Moderate Income (>120% AMI) | 4,031 | 60.7% | 1,402,692 | 42.6% |
| **Total Households** | **6,638** | **100.0%** | **3,295,199** | **100.0%** |

Note: AMI = Area Median Income
Source: Southern California Association of Governments (SCAG) Final RHNA Data Appendix, 2020.

Figure C-11 shows LMI areas regionally. Coastal cities, from Rancho Palos Verdes to El Segundo, and the Pacific Palisades neighborhood have low concentrations of LMI households. In these areas, less than 25% of the population is LMI in most tracts. LMI households are most concentrated in the central Los Angeles County region around the City of Los Angeles. There are smaller concentrations of LMI households in and around the cities of Glendale, El Monte, San Fernando, and Long Beach. El Segundo has LMI household concentrations consistent with coastal cities to the north and south.

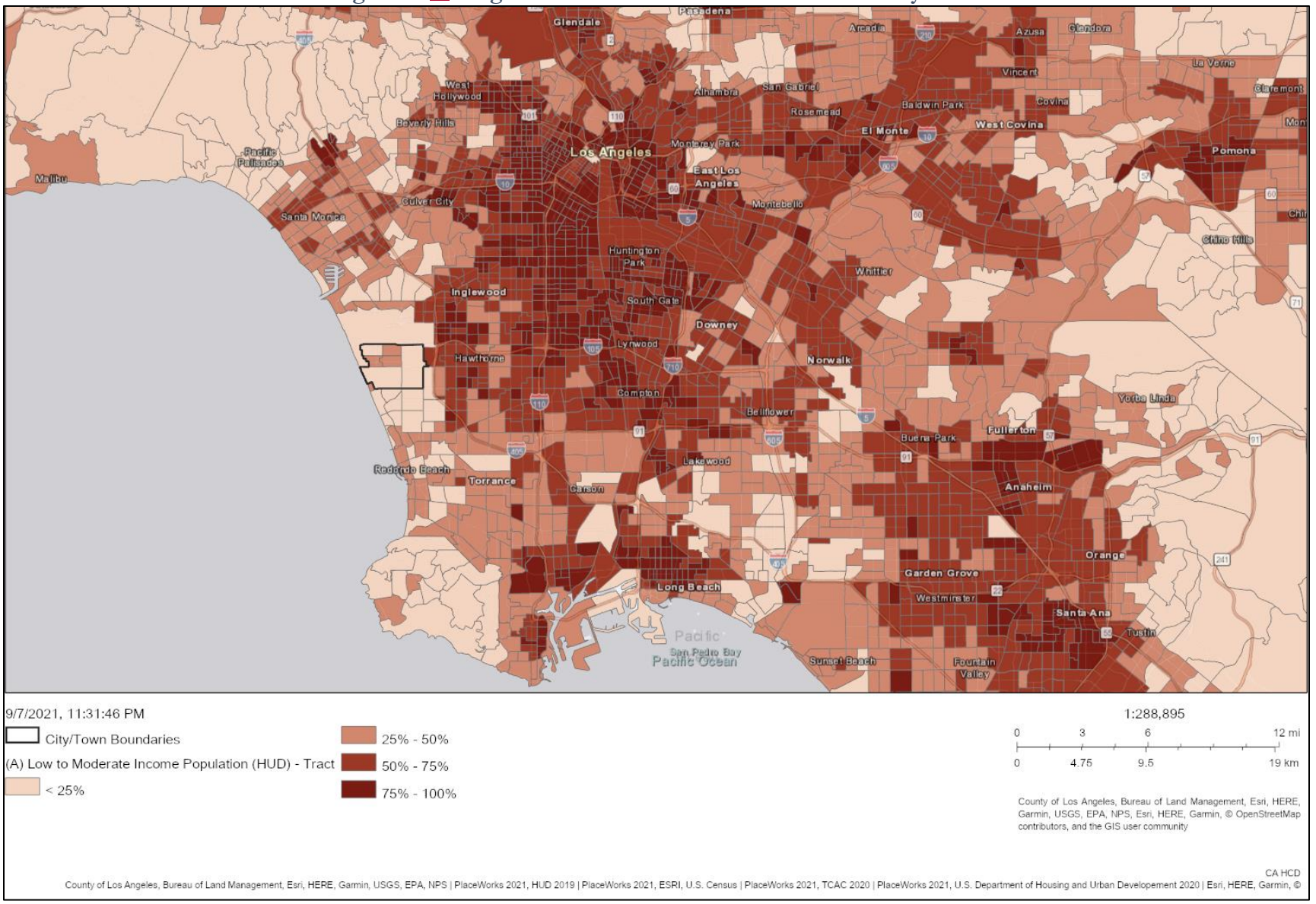
**Local Trend.** As discussed above, less than a quarter of El Segundo households are in the low or moderate income categories. Figure C-12 shows LMI concentrations by block group in the City. According to HUD's definition, there are no LMI areas in El Segundo. Less than 50% of households in all block groups are LMI.

**Sites Inventory.** Figure C-12 also shows the pending project sites and candidate rezone sites used to meet the 2021-2029 RHNA. None of the sites are in LMI areas where more than 51% of households are low or moderate income. However, a larger proportion of lower and moderate income units are in block groups where 25% to 50% of households are LMI, compared to above moderate income units. Approximately 53% of lower income units and 61% of moderate income units are in tracts where more than 25% of the population is LMI compared to only 37% of above moderate income units.

**Table C-7: Distribution of RHNA Units by Concentration of LMI Households**

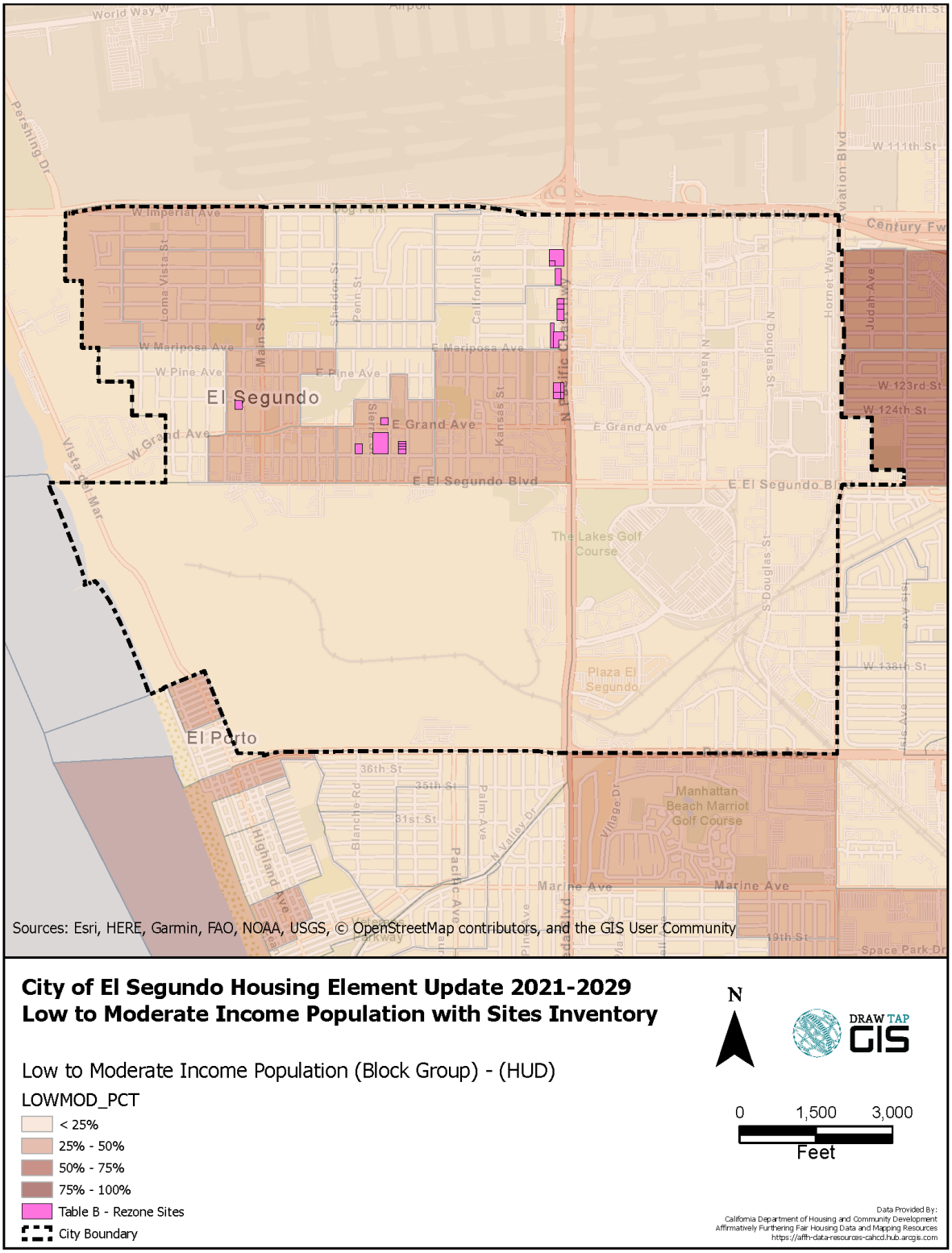
| Concentration of LMI Households (Block Group) | Lower Income | Moderate Income | Above Mod. Income | Total |
|---|---|---|---|---|
| <25% | 47.0% | 38.7% | 63.5% | 52.2% |
| 25-50% | 53.0% | 61.3% | 36.5% | 47.8% |
| **Total** | 264 | 93 | 233 | 590 |

## Figure C-11: Regional LMI Household Concentrations by Tract




Source: HCD AFFH Data Viewer, HUD LMI database (based on 2011-2015 ACS), 2021.

## Figure C-12: LMI Household Concentrations by Block Group and Sites Inventory




Source: HCD AFFH Data Viewer, HUD LMI database (based on 2011-2015 ACS), 2021.

## 3. Racially or Ethnically Concentrated Areas of Poverty

### RACIALLY/ETHNICALLY CONCENTRATED AREAS OF POVERTY (R/ECAPS)

In an effort to identify racially/ethnically concentrated areas of poverty (R/ECAPs), HUD identified census tracts with a majority non-White population with a poverty rate that exceeds 40% or is three times the average tract poverty rate for the metro/micro area, whichever threshold is lower. HCD and the California Tac Credit Allocation Committee (TCAC) convened as the Fair Housing Task Force to create opportunity maps. The maps also identify areas of high segregation and poverty. TCAC Opportunity Maps are discussed in more detail in the following section of this fair housing assessment.

**Regional Trend.** Approximately 15% of the County population is below the federal poverty level (Table C-8). Black/African American, American Indian/Alaska Native, persons of a race not listed ("Some other race"), and Hispanic/Latino populations all experience poverty at a higher rate than the average countywide. The proportion of non-Hispanic White residents under the poverty level is the lowest compared to other racial/ethnic groups in the County. Over 21% of persons with disabilities are also below the poverty level.

**Table C-8: Poverty Status by Race/Ethnicity and Disability Status**

| | Percent Below Poverty Level | |
|---|---|---|
| | El Segundo | L.A. County |
| Black or African American | 1.6% | 20.8% |
| American Indian and Alaska Native | 59.5% | 18.1% |
| Asian | 2.4% | 11.1% |
| Native Hawaiian and Other Pacific Islander | 0.0% | 11.5% |
| Some other race | 31.2% | 19.2% |
| Two or more races | 6.5% | 11.7% |
| Hispanic or Latino (of any race) | 11.9% | 18.1% |
| White alone, not Hispanic or Latino | 5.1% | 9.6% |
| With a disability | -- | 21.2% |
| Population for whom poverty status is determined | 5.9% | 14.9% |

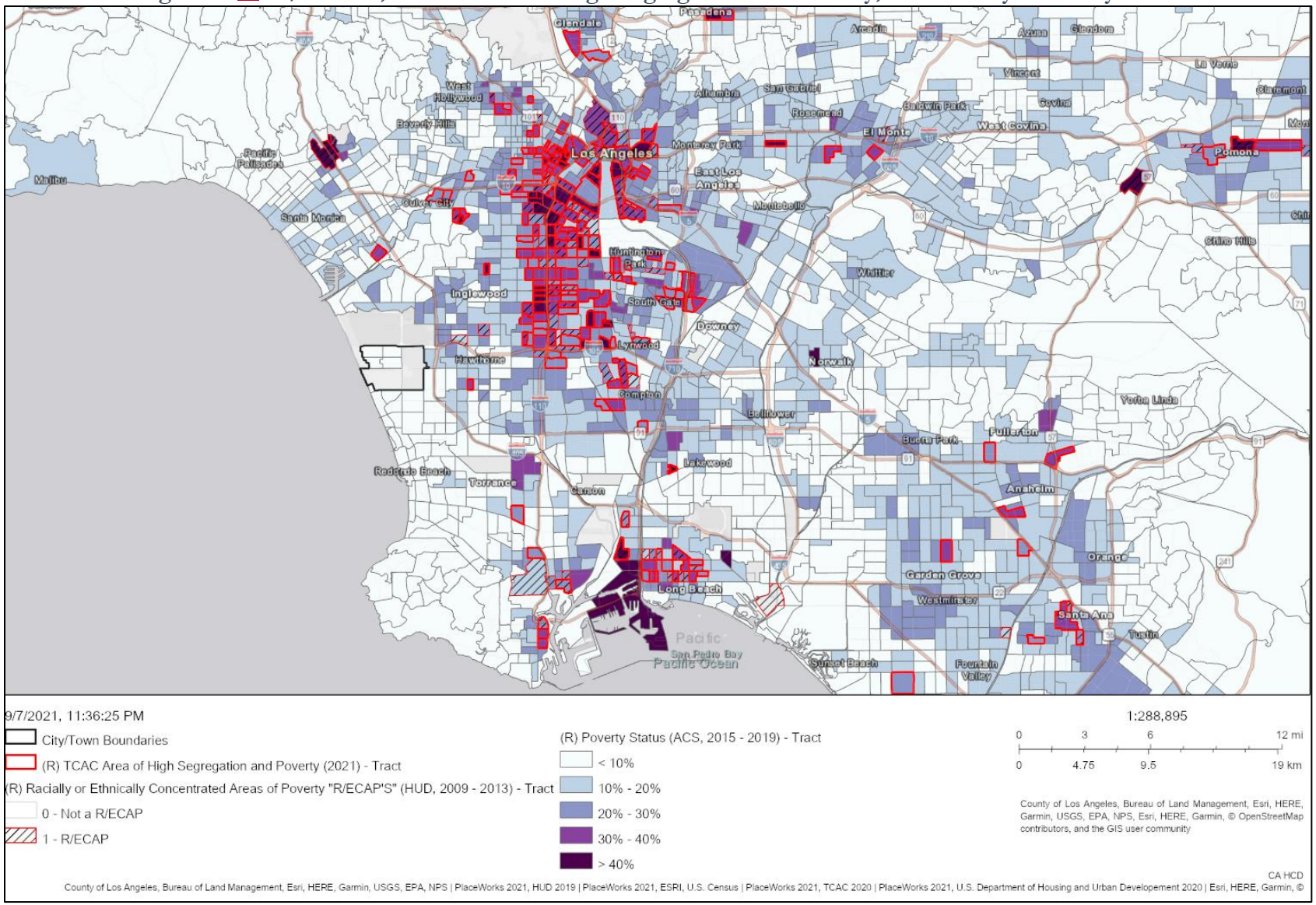
Note: -- = Data not available.
Source: 2015-2019 ACS (5-Year Estimates).

Figure C-13 shows R/ECAPs, TCAC designated areas of high segregation and poverty, and poverty status in the Los Angeles County region. R/ECAPs and areas of high segregation and poverty are concentrated in the central County areas around the City of Los Angeles. Areas of high segregation and poverty have also been identified in tracts east of El Segundo in Hawthorne and Inglewood. Tracts with larger populations of persons experiencing poverty are also concentrated in these areas.

**Local Trend.** As presented in Table C-8 above, only 5.9% of the El Segundo population is below the poverty level, significantly lower than the rate countywide. American Indian and Alaska Native residents experienced poverty at the highest rate. Nearly 60% the American Indian and Alaska Native population, 31.2% of the population belonging to a race not listed ("some other race"), and 11.9% of the Hispanic or Latino population is below the poverty level.

There are no R/ECAPs or TCAC-designated areas of high segregation and poverty in the City and fewer than 10% of the population in all El Segundo tracts have incomes below the poverty level.

**Figure C-13: R/ECAPs, TCAC Areas of High Segregation and Poverty, and Poverty Status by Tract**




Source: HCD AFFH Data Viewer, HUD 2009-2013 R/ECAP database, TCAC 2021, 2015-2019 ACS, 2021.

## RACIALLY/ETHNICALLY CONCENTRATED AREAS OF AFFLUENCE (RCAAS)

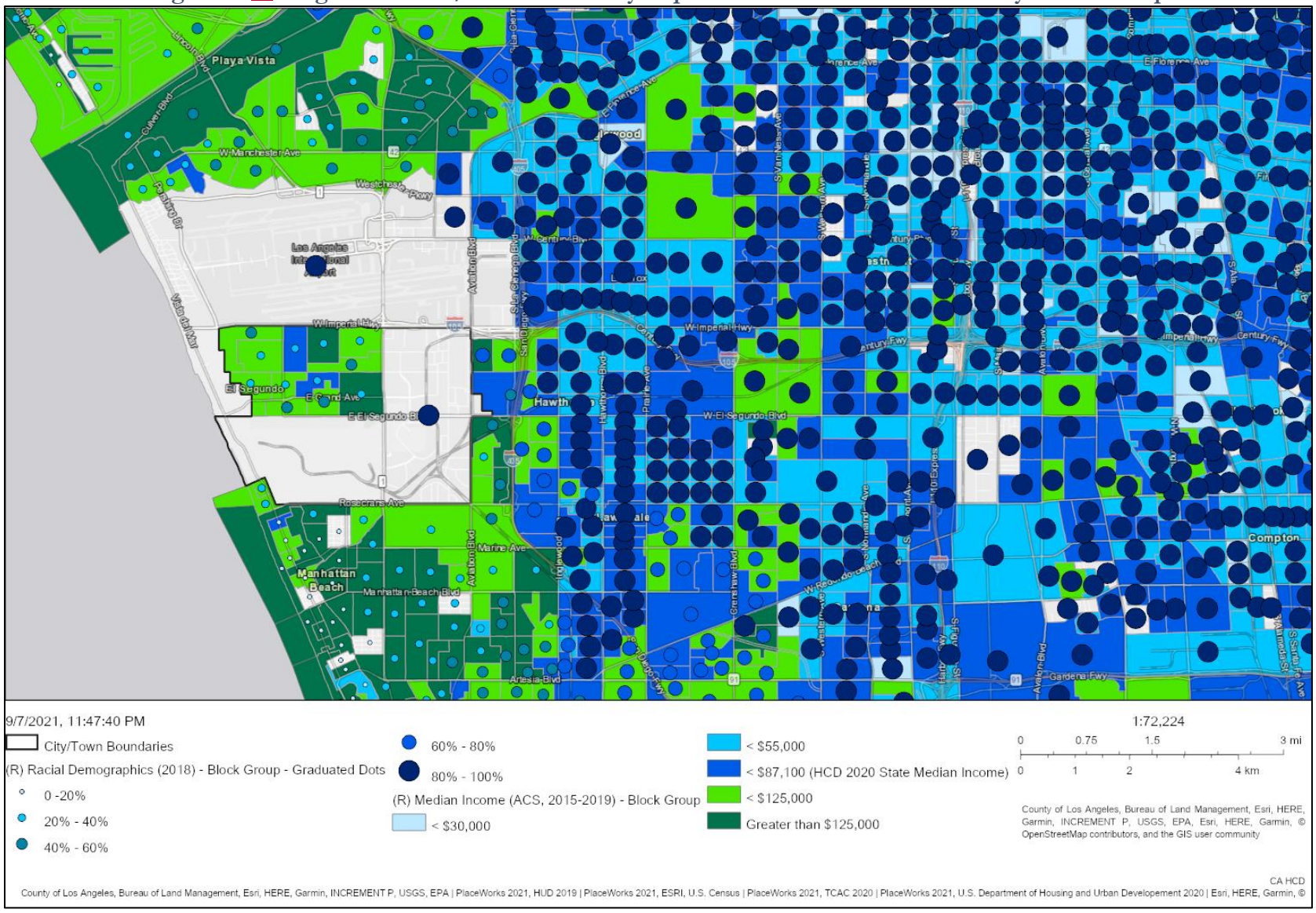
While racially concentrated areas of poverty and segregation (R/ECAPs) have long been the focus of fair housing policies, racially concentrated areas of affluence (RCAAs) must also be analyzed to ensure housing is integrated, a key to fair housing choice. A HUD Policy Paper defines racially concentrated areas of affluence as affluent, White communities.[4] According to this report, Whites are the most racially segregated group in the United States and "in the same way neighborhood disadvantage is associated with concentrated poverty and high concentrations of people of color, conversely, distinct advantages are associated with residence in affluent, White communities." Based on their research, HCD defines RCAAs as census tracts where 1) 80% or more of the population is white, and 2) the median household income is $125,000 or greater (slightly more than double the national median household income in 2016).

**Regional Trend.** Figure C-14 shows racial/ethnic minority populations and median income by block group in the El Segundo region. Jurisdictions along the coast, including El Segundo, Manhattan Beach, and the Playa Vista neighborhood, have higher median incomes and smaller racial/ethnic minority populations. Cities east of El Segundo such as Hawthorne, Lawndale, and Inglewood, have higher concentrations of racial/ethnic minorities. Many block groups in the areas east of El Segundo also have median incomes below the 2020 State median income of $87,100. There is a small concentration of RCAAs, block groups with median incomes exceeding $125,000 and racial/ethnic minority populations below 20%, in Manhattan Beach.

**Local Trend.** As discussed previously, only 38% of the El Segundo population belongs to a racial or ethnic minority group. The remaining 62% of the population is non-Hispanic White. Racial/ethnic minority populations and median income by El Segundo block group are presented in Figure C-15. Of the block groups in the City with data for income, two have median incomes exceeding $125,000, two have median incomes below the State median, and the remaining have median incomes between $87,100 and $125,000. There are no block groups in the City where racial/ethnic minorities make up less than 20% of the population; therefore, there are no RCAAs in El Segundo.

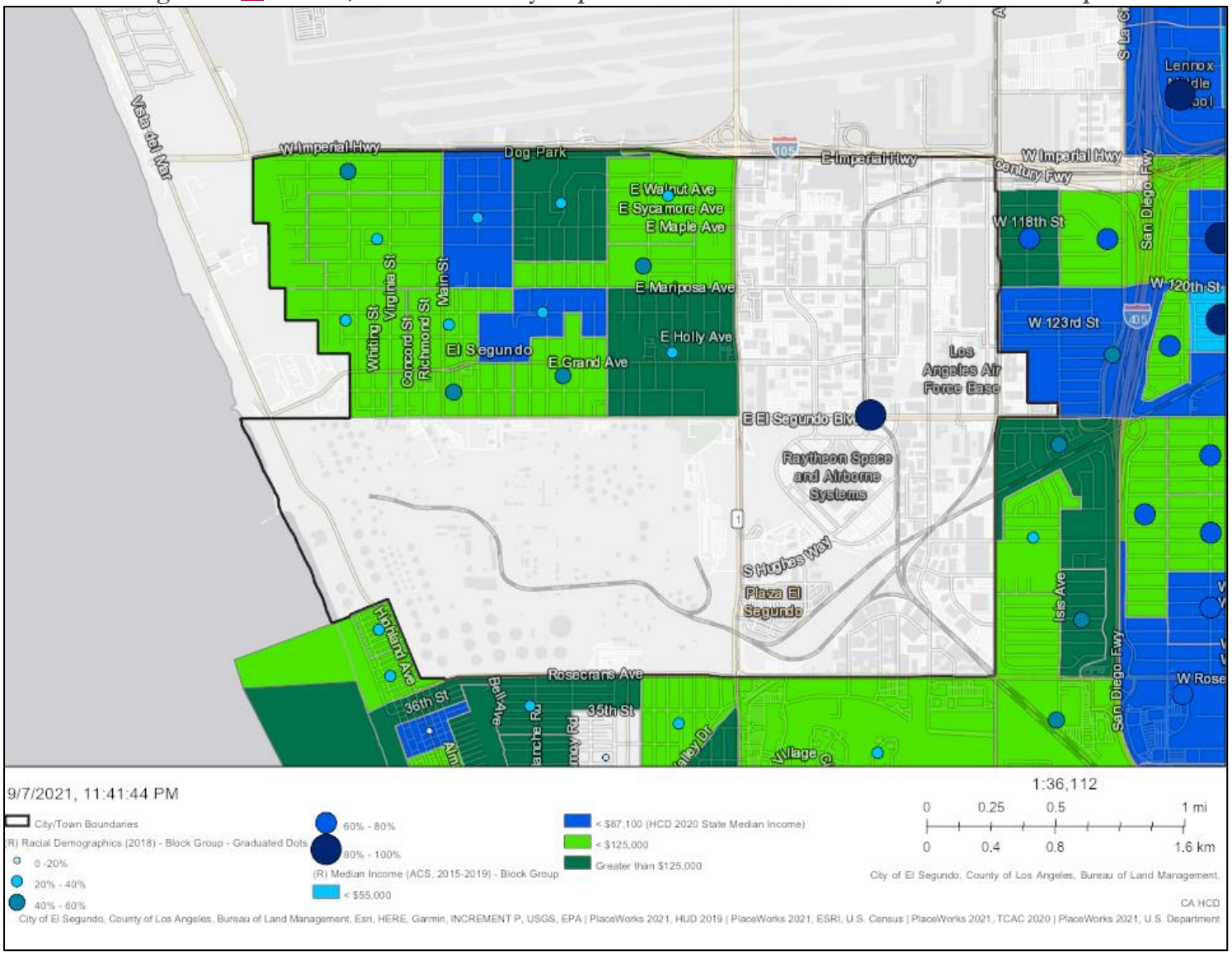
[4] Goetz, Edward G., Damiano, A., & Williams, R. A. (2019) Racially Concentrated Areas of Affluence: A Preliminary Investigation.' Published by the Office of Policy Development and Research (PD&R) of the U.S. Department of Housing and Urban Development in Cityscape: A Journal of Policy Development and Research (21,1, 99-124).

**Figure C-14: Regional Racial/Ethnic Minority Populations and Median Income by Block Group**




Source: HCD AFFH Data Viewer, 2015-2019 ACS, 2021

## Figure C-15: Racial/Ethnic Minority Populations and Median Income by Block Group




Source: HCD AFFH Data Viewer, 2015-2019 ACS, 2021.

## 4. Access to Opportunities

To assess fair access to opportunities regionally and locally, this analysis uses HUD Opportunity Indicators and TCAC Opportunity Area Maps. This section also specifically addresses economic, education, environmental, and transportation opportunities.

HUD developed an index for assessing fair housing by informing communities about disparities in access to opportunity based on race/ethnicity and poverty status. HUD only provides indicator scores for jurisdictions receiving CDBG funding. Because El Segundo receives CDBG funds through the County, opportunity indicator scores are not available. Index scores are based on the following opportunity indicator indices (values range from 0 to 100):

- **Low Poverty Index:** The higher the score, the less exposure to poverty in a neighborhood.
- **School Proficiency Index:** The higher the score, the higher the school system quality is in a neighborhood.
- **Labor Market Engagement Index:** The higher the score, the higher the labor force participation and human capital in a neighborhood.
- **Transit Trips Index:** The higher the trips transit index, the more likely residents in that neighborhood utilize public transit.
- **Low Transportation Cost Index:** The higher the index, the lower the cost of transportation in that neighborhood.
- **Jobs Proximity Index:** The higher the index value, the better access to employment opportunities for residents in a neighborhood.
- **Environmental Health Index:** The higher the value, the better environmental quality of a neighborhood.

To assist in this analysis, the Department of Housing and Community Development (HCD) and the California Tax Credit Allocation Committee (TCAC) convened in the California Fair Housing Task Force (Task Force) to "provide research, evidence-based policy recommendations, and other strategic recommendations to HCD and other related state agencies/departments to further the fair housing goals (as defined by HCD)." The Task force has created Opportunity Maps to identify resources levels across the state "to accompany new policies aimed at increasing access to high opportunity areas for families with children in housing financed with 9% Low Income Housing Tax Credits (LIHTCs)". These opportunity maps are made from composite scores of three different domains made up of a set of indicators related to economic, environmental, and educational opportunities and poverty and racial segregation. Based on these domain scores, tracts are categorized as Highest Resource, High Resource, Moderate Resource, Moderate Resource (Rapidly Changing), Low Resource, or areas of High Segregation and Poverty. Table C-9 shows the full list of indicators.

**Table C-9: Domains and List of Indicators for Opportunity Maps**

| Domain | Indicator |
|---|---|
| Economic | Poverty<br>Adult education<br>Employment<br>Job proximity<br>Median home value |
| Environmental | CalEnviroScreen 3.0 pollution Indicators and values |
| Education | Math proficiency<br>Reading proficiency<br>High School graduation rates<br>Student poverty rates |
| Poverty and Racial Segregation | Poverty: tracts with at least 30% of population under federal poverty line<br>Racial Segregation: Tracts with location quotient higher than 1.25 for Blacks, Hispanics, Asians, or all people of color in comparison to the County |
| Source: California Fair Housing Task Force, Methodology for TCAC/HCD Opportunity Maps, December 2020. | |

**Regional Trend.** HUD Opportunity Indicator scores for Los Angeles County are shown in Table C-10. The White population, including the population below the federal poverty line, received the highest scores in low poverty, school proficiency, labor market participation, jobs proximity, and environmental health. Hispanic communities scored the lowest in low poverty and labor market participation and Black communities scored the lowest in school proficiency, jobs proximity, and environmental health. Black residents were most likely to use public transit and have the lowest transportation costs.

**Table C-10: HUD Opportunity Indicators by Race/Ethnicity – Los Angeles County**

| | Low Poverty | School Prof. | Labor Market | Transit | Low Transp. Cost | Jobs Prox. | Env. Health |
|---|---|---|---|---|---|---|---|
| **Total Population** | | | | | | | |
| White, non-Hispanic | 62.59 | 65.09 | 65.41 | 82.63 | 74.09 | 55.80 | 18.99 |
| Black, non-Hispanic | 34.95 | 32.37 | 34.00 | 87.70 | 79.18 | 40.13 | 11.66 |
| Hispanic | 33.91 | 38.38 | 33.18 | 87.19 | 77.74 | 41.53 | 11.91 |
| Asian or Pacific Islander, non-Hispanic | 53.57 | 59.34 | 55.94 | 86.52 | 76.45 | 51.82 | 12.16 |
| Native American, non-Hispanic | 45.04 | 46.90 | 44.50 | 83.17 | 75.65 | 44.24 | 16.74 |
| **Population below federal poverty line** | | | | | | | |
| White, non-Hispanic | 50.68 | 58.06 | 57.49 | 86.42 | 79.48 | 57.52 | 16.66 |
| Black, non-Hispanic | 23.45 | 27.16 | 25.52 | 88.65 | 81.18 | 36.59 | 11.62 |
| Hispanic | 23.66 | 32.87 | 27.66 | 89.45 | 81.02 | 42.84 | 10.30 |
| Asian or Pacific Islander, non-Hispanic | 42.97 | 54.52 | 50.06 | 89.62 | 81.49 | 54.19 | 9.84 |
| Native American, non-Hispanic | 29.85 | 35.12 | 32.02 | 85.23 | 78.70 | 46.35 | 16.01 |
| Source: HUD AFFH Database – Opportunity Indicators, 2020. | | | | | | | |

The central Los Angeles County areas around the City of Los Angeles are comprised of mostly low and moderate resource tracts and areas of high segregation and poverty. The El Monte/Baldwin Park area and San Fernando area, including Van Nuys/North Hollywood, also have concentrations of low resource areas and some areas of high segregation and poverty. High and highest resource areas are mostly concentrated in coastal communities from Rolling Hills and Rancho Palos Verdes to Santa Monica, and areas in and around Beverly Hills, La Cañada Flintridge, and Pasadena/Arcadia.

**Local Trend.** Opportunity map scores for El Segundo census tracts are presented in Figure C-17 along with the City's sites inventory. As discussed previously, nearly all El Segundo residents reside in the northwestern corner of the City. A majority of the southern and northeastern areas are comprised of commercial, corporate, and industrial uses. There are no housing units in these tracts. Only four El Segundo tracts in the northwestern corner of the City have TCAC Opportunity Map designations. Due to insufficient data, the remaining two tracts the City, along the eastern and southern boundaries, do not have TCAC Opportunity Map categorizations.

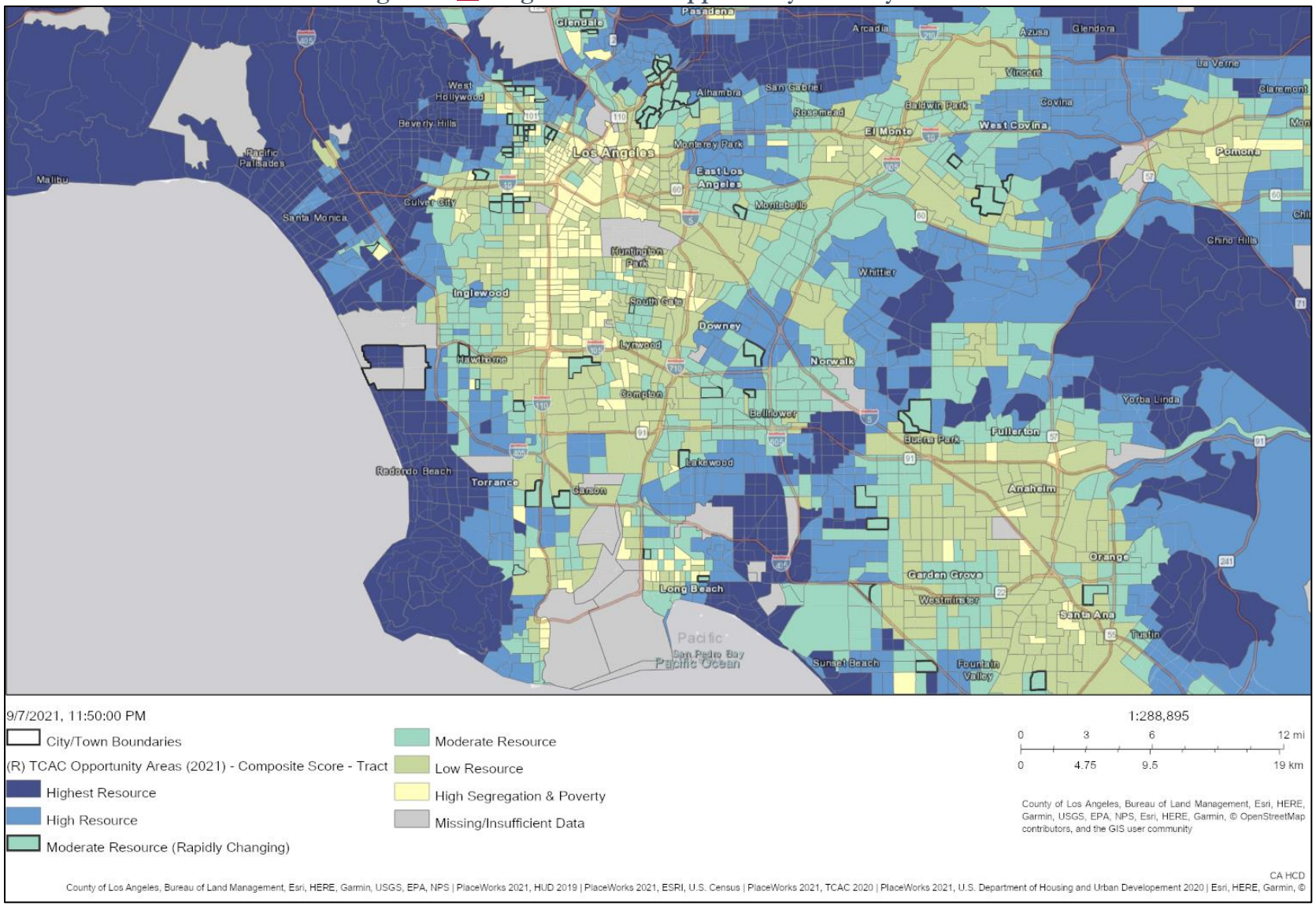
All tracts with sufficient data in the City are highest resource tracts. There are no tracts in the City that are classified as areas of high segregation and poverty. Opportunity map categorization and domain scores for El Segundo census tracts are shown in Table C-11.

**Table C-11: Opportunity Map Scores and Categorization**

| Census Tract | Economic Score | Environmental Score | Education Score | Composite Score | Final Category |
|---|---|---|---|---|---|
| 6037620101 | 0.805 | 0.649 | 0.931 | 0.701 | Highest Resource |
| 6037620001 | 0.897 | 0.474 | 0.952 | 0.831 | Highest Resource |
| 6037620002 | 0.918 | 0.288 | 0.963 | 0.845 | Highest Resource |
| 6037620102 | 0.881 | 0.271 | 0.986 | 0.852 | Highest Resource |

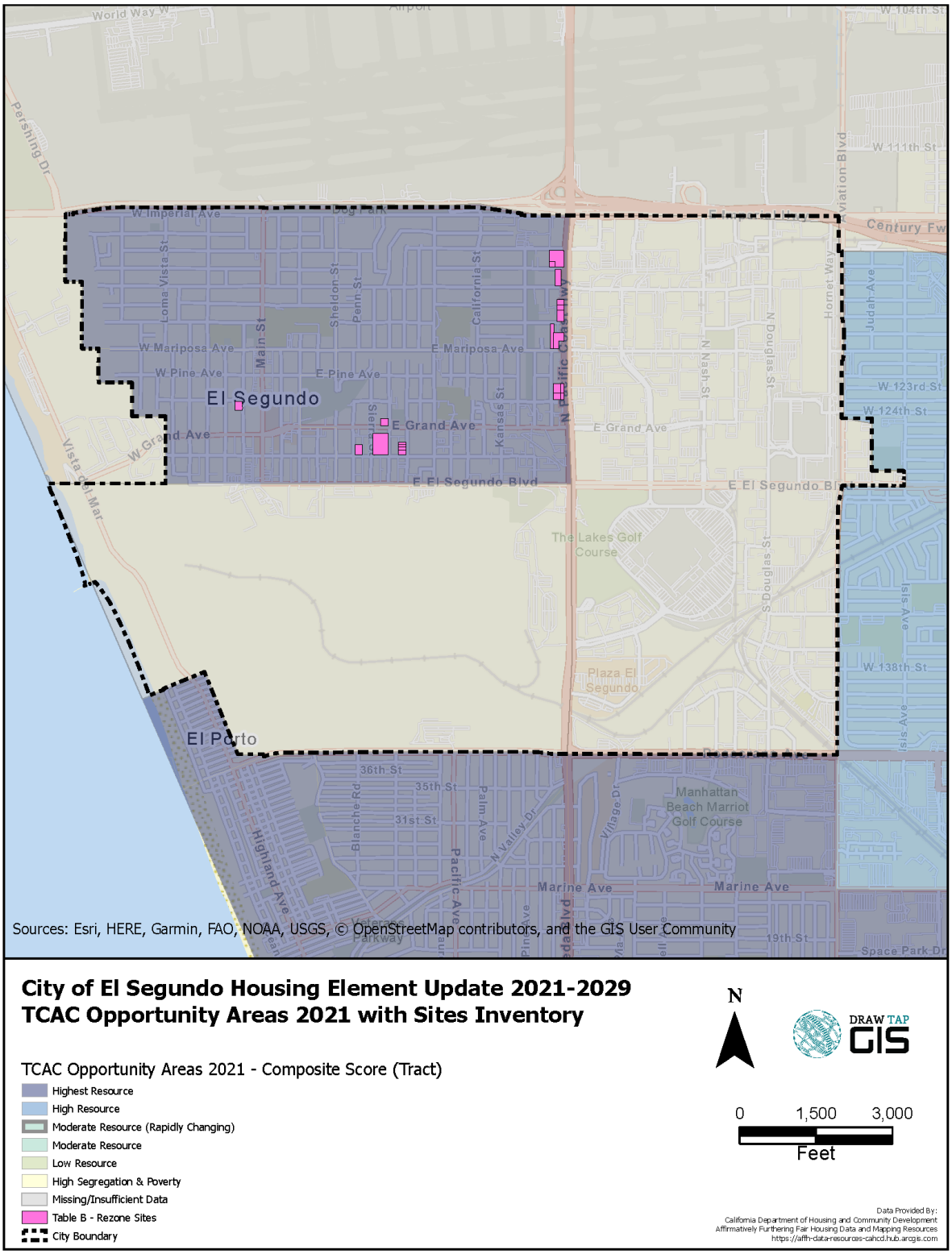
Source: California Fair Housing Task Force, Methodology for the 2021 TCAC/HCD Opportunity Maps, December 2020.

## Figure C-16: Regional TCAC Opportunity Areas by Tract




Source: HCD AFFH Data Viewer, TCAC 2021, 2021.

## Figure C-17: TCAC Opportunity Areas by Tract and Sites Inventory




Source: HCD AFFH Data Viewer, TCAC 2021, 2021.

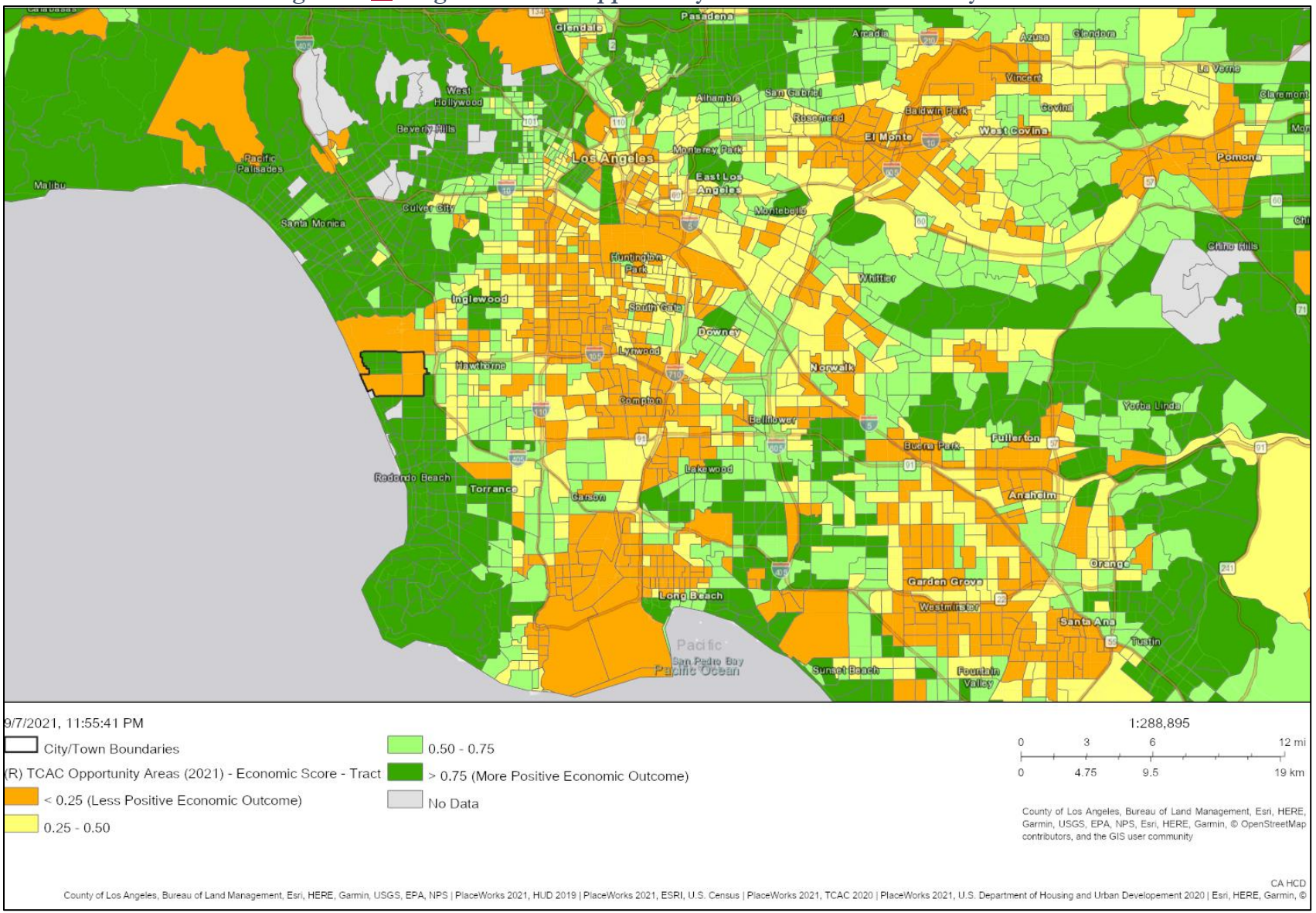
## ECONOMIC

As described previously, the Fair Housing Task Force calculates economic scores based on poverty, adult education, employment, job proximity, and median home values. See Table C-9 for the complete list of TCAC Opportunity Map domains and indicators.

**Regional Trend.** As presented in Table C-10 above, in Los Angeles County, White residents have the highest labor market participation, while Hispanic residents have the lowest labor market participation. Figure C-18 shows TCAC Opportunity Map economic scores in the Los Angeles region by tract. Consistent with final TCAC categories, tracts with the highest economic scores are in concentrated in coastal communities, from the Rancho Palos Verdes to Santa Monica, and areas around Beverly Hills, Pasadena, and Arcadia. Tracts with economic scores in the lowest quartile are concentrated in the central Los Angeles County areas, San Gabriel Valley cities around El Monte, and around the cities of Long Beach and Carson.

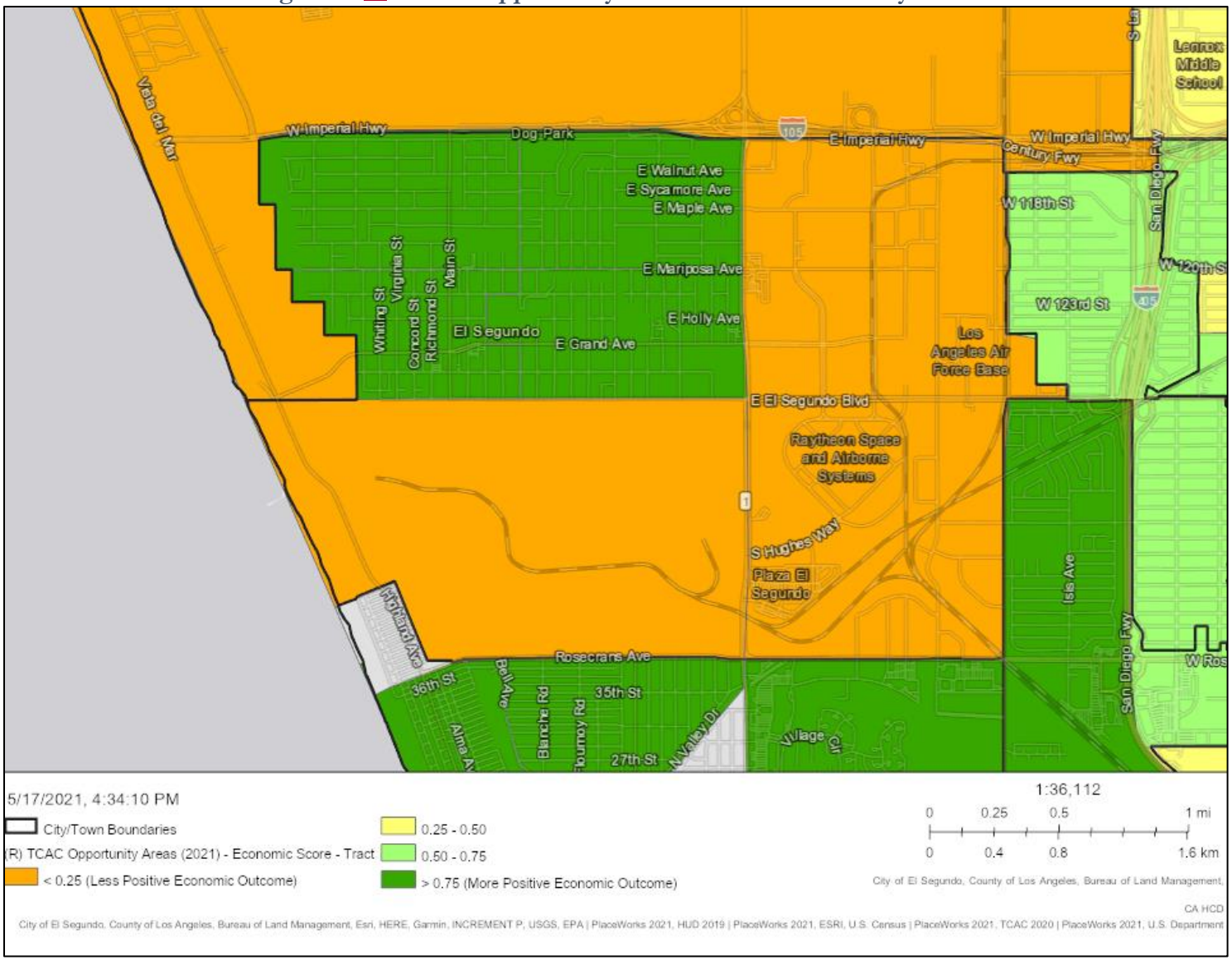
**Local Trend.** As presented in Figure C-19, the northwestern corner of the City is comprised of tracts with economic scores in the highest quartile. As discussed previously, the tracts along the eastern and southern City boundaries are comprised of mostly industrial, corporate, and commercial uses. There are no housing units located in these tracts. These tracts scored in the lowest quartile for economic opportunity. The tract along the eastern City boundary has high concentrations of racial/ethnic minorities exceeding 81% (see Figure C-3).

## Figure C-18: Regional TCAC Opportunity Area Economic Scores by Tract




Source: HCD AFFH Data Viewer, TCAC 2021, 2021

## Figure C-19: TCAC Opportunity Area Economic Scores by Tract




Source: HCD AFFH Data Viewer, TCAC 2021, 2021.

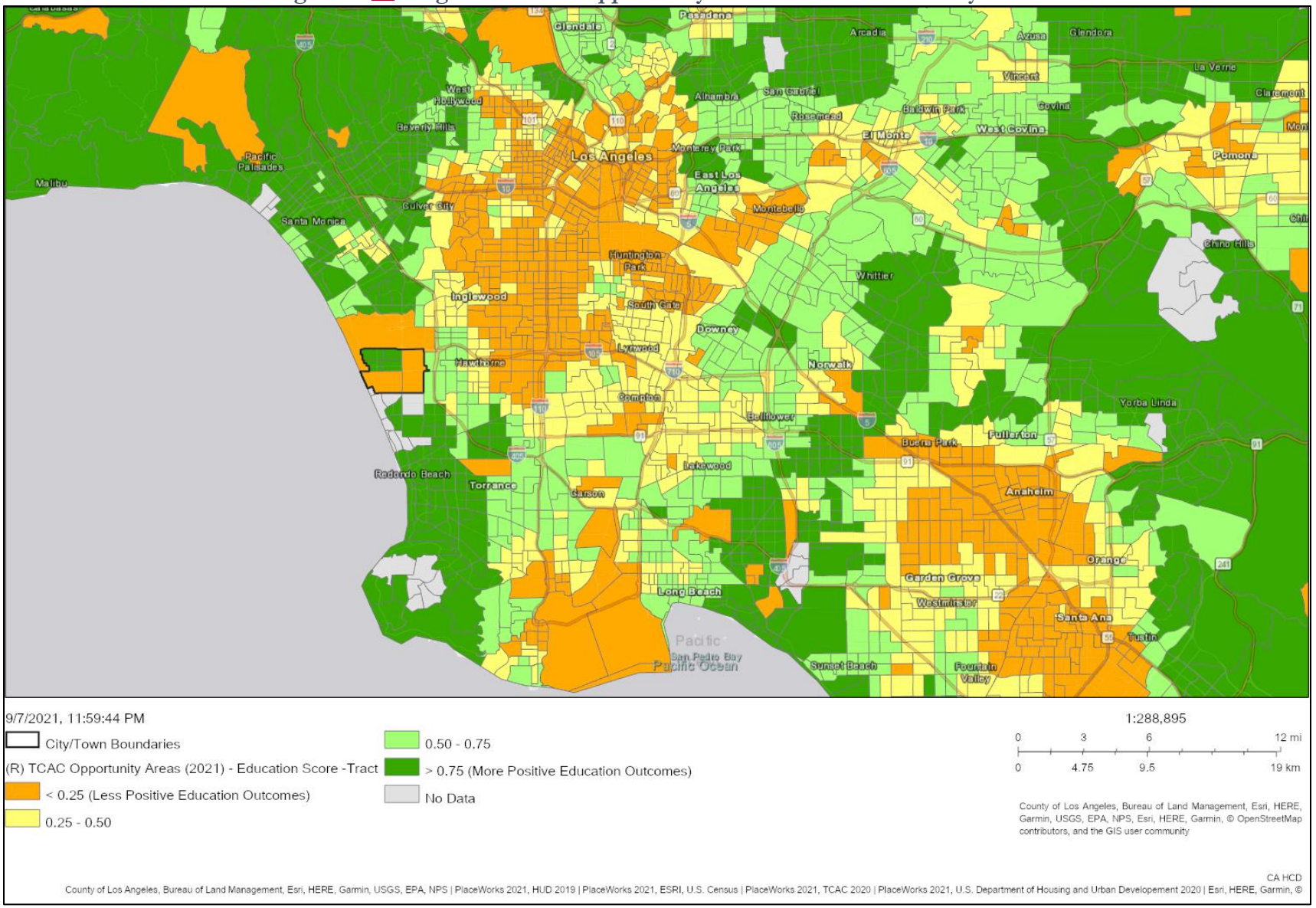
## EDUCATION

As described above, the Fair Housing Task Force determines education scores based on math and reading proficiency, high school graduation rates, and student poverty rates. See Table C-9 for the complete list of TCAC Opportunity Map domains and indicators.

**Regional Trend.** As presented in Table C-10 previously, White Los Angeles County communities are located closest to the highest quality school systems, while Black communities are typically located near lower quality school systems. TCAC Opportunity Map education scores for the region are shown in Figure C-20. The central County areas have the highest concentration of tracts with education scores in the lowest percentile. There is also a concentration of tracts with low education scores around the San Pedro community and City of Long Beach. Coastal communities, and areas near Arcadia, Whittier, and Beverly Hills have the highest education scores.

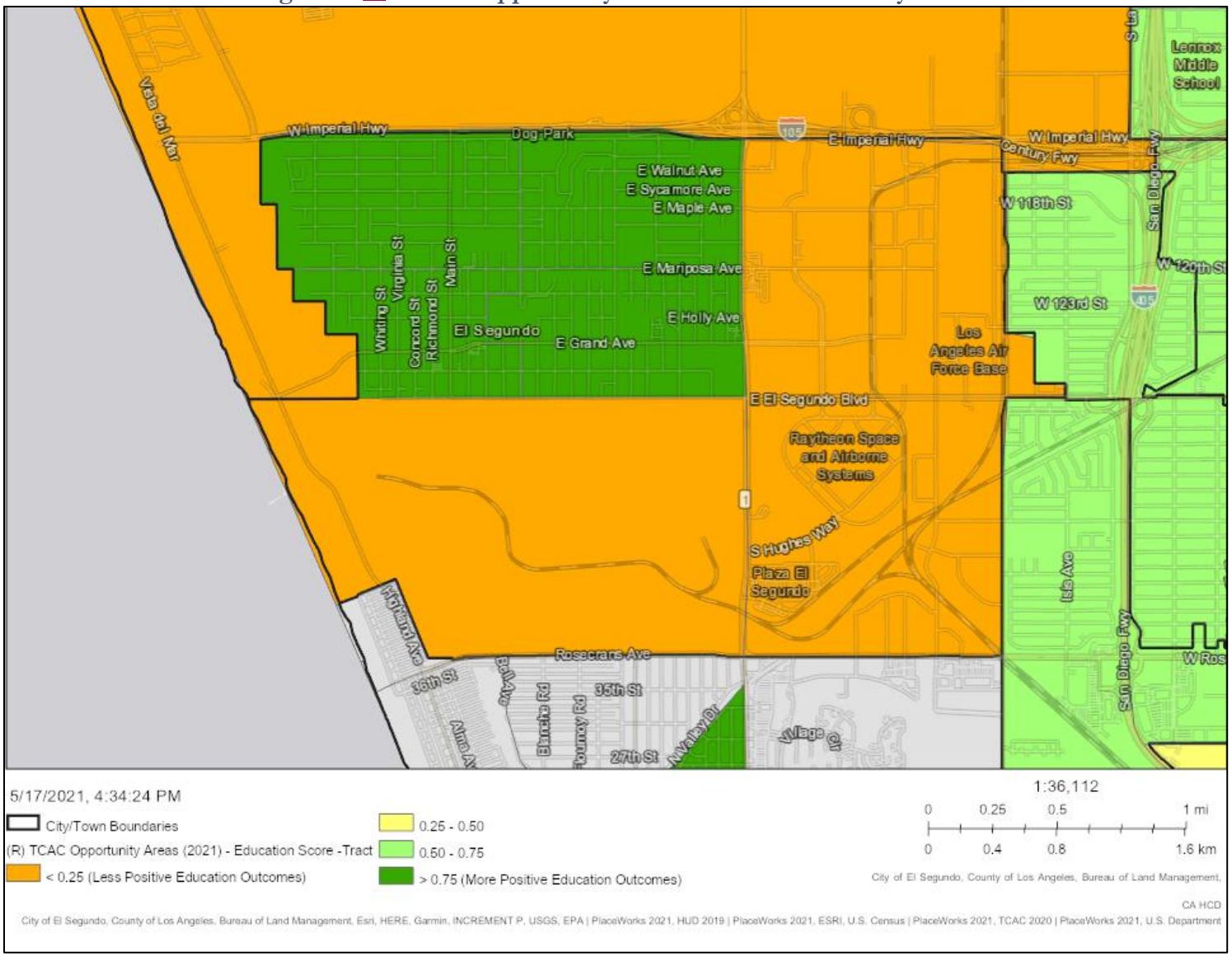
**Local Trend.** Figure C-21 shows TCAC education scores for El Segundo tracts. Tracts in El Segundo received education scores consistent with economic scores discussed above. The northwestern corner of the City, where a large majority of El Segundo households are located, scored in the highest quartile, while the tracts along the eastern and southern City boundaries received education scores below 0.25.

## Figure C-20: Regional TCAC Opportunity Area Education Scores by Tract




Source: HCD AFFH Data Viewer, TCAC 2021, 2021

## Figure C-21: TCAC Opportunity Area Education Scores by Tract




Source: HCD AFFH Data Viewer, TCAC 2021, 2021

## ENVIRONMENTAL

Environmental health scores are determined by the Fair Housing Task Force based on CalEnviroScreen 3.0 pollution indicators and values. The California Office of Environmental Health Hazard Assessment (OEHHA) compiles these scores to help identify California communities disproportionately burdened by multiple sources of pollution. In addition to considering (1) environmental factors such as pollutant exposure, groundwater threats, toxic sites, and hazardous materials exposure and (2) sensitive receptors, including seniors, children, persons with asthma, and low birth weight infants, CalEnviroScreen also takes into consideration socioeconomic factors. These factors include educational attainment, linguistic isolation, poverty, and unemployment.

**Regional Trend.** As discussed previously, Black residents countywide are most likely to experience adverse environmental health conditions, while White residents are the least likely. A larger proportion of Los Angeles County has environmental scores in the lowest percentile compared to economic and education scores (Figure C-22). The central Los Angeles County, San Gabriel Valley, and South Bay areas all have concentrations of tracts with environmental scores in the lowest percentile. Tracts with the highest environmental scores are in western South Bay areas (i.e., Rolling Hills and Redondo Beach), and areas around Inglewood, Altadena, Whittier, Lakewood, and Malibu.

**Local Trend.** Environmental scores by tract in El Segundo are shown in Figure C-23. Only one tract in the northwestern corner of the City received an environmental score above 0.50. The three remaining tracts in the northwestern corner scored between 0.25 and 0.50, and the tracts along the eastern and southern City boundaries scored in the lowest quartile. The tract along the eastern City boundary has a larger non-White population compared to the rest of the City (see Figure C-3).

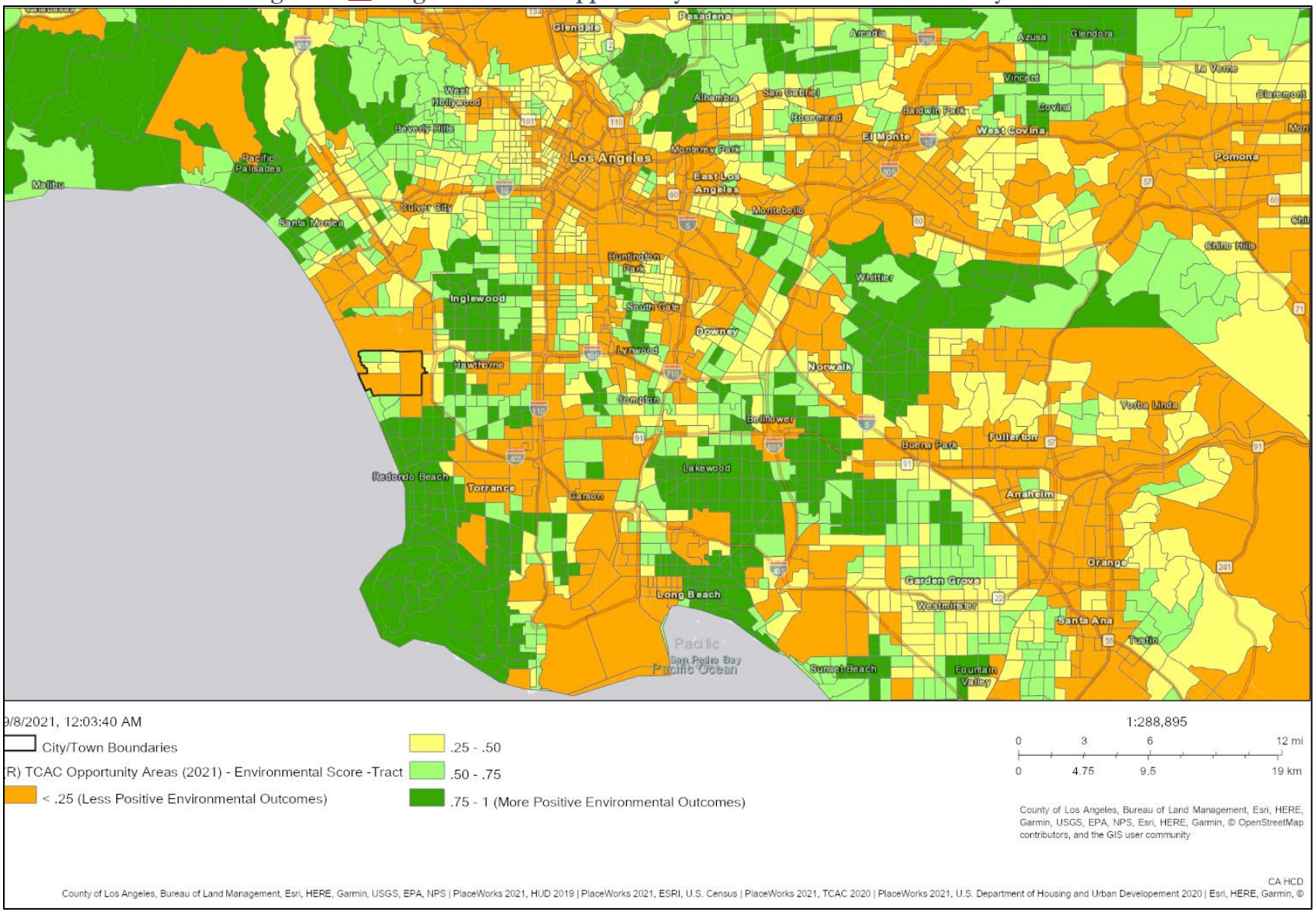
**Sites Inventory.** The February 2021 update to the CalEnviroScreen (CalEnviroScreen 4.0) and the City's sites inventory is shown in Figure C-24. A census tract's overall CalEnviroScreen percentile equals the percentage of all ordered CalEnviroScreen scores that fall below the score for that area. The areas with the highest (worst) scores are in the northwestern corner of the City.

The distribution of RHNA units by CalEnviroScreen 4.0 score is shown in Table C-12. Approximately 47% of lower income units, 39% of moderate income units, and 64% of above moderate income units are in tracts scoring between the 11th and 20th percentile. There are more lower income units (49.2%) and moderate income units (61.3%) in tracts with scores in the 51st to 60th percentile compared to above moderate income units (31.3%).

**Table C-12: Distribution of RHNA Units by CalEnviroScreen 4.0 Percentile Score**

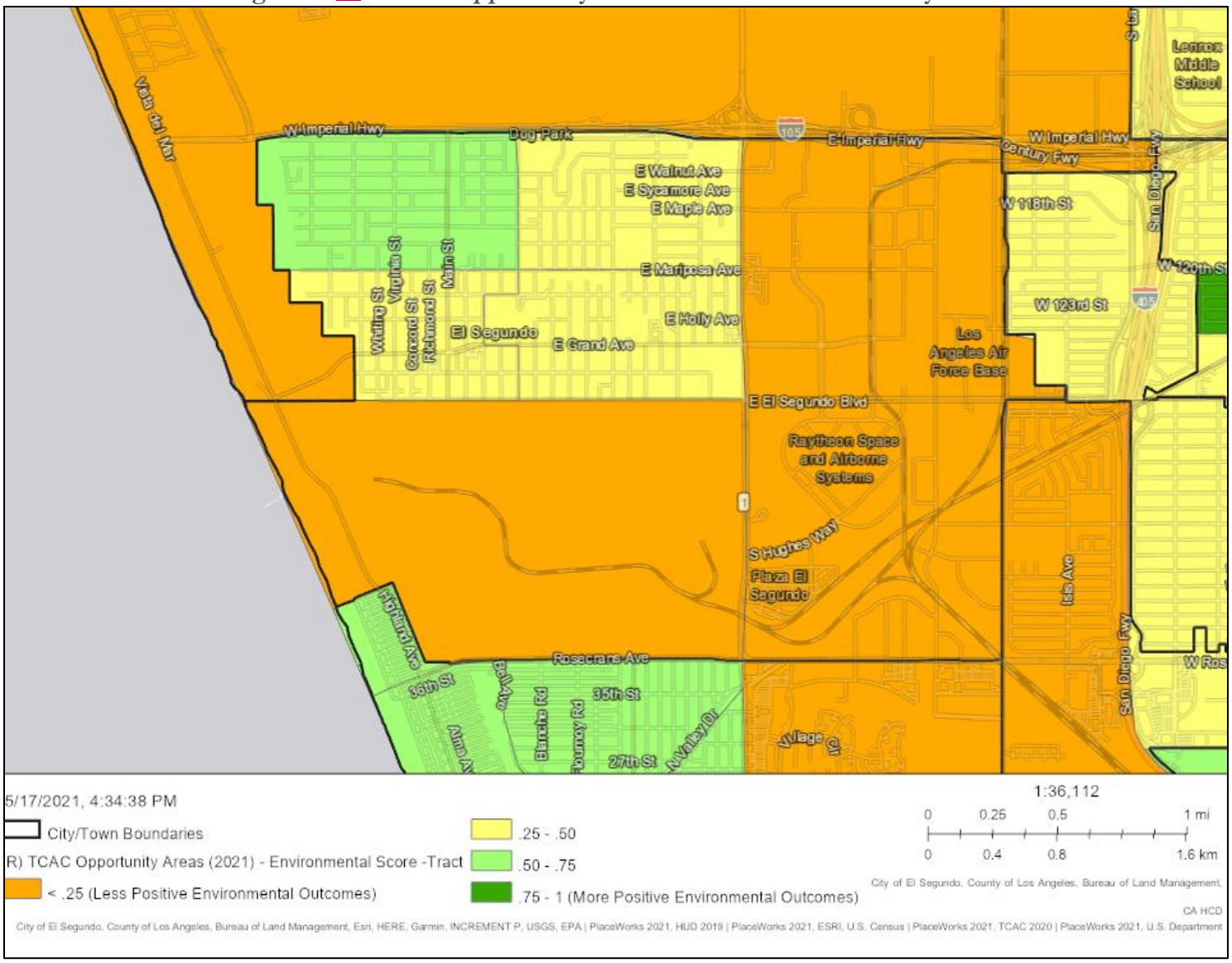
| CalEnviroSceen 4.0 Percentile Score (Tract) | Lower Income | Moderate Income | Above Mod. Income | Total |
|---|---|---|---|---|
| 11-20% | 47.0% | 38.7% | 63.5% | 52.2% |
| 21-30% | 3.8% | 0.0% | 5.2% | 3.7% |
| 31-40% | 0.0% | 0.0% | 0.0% | 0.0% |
| 41-50% | 0.0% | 0.0% | 0.0% | 0.0% |
| 51-60% | 49.2% | 61.3% | 31.3% | 44.1% |
| **Total** | 264 | 93 | 233 | 590 |

## Figure C-22: Regional TCAC Opportunity Area Environmental Scores by Tract



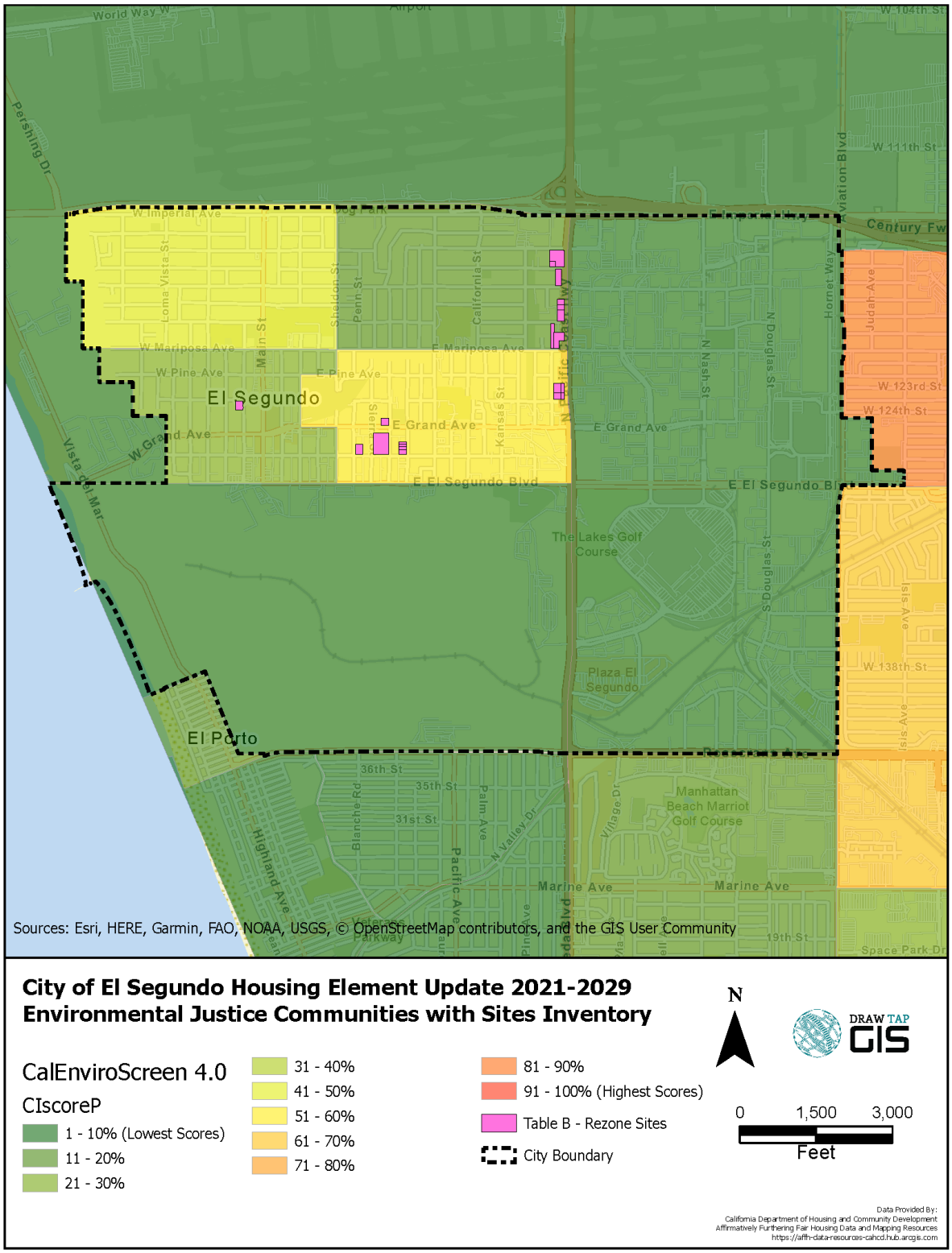

Source: HCD AFFH Data Viewer, TCAC 2021, 2021

**Figure C-23: TCAC Opportunity Area Environmental Scores by Tract**




Source: HCD AFFH Data Viewer, TCAC 2021, 2021.

## Figure C-24: CalEnviroScreen 4.0 Percentile Score by Tract and Sites Inventory




Source: HCD AFFH Data Viewer, CalEnviroScreen 4.0, 2021.

## TRANSPORTATION

HUD's Job Proximity Index, shown in Table C-10, can be used to show transportation need geographically. Block groups with lower jobs proximity indices are located further from employment opportunities and have a higher need for transportation. Availability of efficient, affordable transportation can be used to measure fair housing and access to opportunities. SCAG developed a mapping tool for High Quality Transit Areas (HQTA) as part of the Connect SoCal 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). SCAG defines HQTAs as areas within one-half mile from a major transit stop and a high-quality transit corridor. This section also utilizes All Transit metrics to identify transportation opportunities in Los Angeles County and El Segundo.

**Regional Trend.** All Transit explores metrics that reveal the social and economic impact of transit, specifically looking at connectivity, access to jobs, and frequency of service. El Segundo's All Transit Performance score of 5.8 Hawthorne (7.3), Hermosa Beach (6.4), Inglewood (7.7), Lawndale (7.8), Redondo Beach (6.6), and the County (6.8). The City scored slightly higher than Manhattan Beach (5.6). Los Angeles County All Transit metrics are shown in Figure C-25. The County's All Transit score of 6.8 indicates a moderate combination of trips per week and number of accessible jobs enabling a moderate number of people to take transit to work. All Transit estimates 93.9% of jobs and 90.1% of workers are located within ½ a mile from transit.

**Figure C-25: Los Angeles County All Transit Metrics**

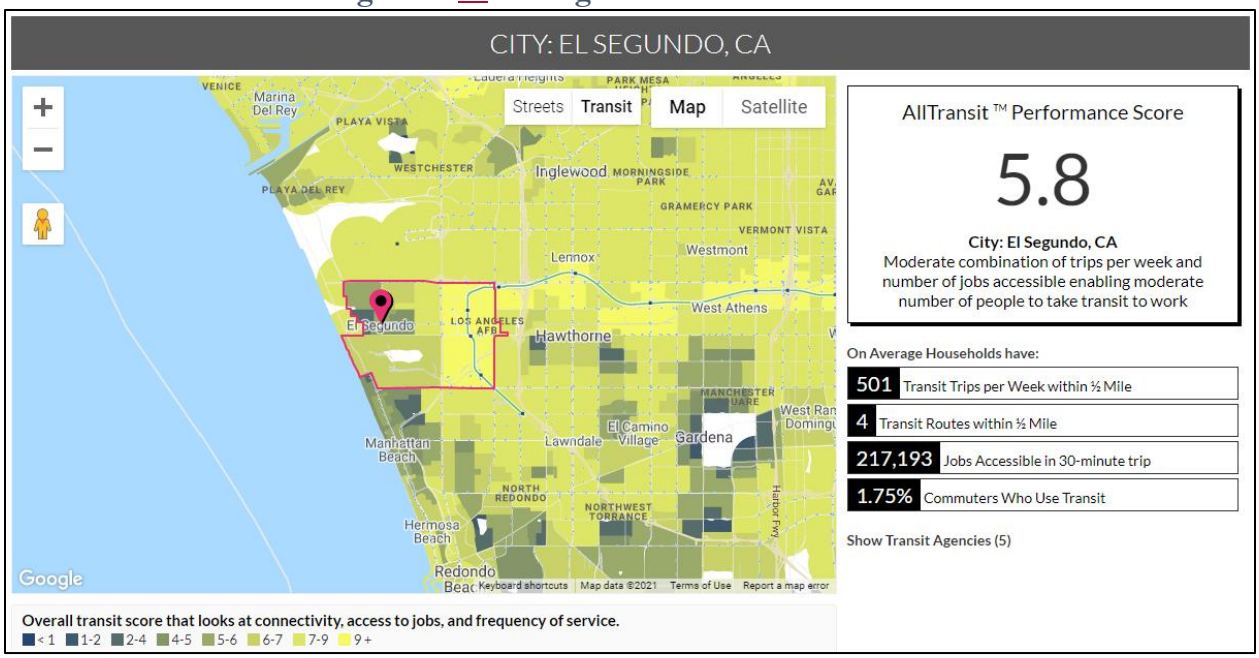
Source: All Transit Metrics: All Transit Performance Score – Los Angeles County, 2019.

As shown in Figure C-27, block groups around Santa Monica and Beverly Hills, Pasadena, Torrance, downtown Los Angeles, and coastal areas around El Segundo have the highest jobs proximity index scores indicating employment opportunities are most accessible in these areas. Central County areas, from Inglewood to Bellflower, southern South Bay cities, and parts of the San Gabriel Valley have the lowest jobs proximity index scores. Most of the central County areas are considered HQTAs.

**Local Trend.** All Transit metrics for El Segundo are shown in Figure C-26. El Segundo received an All Transit Performance Score of 5.8, indicating a moderate combination of trips per week and

number of jobs accessible by transit. All Transit estimates that 99.6% of jobs and 99.6% of workers in El Segundo are within ½ a mile from transit.

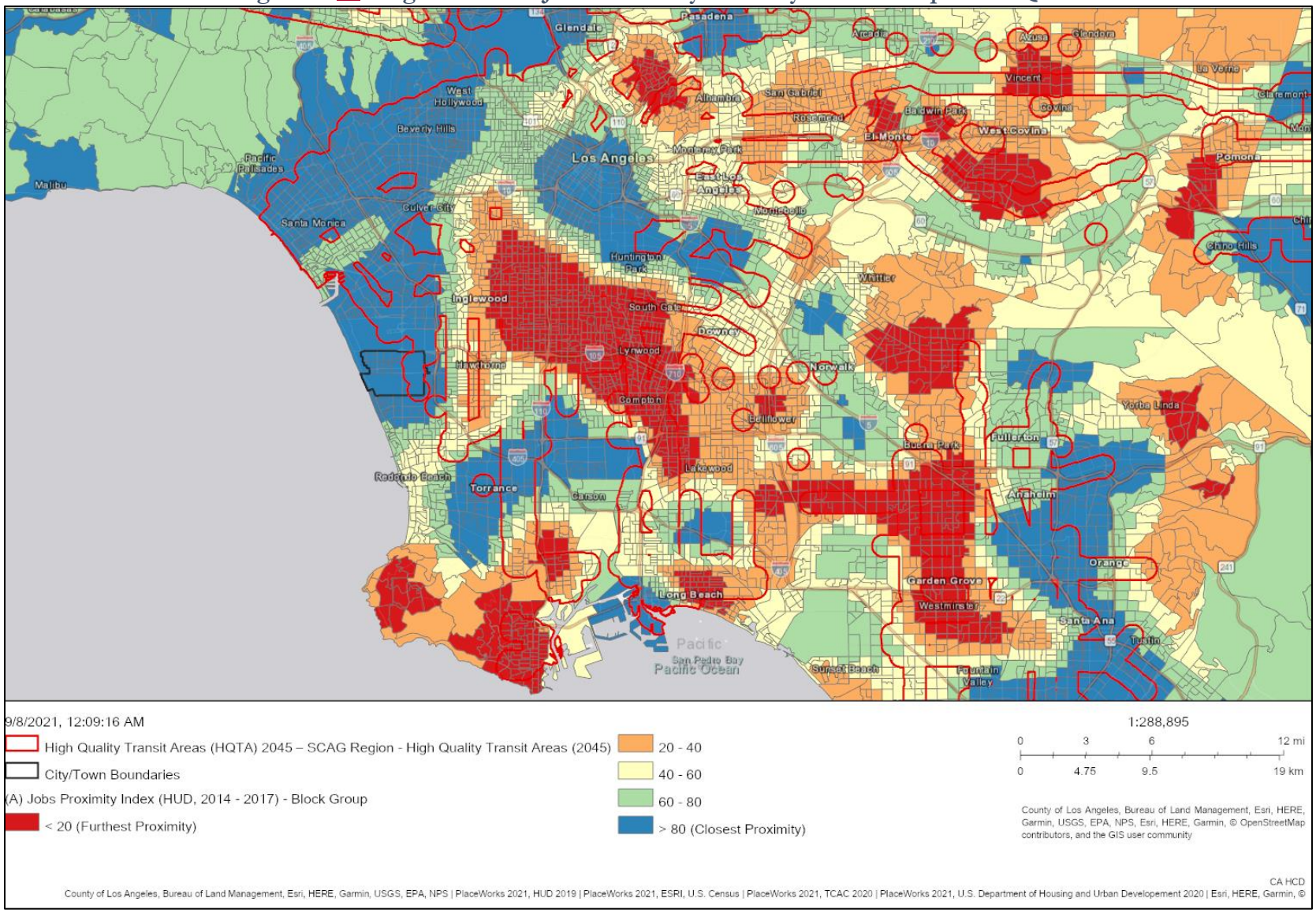
**Figure C-26: El Segundo All Transit Metrics**




Source: All Transit Metrics: All Transit Performance Score – El Segundo, 2019.

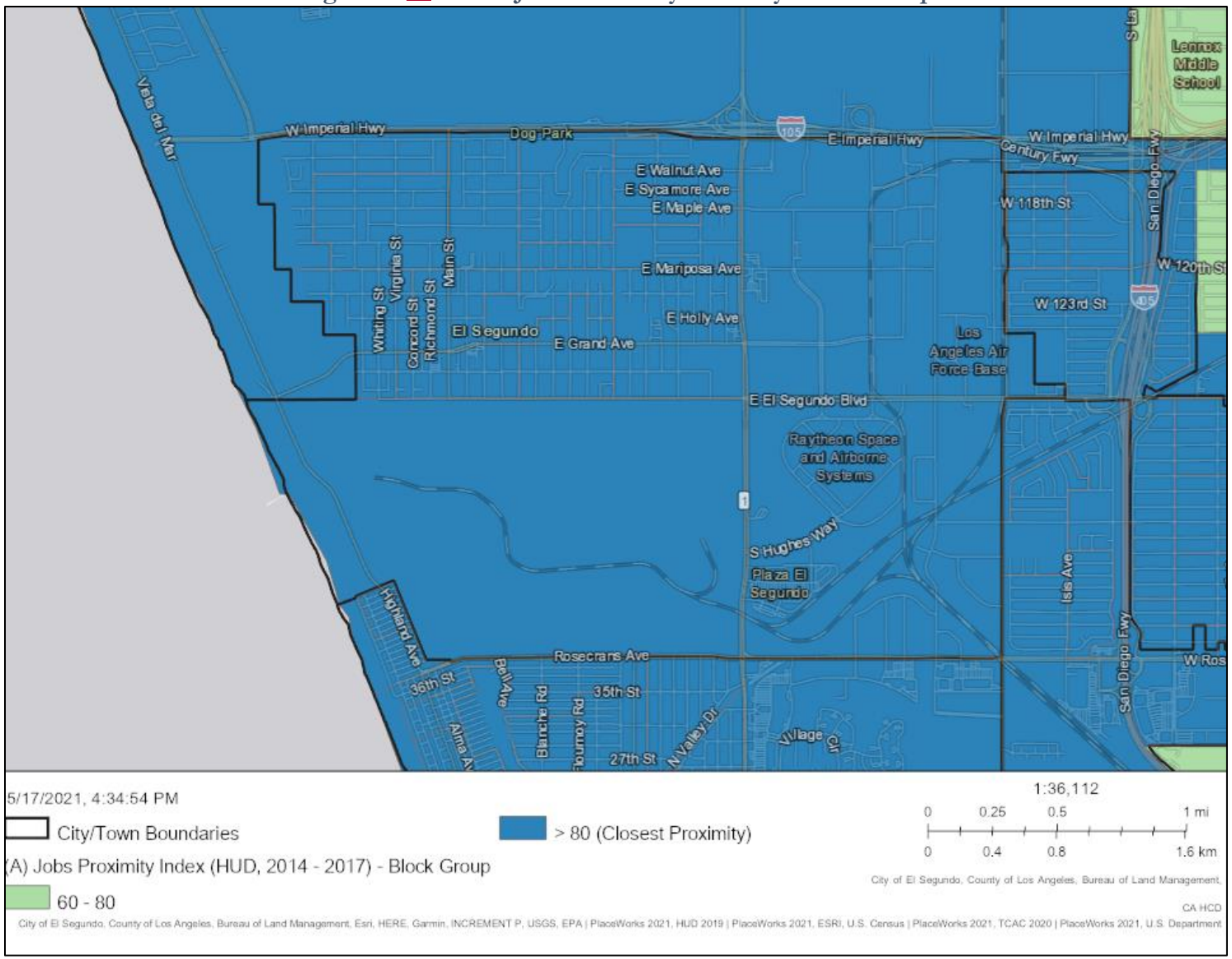
As shown in Figure C-28, all census block groups in El Segundo received the highest jobs proximity index scores exceeding 80, indicating that employment opportunities are very accessible in the City. Additionally, the eastern side of the City is considered an HQTA (Figure C-27).

## Figure C-27: Regional HUD Jobs Proximity Index by Block Group and HQTAs




Source: HCD AFFH Data Viewer, HUD 2014-2017, 2021.

## Figure C-28: HUD Jobs Proximity Index by Block Group




Source: HCD AFFH Data Viewer, HUD 2014-2017, 2021.

## 5. Disproportionate Housing Needs

Housing problems in El Segundo were calculated using HUD's 2020 Comprehensive Housing Affordability Strategy (CHAS) data based on the 2013-2017 ACS. Table C-13 breaks down households by race and ethnicity and presence of housing problems for El Segundo and Los Angeles County households. The following conditions are considered housing problems:

- Substandard Housing (measured by incomplete plumbing or kitchen facilities)
- Overcrowding (more than 1 person per room)
- Cost burden (housing costs greater than 30%)

In El Segundo, 24.7% of owner-occupied households and 44.4% of renter-occupied households have one or more housing problems. The City has a smaller proportion of households with a housing problem compared to the County, where 38.9% of owner-occupied households and 62.3% of renter-occupied households experience a housing problem. In El Segundo, all Pacific Islander renter-households experience a housing problem. White owner-occupied households, Asian owner-occupied households, and Hispanic renter-occupied households also experience housing problems at a higher rate than the City average.

**Table C-13: Housing Problems by Race/Ethnicity**

| | El Segundo | | Los Angeles County | |
|---|---|---|---|---|
| | Owner | Renter | Owner | Renter |
| White | 26.6% | 43.7% | 32.1% | 52.6% |
| Black | -- | 43.8% | 41.5% | 63.7% |
| Asian | 38.0% | 42.4% | 38.3% | 56.3% |
| American Indian | -- | -- | 39.7% | 56.4% |
| Pacific Islander | -- | 100.0% | 39.7% | 55.5% |
| Hispanic | 0.0% | 53.3% | 48.2% | 71.1% |
| Other | 0.0% | 24.0% | 36.5% | 55.7% |
| **All** | **24.7%** | **44.4%** | **38.9%** | **62.3%** |

Note: -- = 0 households in category.
Source: HUD CHAS Data (based on 2013-2017 ACS), 2020.

### COST BURDEN

Households are considered cost burdened if housing costs exceed 30% of their gross income for housing, and severely cost burdened if housing costs exceed 50% of their gross income. Cost burden in El Segundo and Los Angeles County is assessed using 2020 HUD CHAS data (based on 2013-2017 ACS estimates) and the HCD Data Viewer (based on 2010-2014 and 2015-2019 ACS estimates).

**Regional Trend.** Cost burden by tenure and race/ethnicity for Los Angeles County is shown in Table C-14. Approximately 45% of Los Angeles County households are cost burdened, including 35% of owner-occupied households and 54.2% of renter-occupied households. Non-Hispanic Black and Hispanic renter households have the highest rate of cost burden of 59.6% and 58.3%, respectively. Non-Hispanic White and non-Hispanic Pacific Islander owner households have the lowest rate of cost burden of 31.1% and 33.3%, respectively. Cost burden is more common amongst renter households than owner households regardless of race or ethnicity.

**Table C-14: Cost Burden by Race/Ethnicity and Tenure – Los Angeles County**

| | Cost Burdened (>30%) | Severely Cost Burdened (>50%) | Total Households |
|---|---|---|---|
| **Owner-Occupied** | | | |
| White, non-Hispanic | 31.1% | 14.8% | 648,620 |
| Black, non-Hispanic | 40.0% | 19.6% | 104,895 |
| Asian, non-Hispanic | 34.4% | 15.8% | 255,890 |
| American Indian, non-Hispanic | 36.9% | 16.3% | 3,215 |
| Pacific Islander, non-Hispanic | 33.3% | 14.8% | 2,165 |
| Hispanic | 39.5% | 17.8% | 470,670 |
| Other | 34.9% | 17.2% | 26,905 |
| **Renter-Occupied** | | | |
| White, non-Hispanic | 49.4% | 27.5% | 541,545 |
| Black, non-Hispanic | 59.6% | 34.8% | 206,950 |
| Asian, non-Hispanic | 47.6% | 25.5% | 226,765 |
| American Indian, non-Hispanic | 48.8% | 26.8% | 4,420 |
| Pacific Islander, non-Hispanic | 47.9% | 22.5% | 4,355 |
| Hispanic | 58.3% | 30.5% | 755,590 |
| Other | 50.9% | 27.5% | 43,210 |
| Source: HUD CHAS Data (based on 2013-2017 ACS), 2020. | | | |

Cost burden Figure C-29 and Figure C-30 show concentrations of cost burdened owners and renters by tract for the region. Tracts with high concentrations of cost burdened owners are generally dispersed throughout the County. Overpaying owners are most prevalent in the central County areas, in the westside cities of Santa Monica and Beverly Hills, and parts of the San Gabriel Valley. In most tracts in coastal areas from Rolling Hills to El Segundo, 20% to 60% of owners are cost burdened. There is a higher concentration of cost burdened renters countywide. More than 40% of renters overpay for housing in most Los Angeles County tracts. Tracts where more than 60% of renters are cost burdened are most concentrated in the central County areas around Inglewood and the City of Los Angeles, Long Beach, eastern County cities including Norwalk, and parts of the San Gabriel Valley. Between 20% and 60% of renters in coastal areas around El Segundo overpay for housing. There is a higher concentration of overpaying renters in tracts to the east of the City.

**Local Trend.** Cost burden by tenure in El Segundo based on HUD CHAS data is shown in Table C-15. Pacific Islander, Hispanic, and Black renter-occupied households have the highest rate of cost burden in the city (100%, 45.3%, and 43.8% respectively). There are no cost burdened Hispanic owners or owners of a race not listed ("other") in El Segundo. For all racial and ethnic groups other than Asians, cost burden is more prevalent amongst renter-occupied households. Overall, 31.9% of El Segundo households are cost burdened, and 14.6% are severally cost burdened. Only 24% of owners in El Segundo spend more than 30% of their income on housing, compared to 38.3% of renters. Fewer households are cost burdened in El Segundo compared to the County.

**Table C-15: Cost Burden by Race/Ethnicity and Tenure – El Segundo**

| | Cost Burdened (>30%) | Severely Cost Burdened (>50%) | Total Households |
|---|---|---|---|
| **Owner-Occupied** | | | |
| White, non-Hispanic | 26.2% | 11.5% | 2,350 |
| Black, non-Hispanic | -- | -- | 0 |
| Asian, non-Hispanic | 38.0% | 20.0% | 250 |
| American Indian, non-Hispanic | -- | -- | 0 |
| Pacific Islander, non-Hispanic | -- | -- | 0 |
| Hispanic | 0.0% | 0.0% | 285 |
| Other | 0.0% | 0.0% | 75 |
| **Renter-Occupied** | | | |
| White, non-Hispanic | 40.0% | 16.8% | 2,325 |
| Black, non-Hispanic | 43.8% | 25.0% | 80 |
| Asian, non-Hispanic | 22.7% | 3.0% | 330 |
| American Indian, non-Hispanic | -- | -- | 0 |
| Pacific Islander, non-Hispanic | 100.0% | 0.0% | 10 |
| Hispanic | 45.3% | 26.3% | 685 |
| Other | 20.0% | 20.0% | 250 |
| Source: HUD CHAS Data (based on 2013-2017 ACS), 2020. | | | |

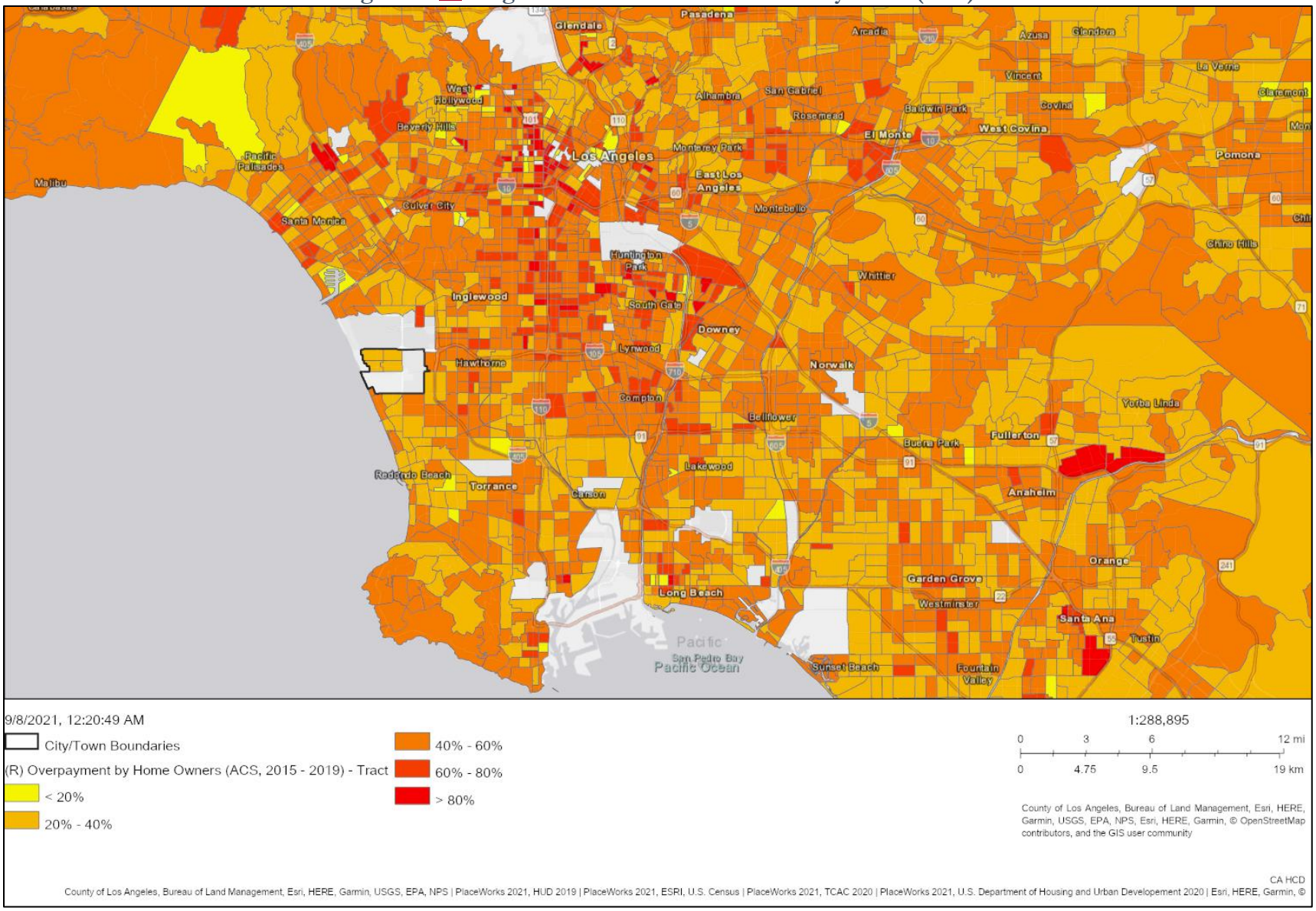
Figure C-31 through Figure C-34 compare cost burden by tract in using the 2010-2014 and 2015-2019 ACS. The rate of cost burdened owners has decreased or remained the same in all tracts in El Segundo since the 2010-2014 ACS. Between 20% and 40% of owners are currently cost burdened in all tracts. The rate of cost burdened renters has increased in one tract in the northwestern corner of the City. According to the most recently 2015-2019 ACS estimates, between 40% and 60% of renters overpay in most El Segundo tracts. Only 20% to 40% of renters overpay in the tract at the cross section of the PCH and El Segundo Boulevard.

**Sites Inventory.** As discussed above, between 20% and 40% of owners overpay for housing in all El Segundo tracts. The distribution of RHNA units by cost burdened renters is shown below. Over half (59%) of RHNA units are in tracts where 40% to 60% of renters overpay for housing, including 50.8% of lower income units, 38.7% of moderate income units, and 68.7% of above moderate income units. As shown in Figure C-34, between 40% and 60% of renters are cost burdened in a majority of the City.

**Table C-16: Distribution of RHNA Units by Percent of Cost Burdened Renters**

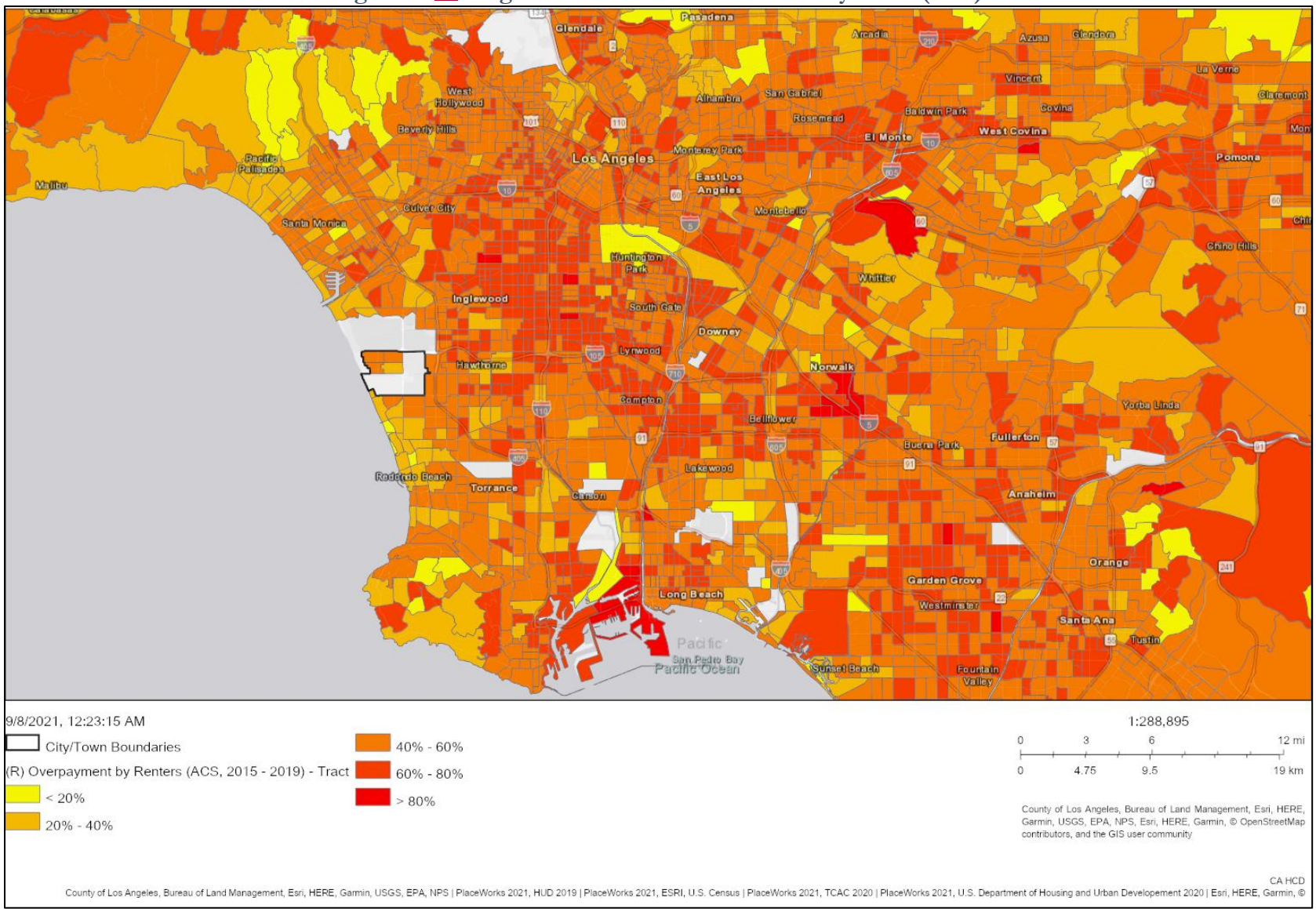
| Percent of Cost Burdened Renters (Tract) | Lower Income | Moderate Income | Above Mod. Income | Total |
|---|---|---|---|---|
| 20-40% | 49.2% | 61.3% | 31.3% | 44.1% |
| 40.1-60% | 50.8% | 38.7% | 68.7% | 55.9% |
| **Total** | 264 | 93 | 233 | 590 |

**Figure C-29: Regional Cost Burdened Owners by Tract (2019)**



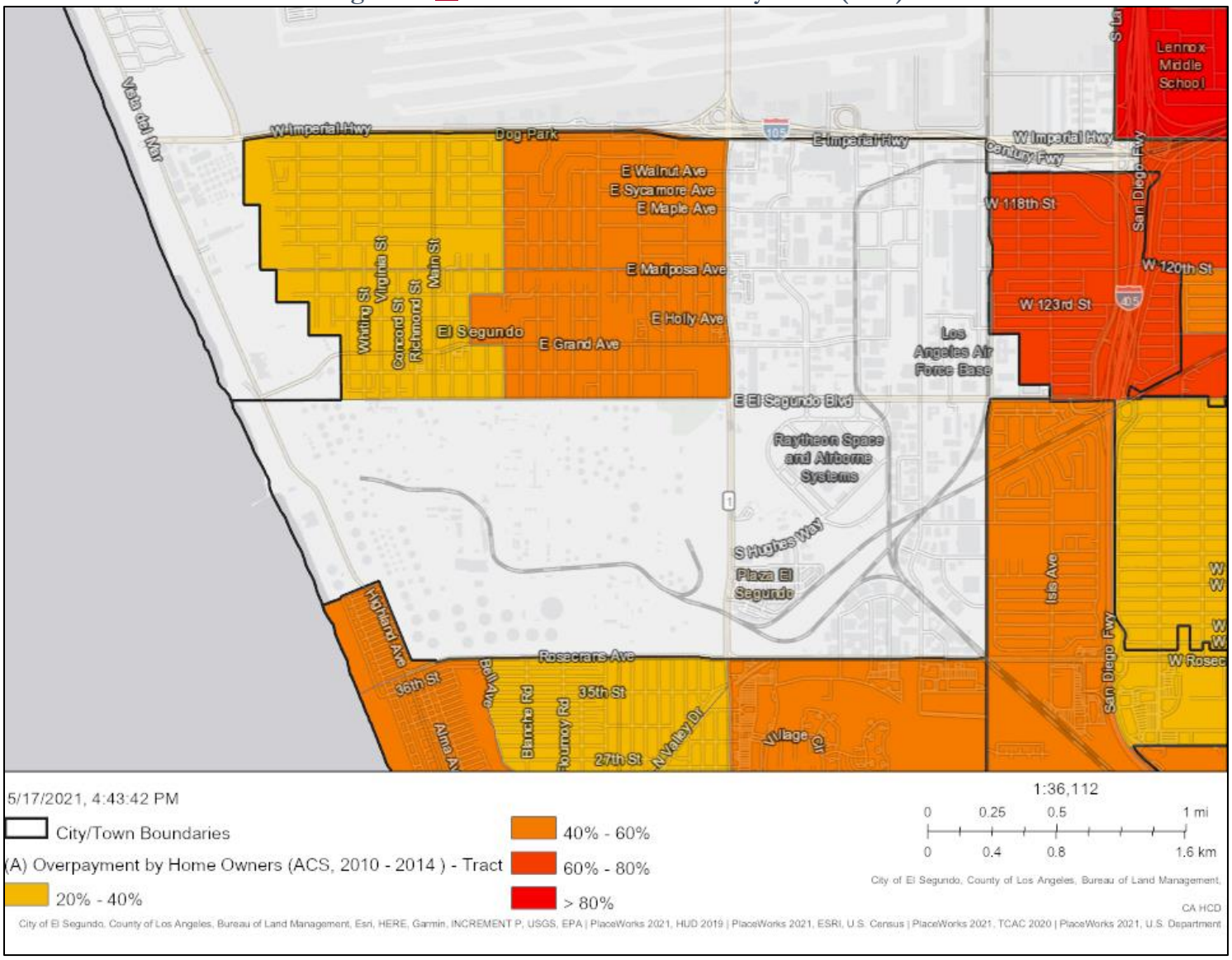

Source: HCD AFFH Data Viewer, 2010-2014 ACS, 2021.

**Figure C-30: Regional Cost Burdened Renters by Tract (2019)**



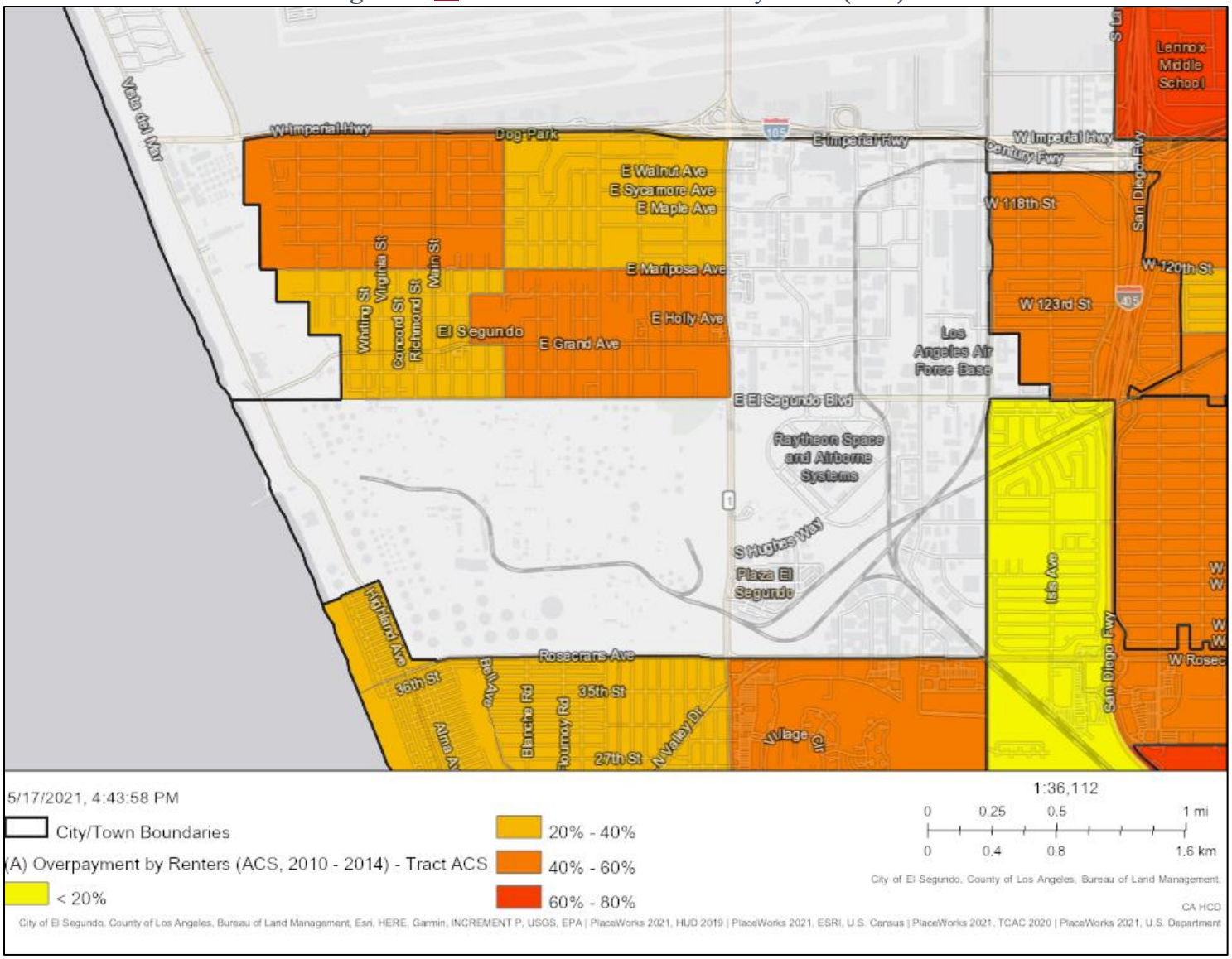

Source: HCD AFFH Data Viewer, 2010-2014 ACS, 2021.

## Figure C-31: Cost Burdened Owners by Tract (2014)



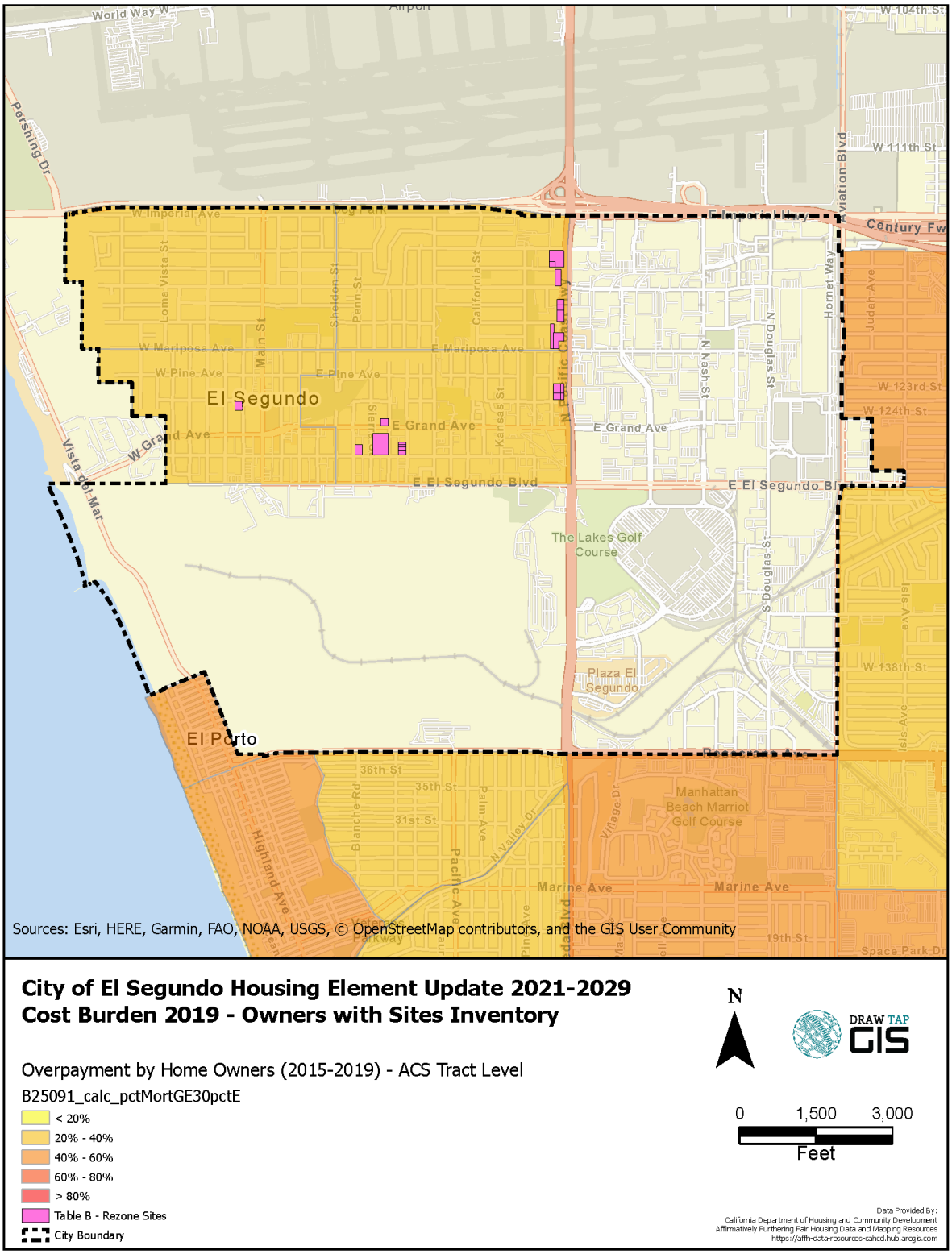

Source: HCD AFFH Data Viewer, 2010-2014 ACS, 2021.

## Figure C-32: Cost Burdened Renters by Tract (2014)



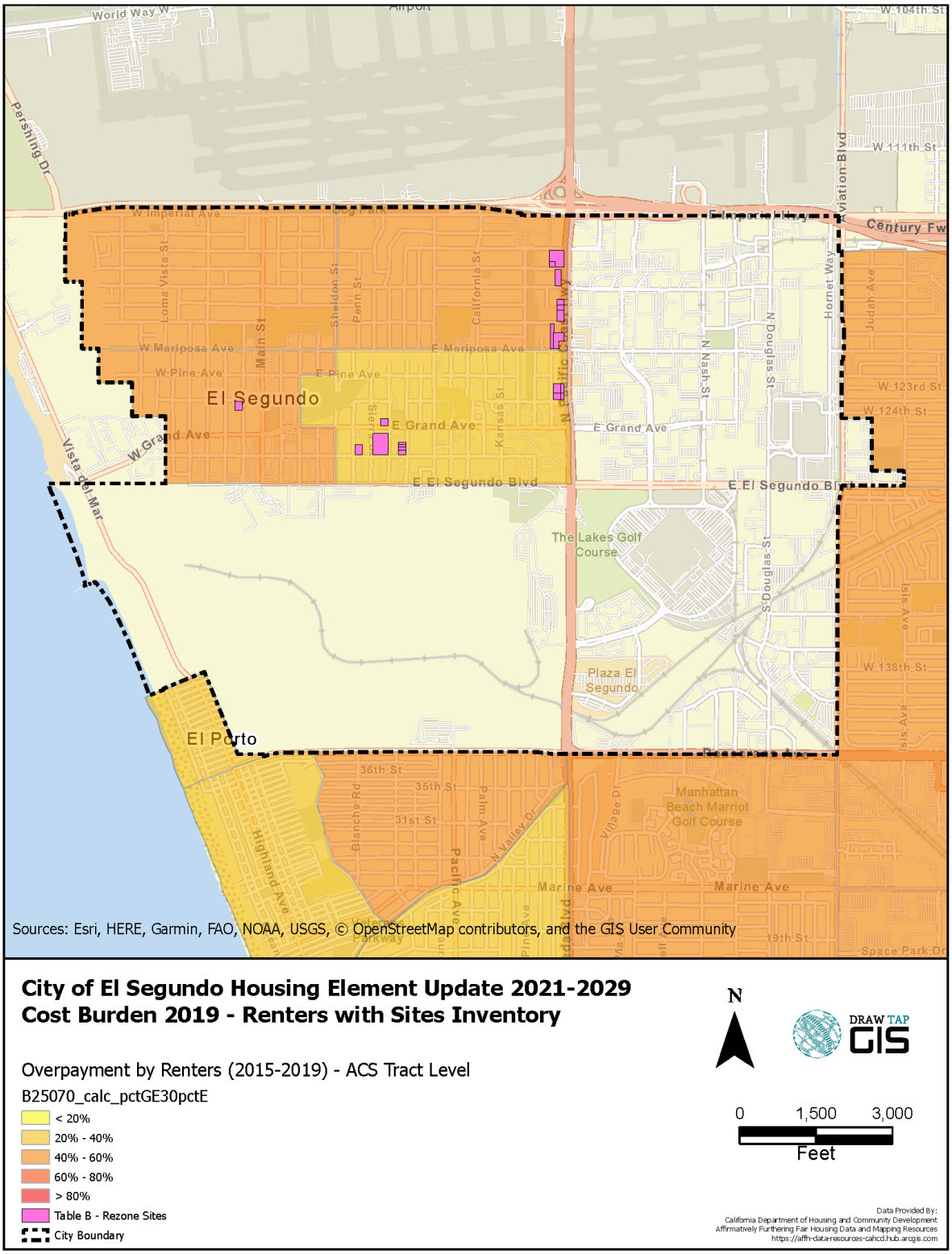

Source: HCD AFFH Data Viewer, 2010-2014 ACS, 2021.

## Figure C-33: Cost Burdened Owners by Tract and Sites Inventory (2019)




Source: HCD AFFH Data Viewer, 2015-2019 ACS, 2021.

## Figure C-34: Cost Burdened Renters by Tract and Sites Inventory (2019)




Source: HCD AFFH Data Viewer, 2015-2019 ACS, 2021.

## OVERCROWDING

A household is considered overcrowded if there is more than one person per room and severely overcrowded is there is more than 1.5 persons per room. HUD CHAS data based on the 2013-2017 ACS and the HCD AFFH Data Viewer (2015-2019 ACS) is used to show overcrowding in El Segundo and Los Angeles County.

**Regional Trend.** As shown in Table C-17, 5.7% of owner-occupied households and 16.7% of renter-occupied households in the County are overcrowded. Severe overcrowding is also an issue in the County, especially amongst renter households. More than 1% of owner households and 7.6% of renter households are severely overcrowded.

**Table C-17: Overcrowding by Tenure**

| | Overcrowded (>1 person per room) | | Severely Overcrowded (>1.5 persons per room) | | Total Households |
|---|---|---|---|---|---|
| | Households | Percent | Households | Percent | |
| **El Segundo** | | | | | |
| Owner-Occupied | 25 | 0.8% | 15 | 0.5% | 2,960 |
| Renter-Occupied | 215 | 5.8% | 80 | 2.2% | 3,680 |
| **Los Angeles County** | | | | | |
| Owner-Occupied | 85,870 | 5.7% | 23,025 | 1.5% | 1,512,365 |
| Renter-Occupied | 298,460 | 16.7% | 134,745 | 7.6% | 1,782,835 |

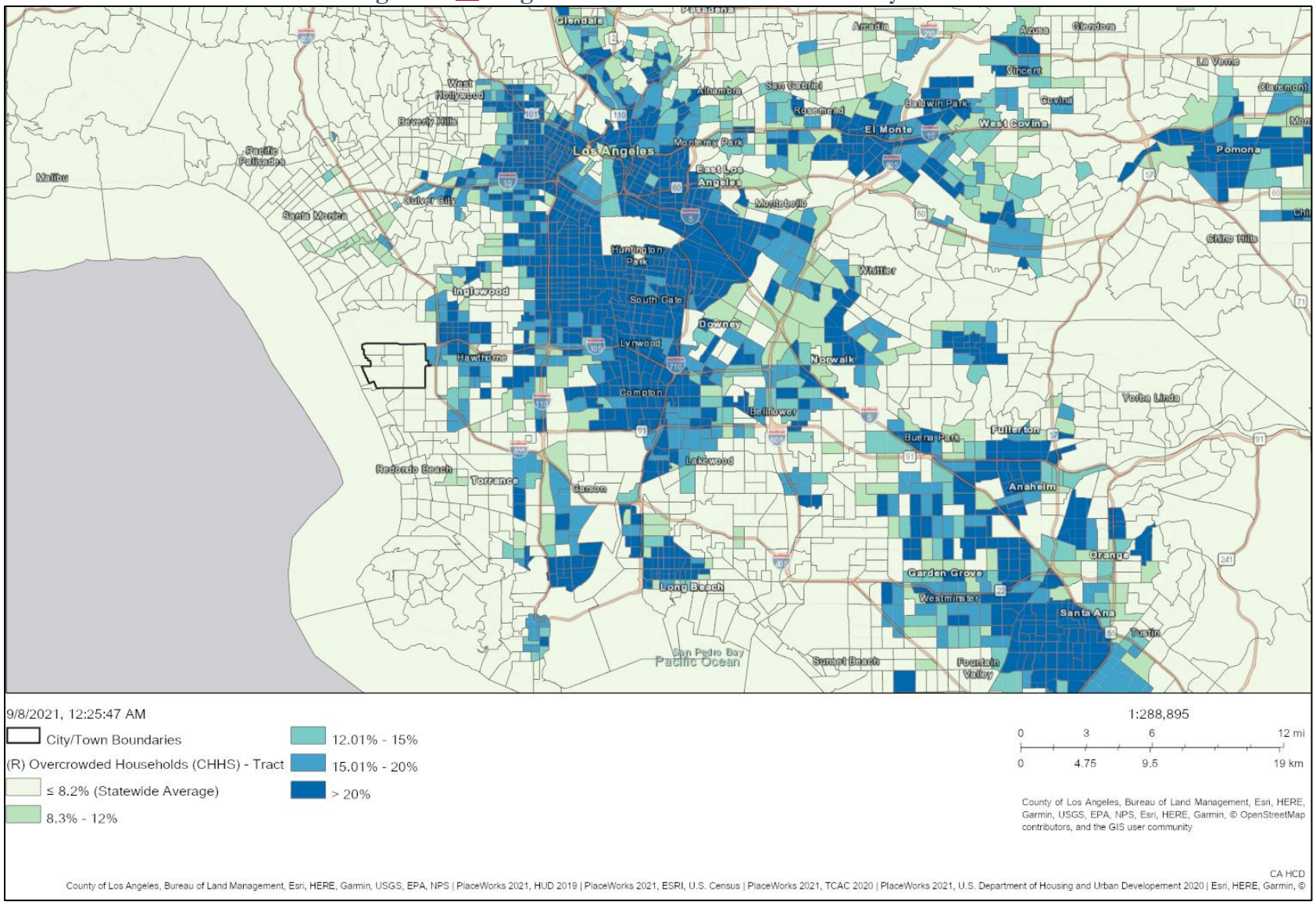
Source: HUD CHAS Data (based on 2013-2017 ACS), 2020.

Figure C-35 shows concentrations of overcrowded households by tract regionally. Overcrowded households are most concentrated in the central County areas, including the City of Los Angeles, South Gate, and Compton, and in parts of San Gabriel Valley. Areas north and south of El Segundo have concentrations of overcrowded households below the State average. Tracts east of El Segundo, around Hawthorn and Inglewood, have significantly more overcrowding.

**Local Trend.** As presented in Table C-17 above, a smaller share of households in El Segundo are overcrowded compared to the countywide average. Less than 1% of owner-occupied households and 5.8% of renter-occupied households in the City have more than one person per room. Only 0.5% of owner households and 2.2% of renter households are severely overcrowded, with more than 1.5 persons per room.

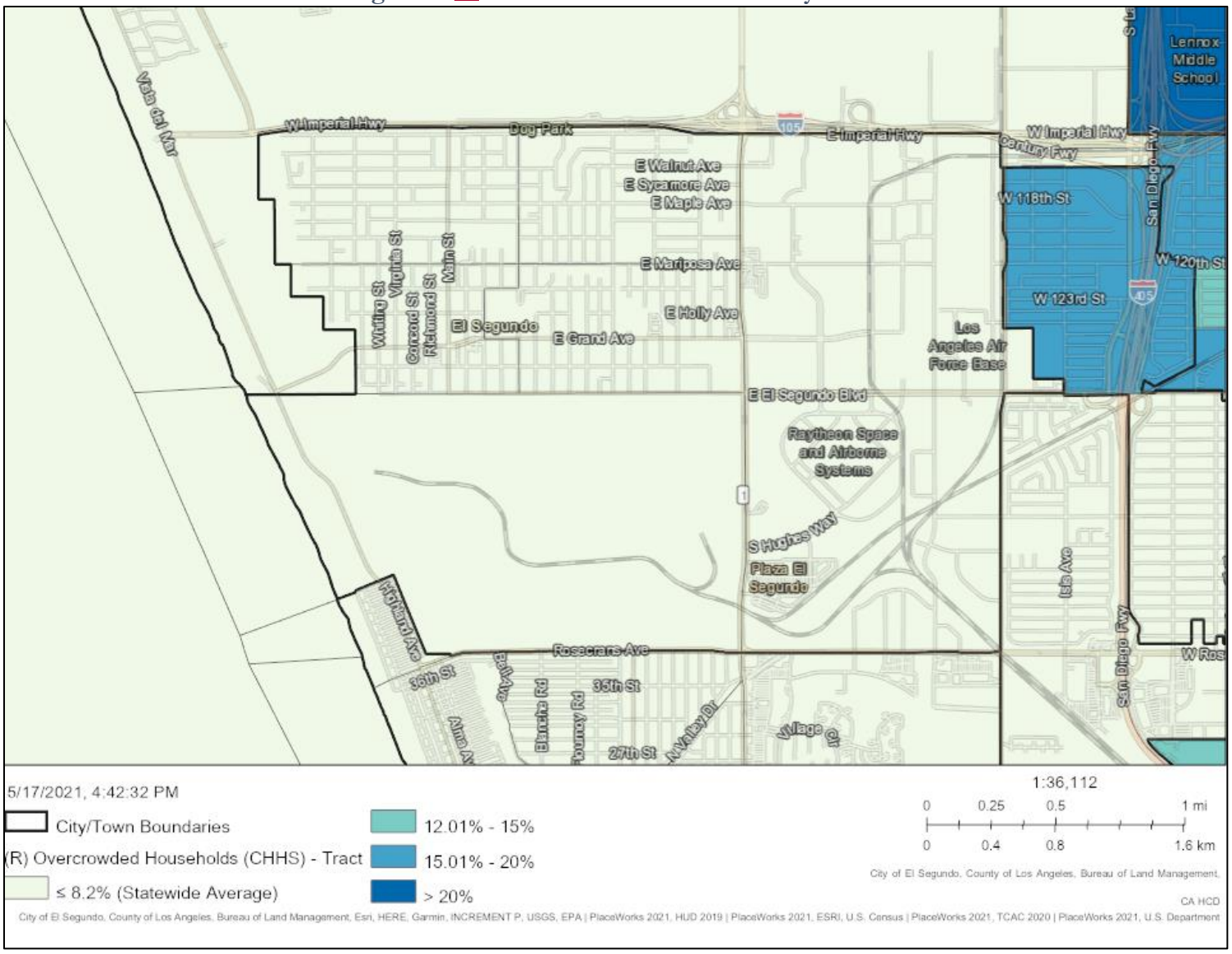
Figure C-36 shows overcrowding by tract in the City. There are no tracts in El Segundo where the percent of overcrowded households exceeds the statewide average of 8.2%.

## Figure C-35: Regional Overcrowded Households by Tract




Source: HCD AFFH Data Viewer, 2020 HUD CHAS data, 2021.

## Figure C-36: Overcrowded Households by Tract




Source: HCD AFFH Data Viewer, 2020 HUD CHAS data, 2021.

## SUBSTANDARD HOUSING

Incomplete plumbing or kitchen facilities and housing stock age can be used to measure substandard housing conditions. Incomplete facilities and housing age are based on the 2015-2019 ACS. In general, residential structures over 30 years of age require minor repairs and modernization improvements, while units over 50 years of age are likely to require major rehabilitation such as roofing, plumbing, and electrical system repairs.

**Regional Trend.** Less than 1% households in the County lack complete plumbing facilities, and 1.5% lack complete kitchen facilities. Incomplete facilities are more common amongst renter-occupied households. Only 0.4% of owner households lack complete kitchen facilities compared to 2.5% of renters (Table C-18).

**Table C-18: Incomplete Facilities**

| | Lacking Complete Plumbing Facilities | | Lacking Complete Kitchen Facilities | | Total Households |
|---|---|---|---|---|---|
| | Households | Percent | Households | Percent | |
| **El Segundo** | | | | | |
| Owner-Occupied | 0 | 0.0% | 0 | 0.0% | 2,792 |
| Renter-Occupied | 19 | 0.5% | 129 | 3.6% | 3,625 |
| Total | 19 | 0.3% | 129 | 2.0% | 6,417 |
| **Los Angeles County** | | | | | |
| Owner-Occupied | 3,672 | 0.2% | 5,823 | 0.4% | 1,519,516 |
| Renter-Occupied | 11,410 | 0.6% | 44,441 | 2.5% | 1,797,279 |
| Total | 15,082 | 0.5% | 50,264 | 1.5% | 3,316,795 |

Source: 2015-2019 ACS (5-Year Estimates).

Housing age can also be used as an indicator for substandard housing and rehabilitation needs. In general, residential structures over 30 years of age require minor repairs and modernization improvements, while units over 50 years of age are likely to require major rehabilitation such as roofing, plumbing, and electrical system repairs. In the County, 86% of the housing stock was built prior to 1990, including 60.5% built prior to 1970 (Table 19).

**Local Trend.** There are no owner-occupied households lacking complete plumbing or kitchen facilities in El Segundo (Table C-18). A larger proportion of renter-occupied households in El Segundo lack complete kitchen facilities compared to the share countywide. Of renter households, 0.5% lack complete plumbing facilities and 3.6% lack complete kitchen facilities.

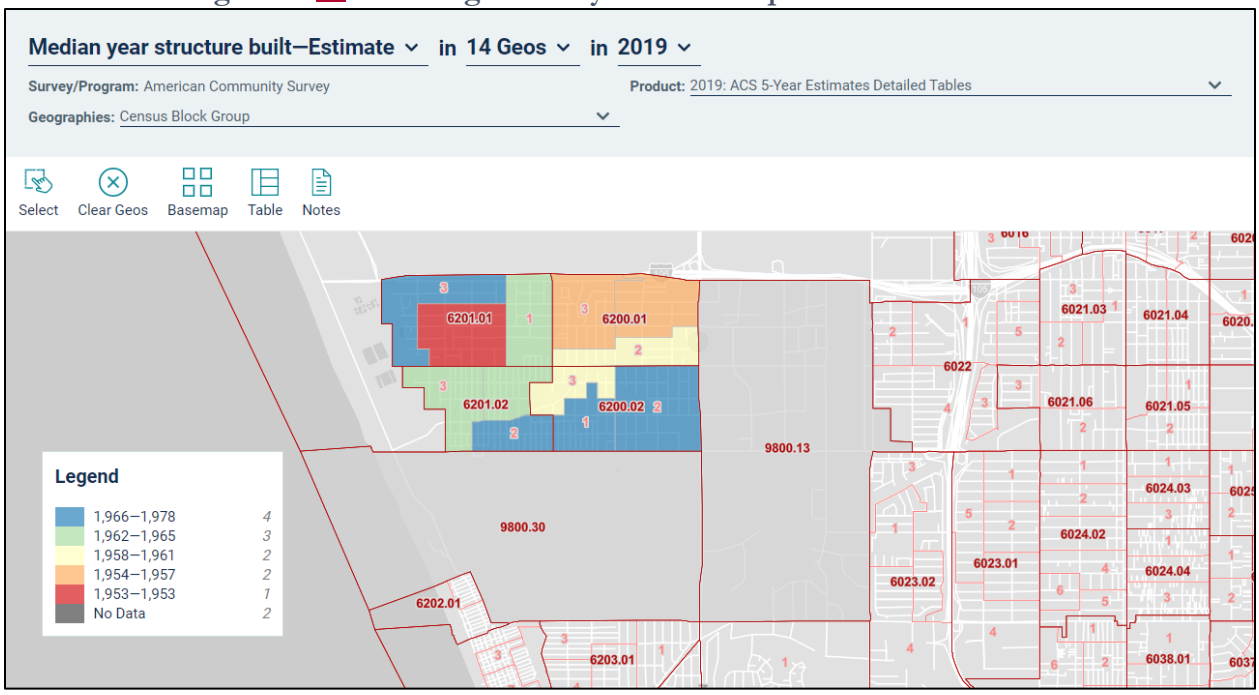
Table 19 shows the housing stock age in El Segundo and El Segundo block groups. Nearly 90% of the City's housing stock was built prior to 1990, a slightly higher share than the County. Tract 6200.01 block groups 1 and 3, and tract 6201.01 block group 2 have the largest share of housing units aged 50 or older. More than 70% of housing units in these block groups were built prior to 1970. Figure C-37 shows the median year housing units were built by block group. The northernmost tracts, tracts 6201.01 and 6200.01, have slightly older housing stocks.

## Table 19: Housing Unit Age

| Tract/Jurisdiction | 1969 or Earlier (50+ Years) | 1970-1989 (30-50 Years) | 1990 or Later (<30 Years) | Total Housing Units |
|---|---|---|---|---|
| Block Group 1, Tract 6200.01 | 73.1% | 21.0% | 5.9% | 442 |
| Block Group 2, Tract 6200.01 | 64.9% | 27.8% | 7.3% | 479 |
| Block Group 3, Tract 6200.01 | 76.5% | 11.0% | 12.4% | 571 |
| Block Group 1, Tract 6200.02 | 55.3% | 29.4% | 15.4% | 494 |
| Block Group 2, Tract 6200.02 | 42.5% | 29.7% | 27.7% | 602 |
| Block Group 3, Tract 6200.02 | 59.9% | 29.1% | 11.1% | 416 |
| Block Group 1, Tract 6201.01 | 57.4% | 38.1% | 4.6% | 680 |
| Block Group 2, Tract 6201.01 | 75.3% | 18.9% | 5.8% | 782 |
| Block Group 3, Tract 6201.01 | 56.8% | 33.3% | 9.9% | 718 |
| Block Group 1, Tract 6201.02 | 57.5% | 23.1% | 19.4% | 381 |
| Block Group 2, Tract 6201.02 | 55.1% | 36.7% | 8.2% | 403 |
| Block Group 3, Tract 6201.02 | 62.0% | 29.9% | 8.1% | 803 |
| Block Group 1, Tract 9800.13 | -- | -- | -- | 0 |
| Block Group 1, Tract 9800.30 | -- | -- | -- | 0 |
| El Segundo | 61.7% | 27.4% | 10.9% | 6,771 |
| Los Angeles County | 60.5% | 25.4% | 14.1% | 3,542,800 |

Source: 2015-2019 ACS (5-Year Estimates).

## Figure C-37: Housing Stock by Block Group – Median Year Built




Source: 2015-2019 ACS (5-Year Estimate).

## DISPLACEMENT RISK

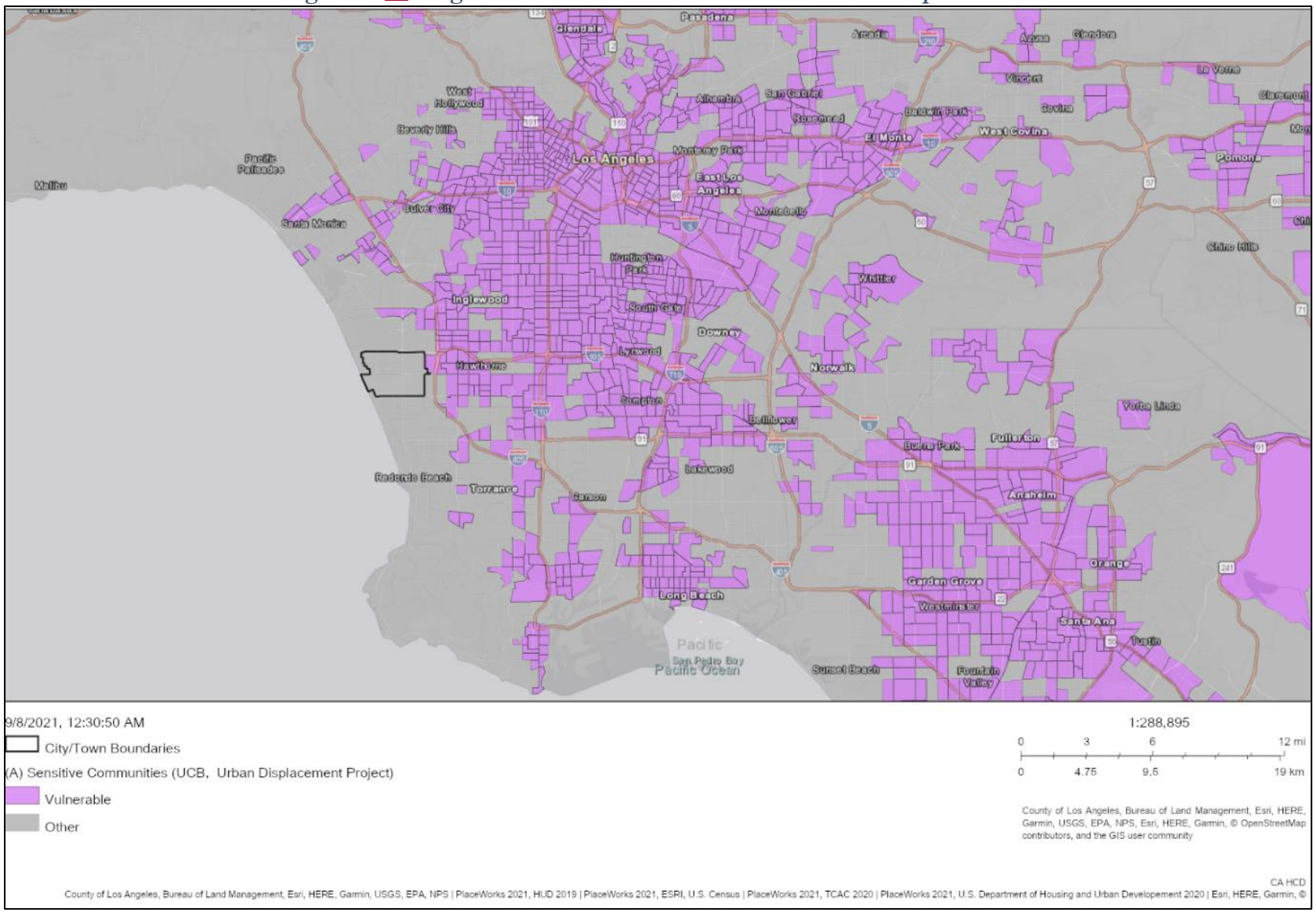
HCD defines sensitive communities as "communities [that] currently have populations vulnerable to displacement in the event of increased development or drastic shifts in housing cost." The following characteristics define a vulnerable community:

- The share of very low-income residents is above 20%; and
- The tract meets two of the following criteria:
  - Share of renters is above 40%,
  - Share of people of color is above 50%,
  - Share of very low-income households that are severely rent burdened households is above the county median,
  - The area or areas in close proximity have recently experienced displacement pressures (percent change in rent above County median for rent increases), or
  - Difference between tract median rent and median rent for surrounding tracts above median for all tracts in county (rent gap).

**Regional Trend.** Figure C-38 shows sensitive communities at risk of displacement in the region. Vulnerable communities are most concentrated in the central County areas around the City of Los Angeles, Inglewood, South Gate, and Compton, East Los Angeles, and parts of the San Gabriel Valley. There are fewer vulnerable communities in coastal areas from Rolling Hills to Malibu.

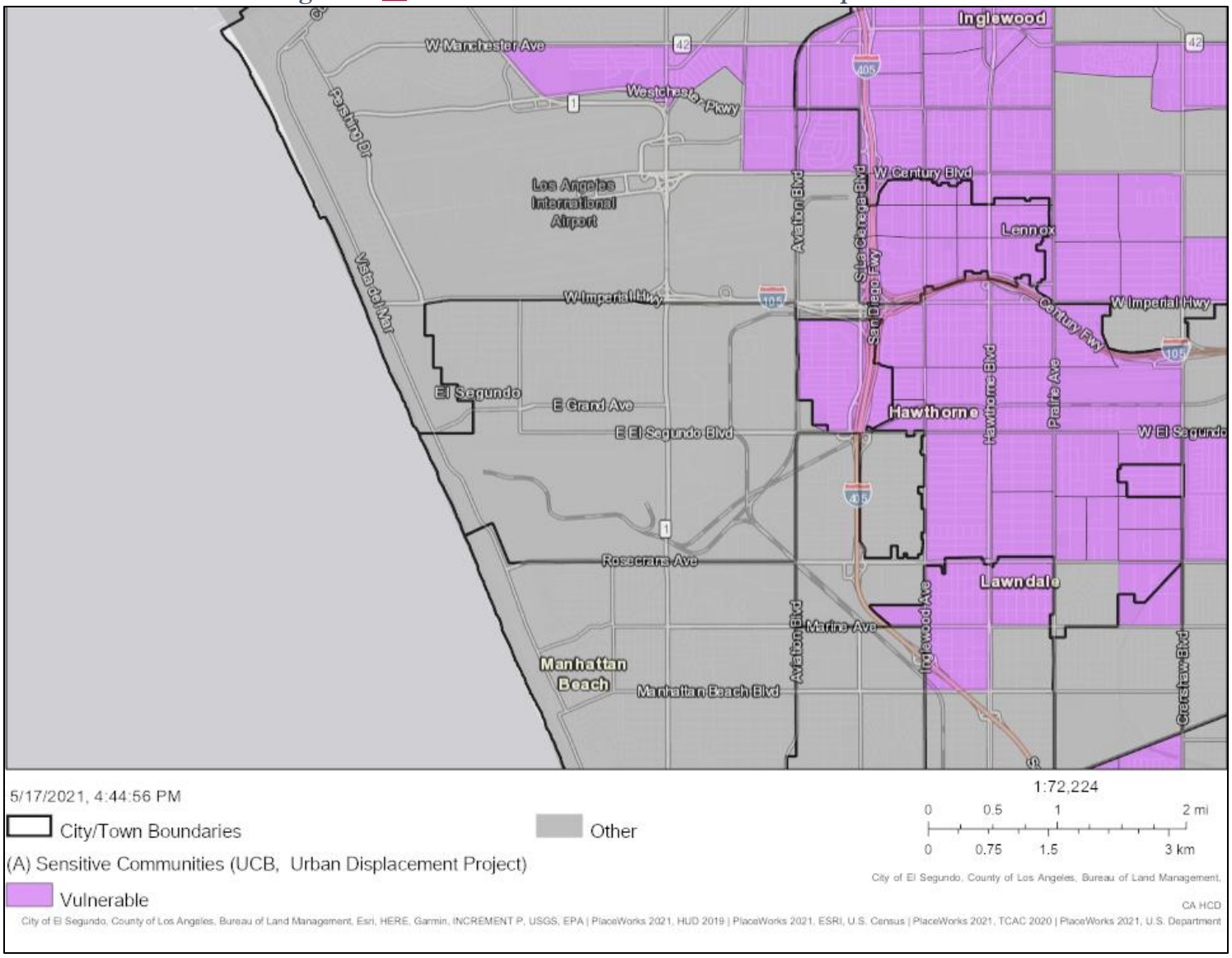
**Local Trend.** As shown in Figure C-39, there are no sensitive communities at risk of displacement in El Segundo. Tracts just east of the City in Hawthorne and Lawndale are considered vulnerable to displacement in the event of increased redevelopment or shifts in housing cost.

## Figure C-38: Regional Sensitive Communities At Risk of Displacement




Source: HCD AFFH Data Viewer, 2020 Urban Displacement Project, 2021.

## Figure C-39: Sensitive Communities At Risk of Displacement

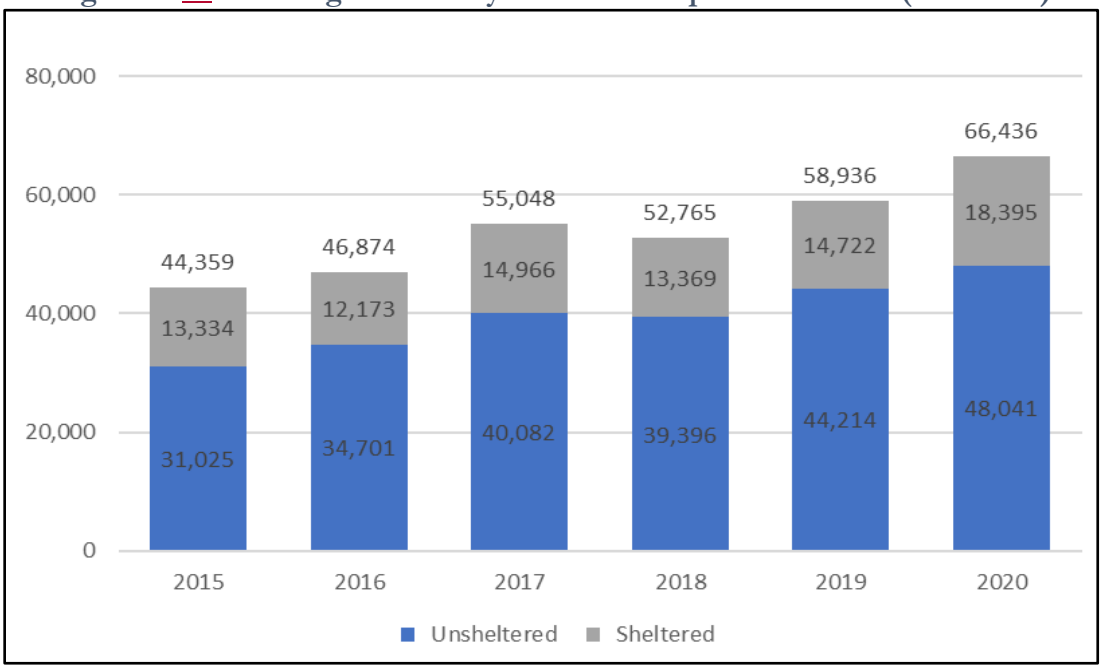



Source: HCD AFFH Data Viewer, 2020 Urban Displacement Project, 2021.

## HOMELESSNESS

**Regional Trend.** The Los Angeles Homeless Services Authority (LAHSA) estimates there were 66,436 persons experiencing homelessness in the Los Angeles County, based on the 2020 Greater Los Angeles Homeless Point-in-Time (PIT) Count. Figure C-40 shows the Los Angeles County homeless populations from 2015 to 2020. Approximately 72% of the homeless population is unsheltered and the remaining 28% is sheltered. The homeless population has increased by nearly 50% since 2015, and 12.7% since 2019. According to 2020 Department of Finance (DOF) estimates, the Los Angeles County population as a whole has grown only 0.5% since 2015.

**Figure C-40: Los Angeles County Homeless Population Trend (2015-2020)**




Source: Los Angeles Homeless Services Authority (LAHSA), 2015-2020 LA County/LA Continuum of Care (CoC) Homeless Counts.

Table C-20 shows the homeless populations in 2019 and 2020 by population type, gender, and health/disability. Approximately 19% of the homeless population belongs to a family with one or more child, 38.4% are chronically homeless, and 22.3% have a serious mental illness. Since 2019, the population of homeless family members (+45.7%), persons experiencing chronic homelessness (+54.2%), persons fleeing domestic violence (+40%), non-binary/gender non-conforming persons (+325.5%), and persons with a substance use disorder (+104%) have increased the most drastically. The population of transgender persons and persons with HIV/AIDS experiencing homelessness have decreased by 81.4% and 4.7%, respectively.

**Table C-20: Los Angeles County Homeless Population Demographics (2019-2020)**

| | 2019 | | 2020 | | Percent Change |
|---|---|---|---|---|---|
| | Persons | Percent | Persons | Percent | |
| **Total** | **58,936** | **100.0%** | **66,436** | **100.0%** | **12.7%** |
| Individuals | 50,071 | 85.0% | 53,619 | 80.7% | 7.1% |
| Transitional Aged Youth (18-24) | 3,635 | 6.2% | 4,278 | 6.4% | 17.7% |
| Unaccompanied Minors (under 18) | 66 | 0.1% | 74 | 0.1% | 12.1% |
| Family Members* | 8,799 | 14.9% | 12,817 | 19.3% | 45.7% |
| Veterans | 3,878 | 6.6% | 3,902 | 5.9% | 0.6% |
| People Experiencing Chronic Homelessness | 16,528 | 28.0% | 25,490 | 38.4% | 54.2% |
| Fleeing Domestic/Intimate Partner Violence | 3,111 | 5.3% | 4,356 | 6.6% | 40.0% |
| **Gender** | | | | | |
| Male | 39,348 | 66.8% | 44,259 | 66.6% | 12.5% |
| Female | 18,331 | 31.1% | 21,129 | 31.8% | 15.3% |
| Non-Binary/Gender Non-Conforming | 200 | 0.3% | 851 | 1.3% | 325.5% |
| Transgender | 1,057 | 1.8% | 197 | 0.3% | -81.4% |
| **Health and Disability**** | | | | | |
| Substance Use Disorder | 7,836 | 13.3% | 15,983 | 24.1% | 104.0% |
| HIV/AIDS | 1,306 | 2.2% | 1,245 | 1.9% | -4.7% |
| Serious Mental Illness | 13,670 | 23.2% | 14,790 | 22.3% | 8.2% |
| **Percent of Total County Population** | **--** | **0.6%** | **--** | **0.7%** | **--** |

*Members of families with at least one child under 18.
** Indicators are not mutually exclusive.
Source: Los Angeles Homeless Services Authority (LAHSA), 2019-2020 LA County/LA Continuum of Care (CoC) Homeless Counts.

The following data refers to the Los Angeles Continuum of Care (CoC) region, covering all Los Angeles County jurisdictions except for the cities of Long Beach, Pasadena, and Glendale. Special needs groups are considered elderly or disabled (including developmental disabilities), female-headed households, large families, farmworkers, and people experiencing homelessness.

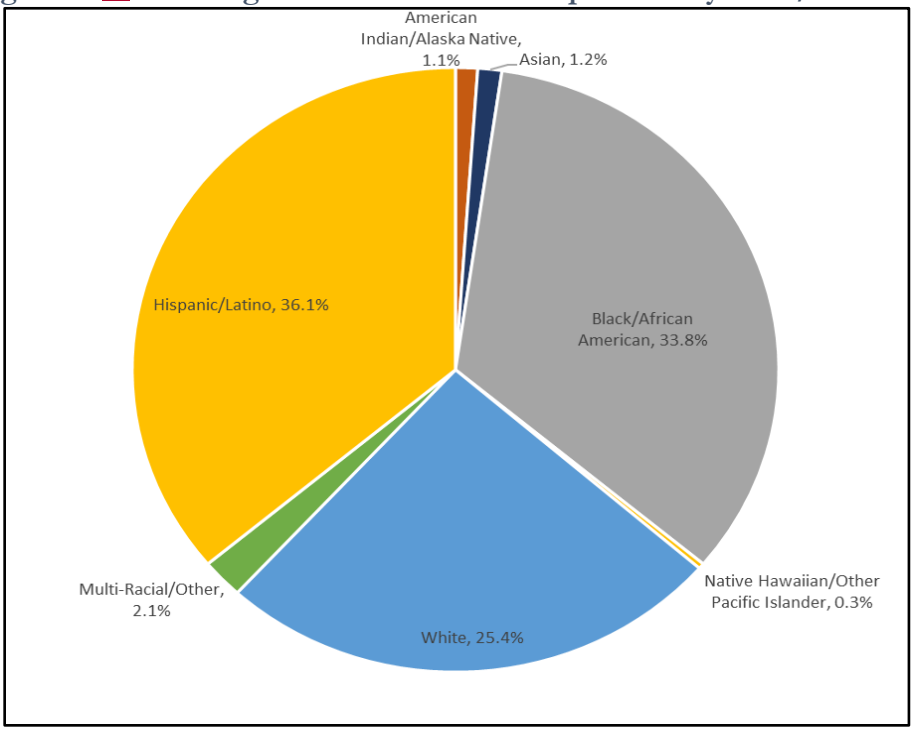
Nearly 20% of the homeless population are members of families with one or more child under the age of 18, 9.9% are elderly persons aged 62 and older, 17% have a physical disability, and 8.3% have a developmental disability. Only 32% of homeless persons with a developmental disability, 17.3% with a physical disability, and 21.5% of homeless seniors are sheltered. However, most families (76.3%) are sheltered (Table C-21).

**Table C-21: Homeless Populations and Special Needs Groups**

| Special Needs Group | Sheltered | Unsheltered | Total |
|---|---|---|---|
| Developmental Disability | 32.1% | 67.9% | 5,292 |
| Physical Disability | 17.3% | 82.7% | 10,833 |
| Family Members | 76.3% | 23.7% | 12,416 |
| 62+ | 21.5% | 78.5% | 6,290 |
| Source: LAHSA, 2020 LA CoC Homeless Count. | | | |

Figure C-41 and Table C-22 show the Los Angeles CoC homeless population by race and ethnicity. The Hispanic/Latino, Black/African American, and White populations make up the largest proportions of the homeless population. The Black/African American population is the most overrepresented in the Los Angeles CoC region. Nearly 34% of homeless persons are Black or African American, compared to only 7.8% of the population countywide. The American Indian and Alaska Native population is also overrepresented, making up only 0.2% of the County population, but 1.1% of the homeless population.

**Figure C-41: Los Angeles CoC Homeless Population by Race/Ethnicity**



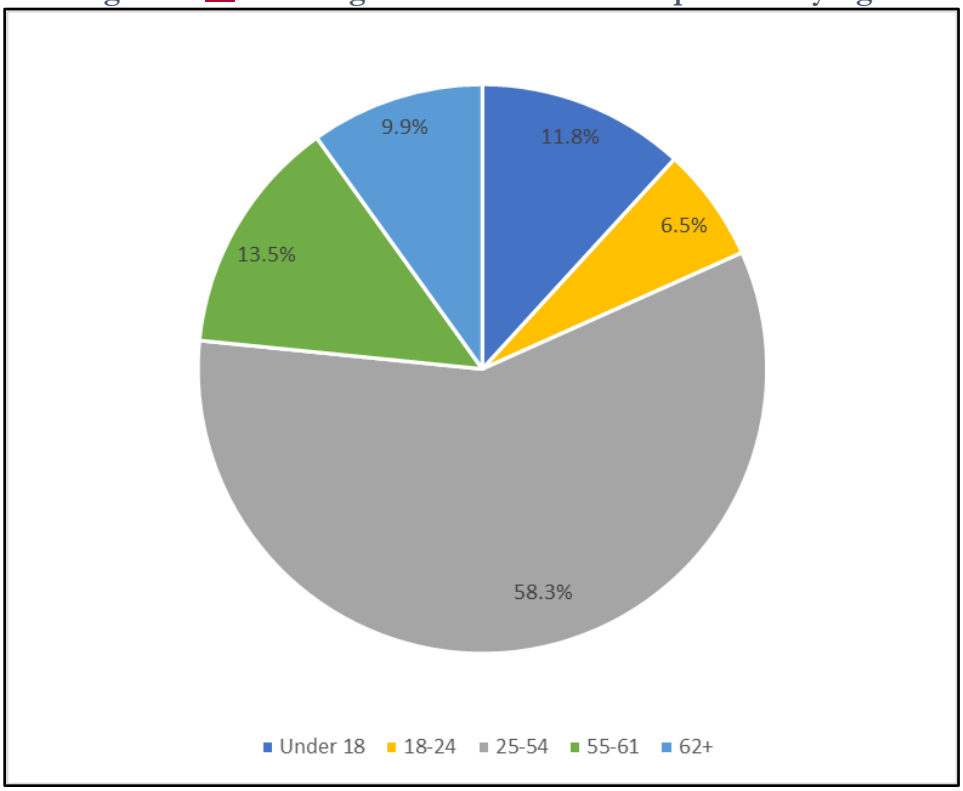

Source: LAHSA, 2020 LA CoC Homeless Count.

**Table C-22: Los Angeles CoC Homeless Population by Race/Ethnicity**

| Race/Ethnicity | Homeless Population | | % LA County Population |
|---|---|---|---|
| | Persons | Percent | |
| American Indian/Alaska Native | 686 | 1.1% | 0.2% |
| Asian | 774 | 1.2% | 14.4% |
| Black/African American | 21,509 | 33.8% | 7.8% |
| Hispanic/Latino | 23,005 | 36.1% | 48.5% |
| Native Hawaiian/Other Pacific Islander | 205 | 0.3% | 0.2% |
| White | 16,208 | 25.4% | 26.2% |
| Multi-Racial/Other | 1,319 | 2.1% | 2.6% |
| Source: LAHSA, 2020 LA CoC Homeless Count; 2015-2019 ACS (5-Year Estimates). | | | |

Figure C-42 and Table C-23 show the distribution of homeless persons in the Los Angeles CoC region by age. Adults aged 25 to 54 make up most of the homeless population, followed by adults aged 55 to 61, and children under 18. Children account for 11.8% of the homeless population and seniors (age 62+) account for 9.9% of the population; 6.6% of the homeless population is transitional aged youths between the ages of 18 and 24.

**Figure C-42: Los Angeles CoC Homeless Population by Age**



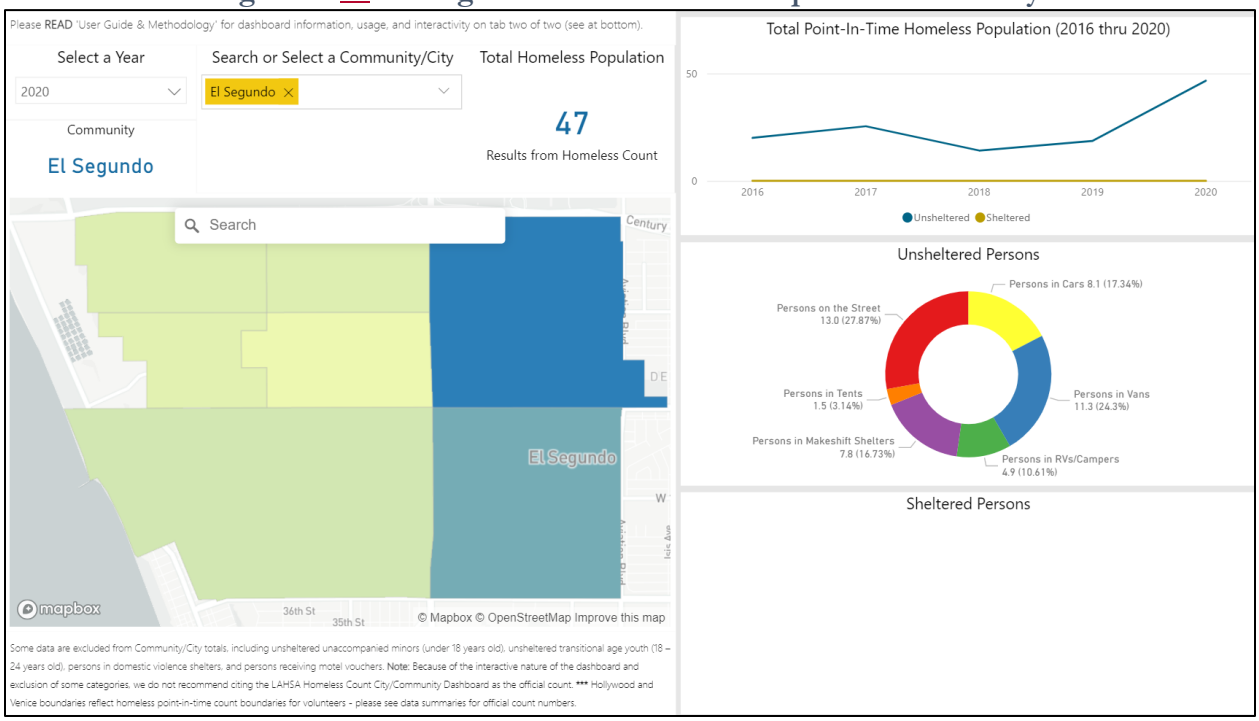

Source: LAHSA, 2020 LA CoC Homeless Count.

**Table C-23: Los Angeles CoC Homeless Population by Age**

| Age | Homeless Population | | % LA County Population |
|---|---|---|---|
| | Persons | Percent | |
| Under 18 | 7,491 | 11.8% | 22.0% |
| 18-24 | 4,181 | 6.6% | 9.7% |
| 25-54 | 37,138 | 58.3% | 43.2% |
| 55-61 | 8,606 | 13.5% | 8.7% |
| 62+ | 6,290 | 9.9% | 16.4% |
| Source: LAHSA, 2020 LA CoC Homeless Count; 2015-2019 ACS (5-Year Estimates). | | | |

**Local Trend.** According to the Los Angeles County PIT count, there were 47 persons experiencing homelessness in El Segundo in 2020. As presented in Figure C-43, the homeless population in the City has increased from 20 persons in 2016. All persons experiencing homeless in the City are unsheltered. A higher concentration of persons experiencing homelessness were identified in tracts along the eastern side of the City.

**Figure C-43: El Segundo Homelessness Population Summary**




Source: LAHSA, 2020 LA CoC Homeless Count.

Based on Los Angeles County Coordinated Entry System (CES) statistics, of the 27 persons experiencing homelessness assessed in El Segundo between July and December of 2020, three were youth, three were members of families with one or more child, two were veterans, and three were elderly adults aged 62 and over.

## OTHER RELEVANT FACTORS

### Historical Trends

The City of El Segundo was incorporated in 1917. El Segundo was originally purchased by the

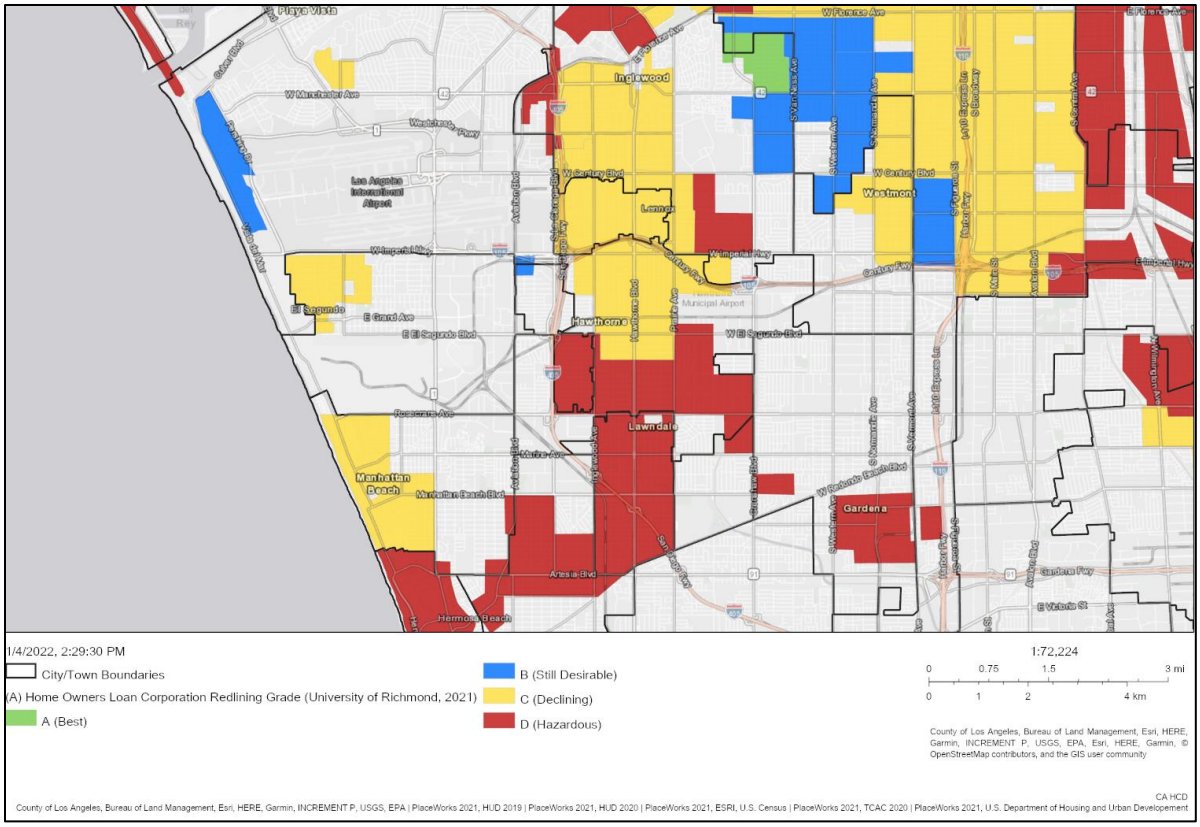
Standard Oil refinery in 1911 and remained a "one-industry town" until the 1920s. The Los Angeles International Airport (LAX) opened in 1930, making El Segundo an aerospace hub.[5] While El Segundo is predominantly White currently, [SP1]historically, the City was given a C-rating under HOLC's redlining maps, further described below. Lower ratings generally indicated a higher concentration of racial/ethnic minority populations while higher ratings were considered areas better for investments and were typically predominantly White neighborhoods. El Segundo likely received a C-rating due to the high number of blue collar workers brought in by the Standard Oil Company and LAX.

The 1896 Supreme Court ruling of Plessy v. Ferguson upheld the constitutionality of "separate but equal," ushering in the Jim Crow Era of racial segregation and disenfranchisement. This sentiment spread beyond the South, where African Americans and other minority groups were expelled from predominantly White communities, through the adoption of policies forbidding them from residing or even being within town borders after dark, known as 'sundown towns.' Contrary to the widespread misconception that these existed only in the deep south, sundown towns were prominent throughout the Country, including more than 100 California towns, several of which in Los Angeles County.

The Home Owners' Loan Corporation (HOLC), formed in 1933 under the New Deal Program, established the County's first red-lining maps. The northwestern corner of El Segundo received a C-rating, indicating the community was "declining" and a higher loan risk. Redlined, or D-rated communities, were typically comprised of large minority communities. Segregation achieved through red-lining was further exacerbated through the establishment of the Federal Housing Administration in 1934. The FHA insured bank mortgages that covered 80% of purchase prices and had terms of 20 years and were fully amortized. However, the FHA also conducted its own appraisals; mortgages were granted only to Whites and mixed-race neighborhoods or White neighborhoods in the vicinity of Black neighborhoods were deemed "too risky."[6] Figure C-44 shows the redlining maps for El Segundo and the surrounding areas.

[5] Megowan Realty Group, Bruce and Maureen Megowan. 2020. https://maureenmegowan.com/south-bay-history/history-of-el-segundo/. Accessed January 2022.
[6] Rothstein, Richard. (2017). The Color of Law: A Forgotten History of How Our Government Segregated America. Liveright Publishing Corporation.

## Figure C-44: Redlining Map – El Segundo and Surrounding Areas




## Lending Practices

Home loan applications in El Segundo by race and income are shown in Table C-24. Black and joint race applicants were denied loans at the highest rates (25 percent and 18 percent, respectively), while American Indian/Alaska Native (one applicant; 0 percent), Asian (5.4 percent), two or more minority race (one applicant; 0 percent) and Hispanic/Latino (8.7 percent) applicants were denied at the lowest rates. Applicants belonging to lower income categories had higher denial rates; 50 percent of loan applications submitted by low income residents were denied compared to 33.3 percent of moderate income residents, 13.8 percent of middle income residents, and only 6.1 percent of applications submitted by upper income residents.

**Table C-24: Home Loan Approval and Denial Rates – El Segundo (2020)**

| Loan Type/Applicant Demographics | Approved/ Originated | Denied | Total Applications |
|---|---|---|---|
| **Loan Purpose and Type** | | | |
| Purchase – Conventional | 77.0% | 7.0% | 213 |
| Purchase – Government | 45.5% | 18.2% | 11 |
| Home Improvement | 66.7% | 14.6% | 48 |
| Refinancing | 71.3% | 11.7% | 349 |
| **Applicant Race/Ethnicity** | | | |
| American Indian/Alaska Native | 100.0% | 0.0% | 1 |
| Asian | 89.2% | 5.4% | 37 |
| Black or African American | 75.0% | 25.0% | 4 |
| Hawaiian / Pacific Islander | N/A | N/A | 0 |
| White | 71.5% | 11.8% | 407 |
| 2 or More Minority Races | 100.0% | 0.0% | 1 |
| Joint Race (White/Minority) | 71.4% | 17.9% | 28 |
| Race Not Available | 70.6% | 6.3% | 143 |
| Hispanic or Latino | 60.9% | 8.7% | 23 |
| Not Hispanic or Latino | 74.1% | 11.9% | 428 |
| **Applicant Income** | | | |
| Low (0-49% of Median) | 50.0% | 50.0% | 2 |
| Moderate (50-79% of Median) | 22.2% | 33.3% | 9 |
| Middle (80-119% of Median) | 72.4% | 13.8% | 29 |
| Upper (>=120% of Median) | 72.4% | 10.2% | 532 |
| Income Not Available | 83.7% | 6.1% | 49 |

Note: This dataset excludes withdrawn/incomplete applications. Sum of percentages may not total 100%.
Source: Home Mortgage Disclosure Act (HMDA) Data – City of El Segundo, 2020.

## C. SITES INVENTORY

In general, the El Segundo is an affluent City and is considered a highest resource area according to TCAC Opportunity Maps. There are no concentrations of LMI households or low resource areas in the City; therefore, the City's RHNA strategy does not disproportionately locate units, specifically lower income units, in low income or low opportunity areas. There are also no concentrations of persons with disabilities in the City and the City's RHNA strategy does not disproportionately place lower or moderate units in areas with larger non-White populations, low environmental quality, or cost burdened households.

Additionally, the sites were selected, in part, based on the following methodology to ensure new housing development has ample access to opportunities regardless of income level. All sites meet at least three of the following criteria:

1. Within ¼ mile from school
2. Within ¼ mile from parks
3. Within ¼ mile from religious institution
4. Within ¼ mile from healthcare facility
5. Within ¼ mile from grocery store
6. Within ¼ mile from fire station
7. ¼ mile from police department

# D. IDENTIFICATION AND PRIORITIZATION OF CONTRIBUTING FACTORS

## 1. Insufficient Fair Housing Monitoring and Outreach Capacity

El Segundo has limited fair housing information available on the City website. Fair Housing outreach efforts in the City are limited. There were two FHEO inquiries in the City between 2013 and 2021, both not related to a specific fair housing issue. There is not a concentration of renters received HCVs anywhere in the City.

***Contributing Factors***

- Lack of monitoring
- Lack of a variety of media inputs
- Lack of marketing communities

## 2. Concentration of Protected Groups

While the City generally has low concentrations of racial/ethnic minority populations and LMI households, some block groups in the northwestern area of the City larger non-White and low to moderate income populations. Up to 60% of households also overpay in some of these areas. There are very few HCV recipients in the City despite the level of overpaying households. There are no affordable housing units, other than senior housing, located in the City.

***Contributing Factors***

- Location and type of affordable housing, lack of HCVs

## 3. Substandard Housing Conditions

A large proportion of the housing stock in El Segundo was built in 1969 or earlier (61.7% of housing stock). Aging housing units are most concentrated in areas in along the northwestern City boundary. A larger proportion of renter-occupied households also lack complete kitchen facilities (3.6%) compared to the County average (2.5%). In 2014-2021, 538 residential violations of the El Segundo Municipal Code property maintenance standards were reported. While only a small proportion of the housing stock is considered to be in need of rehabilitation, much of the City's housing stock is aging and may be in need of rehabilitation in the near future. Further, aging housing units are most concentrated in areas where there are higher concentrations of overpaying renters and households with lower median incomes.

***Contributing Factors***

- Age of housing stock
- Cost of repairs/rehabilitation

## 4. Displacement Risk

Though there are no sensitive communities at risk of displacement identified in El Segundo, there are areas in the City where up to 60% of households overpay for housing. Many of these tracts also have higher concentrations of non-White populations and LMI households. The homeless population in the City has more than doubled since 2016.

***Contributing Factors***

- Displacement risk due to economic pressures
- Increasing rents

P: (626) 381-9248
F: (626) 389-5414
E: info@mitchtsailaw.com

**Mitchell M. Tsai**
Attorney At Law

139 South Hudson Avenue
Suite 200
Pasadena, California 91101

**VIA E-MAIL**

November 29, 2021

Paul Samaras, Principal Planner
City of El Segundo Planning Division
350 Main Street
El Segundo, CA 90245
Em: psamaras@elsegundo.org

RE: City of El Segundo Draft 2021-2029 Housing Element Update – Comments on Draft Initial Study/Negative Declaration

Dear Paul Samaras,

On behalf of the Southwest Regional Council of Carpenters ("**Southwest Carpenters**" or "**SWRCC**"), my Office is submitting these comments on the City of El Segundo's ("**City**" or "**Lead Agency**") Draft Initial Study/Negative Declaration ("**IS/ND**") for the City's Draft 2021-2029 Housing Element Update ("**Draft HEU**" or "**Project**").

The Southwest Carpenters is a labor union representing 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

SWRCC expressly reserve the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

SWRCC expressly reserve the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens*

*for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

SWRCC incorporate by reference all comments raising issues regarding the IS/ND submitted prior to adoption of the IS/ND for the Project. *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any party who has objected to the Project's environmental documentation may assert any issue timely raised by other parties).

Moreover, SWRCC request that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

The City should require the use of a local skilled and trained workforce to benefit the community's economic development and environment. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the

> reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Skilled and trained workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the UC Berkeley Center for Labor Research and Education concluded:

> . . . labor should be considered an investment rather than a cost – and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

Local skilled and trained workforce requirements and policies have significant environmental benefits since they improve an area's jobs-housing balance, decreasing the amount of and length of job commutes and their associated greenhouse gas emissions. Recently, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program or a skilled and trained workforce with a local hire component" can result in air pollutant reductions.[2]

Cities are increasingly adopting local skilled and trained workforce policies and requirements into general plans and municipal codes. For example, the City of Hayward 2040 General Plan requires the City to "promote local hiring . . . to help

[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf

[2] South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10

achieve a more positive jobs-housing balance, and reduce regional commuting, gas consumption, and greenhouse gas emissions."[3]

In fact, the City of Hayward has gone as far as to adopt a Skilled Labor Force policy into its Downtown Specific Plan and municipal code, requiring developments in its Downtown area to requiring that the City "[c]ontribute to the stabilization of regional construction markets by spurring applicants of housing and nonresidential developments to require contractors to utilize apprentices from state-approved, joint labor-management training programs, . . ."[4] In addition, the City of Hayward requires all projects 30,000 square feet or larger to "utilize apprentices from state-approved, joint labor-management training programs."[5]

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

> People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.[6]

In addition, local hire mandates as well as skill training are critical facets of a strategy to reduce vehicle miles traveled. As planning experts Robert Cervero and Michael Duncan noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions since the skill requirements of available local jobs must be matched to those held by local residents.[7] Some municipalities have tied local hire and skilled and

[3] City of Hayward (2014) Hayward 2040 General Plan Policy Document at p. 3-99, *available at* https://www.hayward-ca.gov/sites/default/files/documents/General_Plan_FINAL.pdf.
[4] City of Hayward (2019) Hayward Downtown Specific Plan at p. 5-24, *available at* https://www.hayward-ca.gov/sites/default/files/Hayward%20Downtown%20Specific%20Plan.pdf.
[5] City of Hayward Municipal Code, Chapter 10, § 28.5.3.020(C).
[6] California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf
[7] Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf.

trained workforce policies to local development permits to address transportation issues. As Cervero and Duncan note:

> In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing." The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

The City should consider utilizing skilled and trained workforce policies and requirements to benefit the local area economically and mitigate greenhouse gas, air quality and transportation impacts.

The City should also require developments constructed pursuant to the Project to be built to standards exceeding the current 2019 California Green Building Code to mitigate the Project's environmental impacts and to advance progress towards the State of California's environmental goals.

## IV. CONCLUSION

SWRCC request that the City consider the aforementioned issues raised. Please contact my Office if you have any questions or concerns.

Sincerely,

Mitchell M. Tsai
Attorneys for Southwest Regional
Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

# EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

**Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling**

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

## Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> Where:
>
> n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

## Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added). [12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

| Worker Trip Length by Air Basin | | |
|---|---|---|
| **Air Basin** | **Rural (miles)** | **Urban (miles)** |
| Great Basin Valleys | 16.8 | 10.8 |
| Lake County | 16.8 | 10.8 |
| Lake Tahoe | 16.8 | 10.8 |
| Mojave Desert | 16.8 | 10.8 |
| Mountain Counties | 16.8 | 10.8 |
| North Central Coast | 17.1 | 12.3 |
| North Coast | 16.8 | 10.8 |
| Northeast Plateau | 16.8 | 10.8 |
| Sacramento Valley | 16.8 | 10.8 |
| Salton Sea | 14.6 | 11 |
| San Diego | 16.8 | 10.8 |
| San Francisco Bay Area | 10.8 | 10.8 |
| San Joaquin Valley | 16.8 | 10.8 |
| South Central Coast | 16.8 | 10.8 |
| South Coast | 19.8 | 14.7 |
| **Average** | **16.47** | **11.17** |
| **Minimum** | **10.80** | **10.80** |
| **Maximum** | **19.80** | **14.70** |
| **Range** | **9.00** | **3.90** |

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

## Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

| **Local Hire Provision Net Change** | |
|---|---|
| **Without Local Hire Provision** | |
| Total Construction GHG Emissions (MT $CO_2e$) | 3,623 |
| Amortized Construction GHG Emissions (MT $CO_2e$/year) | 120.77 |
| **With Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,024 |
| Amortized Construction GHG Emissions (MT $CO_2e$/year) | 100.80 |
| ***% Decrease in Construction-related GHG Emissions*** | ***17%*** |

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

## Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

| Location Type | Location Name | Rural H-W (miles) | Urban H-W (miles) |
|---|---|---|---|
| Air Basin | Great Basin | 16.8 | 10.8 |
| Air Basin | Lake County | 16.8 | 10.8 |
| Air Basin | Lake Tahoe | 16.8 | 10.8 |
| Air Basin | Mojave Desert | 16.8 | 10.8 |
| Air Basin | Mountain | 16.8 | 10.8 |
| Air Basin | North Central | 17.1 | 12.3 |
| Air Basin | North Coast | 16.8 | 10.8 |
| Air Basin | Northeast | 16.8 | 10.8 |
| Air Basin | Sacramento | 16.8 | 10.8 |
| Air Basin | Salton Sea | 14.6 | 11 |
| Air Basin | San Diego | 16.8 | 10.8 |
| Air Basin | San Francisco | 10.8 | 10.8 |
| Air Basin | San Joaquin | 16.8 | 10.8 |
| Air Basin | South Central | 16.8 | 10.8 |
| Air Basin | South Coast | 19.8 | 14.7 |
| Air District | Amador County | 16.8 | 10.8 |
| Air District | Antelope Valley | 16.8 | 10.8 |
| Air District | Bay Area AQMD | 10.8 | 10.8 |
| Air District | Butte County | 12.54 | 12.54 |
| Air District | Calaveras | 16.8 | 10.8 |
| Air District | Colusa County | 16.8 | 10.8 |
| Air District | El Dorado | 16.8 | 10.8 |
| Air District | Feather River | 16.8 | 10.8 |
| Air District | Glenn County | 16.8 | 10.8 |
| Air District | Great Basin | 16.8 | 10.8 |
| Air District | Imperial County | 10.2 | 7.3 |
| Air District | Kern County | 16.8 | 10.8 |
| Air District | Lake County | 16.8 | 10.8 |
| Air District | Lassen County | 16.8 | 10.8 |
| Air District | Mariposa | 16.8 | 10.8 |
| Air District | Mendocino | 16.8 | 10.8 |
| Air District | Modoc County | 16.8 | 10.8 |
| Air District | Mojave Desert | 16.8 | 10.8 |
| Air District | Monterey Bay | 16.8 | 10.8 |
| Air District | North Coast | 16.8 | 10.8 |
| Air District | Northern Sierra | 16.8 | 10.8 |
| Air District | Northern | 16.8 | 10.8 |
| Air District | Placer County | 16.8 | 10.8 |
| Air District | Sacramento | 15 | 10 |

| | | | |
|---|---|---|---|
| Air District | San Diego | 16.8 | 10.8 |
| Air District | San Joaquin | 16.8 | 10.8 |
| Air District | San Luis Obispo | 13 | 13 |
| Air District | Santa Barbara | 8.3 | 8.3 |
| Air District | Shasta County | 16.8 | 10.8 |
| Air District | Siskiyou County | 16.8 | 10.8 |
| Air District | South Coast | 19.8 | 14.7 |
| Air District | Tehama County | 16.8 | 10.8 |
| Air District | Tuolumne | 16.8 | 10.8 |
| Air District | Ventura County | 16.8 | 10.8 |
| Air District | Yolo/Solano | 15 | 10 |
| County | Alameda | 10.8 | 10.8 |
| County | Alpine | 16.8 | 10.8 |
| County | Amador | 16.8 | 10.8 |
| County | Butte | 12.54 | 12.54 |
| County | Calaveras | 16.8 | 10.8 |
| County | Colusa | 16.8 | 10.8 |
| County | Contra Costa | 10.8 | 10.8 |
| County | Del Norte | 16.8 | 10.8 |
| County | El Dorado-Lake | 16.8 | 10.8 |
| County | El Dorado- | 16.8 | 10.8 |
| County | Fresno | 16.8 | 10.8 |
| County | Glenn | 16.8 | 10.8 |
| County | Humboldt | 16.8 | 10.8 |
| County | Imperial | 10.2 | 7.3 |
| County | Inyo | 16.8 | 10.8 |
| County | Kern-Mojave | 16.8 | 10.8 |
| County | Kern-San | 16.8 | 10.8 |
| County | Kings | 16.8 | 10.8 |
| County | Lake | 16.8 | 10.8 |
| County | Lassen | 16.8 | 10.8 |
| County | Los Angeles- | 16.8 | 10.8 |
| County | Los Angeles- | 19.8 | 14.7 |
| County | Madera | 16.8 | 10.8 |
| County | Marin | 10.8 | 10.8 |
| County | Mariposa | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Merced | 16.8 | 10.8 |
| County | Modoc | 16.8 | 10.8 |
| County | Mono | 16.8 | 10.8 |
| County | Monterey | 16.8 | 10.8 |
| County | Napa | 10.8 | 10.8 |

| | | | |
|---|---|---|---|
| County | Nevada | 16.8 | 10.8 |
| County | Orange | 19.8 | 14.7 |
| County | Placer-Lake | 16.8 | 10.8 |
| County | Placer-Mountain | 16.8 | 10.8 |
| County | Placer- | 16.8 | 10.8 |
| County | Plumas | 16.8 | 10.8 |
| County | Riverside- | 16.8 | 10.8 |
| County | Riverside- | 19.8 | 14.7 |
| County | Riverside-Salton | 14.6 | 11 |
| County | Riverside-South | 19.8 | 14.7 |
| County | Sacramento | 15 | 10 |
| County | San Benito | 16.8 | 10.8 |
| County | San Bernardino- | 16.8 | 10.8 |
| County | San Bernardino- | 19.8 | 14.7 |
| County | San Diego | 16.8 | 10.8 |
| County | San Francisco | 10.8 | 10.8 |
| County | San Joaquin | 16.8 | 10.8 |
| County | San Luis Obispo | 13 | 13 |
| County | San Mateo | 10.8 | 10.8 |
| County | Santa Barbara- | 8.3 | 8.3 |
| County | Santa Barbara- | 8.3 | 8.3 |
| County | Santa Clara | 10.8 | 10.8 |
| County | Santa Cruz | 16.8 | 10.8 |
| County | Shasta | 16.8 | 10.8 |
| County | Sierra | 16.8 | 10.8 |
| County | Siskiyou | 16.8 | 10.8 |
| County | Solano- | 15 | 10 |
| County | Solano-San | 16.8 | 10.8 |
| County | Sonoma-North | 16.8 | 10.8 |
| County | Sonoma-San | 10.8 | 10.8 |
| County | Stanislaus | 16.8 | 10.8 |
| County | Sutter | 16.8 | 10.8 |
| County | Tehama | 16.8 | 10.8 |
| County | Trinity | 16.8 | 10.8 |
| County | Tulare | 16.8 | 10.8 |
| County | Tuolumne | 16.8 | 10.8 |
| County | Ventura | 16.8 | 10.8 |
| County | Yolo | 15 | 10 |
| County | Yuba | 16.8 | 10.8 |
| Statewide | Statewide | 16.8 | 10.8 |

| Worker Trip Length by Air Basin | | |
|---|---|---|
| **Air Basin** | **Rural (miles)** | **Urban (miles)** |
| Great Basin Valleys | 16.8 | 10.8 |
| Lake County | 16.8 | 10.8 |
| Lake Tahoe | 16.8 | 10.8 |
| Mojave Desert | 16.8 | 10.8 |
| Mountain Counties | 16.8 | 10.8 |
| North Central Coast | 17.1 | 12.3 |
| North Coast | 16.8 | 10.8 |
| Northeast Plateau | 16.8 | 10.8 |
| Sacramento Valley | 16.8 | 10.8 |
| Salton Sea | 14.6 | 11 |
| San Diego | 16.8 | 10.8 |
| San Francisco Bay Area | 10.8 | 10.8 |
| San Joaquin Valley | 16.8 | 10.8 |
| South Central Coast | 16.8 | 10.8 |
| South Coast | 19.8 | 14.7 |
| **Average** | **16.47** | **11.17** |
| **Mininum** | **10.80** | **10.80** |
| **Maximum** | **19.80** | **14.70** |
| **Range** | **9.00** | **3.90** |

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1713 | 1.8242 | 1.1662 | 2.4000e-003 | 0.4169 | 0.0817 | 0.4986 | 0.1795 | 0.0754 | 0.2549 | 0.0000 | 213.1969 | 213.1969 | 0.0601 | 0.0000 | 214.6993 |
| 2022 | 0.6904 | 4.1142 | 6.1625 | 0.0189 | 1.3058 | 0.1201 | 1.4259 | 0.3460 | 0.1128 | 0.4588 | 0.0000 | 1,721.6826 | 1,721.6826 | 0.1294 | 0.0000 | 1,724.9187 |
| 2023 | 0.6148 | 3.3649 | 5.6747 | 0.0178 | 1.1963 | 0.0996 | 1.2959 | 0.3203 | 0.0935 | 0.4138 | 0.0000 | 1,627.5295 | 1,627.5295 | 0.1185 | 0.0000 | 1,630.4925 |
| 2024 | 4.1619 | 0.1335 | 0.2810 | 5.9000e-004 | 0.0325 | 6.4700e-003 | 0.0390 | 8.6300e-003 | 6.0400e-003 | 0.0147 | 0.0000 | 52.9078 | 52.9078 | 8.0200e-003 | 0.0000 | 53.1082 |
| **Maximum** | **4.1619** | **4.1142** | **6.1625** | **0.0189** | **1.3058** | **0.1201** | **1.4259** | **0.3460** | **0.1128** | **0.4588** | **0.0000** | **1,721.6826** | **1,721.6826** | **0.1294** | **0.0000** | **1,724.9187** |

## 2.1 Overall Construction

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1713 | 1.8242 | 1.1662 | 2.4000e-003 | 0.4169 | 0.0817 | 0.4986 | 0.1795 | 0.0754 | 0.2549 | 0.0000 | 213.1967 | 213.1967 | 0.0601 | 0.0000 | 214.6991 |
| 2022 | 0.6904 | 4.1142 | 6.1625 | 0.0189 | 1.3058 | 0.1201 | 1.4259 | 0.3460 | 0.1128 | 0.4588 | 0.0000 | 1,721.6823 | 1,721.6823 | 0.1294 | 0.0000 | 1,724.9183 |
| 2023 | 0.6148 | 3.3648 | 5.6747 | 0.0178 | 1.1963 | 0.0996 | 1.2959 | 0.3203 | 0.0935 | 0.4138 | 0.0000 | 1,627.5291 | 1,627.5291 | 0.1185 | 0.0000 | 1,630.4921 |
| 2024 | 4.1619 | 0.1335 | 0.2810 | 5.9000e-004 | 0.0325 | 6.4700e-003 | 0.0390 | 8.6300e-003 | 6.0400e-003 | 0.0147 | 0.0000 | 52.9077 | 52.9077 | 8.0200e-003 | 0.0000 | 53.1082 |
| **Maximum** | **4.1619** | **4.1142** | **6.1625** | **0.0189** | **1.3058** | **0.1201** | **1.4259** | **0.3460** | **0.1128** | **0.4588** | **0.0000** | **1,721.6823** | **1,721.6823** | **0.1294** | **0.0000** | **1,724.9183** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| 1 | 9-1-2021 | 11-30-2021 | 1.4103 | 1.4103 |
| 2 | 12-1-2021 | 2-28-2022 | 1.3613 | 1.3613 |
| 3 | 3-1-2022 | 5-31-2022 | 1.1985 | 1.1985 |
| 4 | 6-1-2022 | 8-31-2022 | 1.1921 | 1.1921 |
| 5 | 9-1-2022 | 11-30-2022 | 1.1918 | 1.1918 |
| 6 | 12-1-2022 | 2-28-2023 | 1.0774 | 1.0774 |
| 7 | 3-1-2023 | 5-31-2023 | 1.0320 | 1.0320 |
| 8 | 6-1-2023 | 8-31-2023 | 1.0260 | 1.0260 |

| | | | | |
|---|---|---|---|---|
| **9** | **9-1-2023** | **11-30-2023** | 1.0265 | 1.0265 |
| **10** | **12-1-2023** | **2-29-2024** | 2.8857 | 2.8857 |
| **11** | **3-1-2024** | **5-31-2024** | 1.6207 | 1.6207 |
| | | **Highest** | 2.8857 | 2.8857 |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

## 2.2 Overall Operational

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0012 | 51.0012 | 0.0144 | 0.0000 | 51.3601 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0012** | **51.0012** | **0.0144** | **0.0000** | **51.3601** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.7000e-004 | 7.5000e-004 | 8.5100e-003 | 2.0000e-005 | 2.4700e-003 | 2.0000e-005 | 2.4900e-003 | 6.5000e-004 | 2.0000e-005 | 6.7000e-004 | 0.0000 | 2.2251 | 2.2251 | 7.0000e-005 | 0.0000 | 2.2267 |
| **Total** | **2.9000e-003** | **0.0641** | **0.0233** | **2.0000e-004** | **6.4100e-003** | **2.1000e-004** | **6.6200e-003** | **1.7300e-003** | **2.0000e-004** | **1.9300e-003** | **0.0000** | **19.6816** | **19.6816** | **1.2800e-003** | **0.0000** | **19.7136** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0011 | 51.0011 | 0.0144 | 0.0000 | 51.3600 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0011** | **51.0011** | **0.0144** | **0.0000** | **51.3600** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.7000e-004 | 7.5000e-004 | 8.5100e-003 | 2.0000e-005 | 2.4700e-003 | 2.0000e-005 | 2.4900e-003 | 6.5000e-004 | 2.0000e-005 | 6.7000e-004 | 0.0000 | 2.2251 | 2.2251 | 7.0000e-005 | 0.0000 | 2.2267 |
| **Total** | **2.9000e-003** | **0.0641** | **0.0233** | **2.0000e-004** | **6.4100e-003** | **2.1000e-004** | **6.6200e-003** | **1.7300e-003** | **2.0000e-004** | **1.9300e-003** | **0.0000** | **19.6816** | **19.6816** | **1.2800e-003** | **0.0000** | **19.7136** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7061 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7061** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.7000e-004 | 6.0000e-004 | 6.8100e-003 | 2.0000e-005 | 1.9700e-003 | 2.0000e-005 | 1.9900e-003 | 5.2000e-004 | 1.0000e-005 | 5.4000e-004 | 0.0000 | 1.7801 | 1.7801 | 5.0000e-005 | 0.0000 | 1.7814 |
| **Total** | **7.7000e-004** | **6.0000e-004** | **6.8100e-003** | **2.0000e-005** | **1.9700e-003** | **2.0000e-005** | **1.9900e-003** | **5.2000e-004** | **1.0000e-005** | **5.4000e-004** | **0.0000** | **1.7801** | **1.7801** | **5.0000e-005** | **0.0000** | **1.7814** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7060 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7060** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.7000e-004 | 6.0000e-004 | 6.8100e-003 | 2.0000e-005 | 1.9700e-003 | 2.0000e-005 | 1.9900e-003 | 5.2000e-004 | 1.0000e-005 | 5.4000e-004 | 0.0000 | 1.7801 | 1.7801 | 5.0000e-005 | 0.0000 | 1.7814 |
| **Total** | **7.7000e-004** | **6.0000e-004** | **6.8100e-003** | **2.0000e-005** | **1.9700e-003** | **2.0000e-005** | **1.9900e-003** | **5.2000e-004** | **1.0000e-005** | **5.4000e-004** | **0.0000** | **1.7801** | **1.7801** | **5.0000e-005** | **0.0000** | **1.7814** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5405 | 103.5405 | 0.0335 | 0.0000 | 104.3776 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5405** | **103.5405** | **0.0335** | **0.0000** | **104.3776** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6400e-003 | 1.2700e-003 | 0.0144 | 4.0000e-005 | 4.1600e-003 | 3.0000e-005 | 4.2000e-003 | 1.1100e-003 | 3.0000e-005 | 1.1400e-003 | 0.0000 | 3.7579 | 3.7579 | 1.1000e-004 | 0.0000 | 3.7607 |
| **Total** | **1.6400e-003** | **1.2700e-003** | **0.0144** | **4.0000e-005** | **4.1600e-003** | **3.0000e-005** | **4.2000e-003** | **1.1100e-003** | **3.0000e-005** | **1.1400e-003** | **0.0000** | **3.7579** | **3.7579** | **1.1000e-004** | **0.0000** | **3.7607** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5403 | 103.5403 | 0.0335 | 0.0000 | 104.3775 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5403** | **103.5403** | **0.0335** | **0.0000** | **104.3775** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6400e-003 | 1.2700e-003 | 0.0144 | 4.0000e-005 | 4.1600e-003 | 3.0000e-005 | 4.2000e-003 | 1.1100e-003 | 3.0000e-005 | 1.1400e-003 | 0.0000 | 3.7579 | 3.7579 | 1.1000e-004 | 0.0000 | 3.7607 |
| **Total** | **1.6400e-003** | **1.2700e-003** | **0.0144** | **4.0000e-005** | **4.1600e-003** | **3.0000e-005** | **4.2000e-003** | **1.1100e-003** | **3.0000e-005** | **1.1400e-003** | **0.0000** | **3.7579** | **3.7579** | **1.1000e-004** | **0.0000** | **3.7607** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.8000e-004 | 2.1000e-004 | 2.4400e-003 | 1.0000e-005 | 7.7000e-004 | 1.0000e-005 | 7.7000e-004 | 2.0000e-004 | 1.0000e-005 | 2.1000e-004 | 0.0000 | 0.6679 | 0.6679 | 2.0000e-005 | 0.0000 | 0.6684 |
| **Total** | **2.8000e-004** | **2.1000e-004** | **2.4400e-003** | **1.0000e-005** | **7.7000e-004** | **1.0000e-005** | **7.7000e-004** | **2.0000e-004** | **1.0000e-005** | **2.1000e-004** | **0.0000** | **0.6679** | **0.6679** | **2.0000e-005** | **0.0000** | **0.6684** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.8000e-004 | 2.1000e-004 | 2.4400e-003 | 1.0000e-005 | 7.7000e-004 | 1.0000e-005 | 7.7000e-004 | 2.0000e-004 | 1.0000e-005 | 2.1000e-004 | 0.0000 | 0.6679 | 0.6679 | 2.0000e-005 | 0.0000 | 0.6684 |
| **Total** | **2.8000e-004** | **2.1000e-004** | **2.4400e-003** | **1.0000e-005** | **7.7000e-004** | **1.0000e-005** | **7.7000e-004** | **2.0000e-004** | **1.0000e-005** | **2.1000e-004** | **0.0000** | **0.6679** | **0.6679** | **2.0000e-005** | **0.0000** | **0.6684** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1324 | 293.1324 | 0.0702 | 0.0000 | 294.8881 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1324** | **293.1324** | **0.0702** | **0.0000** | **294.8881** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.4088 | 0.3066 | 3.5305 | 0.0107 | 1.1103 | 8.8700e-003 | 1.1192 | 0.2949 | 8.1700e-003 | 0.3031 | 0.0000 | 966.8117 | 966.8117 | 0.0266 | 0.0000 | 967.4773 |
| **Total** | **0.4616** | **2.0027** | **3.9885** | **0.0152** | **1.2243** | **0.0121** | **1.2363** | **0.3278** | **0.0112** | **0.3390** | **0.0000** | **1,408.7952** | **1,408.7952** | **0.0530** | **0.0000** | **1,410.1208** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1321 | 293.1321 | 0.0702 | 0.0000 | 294.8877 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1321** | **293.1321** | **0.0702** | **0.0000** | **294.8877** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.4088 | 0.3066 | 3.5305 | 0.0107 | 1.1103 | 8.8700e-003 | 1.1192 | 0.2949 | 8.1700e-003 | 0.3031 | 0.0000 | 966.8117 | 966.8117 | 0.0266 | 0.0000 | 967.4773 |
| **Total** | **0.4616** | **2.0027** | **3.9885** | **0.0152** | **1.2243** | **0.0121** | **1.2363** | **0.3278** | **0.0112** | **0.3390** | **0.0000** | **1,408.7952** | **1,408.7952** | **0.0530** | **0.0000** | **1,410.1208** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2789 | 286.2789 | 0.0681 | 0.0000 | 287.9814 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2789** | **286.2789** | **0.0681** | **0.0000** | **287.9814** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.3753 | 0.2708 | 3.1696 | 0.0101 | 1.0840 | 8.4100e-003 | 1.0924 | 0.2879 | 7.7400e-003 | 0.2957 | 0.0000 | 909.3439 | 909.3439 | 0.0234 | 0.0000 | 909.9291 |
| **Total** | **0.4135** | **1.5218** | **3.5707** | **0.0144** | **1.1953** | **9.8700e-003** | **1.2051** | **0.3200** | **9.1400e-003** | **0.3292** | **0.0000** | **1,327.3369** | **1,327.3369** | **0.0462** | **0.0000** | **1,328.4916** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2785 | 286.2785 | 0.0681 | 0.0000 | 287.9811 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2785** | **286.2785** | **0.0681** | **0.0000** | **287.9811** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.3753 | 0.2708 | 3.1696 | 0.0101 | 1.0840 | 8.4100e-003 | 1.0924 | 0.2879 | 7.7400e-003 | 0.2957 | 0.0000 | 909.3439 | 909.3439 | 0.0234 | 0.0000 | 909.9291 |
| **Total** | **0.4135** | **1.5218** | **3.5707** | **0.0144** | **1.1953** | **9.8700e-003** | **1.2051** | **0.3200** | **9.1400e-003** | **0.3292** | **0.0000** | **1,327.3369** | **1,327.3369** | **0.0462** | **0.0000** | **1,328.4916** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.7000e-004 | 2.7000e-004 | 3.1200e-003 | 1.0000e-005 | 1.0700e-003 | 1.0000e-005 | 1.0800e-003 | 2.8000e-004 | 1.0000e-005 | 2.9000e-004 | 0.0000 | 0.8963 | 0.8963 | 2.0000e-005 | 0.0000 | 0.8968 |
| **Total** | **3.7000e-004** | **2.7000e-004** | **3.1200e-003** | **1.0000e-005** | **1.0700e-003** | **1.0000e-005** | **1.0800e-003** | **2.8000e-004** | **1.0000e-005** | **2.9000e-004** | **0.0000** | **0.8963** | **0.8963** | **2.0000e-005** | **0.0000** | **0.8968** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

### 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.7000e-004 | 2.7000e-004 | 3.1200e-003 | 1.0000e-005 | 1.0700e-003 | 1.0000e-005 | 1.0800e-003 | 2.8000e-004 | 1.0000e-005 | 2.9000e-004 | 0.0000 | 0.8963 | 0.8963 | 2.0000e-005 | 0.0000 | 0.8968 |
| **Total** | **3.7000e-004** | **2.7000e-004** | **3.1200e-003** | **1.0000e-005** | **1.0700e-003** | **1.0000e-005** | **1.0800e-003** | **2.8000e-004** | **1.0000e-005** | **2.9000e-004** | **0.0000** | **0.8963** | **0.8963** | **2.0000e-005** | **0.0000** | **0.8968** |

### 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.9000e-004 | 4.1000e-004 | 4.9200e-003 | 2.0000e-005 | 1.8100e-003 | 1.0000e-005 | 1.8200e-003 | 4.8000e-004 | 1.0000e-005 | 4.9000e-004 | 0.0000 | 1.4697 | 1.4697 | 4.0000e-005 | 0.0000 | 1.4706 |
| **Total** | **5.9000e-004** | **4.1000e-004** | **4.9200e-003** | **2.0000e-005** | **1.8100e-003** | **1.0000e-005** | **1.8200e-003** | **4.8000e-004** | **1.0000e-005** | **4.9000e-004** | **0.0000** | **1.4697** | **1.4697** | **4.0000e-005** | **0.0000** | **1.4706** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.9000e-004 | 4.1000e-004 | 4.9200e-003 | 2.0000e-005 | 1.8100e-003 | 1.0000e-005 | 1.8200e-003 | 4.8000e-004 | 1.0000e-005 | 4.9000e-004 | 0.0000 | 1.4697 | 1.4697 | 4.0000e-005 | 0.0000 | 1.4706 |
| **Total** | **5.9000e-004** | **4.1000e-004** | **4.9200e-003** | **2.0000e-005** | **1.8100e-003** | **1.0000e-005** | **1.8200e-003** | **4.8000e-004** | **1.0000e-005** | **4.9000e-004** | **0.0000** | **1.4697** | **1.4697** | **4.0000e-005** | **0.0000** | **1.4706** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0101 | 6.9900e-003 | 0.0835 | 2.8000e-004 | 0.0307 | 2.3000e-004 | 0.0309 | 8.1500e-003 | 2.2000e-004 | 8.3700e-003 | 0.0000 | 24.9407 | 24.9407 | 6.1000e-004 | 0.0000 | 24.9558 |
| **Total** | **0.0101** | **6.9900e-003** | **0.0835** | **2.8000e-004** | **0.0307** | **2.3000e-004** | **0.0309** | **8.1500e-003** | **2.2000e-004** | **8.3700e-003** | **0.0000** | **24.9407** | **24.9407** | **6.1000e-004** | **0.0000** | **24.9558** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0101 | 6.9900e-003 | 0.0835 | 2.8000e-004 | 0.0307 | 2.3000e-004 | 0.0309 | 8.1500e-003 | 2.2000e-004 | 8.3700e-003 | 0.0000 | 24.9407 | 24.9407 | 6.1000e-004 | 0.0000 | 24.9558 |
| **Total** | **0.0101** | **6.9900e-003** | **0.0835** | **2.8000e-004** | **0.0307** | **2.3000e-004** | **0.0309** | **8.1500e-003** | **2.2000e-004** | **8.3700e-003** | **0.0000** | **24.9407** | **24.9407** | **6.1000e-004** | **0.0000** | **24.9558** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| NaturalGas Mitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |
| NaturalGas Unmitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

### 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| Unmitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Unmitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

### 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2769 | 46.4588 | 31.6840 | 0.0643 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,234.7974 | 6,234.7974 | 1.9495 | 0.0000 | 6,283.5352 |
| 2022 | 5.3304 | 38.8967 | 49.5629 | 0.1517 | 9.8688 | 1.6366 | 10.7727 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 15,251.5674 | 15,251.5674 | 1.9503 | 0.0000 | 15,278.5288 |
| 2023 | 4.8957 | 26.3317 | 46.7567 | 0.1472 | 9.8688 | 0.7794 | 10.6482 | 2.6381 | 0.7322 | 3.3702 | 0.0000 | 14,807.5269 | 14,807.5269 | 1.0250 | 0.0000 | 14,833.1521 |
| 2024 | 237.1630 | 9.5575 | 15.1043 | 0.0244 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,361.3989 | 2,361.3989 | 0.7177 | 0.0000 | 2,379.3421 |
| **Maximum** | **237.1630** | **46.4588** | **49.5629** | **0.1517** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **15,251.5674** | **15,251.5674** | **1.9503** | **0.0000** | **15,278.5288** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2769 | 46.4588 | 31.6840 | 0.0643 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,234.7974 | 6,234.7974 | 1.9495 | 0.0000 | 6,283.5352 |
| 2022 | 5.3304 | 38.8967 | 49.5629 | 0.1517 | 9.8688 | 1.6366 | 10.7727 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 15,251.5674 | 15,251.5674 | 1.9503 | 0.0000 | 15,278.5288 |
| 2023 | 4.8957 | 26.3317 | 46.7567 | 0.1472 | 9.8688 | 0.7794 | 10.6482 | 2.6381 | 0.7322 | 3.3702 | 0.0000 | 14,807.5269 | 14,807.5269 | 1.0250 | 0.0000 | 14,833.1520 |
| 2024 | 237.1630 | 9.5575 | 15.1043 | 0.0244 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,361.3989 | 2,361.3989 | 0.7177 | 0.0000 | 2,379.3421 |
| **Maximum** | **237.1630** | **46.4588** | **49.5629** | **0.1517** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **15,251.5674** | **15,251.5674** | **1.9503** | **0.0000** | **15,278.5288** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| **Total** | **0.1916** | **4.1394** | **1.5644** | **0.0136** | **0.4346** | **0.0139** | **0.4485** | **0.1176** | **0.0133** | **0.1309** | | **1,463.0568** | **1,463.0568** | **0.0927** | | **1,465.3750** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| **Total** | **0.1916** | **4.1394** | **1.5644** | **0.0136** | **0.4346** | **0.0139** | **0.4485** | **0.1176** | **0.0133** | **0.1309** | | **1,463.0568** | **1,463.0568** | **0.0927** | | **1,465.3750** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0772 | 0.0530 | 0.7250 | 2.0600e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 204.9786 | 204.9786 | 6.0400e-003 | | 205.1296 |
| **Total** | **0.0772** | **0.0530** | **0.7250** | **2.0600e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **204.9786** | **204.9786** | **6.0400e-003** | | **205.1296** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0772 | 0.0530 | 0.7250 | 2.0600e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 204.9786 | 204.9786 | 6.0400e-003 | | 205.1296 |
| **Total** | **0.0772** | **0.0530** | **0.7250** | **2.0600e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **204.9786** | **204.9786** | **6.0400e-003** | | **205.1296** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0857 | 0.0589 | 0.8056 | 2.2900e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 227.7540 | 227.7540 | 6.7100e-003 | | 227.9217 |
| **Total** | **0.0857** | **0.0589** | **0.8056** | **2.2900e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **227.7540** | **227.7540** | **6.7100e-003** | | **227.9217** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0857 | 0.0589 | 0.8056 | 2.2900e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 227.7540 | 227.7540 | 6.7100e-003 | | 227.9217 |
| **Total** | **0.0857** | **0.0589** | **0.8056** | **2.2900e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **227.7540** | **227.7540** | **6.7100e-003** | | **227.9217** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0803 | 0.0532 | 0.7432 | 2.2100e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 219.7425 | 219.7425 | 6.0600e-003 | | 219.8941 |
| **Total** | **0.0803** | **0.0532** | **0.7432** | **2.2100e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **219.7425** | **219.7425** | **6.0600e-003** | | **219.8941** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | 0.0000 | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0803 | 0.0532 | 0.7432 | 2.2100e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 219.7425 | 219.7425 | 6.0600e-003 | | 219.8941 |
| **Total** | **0.0803** | **0.0532** | **0.7432** | **2.2100e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **219.7425** | **219.7425** | **6.0600e-003** | | **219.8941** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 3.2162 | 2.1318 | 29.7654 | 0.0883 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,800.6857 | 8,800.6857 | 0.2429 | | 8,806.7582 |
| **Total** | **3.6242** | **15.3350** | **33.1995** | **0.1247** | **9.8688** | **0.0949** | **9.9637** | **2.6381** | **0.0883** | **2.7263** | | **12,697.2339** | **12,697.2339** | **0.4665** | | **12,708.8966** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 3.2162 | 2.1318 | 29.7654 | 0.0883 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,800.6857 | 8,800.6857 | 0.2429 | | 8,806.7582 |
| **Total** | **3.6242** | **15.3350** | **33.1995** | **0.1247** | **9.8688** | **0.0949** | **9.9637** | **2.6381** | **0.0883** | **2.7263** | | **12,697.2339** | **12,697.2339** | **0.4665** | | **12,708.8966** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 3.0203 | 1.9287 | 27.4113 | 0.0851 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 8,478.4408 | 8,478.4408 | 0.2190 | | 8,483.9160 |
| **Total** | **3.3229** | **11.9468** | **30.5127** | **0.1203** | **9.8688** | **0.0797** | **9.9485** | **2.6381** | **0.0738** | **2.7118** | | **12,252.3170** | **12,252.3170** | **0.4172** | | **12,262.7460** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 3.0203 | 1.9287 | 27.4113 | 0.0851 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 8,478.4408 | 8,478.4408 | 0.2190 | | 8,483.9160 |
| **Total** | **3.3229** | **11.9468** | **30.5127** | **0.1203** | **9.8688** | **0.0797** | **9.9485** | **2.6381** | **0.0738** | **2.7118** | | **12,252.3170** | **12,252.3170** | **0.4172** | | **12,262.7460** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0566 | 0.0361 | 0.5133 | 1.5900e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 158.7723 | 158.7723 | 4.1000e-003 | | 158.8748 |
| **Total** | **0.0566** | **0.0361** | **0.5133** | **1.5900e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **158.7723** | **158.7723** | **4.1000e-003** | | **158.8748** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0566 | 0.0361 | 0.5133 | 1.5900e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 158.7723 | 158.7723 | 4.1000e-003 | | 158.8748 |
| **Total** | **0.0566** | **0.0361** | **0.5133** | **1.5900e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **158.7723** | **158.7723** | **4.1000e-003** | | **158.8748** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0535 | 0.0329 | 0.4785 | 1.5400e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 153.8517 | 153.8517 | 3.7600e-003 | | 153.9458 |
| **Total** | **0.0535** | **0.0329** | **0.4785** | **1.5400e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **153.8517** | **153.8517** | **3.7600e-003** | | **153.9458** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0535 | 0.0329 | 0.4785 | 1.5400e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 153.8517 | 153.8517 | 3.7600e-003 | | 153.9458 |
| **Total** | **0.0535** | **0.0329** | **0.4785** | **1.5400e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **153.8517** | **153.8517** | **3.7600e-003** | | **153.9458** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,641.0852 | 1,641.0852 | 0.0401 | | 1,642.0886 |
| **Total** | **0.5707** | **0.3513** | **5.1044** | **0.0165** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,641.0852** | **1,641.0852** | **0.0401** | | **1,642.0886** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,641.0852 | 1,641.0852 | 0.0401 | | 1,642.0886 |
| **Total** | **0.5707** | **0.3513** | **5.1044** | **0.0165** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,641.0852** | **1,641.0852** | **0.0401** | | **1,642.0886** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| Unmitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2865 | 46.4651 | 31.6150 | 0.0642 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,221.4937 | 6,221.4937 | 1.9491 | 0.0000 | 6,270.2214 |
| 2022 | 5.7218 | 38.9024 | 47.3319 | 0.1455 | 9.8688 | 1.6366 | 10.7736 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 14,630.3099 | 14,630.3099 | 1.9499 | 0.0000 | 14,657.2663 |
| 2023 | 5.2705 | 26.4914 | 44.5936 | 0.1413 | 9.8688 | 0.7800 | 10.6488 | 2.6381 | 0.7328 | 3.3708 | 0.0000 | 14,210.3424 | 14,210.3424 | 1.0230 | 0.0000 | 14,235.9160 |
| 2024 | 237.2328 | 9.5610 | 15.0611 | 0.0243 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,352.4178 | 2,352.4178 | 0.7175 | 0.0000 | 2,370.3550 |
| **Maximum** | **237.2328** | **46.4651** | **47.3319** | **0.1455** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **14,630.3099** | **14,630.3099** | **1.9499** | **0.0000** | **14,657.2663** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2865 | 46.4651 | 31.6150 | 0.0642 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,221.4937 | 6,221.4937 | 1.9491 | 0.0000 | 6,270.2214 |
| 2022 | 5.7218 | 38.9024 | 47.3319 | 0.1455 | 9.8688 | 1.6366 | 10.7736 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 14,630.3099 | 14,630.3099 | 1.9499 | 0.0000 | 14,657.2663 |
| 2023 | 5.2705 | 26.4914 | 44.5936 | 0.1413 | 9.8688 | 0.7800 | 10.6488 | 2.6381 | 0.7328 | 3.3708 | 0.0000 | 14,210.3424 | 14,210.3424 | 1.0230 | 0.0000 | 14,235.9160 |
| 2024 | 237.2328 | 9.5610 | 15.0611 | 0.0243 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,352.4178 | 2,352.4178 | 0.7175 | 0.0000 | 2,370.3550 |
| **Maximum** | **237.2328** | **46.4651** | **47.3319** | **0.1455** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **14,630.3099** | **14,630.3099** | **1.9499** | **0.0000** | **14,657.2663** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| **Total** | **0.2019** | **4.1943** | **1.5706** | **0.0133** | **0.4346** | **0.0141** | **0.4487** | **0.1176** | **0.0135** | **0.1311** | | **1,430.6932** | **1,430.6932** | **0.0955** | | **1,433.0812** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| **Total** | **0.2019** | **4.1943** | **1.5706** | **0.0133** | **0.4346** | **0.0141** | **0.4487** | **0.1176** | **0.0135** | **0.1311** | | **1,430.6932** | **1,430.6932** | **0.0955** | | **1,433.0812** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0858 | 0.0587 | 0.6629 | 1.9400e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 193.0052 | 193.0052 | 5.6800e-003 | | 193.1472 |
| **Total** | **0.0858** | **0.0587** | **0.6629** | **1.9400e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **193.0052** | **193.0052** | **5.6800e-003** | | **193.1472** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0858 | 0.0587 | 0.6629 | 1.9400e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 193.0052 | 193.0052 | 5.6800e-003 | | 193.1472 |
| **Total** | **0.0858** | **0.0587** | **0.6629** | **1.9400e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **193.0052** | **193.0052** | **5.6800e-003** | | **193.1472** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0954 | 0.0652 | 0.7365 | 2.1500e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 214.4502 | 214.4502 | 6.3100e-003 | | 214.6080 |
| **Total** | **0.0954** | **0.0652** | **0.7365** | **2.1500e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **214.4502** | **214.4502** | **6.3100e-003** | | **214.6080** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0954 | 0.0652 | 0.7365 | 2.1500e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 214.4502 | 214.4502 | 6.3100e-003 | | 214.6080 |
| **Total** | **0.0954** | **0.0652** | **0.7365** | **2.1500e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **214.4502** | **214.4502** | **6.3100e-003** | | **214.6080** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0896 | 0.0589 | 0.6784 | 2.0800e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 206.9139 | 206.9139 | 5.7000e-003 | | 207.0563 |
| **Total** | **0.0896** | **0.0589** | **0.6784** | **2.0800e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **206.9139** | **206.9139** | **5.7000e-003** | | **207.0563** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | 0.0000 | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0896 | 0.0589 | 0.6784 | 2.0800e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 206.9139 | 206.9139 | 5.7000e-003 | | 207.0563 |
| **Total** | **0.0896** | **0.0589** | **0.6784** | **2.0800e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **206.9139** | **206.9139** | **5.7000e-003** | | **207.0563** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 3.5872 | 2.3593 | 27.1680 | 0.0832 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,286.9013 | 8,286.9013 | 0.2282 | | 8,292.6058 |
| **Total** | **4.0156** | **15.5266** | **30.9685** | **0.1186** | **9.8688** | **0.0957** | **9.9645** | **2.6381** | **0.0891** | **2.7271** | | **12,075.9763** | **12,075.9763** | **0.4663** | | **12,087.6341** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 3.5872 | 2.3593 | 27.1680 | 0.0832 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,286.9013 | 8,286.9013 | 0.2282 | | 8,292.6058 |
| **Total** | **4.0156** | **15.5266** | **30.9685** | **0.1186** | **9.8688** | **0.0957** | **9.9645** | **2.6381** | **0.0891** | **2.7271** | | **12,075.9763** | **12,075.9763** | **0.4663** | | **12,087.6341** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 3.3795 | 2.1338 | 24.9725 | 0.0801 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 7,983.7318 | 7,983.7318 | 0.2055 | | 7,988.8683 |
| **Total** | **3.6978** | **12.1065** | **28.3496** | **0.1144** | **9.8688** | **0.0803** | **9.9491** | **2.6381** | **0.0743** | **2.7124** | | **11,655.1325** | **11,655.1325** | **0.4151** | | **11,665.5099** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 3.3795 | 2.1338 | 24.9725 | 0.0801 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 7,983.7318 | 7,983.7318 | 0.2055 | | 7,988.8683 |
| **Total** | **3.6978** | **12.1065** | **28.3496** | **0.1144** | **9.8688** | **0.0803** | **9.9491** | **2.6381** | **0.0743** | **2.7124** | | **11,655.1325** | **11,655.1325** | **0.4151** | | **11,665.5099** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0633 | 0.0400 | 0.4677 | 1.5000e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 149.5081 | 149.5081 | 3.8500e-003 | | 149.6043 |
| **Total** | **0.0633** | **0.0400** | **0.4677** | **1.5000e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **149.5081** | **149.5081** | **3.8500e-003** | | **149.6043** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0633 | 0.0400 | 0.4677 | 1.5000e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 149.5081 | 149.5081 | 3.8500e-003 | | 149.6043 |
| **Total** | **0.0633** | **0.0400** | **0.4677** | **1.5000e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **149.5081** | **149.5081** | **3.8500e-003** | | **149.6043** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0601 | 0.0364 | 0.4354 | 1.4500e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 144.8706 | 144.8706 | 3.5300e-003 | | 144.9587 |
| **Total** | **0.0601** | **0.0364** | **0.4354** | **1.4500e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **144.8706** | **144.8706** | **3.5300e-003** | | **144.9587** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0601 | 0.0364 | 0.4354 | 1.4500e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 144.8706 | 144.8706 | 3.5300e-003 | | 144.9587 |
| **Total** | **0.0601** | **0.0364** | **0.4354** | **1.4500e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **144.8706** | **144.8706** | **3.5300e-003** | | **144.9587** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,545.2860 | 1,545.2860 | 0.0376 | | 1,546.2262 |
| **Total** | **0.6406** | **0.3886** | **4.6439** | **0.0155** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,545.2860** | **1,545.2860** | **0.0376** | | **1,546.2262** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,545.2860 | 1,545.2860 | 0.0376 | | 1,546.2262 |
| **Total** | **0.6406** | **0.3886** | **4.6439** | **0.0155** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,545.2860** | **1,545.2860** | **0.0376** | | **1,546.2262** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| Unmitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1704 | 1.8234 | 1.1577 | 2.3800e-003 | 0.4141 | 0.0817 | 0.4958 | 0.1788 | 0.0754 | 0.2542 | 0.0000 | 210.7654 | 210.7654 | 0.0600 | 0.0000 | 212.2661 |
| 2022 | 0.5865 | 4.0240 | 5.1546 | 0.0155 | 0.9509 | 0.1175 | 1.0683 | 0.2518 | 0.1103 | 0.3621 | 0.0000 | 1,418.6554 | 1,418.6554 | 0.1215 | 0.0000 | 1,421.6925 |
| 2023 | 0.5190 | 3.2850 | 4.7678 | 0.0147 | 0.8497 | 0.0971 | 0.9468 | 0.2283 | 0.0912 | 0.3195 | 0.0000 | 1,342.4412 | 1,342.4412 | 0.1115 | 0.0000 | 1,345.2291 |
| 2024 | 4.1592 | 0.1313 | 0.2557 | 5.0000e-004 | 0.0221 | 6.3900e-003 | 0.0285 | 5.8700e-003 | 5.9700e-003 | 0.0118 | 0.0000 | 44.6355 | 44.6355 | 7.8300e-003 | 0.0000 | 44.8311 |
| **Maximum** | **4.1592** | **4.0240** | **5.1546** | **0.0155** | **0.9509** | **0.1175** | **1.0683** | **0.2518** | **0.1103** | **0.3621** | **0.0000** | **1,418.6554** | **1,418.6554** | **0.1215** | **0.0000** | **1,421.6925** |

## 2.1 Overall Construction

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1704 | 1.8234 | 1.1577 | 2.3800e-003 | 0.4141 | 0.0817 | 0.4958 | 0.1788 | 0.0754 | 0.2542 | 0.0000 | 210.7651 | 210.7651 | 0.0600 | 0.0000 | 212.2658 |
| 2022 | 0.5865 | 4.0240 | 5.1546 | 0.0155 | 0.9509 | 0.1175 | 1.0683 | 0.2518 | 0.1103 | 0.3621 | 0.0000 | 1,418.6550 | 1,418.6550 | 0.1215 | 0.0000 | 1,421.6921 |
| 2023 | 0.5190 | 3.2850 | 4.7678 | 0.0147 | 0.8497 | 0.0971 | 0.9468 | 0.2283 | 0.0912 | 0.3195 | 0.0000 | 1,342.4409 | 1,342.4409 | 0.1115 | 0.0000 | 1,345.2287 |
| 2024 | 4.1592 | 0.1313 | 0.2557 | 5.0000e-004 | 0.0221 | 6.3900e-003 | 0.0285 | 5.8700e-003 | 5.9700e-003 | 0.0118 | 0.0000 | 44.6354 | 44.6354 | 7.8300e-003 | 0.0000 | 44.8311 |
| **Maximum** | **4.1592** | **4.0240** | **5.1546** | **0.0155** | **0.9509** | **0.1175** | **1.0683** | **0.2518** | **0.1103** | **0.3621** | **0.0000** | **1,418.6550** | **1,418.6550** | **0.1215** | **0.0000** | **1,421.6921** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| **1** | **9-1-2021** | **11-30-2021** | 1.4091 | 1.4091 |
| **2** | **12-1-2021** | **2-28-2022** | 1.3329 | 1.3329 |
| **3** | **3-1-2022** | **5-31-2022** | 1.1499 | 1.1499 |
| **4** | **6-1-2022** | **8-31-2022** | 1.1457 | 1.1457 |
| **5** | **9-1-2022** | **11-30-2022** | 1.1415 | 1.1415 |
| **6** | **12-1-2022** | **2-28-2023** | 1.0278 | 1.0278 |
| **7** | **3-1-2023** | **5-31-2023** | 0.9868 | 0.9868 |
| **8** | **6-1-2023** | **8-31-2023** | 0.9831 | 0.9831 |

| | | | | |
|---|---|---|---|---|
| **9** | **9-1-2023** | **11-30-2023** | 0.9798 | 0.9798 |
| **10** | **12-1-2023** | **2-29-2024** | 2.8757 | 2.8757 |
| **11** | **3-1-2024** | **5-31-2024** | 1.6188 | 1.6188 |
| | | **Highest** | 2.8757 | 2.8757 |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

## 2.2 Overall Operational

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0012 | 51.0012 | 0.0144 | 0.0000 | 51.3601 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0012** | **51.0012** | **0.0144** | **0.0000** | **51.3601** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.2000e-004 | 5.3000e-004 | 6.0900e-003 | 2.0000e-005 | 1.6800e-003 | 1.0000e-005 | 1.6900e-003 | 4.5000e-004 | 1.0000e-005 | 4.6000e-004 | 0.0000 | 1.5281 | 1.5281 | 5.0000e-005 | 0.0000 | 1.5293 |
| **Total** | **2.6500e-003** | **0.0639** | **0.0209** | **2.0000e-004** | **5.6200e-003** | **2.0000e-004** | **5.8200e-003** | **1.5300e-003** | **1.9000e-004** | **1.7200e-003** | **0.0000** | **18.9847** | **18.9847** | **1.2600e-003** | **0.0000** | **19.0161** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0011 | 51.0011 | 0.0144 | 0.0000 | 51.3600 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0011** | **51.0011** | **0.0144** | **0.0000** | **51.3600** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.2000e-004 | 5.3000e-004 | 6.0900e-003 | 2.0000e-005 | 1.6800e-003 | 1.0000e-005 | 1.6900e-003 | 4.5000e-004 | 1.0000e-005 | 4.6000e-004 | 0.0000 | 1.5281 | 1.5281 | 5.0000e-005 | 0.0000 | 1.5293 |
| **Total** | **2.6500e-003** | **0.0639** | **0.0209** | **2.0000e-004** | **5.6200e-003** | **2.0000e-004** | **5.8200e-003** | **1.5300e-003** | **1.9000e-004** | **1.7200e-003** | **0.0000** | **18.9847** | **18.9847** | **1.2600e-003** | **0.0000** | **19.0161** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7061 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7061** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.8000e-004 | 4.3000e-004 | 4.8700e-003 | 1.0000e-005 | 1.3400e-003 | 1.0000e-005 | 1.3500e-003 | 3.6000e-004 | 1.0000e-005 | 3.7000e-004 | 0.0000 | 1.2225 | 1.2225 | 4.0000e-005 | 0.0000 | 1.2234 |
| **Total** | **5.8000e-004** | **4.3000e-004** | **4.8700e-003** | **1.0000e-005** | **1.3400e-003** | **1.0000e-005** | **1.3500e-003** | **3.6000e-004** | **1.0000e-005** | **3.7000e-004** | **0.0000** | **1.2225** | **1.2225** | **4.0000e-005** | **0.0000** | **1.2234** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7060 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7060** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.8000e-004 | 4.3000e-004 | 4.8700e-003 | 1.0000e-005 | 1.3400e-003 | 1.0000e-005 | 1.3500e-003 | 3.6000e-004 | 1.0000e-005 | 3.7000e-004 | 0.0000 | 1.2225 | 1.2225 | 4.0000e-005 | 0.0000 | 1.2234 |
| **Total** | **5.8000e-004** | **4.3000e-004** | **4.8700e-003** | **1.0000e-005** | **1.3400e-003** | **1.0000e-005** | **1.3500e-003** | **3.6000e-004** | **1.0000e-005** | **3.7000e-004** | **0.0000** | **1.2225** | **1.2225** | **4.0000e-005** | **0.0000** | **1.2234** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5405 | 103.5405 | 0.0335 | 0.0000 | 104.3776 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5405** | **103.5405** | **0.0335** | **0.0000** | **104.3776** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.2200e-003 | 9.0000e-004 | 0.0103 | 3.0000e-005 | 2.8300e-003 | 2.0000e-005 | 2.8600e-003 | 7.5000e-004 | 2.0000e-005 | 7.8000e-004 | 0.0000 | 2.5808 | 2.5808 | 8.0000e-005 | 0.0000 | 2.5828 |
| **Total** | **1.2200e-003** | **9.0000e-004** | **0.0103** | **3.0000e-005** | **2.8300e-003** | **2.0000e-005** | **2.8600e-003** | **7.5000e-004** | **2.0000e-005** | **7.8000e-004** | **0.0000** | **2.5808** | **2.5808** | **8.0000e-005** | **0.0000** | **2.5828** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5403 | 103.5403 | 0.0335 | 0.0000 | 104.3775 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5403** | **103.5403** | **0.0335** | **0.0000** | **104.3775** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.2200e-003 | 9.0000e-004 | 0.0103 | 3.0000e-005 | 2.8300e-003 | 2.0000e-005 | 2.8600e-003 | 7.5000e-004 | 2.0000e-005 | 7.8000e-004 | 0.0000 | 2.5808 | 2.5808 | 8.0000e-005 | 0.0000 | 2.5828 |
| **Total** | **1.2200e-003** | **9.0000e-004** | **0.0103** | **3.0000e-005** | **2.8300e-003** | **2.0000e-005** | **2.8600e-003** | **7.5000e-004** | **2.0000e-005** | **7.8000e-004** | **0.0000** | **2.5808** | **2.5808** | **8.0000e-005** | **0.0000** | **2.5828** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.1000e-004 | 1.5000e-004 | 1.7400e-003 | 1.0000e-005 | 5.2000e-004 | 0.0000 | 5.3000e-004 | 1.4000e-004 | 0.0000 | 1.4000e-004 | 0.0000 | 0.4587 | 0.4587 | 1.0000e-005 | 0.0000 | 0.4590 |
| **Total** | **2.1000e-004** | **1.5000e-004** | **1.7400e-003** | **1.0000e-005** | **5.2000e-004** | **0.0000** | **5.3000e-004** | **1.4000e-004** | **0.0000** | **1.4000e-004** | **0.0000** | **0.4587** | **0.4587** | **1.0000e-005** | **0.0000** | **0.4590** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.1000e-004 | 1.5000e-004 | 1.7400e-003 | 1.0000e-005 | 5.2000e-004 | 0.0000 | 5.3000e-004 | 1.4000e-004 | 0.0000 | 1.4000e-004 | 0.0000 | 0.4587 | 0.4587 | 1.0000e-005 | 0.0000 | 0.4590 |
| **Total** | **2.1000e-004** | **1.5000e-004** | **1.7400e-003** | **1.0000e-005** | **5.2000e-004** | **0.0000** | **5.3000e-004** | **1.4000e-004** | **0.0000** | **1.4000e-004** | **0.0000** | **0.4587** | **0.4587** | **1.0000e-005** | **0.0000** | **0.4590** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1324 | 293.1324 | 0.0702 | 0.0000 | 294.8881 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1324** | **293.1324** | **0.0702** | **0.0000** | **294.8881** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.3051 | 0.2164 | 2.5233 | 7.3500e-003 | 0.7557 | 6.2300e-003 | 0.7619 | 0.2007 | 5.7400e-003 | 0.2065 | 0.0000 | 663.9936 | 663.9936 | 0.0187 | 0.0000 | 664.4604 |
| **Total** | **0.3578** | **1.9125** | **2.9812** | **0.0119** | **0.8696** | **9.4100e-003** | **0.8790** | **0.2336** | **8.7800e-003** | **0.2424** | **0.0000** | **1,105.9771** | **1,105.9771** | **0.0451** | **0.0000** | **1,107.1039** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1321 | 293.1321 | 0.0702 | 0.0000 | 294.8877 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1321** | **293.1321** | **0.0702** | **0.0000** | **294.8877** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.3051 | 0.2164 | 2.5233 | 7.3500e-003 | 0.7557 | 6.2300e-003 | 0.7619 | 0.2007 | 5.7400e-003 | 0.2065 | 0.0000 | 663.9936 | 663.9936 | 0.0187 | 0.0000 | 664.4604 |
| **Total** | **0.3578** | **1.9125** | **2.9812** | **0.0119** | **0.8696** | **9.4100e-003** | **0.8790** | **0.2336** | **8.7800e-003** | **0.2424** | **0.0000** | **1,105.9771** | **1,105.9771** | **0.0451** | **0.0000** | **1,107.1039** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2789 | 286.2789 | 0.0681 | 0.0000 | 287.9814 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2789** | **286.2789** | **0.0681** | **0.0000** | **287.9814** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.2795 | 0.1910 | 2.2635 | 6.9100e-003 | 0.7377 | 5.9100e-003 | 0.7436 | 0.1960 | 5.4500e-003 | 0.2014 | 0.0000 | 624.5363 | 624.5363 | 0.0164 | 0.0000 | 624.9466 |
| **Total** | **0.3177** | **1.4420** | **2.6646** | **0.0112** | **0.8490** | **7.3700e-003** | **0.8564** | **0.2281** | **6.8500e-003** | **0.2349** | **0.0000** | **1,042.5294** | **1,042.5294** | **0.0392** | **0.0000** | **1,043.5090** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2785 | 286.2785 | 0.0681 | 0.0000 | 287.9811 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2785** | **286.2785** | **0.0681** | **0.0000** | **287.9811** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.2795 | 0.1910 | 2.2635 | 6.9100e-003 | 0.7377 | 5.9100e-003 | 0.7436 | 0.1960 | 5.4500e-003 | 0.2014 | 0.0000 | 624.5363 | 624.5363 | 0.0164 | 0.0000 | 624.9466 |
| **Total** | **0.3177** | **1.4420** | **2.6646** | **0.0112** | **0.8490** | **7.3700e-003** | **0.8564** | **0.2281** | **6.8500e-003** | **0.2349** | **0.0000** | **1,042.5294** | **1,042.5294** | **0.0392** | **0.0000** | **1,043.5090** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.8000e-004 | 1.9000e-004 | 2.2300e-003 | 1.0000e-005 | 7.3000e-004 | 1.0000e-005 | 7.3000e-004 | 1.9000e-004 | 1.0000e-005 | 2.0000e-004 | 0.0000 | 0.6156 | 0.6156 | 2.0000e-005 | 0.0000 | 0.6160 |
| **Total** | **2.8000e-004** | **1.9000e-004** | **2.2300e-003** | **1.0000e-005** | **7.3000e-004** | **1.0000e-005** | **7.3000e-004** | **1.9000e-004** | **1.0000e-005** | **2.0000e-004** | **0.0000** | **0.6156** | **0.6156** | **2.0000e-005** | **0.0000** | **0.6160** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

### 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.8000e-004 | 1.9000e-004 | 2.2300e-003 | 1.0000e-005 | 7.3000e-004 | 1.0000e-005 | 7.3000e-004 | 1.9000e-004 | 1.0000e-005 | 2.0000e-004 | 0.0000 | 0.6156 | 0.6156 | 2.0000e-005 | 0.0000 | 0.6160 |
| **Total** | **2.8000e-004** | **1.9000e-004** | **2.2300e-003** | **1.0000e-005** | **7.3000e-004** | **1.0000e-005** | **7.3000e-004** | **1.9000e-004** | **1.0000e-005** | **2.0000e-004** | **0.0000** | **0.6156** | **0.6156** | **2.0000e-005** | **0.0000** | **0.6160** |

### 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.4000e-004 | 2.9000e-004 | 3.5100e-003 | 1.0000e-005 | 1.2300e-003 | 1.0000e-005 | 1.2400e-003 | 3.3000e-004 | 1.0000e-005 | 3.4000e-004 | 0.0000 | 1.0094 | 1.0094 | 3.0000e-005 | 0.0000 | 1.0100 |
| **Total** | **4.4000e-004** | **2.9000e-004** | **3.5100e-003** | **1.0000e-005** | **1.2300e-003** | **1.0000e-005** | **1.2400e-003** | **3.3000e-004** | **1.0000e-005** | **3.4000e-004** | **0.0000** | **1.0094** | **1.0094** | **3.0000e-005** | **0.0000** | **1.0100** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.4000e-004 | 2.9000e-004 | 3.5100e-003 | 1.0000e-005 | 1.2300e-003 | 1.0000e-005 | 1.2400e-003 | 3.3000e-004 | 1.0000e-005 | 3.4000e-004 | 0.0000 | 1.0094 | 1.0094 | 3.0000e-005 | 0.0000 | 1.0100 |
| **Total** | **4.4000e-004** | **2.9000e-004** | **3.5100e-003** | **1.0000e-005** | **1.2300e-003** | **1.0000e-005** | **1.2400e-003** | **3.3000e-004** | **1.0000e-005** | **3.4000e-004** | **0.0000** | **1.0094** | **1.0094** | **3.0000e-005** | **0.0000** | **1.0100** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.4800e-003 | 4.9300e-003 | 0.0596 | 1.9000e-004 | 0.0209 | 1.6000e-004 | 0.0211 | 5.5500e-003 | 1.5000e-004 | 5.7000e-003 | 0.0000 | 17.1287 | 17.1287 | 4.3000e-004 | 0.0000 | 17.1394 |
| **Total** | **7.4800e-003** | **4.9300e-003** | **0.0596** | **1.9000e-004** | **0.0209** | **1.6000e-004** | **0.0211** | **5.5500e-003** | **1.5000e-004** | **5.7000e-003** | **0.0000** | **17.1287** | **17.1287** | **4.3000e-004** | **0.0000** | **17.1394** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.4800e-003 | 4.9300e-003 | 0.0596 | 1.9000e-004 | 0.0209 | 1.6000e-004 | 0.0211 | 5.5500e-003 | 1.5000e-004 | 5.7000e-003 | 0.0000 | 17.1287 | 17.1287 | 4.3000e-004 | 0.0000 | 17.1394 |
| **Total** | **7.4800e-003** | **4.9300e-003** | **0.0596** | **1.9000e-004** | **0.0209** | **1.6000e-004** | **0.0211** | **5.5500e-003** | **1.5000e-004** | **5.7000e-003** | **0.0000** | **17.1287** | **17.1287** | **4.3000e-004** | **0.0000** | **17.1394** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| NaturalGas Mitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |
| NaturalGas Unmitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

### 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| Unmitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Unmitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

### 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2561 | 46.4415 | 31.4494 | 0.0636 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,163.4166 | 6,163.4166 | 1.9475 | 0.0000 | 6,212.1039 |
| 2022 | 4.5441 | 38.8811 | 40.8776 | 0.1240 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,493.4403 | 12,493.4403 | 1.9485 | 0.0000 | 12,518.5707 |
| 2023 | 4.1534 | 25.7658 | 38.7457 | 0.1206 | 7.0088 | 0.7592 | 7.7679 | 1.8799 | 0.7136 | 2.5935 | 0.0000 | 12,150.4890 | 12,150.4890 | 0.9589 | 0.0000 | 12,174.4615 |
| 2024 | 237.0219 | 9.5478 | 14.9642 | 0.0239 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,313.1808 | 2,313.1808 | 0.7166 | 0.0000 | 2,331.0956 |
| **Maximum** | **237.0219** | **46.4415** | **40.8776** | **0.1240** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,493.4403** | **12,493.4403** | **1.9485** | **0.0000** | **12,518.5707** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2561 | 46.4415 | 31.4494 | 0.0636 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,163.4166 | 6,163.4166 | 1.9475 | 0.0000 | 6,212.1039 |
| 2022 | 4.5441 | 38.8811 | 40.8776 | 0.1240 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,493.4403 | 12,493.4403 | 1.9485 | 0.0000 | 12,518.5707 |
| 2023 | 4.1534 | 25.7658 | 38.7457 | 0.1206 | 7.0088 | 0.7592 | 7.7679 | 1.8799 | 0.7136 | 2.5935 | 0.0000 | 12,150.4890 | 12,150.4890 | 0.9589 | 0.0000 | 12,174.4615 |
| 2024 | 237.0219 | 9.5478 | 14.9642 | 0.0239 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,313.1808 | 2,313.1808 | 0.7166 | 0.0000 | 2,331.0955 |
| **Maximum** | **237.0219** | **46.4415** | **40.8776** | **0.1240** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,493.4403** | **12,493.4403** | **1.9485** | **0.0000** | **12,518.5707** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0487 | 0.0313 | 0.4282 | 1.1800e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 117.2799 | 117.2799 | 3.5200e-003 | | 117.3678 |
| **Total** | **0.1760** | **4.1265** | **1.3884** | **0.0131** | **0.3810** | **0.0135** | **0.3946** | **0.1034** | **0.0129** | **0.1163** | | **1,409.5212** | **1,409.5212** | **0.0912** | | **1,411.8015** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0487 | 0.0313 | 0.4282 | 1.1800e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 117.2799 | 117.2799 | 3.5200e-003 | | 117.3678 |
| **Total** | **0.1760** | **4.1265** | **1.3884** | **0.0131** | **0.3810** | **0.0135** | **0.3946** | **0.1034** | **0.0129** | **0.1163** | | **1,409.5212** | **1,409.5212** | **0.0912** | | **1,411.8015** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0584 | 0.0375 | 0.5139 | 1.4100e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 140.7359 | 140.7359 | 4.2200e-003 | | 140.8414 |
| **Total** | **0.0584** | **0.0375** | **0.5139** | **1.4100e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **140.7359** | **140.7359** | **4.2200e-003** | | **140.8414** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0584 | 0.0375 | 0.5139 | 1.4100e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 140.7359 | 140.7359 | 4.2200e-003 | | 140.8414 |
| **Total** | **0.0584** | **0.0375** | **0.5139** | **1.4100e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **140.7359** | **140.7359** | **4.2200e-003** | | **140.8414** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0649 | 0.0417 | 0.5710 | 1.5700e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 156.3732 | 156.3732 | 4.6900e-003 | | 156.4904 |
| **Total** | **0.0649** | **0.0417** | **0.5710** | **1.5700e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **156.3732** | **156.3732** | **4.6900e-003** | | **156.4904** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0649 | 0.0417 | 0.5710 | 1.5700e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 156.3732 | 156.3732 | 4.6900e-003 | | 156.4904 |
| **Total** | **0.0649** | **0.0417** | **0.5710** | **1.5700e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **156.3732** | **156.3732** | **4.6900e-003** | | **156.4904** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0607 | 0.0376 | 0.5263 | 1.5100e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 150.8754 | 150.8754 | 4.2400e-003 | | 150.9813 |
| **Total** | **0.0607** | **0.0376** | **0.5263** | **1.5100e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **150.8754** | **150.8754** | **4.2400e-003** | | **150.9813** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | 0.0000 | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0607 | 0.0376 | 0.5263 | 1.5100e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 150.8754 | 150.8754 | 4.2400e-003 | | 150.9813 |
| **Total** | **0.0607** | **0.0376** | **0.5263** | **1.5100e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **150.8754** | **150.8754** | **4.2400e-003** | | **150.9813** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 2.4299 | 1.5074 | 21.0801 | 0.0607 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 6,042.5585 | 6,042.5585 | 0.1697 | | 6,046.8000 |
| **Total** | **2.8378** | **14.7106** | **24.5142** | **0.0971** | **7.0087** | **0.0741** | **7.0828** | **1.8799** | **0.0691** | **1.9490** | | **9,939.1067** | **9,939.1067** | **0.3933** | | **9,948.9384** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 2.4299 | 1.5074 | 21.0801 | 0.0607 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 6,042.5585 | 6,042.5585 | 0.1697 | | 6,046.8000 |
| **Total** | **2.8378** | **14.7106** | **24.5142** | **0.0971** | **7.0087** | **0.0741** | **7.0828** | **1.8799** | **0.0691** | **1.9490** | | **9,939.1067** | **9,939.1067** | **0.3933** | | **9,948.9384** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 2.2780 | 1.3628 | 19.4002 | 0.0584 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,821.4028 | 5,821.4028 | 0.1529 | | 5,825.2254 |
| **Total** | **2.5807** | **11.3809** | **22.5017** | **0.0936** | **7.0088** | **0.0595** | **7.0682** | **1.8799** | **0.0552** | **1.9350** | | **9,595.2790** | **9,595.2790** | **0.3511** | | **9,604.0554** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 2.2780 | 1.3628 | 19.4002 | 0.0584 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,821.4028 | 5,821.4028 | 0.1529 | | 5,825.2254 |
| **Total** | **2.5807** | **11.3809** | **22.5017** | **0.0936** | **7.0088** | **0.0595** | **7.0682** | **1.8799** | **0.0552** | **1.9350** | | **9,595.2790** | **9,595.2790** | **0.3511** | | **9,604.0554** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0427 | 0.0255 | 0.3633 | 1.0900e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 109.0150 | 109.0150 | 2.8600e-003 | | 109.0866 |
| **Total** | **0.0427** | **0.0255** | **0.3633** | **1.0900e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **109.0150** | **109.0150** | **2.8600e-003** | | **109.0866** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0427 | 0.0255 | 0.3633 | 1.0900e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 109.0150 | 109.0150 | 2.8600e-003 | | 109.0866 |
| **Total** | **0.0427** | **0.0255** | **0.3633** | **1.0900e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **109.0150** | **109.0150** | **2.8600e-003** | | **109.0866** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0403 | 0.0233 | 0.3384 | 1.0600e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 105.6336 | 105.6336 | 2.6300e-003 | | 105.6992 |
| **Total** | **0.0403** | **0.0233** | **0.3384** | **1.0600e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **105.6336** | **105.6336** | **2.6300e-003** | | **105.6992** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0403 | 0.0233 | 0.3384 | 1.0600e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 105.6336 | 105.6336 | 2.6300e-003 | | 105.6992 |
| **Total** | **0.0403** | **0.0233** | **0.3384** | **1.0600e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **105.6336** | **105.6336** | **2.6300e-003** | | **105.6992** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,126.7583 | 1,126.7583 | 0.0280 | | 1,127.4583 |
| **Total** | **0.4296** | **0.2481** | **3.6098** | **0.0113** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,126.7583** | **1,126.7583** | **0.0280** | | **1,127.4583** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,126.7583 | 1,126.7583 | 0.0280 | | 1,127.4583 |
| **Total** | **0.4296** | **0.2481** | **3.6098** | **0.0113** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,126.7583** | **1,126.7583** | **0.0280** | | **1,127.4583** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| Unmitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2621 | 46.4460 | 31.4068 | 0.0635 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,154.3377 | 6,154.3377 | 1.9472 | 0.0000 | 6,203.0186 |
| 2022 | 4.7966 | 38.8851 | 39.6338 | 0.1195 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,035.3440 | 12,035.3440 | 1.9482 | 0.0000 | 12,060.6013 |
| 2023 | 4.3939 | 25.8648 | 37.5031 | 0.1162 | 7.0088 | 0.7598 | 7.7685 | 1.8799 | 0.7142 | 2.5940 | 0.0000 | 11,710.4080 | 11,710.4080 | 0.9617 | 0.0000 | 11,734.4497 |
| 2024 | 237.0656 | 9.5503 | 14.9372 | 0.0238 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,307.0517 | 2,307.0517 | 0.7164 | 0.0000 | 2,324.9627 |
| **Maximum** | **237.0656** | **46.4460** | **39.6338** | **0.1195** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,035.3440** | **12,035.3440** | **1.9482** | **0.0000** | **12,060.6013** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2621 | 46.4460 | 31.4068 | 0.0635 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,154.3377 | 6,154.3377 | 1.9472 | 0.0000 | 6,203.0186 |
| 2022 | 4.7966 | 38.8851 | 39.6338 | 0.1195 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,035.3440 | 12,035.3440 | 1.9482 | 0.0000 | 12,060.6013 |
| 2023 | 4.3939 | 25.8648 | 37.5031 | 0.1162 | 7.0088 | 0.7598 | 7.7685 | 1.8799 | 0.7142 | 2.5940 | 0.0000 | 11,710.4080 | 11,710.4080 | 0.9617 | 0.0000 | 11,734.4497 |
| 2024 | 237.0656 | 9.5503 | 14.9372 | 0.0238 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,307.0517 | 2,307.0517 | 0.7164 | 0.0000 | 2,324.9627 |
| **Maximum** | **237.0656** | **46.4460** | **39.6338** | **0.1195** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,035.3440** | **12,035.3440** | **1.9482** | **0.0000** | **12,060.6013** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0532 | 0.0346 | 0.3963 | 1.1100e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 110.4707 | 110.4707 | 3.3300e-003 | | 110.5539 |
| **Total** | **0.1835** | **4.1800** | **1.4144** | **0.0128** | **0.3810** | **0.0137** | **0.3948** | **0.1034** | **0.0131** | **0.1165** | | **1,380.3262** | **1,380.3262** | **0.0941** | | **1,382.6791** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0532 | 0.0346 | 0.3963 | 1.1100e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 110.4707 | 110.4707 | 3.3300e-003 | | 110.5539 |
| **Total** | **0.1835** | **4.1800** | **1.4144** | **0.0128** | **0.3810** | **0.0137** | **0.3948** | **0.1034** | **0.0131** | **0.1165** | | **1,380.3262** | **1,380.3262** | **0.0941** | | **1,382.6791** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0638 | 0.0415 | 0.4755 | 1.3300e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 132.5649 | 132.5649 | 3.9900e-003 | | 132.6646 |
| **Total** | **0.0638** | **0.0415** | **0.4755** | **1.3300e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **132.5649** | **132.5649** | **3.9900e-003** | | **132.6646** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0638 | 0.0415 | 0.4755 | 1.3300e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 132.5649 | 132.5649 | 3.9900e-003 | | 132.6646 |
| **Total** | **0.0638** | **0.0415** | **0.4755** | **1.3300e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **132.5649** | **132.5649** | **3.9900e-003** | | **132.6646** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0709 | 0.0462 | 0.5284 | 1.4800e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 147.2943 | 147.2943 | 4.4300e-003 | | 147.4051 |
| **Total** | **0.0709** | **0.0462** | **0.5284** | **1.4800e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **147.2943** | **147.2943** | **4.4300e-003** | | **147.4051** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0709 | 0.0462 | 0.5284 | 1.4800e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 147.2943 | 147.2943 | 4.4300e-003 | | 147.4051 |
| **Total** | **0.0709** | **0.0462** | **0.5284** | **1.4800e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **147.2943** | **147.2943** | **4.4300e-003** | | **147.4051** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0665 | 0.0416 | 0.4861 | 1.4300e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 142.1207 | 142.1207 | 4.0000e-003 | | 142.2207 |
| **Total** | **0.0665** | **0.0416** | **0.4861** | **1.4300e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **142.1207** | **142.1207** | **4.0000e-003** | | **142.2207** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | 0.0000 | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0665 | 0.0416 | 0.4861 | 1.4300e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 142.1207 | 142.1207 | 4.0000e-003 | | 142.2207 |
| **Total** | **0.0665** | **0.0416** | **0.4861** | **1.4300e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **142.1207** | **142.1207** | **4.0000e-003** | | **142.2207** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 2.6620 | 1.6677 | 19.4699 | 0.0571 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 5,691.9354 | 5,691.9354 | 0.1602 | | 5,695.9408 |
| **Total** | **3.0904** | **14.8350** | **23.2704** | **0.0926** | **7.0087** | **0.0749** | **7.0836** | **1.8799** | **0.0699** | **1.9498** | | **9,481.0104** | **9,481.0104** | **0.3984** | | **9,490.9691** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 2.6620 | 1.6677 | 19.4699 | 0.0571 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 5,691.9354 | 5,691.9354 | 0.1602 | | 5,695.9408 |
| **Total** | **3.0904** | **14.8350** | **23.2704** | **0.0926** | **7.0087** | **0.0749** | **7.0836** | **1.8799** | **0.0699** | **1.9498** | | **9,481.0104** | **9,481.0104** | **0.3984** | | **9,490.9691** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 2.5029 | 1.5073 | 17.8820 | 0.0550 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,483.7974 | 5,483.7974 | 0.1442 | | 5,487.4020 |
| **Total** | **2.8211** | **11.4799** | **21.2591** | **0.0893** | **7.0088** | **0.0601** | **7.0688** | **1.8799** | **0.0557** | **1.9356** | | **9,155.1981** | **9,155.1981** | **0.3538** | | **9,164.0437** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 2.5029 | 1.5073 | 17.8820 | 0.0550 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,483.7974 | 5,483.7974 | 0.1442 | | 5,487.4020 |
| **Total** | **2.8211** | **11.4799** | **21.2591** | **0.0893** | **7.0088** | **0.0601** | **7.0688** | **1.8799** | **0.0557** | **1.9356** | | **9,155.1981** | **9,155.1981** | **0.3538** | | **9,164.0437** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0469 | 0.0282 | 0.3349 | 1.0300e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 102.6928 | 102.6928 | 2.7000e-003 | | 102.7603 |
| **Total** | **0.0469** | **0.0282** | **0.3349** | **1.0300e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **102.6928** | **102.6928** | **2.7000e-003** | | **102.7603** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

### 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0469 | 0.0282 | 0.3349 | 1.0300e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 102.6928 | 102.6928 | 2.7000e-003 | | 102.7603 |
| **Total** | **0.0469** | **0.0282** | **0.3349** | **1.0300e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **102.6928** | **102.6928** | **2.7000e-003** | | **102.7603** |

### 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0444 | 0.0257 | 0.3114 | 1.0000e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 99.5045 | 99.5045 | 2.4700e-003 | | 99.5663 |
| **Total** | **0.0444** | **0.0257** | **0.3114** | **1.0000e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **99.5045** | **99.5045** | **2.4700e-003** | | **99.5663** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0444 | 0.0257 | 0.3114 | 1.0000e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 99.5045 | 99.5045 | 2.4700e-003 | | 99.5663 |
| **Total** | **0.0444** | **0.0257** | **0.3114** | **1.0000e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **99.5045** | **99.5045** | **2.4700e-003** | | **99.5663** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,061.3818 | 1,061.3818 | 0.0264 | | 1,062.0410 |
| **Total** | **0.4734** | **0.2743** | **3.3220** | **0.0107** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,061.3818** | **1,061.3818** | **0.0264** | | **1,062.0410** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,061.3818 | 1,061.3818 | 0.0264 | | 1,062.0410 |
| **Total** | **0.4734** | **0.2743** | **3.3220** | **0.0107** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,061.3818** | **1,061.3818** | **0.0264** | | **1,062.0410** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| Unmitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

| Local Hire Provision Net Change | |
|---|---|
| **Without Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,623 |
| Amortized (MT CO2e/year) | 120.77 |
| **With Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,024 |
| Amortized (MT CO2e/year) | 100.80 |
| ***% Decrease in Construction-related GHG Emissions*** | ***17%*** |

# EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

**SOIL WATER AIR PROTECTION ENTERPRISE**
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
**Email:** prosenfeld@swape.com

# *Paul Rosenfeld, Ph.D.*

**Chemical Fate and Transport & Air Dispersion Modeling**

*Principal Environmental Chemist*

**Risk Assessment & Remediation Specialist**

## Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

## Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

## Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex $H_2O$ Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

## Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

**Rosenfeld, P.E**. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

**Rosenfeld, P.E.,** J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

**Rosenfeld, P. E.,** M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

**Rosenfeld, P.E.,** and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

**Rosenfeld P. E.,** J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

**Rosenfeld, P.E.,** and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

**Rosenfeld, P.E.,** and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49( 9), 171-178.

**Rosenfeld, P. E**., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

**Rosenfeld, P.E.,** Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

**Rosenfeld, P.E**., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

**Rosenfeld, P.E.,** and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

**Rosenfeld, P.E.,** C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

**Rosenfeld, P.E.,** and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

**Rosenfeld, P.E.,** and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

**Rosenfeld, P. E.** (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

**Rosenfeld, P. E.** (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

**Rosenfeld, P. E. (**1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

**Rosenfeld, P. E.** (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

**Rosenfeld, P. E. (**1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

## Presentations:

**Rosenfeld, P.E.,** Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

**Rosenfeld, P.E**. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

**Rosenfeld, P.E.** (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

**Rosenfeld, P. E.** (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld P. E.** (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

**Rosenfeld P. E.** (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

**Paul Rosenfeld Ph.D**. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

**Paul Rosenfeld Ph.D**. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

**Paul Rosenfeld Ph.D**. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

**Paul Rosenfeld, Ph.D.** (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

**Paul Rosenfeld, Ph.D.** (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

**Rosenfeld, P. E**., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

**Paul Rosenfeld, Ph.D.** (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

**Paul Rosenfeld, Ph.D**. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E**. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E**. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

**Rosenfeld, P.E**. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

**Rosenfeld. P.E.** (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

**Rosenfeld. P.E. (**October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

**Rosenfeld, P.E. (**2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E**., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

**Rosenfeld, P.E.**, C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

**Rosenfeld, P.E.**, C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

**Rosenfeld, P.E,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

## Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

## Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

## Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs,* vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs,* vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs,* vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

# EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

1640 5th St.., Suite 204 Santa
Santa Monica, California 90401
Tel: (949) 887-9013
Email: mhagemann@swape.com

## Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

**Geologic and Hydrogeologic Characterization**
**Industrial Stormwater Compliance**
**Investigation and Remediation Strategies**
**Litigation Support and Testifying Expert**
**CEQA Review**

**Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

**Professional Certifications:**

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

**Professional Experience:**

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

**Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

**Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

**Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

**Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

**Geology:**

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

**Teaching:**

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

**Invited Testimony, Reports, Papers and Presentations:**

**Hagemann, M.F**., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F**., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann, M.F.,** 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F.**, 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

**Hagemann, M.F.,** 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

**Hagemann, M.F**., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

**Hagemann, M.F**., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

**Hagemann, M.F**., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F**., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F**., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F**., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

**Hagemann, M.F**., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

**Hagemann, M.F**., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

**Hagemann, M.F**., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

**Hagemann, M.F**., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

**Hagemann, M.F**., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

**Hagemann, M.F**., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

**Hagemann, M.F**., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

**Hagemann, M.F**., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

**Hagemann, M.F**., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

**Hagemann, M. F**., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

**Hagemann, M.F**., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

**Hagemann, M.**F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

**Hagemann, M.F**., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

**Hagemann, M.F**., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

**Other Experience:**

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

# City Council Agenda Statement

**Meeting Date:** February 1, 2022
**Agenda Heading:** Staff Presentations
**Item Number:** D.11

## TITLE:

Ordinance Amending Chapter 6 of Title 5 of the El Segundo Municipal Code Regarding the Regulation and Prohibition of Smoking in Designated Areas

## RECOMMENDATION:

1. Waive the first reading and introduce an ordinance amending Chapter 6 of Title 5 of the El Segundo Municipal Code regarding the regulations and prohibition of smoking in designated areas

2. Schedule the second reading for the February 15, 2022 City Council meeting

## FISCAL IMPACT:

There will be additional enforcement cost associated for Police Department. This indirect cost of staff time will be absorbed via City's adopted FY 2022-2023 Annual Budget.

## BACKGROUND:

On September 7, 2021, The Environmental Committee made a Smoking Ban presentation to the City Council (please see Attachment 2). The following were recommendations from the Environmental Committee:

- Prohibit smoking in all outdoor public areas (including sidewalks, parks, streets, public parking lots, etc.

- Prohibit smoking in common areas and open spaces of multi-unit (3 or more) residential complexes.

**DISCUSSION:**

After discussion, it was the consensus of City Council to direct staff to prepare an ordinance to prohibit smoking in all public areas, but not in common areas and open spaces within private properties.

The current El Segundo Municipal Code prohibits smoking in the following places:

- Enclosed place of employment or workplace (ESMC § 5-6-4(A))
- Enclosed portions of eating establishments (ESMC § 5-6-4(B))
- Any enclosed space/area used by or open to the public (ESMC § 5-6-3(B))
- Any City-owned or City-operated vehicle (ESMC § 5-6-3(A))
- Any public beach within the city of El Segundo (ESMC 10-3-11(V))

Most of the City's smoking prohibition regulations were adopted in 1989 by the City Council and warrant updating. For example, the ESMC currently does not explicitly prohibit smoking in bars (§ 5-6-5(A)), although such activity is prohibited under state law. Violations of Chapter 5-6 are punishable as an infraction, with a fine of $50 for the first violation. State law also prohibits smoking in certain public areas, such as within 25-feet of playgrounds and "tot lot sandbox areas" or within 250-feet of "youth sports events" (H&S Code § 104495).

Further, this ordinance provides the following:

- Updates the provisions of the previous prohibition ESMC Chapter 5-6 to update and modernize the prohibition provisions. For example, it updates the definition of "smoking" to include various electronic devices and expands the definition to include non-tobacco "plant" materials.
- Prohibits smoking in "places of employment," which means any place under the legal or de facto control of an employer that an employee or the general public may enter in the normal course of operations, but regardless of hours of operation.
- Prohibits smoking in "public places," which means any indoor or outdoor place open to the general public, whether publicly or privately owned.
- Updates the definition of "tobacco products" in the other portions of Articles A and B of ESMC Chapter 5-6 concerning tobacco sale regulations and tobacco retailer licensing to include modern tobacco smoking devices and paraphernalia.

- Updates the beach smoking prohibition in Section 10-3-11 to be consistent with the new language in ESMC Chapter 5-6.

## CITY STRATEGIC PLAN COMPLIANCE:

Goal 2: Support Community Safety and Preparedness

Objective: El Segundo is a safe and prepared city.

**PREPARED BY:**
Cheryl Ebert, Senior Civil Engineer
**REVIEWED BY:**
Elias Sassoon, Public Works Director
**APPROVED BY:**
Barbara Voss, Deputy City Manager

## ATTACHED SUPPORTING DOCUMENTS:

1. El Segundo Smoking Prohibition Ordinance
2. Smoking - Environmental Consideration & Recommendation Presentation by the Environmental Committee

**ORDINANCE NO. _____**

**AN ORDINANCE AMENDING CHAPTER 6 OF TITLE 5 OF THE EL SEGUNDO MUNICIPAL CODE REGARDING THE REGULATION AND PROHIBITION OF SMOKING.**

**THE CITY COUNCIL OF THE CITY OF EL SEGUNDO DOES ORDAIN AS FOLLOWS:**

SECTION 1. *Findings*. The City Council finds and declares as follows:

A. According to the United States Centers for Disease Control and Prevention ("CDC"), cigarette smoking causes more than 480,000 deaths each year in the United States; smokers are more likely than nonsmokers to develop heart disease, stroke, and lung cancer; and smoking causes diminished overall health, increased absenteeism from work, and increased health care utilization and cost.

B. Also pursuant to the CDC, secondhand smoke can cause serious health problems in children and adults; about 2.5 million people who do not smoke have died from health problems caused by secondhand smoke exposure since 1964; and even if one has not smoked, secondhand smoke exposure can still cause hearth disease, lung cancer, or stroke.

C. According to the World Health Organization, the tobacco epidemic is one of the biggest public health threats the world has ever faced, killing more than 8 million people a year around the world, and more than 7 million of those deaths are the direct result of tobacco use, while around 1.2 million are the result of non-smokers being exposed to secondhand smoke.

D. Both federal and state laws list nicotine as hazardous waste under lists of commercial chemical waste.

E. According to the United States Attorney General, electronic cigarettes can contain harmful and potentially harmful ingredients, including without limitation, nicotine, volatile organic compounds, heavy metals, and flavorants such as diacetyl, a chemical linked with serious lung disease.

F. According to the American Lung Association, discarded commercial tobacco products, including cigarette "butts" and e-cigarette waste introduce harmful chemicals into storm drain systems that eventually adversely impact beaches, oceans, and associated marine life.

G. With the enactment of Assembly Bill 13 in 1994, California became the first state in the country to ban smoking in nearly every workplace and in indoor public spaces.

H. California has an array of laws regulating and prohibiting smoking, including

without limitation:

1. Building entryways: Smoking banned within 20 feet of main entrances, exits, and operable windows of all state, county, and city buildings (Gov. Code, § 19994.30 et seq.).

2. Playgrounds and tot lots: Smoking prohibited within playgrounds or tot lot sandbox areas (Health & Saf. Code, § 104495).

3. Workplaces: Smoking banned in enclosed workplaces, including restaurants and bars (Labor Code, § 6404.5).

4. Day care facilities: Smoking prohibited in day care facilities, including those in private residences (Health & Saf. Code, § 1596.795).

5. In a car with a minor: Smoking banned in a parked or moving vehicle when a minor is within the same vehicle (Veh. Code, § 12814.6).

I. Many of the state laws referenced in the recital paragraph directly above explicitly permit cities and counties to pass stricter regulations than imposed by the state.

J. Health and Safety Code § 118910 authorizes governing bodies of local agencies to regulate or completely ban smoking, including the use of electronic smoking devices, in any manner consistent with state law.

K. The portions of the El Segundo Municipal Code ("ESMC") concerning the regulation and prohibition of smoking set forth in ESMC Title 5, Chapter 6 have not been updated in nearly 33 years.

L. Civil Code § identifies a nuisance as "[a]nything which is injurious to health . . . or indecent or offensive to the senses, or an obstruction to the free use of property so as to interfere with the comfortable enjoyment of life or property.," and the City Council finds that secondhand smoke constitutes a nuisance in the City. .

SECTION 2. Except for its Article A (Regulation of Tobacco Product Sales) and Article B (Tobacco Retailer License), Chapter 6 (Smoking Regulated or Prohibited) of Title 5 (Health and Sanitation) of the ESMC is amended in its entirety to read as follows [EDITOR'S NOTE – Portions of Article A and Article B are separately amended in Ordinance Sections 3 and 4 below.]:

"**CHAPTER 6**
**SMOKING REGULATIONS AND PROHIBITIONS**

### 5-6-1 Purpose.

This chapter is adopted in accordance with Article XI, § 7 of the California Constitution and Health and Safety Code § 118910 to update its regulations and prohibitions concerning smoking to improve the public health, safety, and welfare by discouraging smoking; protecting the public from nonconsensual exposure to secondhand smoke; expanding the reach of the City's smoking regulations to include modern smoking devices; protecting children from exposure to smoking where they play; reducing the risk of fires; and ensuring the preservation of natural resources and habitats.

### 5-6-2 Definitions.

Unless the contrary is stated or clearly appears from the context, the following definitions govern the construction of the words and phrases used in this chapter.

"Electronic smoking device" means an electronic device that can be used to deliver an inhaled dose of nicotine, or other substances, including, without limitation, plant substances or substances derived therefrom, including any component, part, or accessory of such device, whether or not sold separately. This definition includes any such device, whether manufactured, distributed, marketed, or sold as an electronic cigarette, an electronic cigar, an electronic cigarillo, an electronic pipe, an electronic hookah, or any other product name or descriptor, including any component, part of accessory of such device, whether or not sold separately.

"Employee" means any person who is employed by, or retained as an independent contractor by, any employer, or any person who volunteers his or her services for a business or employer.

"Employer" means any person, partnership, corporation, association, nonprofit, or other entity who employs or retains the services of one or more employees.

"Enclosed" means closed in by a roof and four walls with appropriate openings for ingress and egress.

"Place of employment" means any place under the legal or de facto control of an employer that an employee or the general public may enter in the normal course of operations, but regardless of hours of operation, including, without limitation, indoor and outdoor work areas, construction sites, employee lounges, conference and banquet rooms, long-term health facilities, warehouses, and any private residences subject to licensing requirements used for child-care or health-care facilities.

"Public place" means any indoor or outdoor place open to the general public,

whether publicly or privately owned, including, without limitation: beaches; beach access ways; dining areas; restaurants; public buildings; bars; entryways; elevators; hospitals; lobbies; health care facilities; theaters; auditoriums; restrooms; service lines; streets; alleys; rights-of-way; sidewalks; plazas; public transportation; bus shelters; real property owned, leased, or operated by the City; parking lots; parking structures; parks; picnic areas; playgrounds; sports fields; walking paths; hiking trails; bike paths; hazardous fire areas; farmers' markets; stadiums; ATMs; parades; craft fairs; and festivals.

"Smoke" smoke means the gases, particles, or vapors released into the as a result of smoking.

"Smoking" means inhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, or pipe, or any other lighted or heated tobacco or plant product intended for inhalation, whether natural or synthetic, in any manner or in any form. "Smoking" includes the use of an electronic smoking device that creates an aerosol or vapor, in any manner or in any form, or the use of any oral smoking device for the purpose of circumventing the prohibition of smoking.

**5-6-3 Smoking prohibited.**

In addition to all places where smoking is prohibited under state or federal law, it is unlawful to smoke in or establish a designated smoking area in the following locations:

A. Public places; and

B. Places of employment.

**5-6-4 Signage Required.**

A. Except where other signs are required, whenever in this code smoking is prohibited, "No Smoking" or "Smoke Free" signs must be conspicuously posted by the owner, operator, manager, or other persons having control of such room, building, or other place where smoking is prohibited. The City Manager or his/her designee must post signs at or near the primary entrance(s) to a public place in which smoking is prohibited and which is owned or controlled by the City. Signage required by this section must be prominently displayed, must clearly recite the phrase no smoking and/or use the international no-smoking symbol and must cite the appropriate section of this Code. Such signs must be of sufficient number and location to cause the message of the signs to be clearly visible and readable to the public. The presence or absence of such signage will not constitute a defense to a violation of the other provisions of this Chapter.

B. As an alternative to posting signs as required by this section, eating establishments may place small signs, containing the messages described above, on each dining table located in an area subject to the provisions of this Chapter.

C. It is unlawful to willfully mutilate or destroy any sign required by this section.

**5-6-5 Enforcement; Notice.**

A. Any person found to violate any provision of this Chapter must be deemed guilty of an infraction and subject to the penalties set forth in Section 1-2-3 of this Code.

B. Notwithstanding Subsection A, above, the City may otherwise enforce this Chapter's provisions in accordance to its authority under state law.

C. Compliance with this Chapter may be reviewed by City officials during the conduct of otherwise mandatory property inspections.

D. The Finance Department must provide notice to applicants for business licenses or renewals thereof, however, any failure to provide such notices will not be a defense to a violation of this Chapter."

SECTION 3: Section 5-6A-2 of Article A (Regulation of Tobacco Product Sales) of Chapter 6 (Smoking Regulated or Prohibited) of Title 5 (Health and Sanitation) of the ESMC is amended to modify and update the definition of "tobacco product" as follows:

"TOBACCO PRODUCT: Any product containing, made from, or derived from tobacco or nicotine that is intended for human consumption, whether smoked, heated, chewed, absorbed, dissolved, inhaled, snorted, sniffed, or ingested by any other means, including, without limitation, cigarettes, cigars, little cigars, chewing tobacco, pipe tobacco, or snuff; any electronic device that delivers nicotine or other vaporize liquids to the person inhaling from the device, including, without limitation, an electronic cigarette, cigar, pipe, or hookah; or any component, part, or accessory of a tobacco product, whether or not sold separately."

SECTION 4. Section 5-6B-1-2 of Article B (Tobacco Retailer License) of Chapter 6 (Smoking Regulated or Prohibited) of Title 5 (Health and Sanitation) of the ESMC is amended to modify and update the definition of "tobacco product" as follows:

"TOBACCO PRODUCT: Any product containing, made from, or derived from tobacco or nicotine that is intended for human consumption, whether smoked, heated, chewed, absorbed, dissolved, inhaled, snorted, sniffed, or ingested by any other means, including, without limitation, cigarettes, cigars, little cigars,

chewing tobacco, pipe tobacco, or snuff; any electronic device that delivers nicotine or other vaporize liquids to the person inhaling from the device, including, without limitation, an electronic cigarette, cigar, pipe, or hooka; or any component, part, or accessory of a tobacco product, whether or not sold separately."

SECTION 5. Subsection V (Smoking Prohibited) of Section 10-3-11 (Rules and Regulations) of Chapter 3 (Beach Regulations) of Title 10 (Parks and Recreation) of the ESMC is amended to read as follows:

V. Smoking Prohibited. It is unlawful to smoke in any public beach within the city, in accordance with Chapter 6 (Smoking Regulated or Prohibited) of Title 5 (Health and Sanitation) of this Code.

SECTION 6. *Environmental Review.* This Ordinance was reviewed pursuant to the California Environmental Quality Act (Public Resources Code §§ 21000, *et seq*., "CEQA") and the regulations promulgated thereunder (14 Cal. Code of Regulations §§15000, *et seq*., the "CEQA Guidelines"). Based upon that review, this Ordinance is exempt from further review pursuant to CEQA Guidelines § 15061(b)(3) because it can be seen with certainty that there is no possibility that the Ordinance may have a significant effect on the environment. In addition, to the extent this Ordinance applies to places of employment, it regulates working conditions by ensuring that employees are not exposed to the harmful effects of secondhand smoke and is therefore categorically exempt from CEQA, pursuant to CEQA Guidelines § 15324(c).

SECTION 7. *Electronic Signatures*. This Ordinance may be executed with electronic signatures in accordance with Government Code §16.5. Such electronic signatures will be treated in all respects as having the same effect as an original signature.

SECTION 8. *Construction*. This Ordinance must be broadly construed to achieve the purposes stated in this Ordinance. It is the City Council's intent that the provisions of this Ordinance be interpreted or implemented by the City and others in a manner that facilitates the purposes set forth in this Ordinance.

SECTION 9. *Enforceability*. Repeal or amendment of any provision of the MPMC will not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before this Ordinance's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

SECTION 10. *Severability*. If any part of this Ordinance or its application is deemed invalid by a court of competent jurisdiction, the city council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Ordinance are severable.

SECTION 11. *Recording*. The City Clerk is directed to certify the passage and adoption of this Ordinance; cause it to be entered into the city of El Segundo's book of original ordinances; make a note of the passage and adoption in the records of this meeting; and, within 15 days after the passage and adoption of this Ordinance, cause it to be published or posted in accordance with California law.

SECTION 12. *Execution*. The Mayor, or presiding officer, is hereby authorized to affix his signature to this Ordinance signifying its adoption by the City Council of the City of El Segundo, and the City Clerk, or duly appointed deputy, is directed to attest thereto.

SECTION 13. *Effectiveness*. This Ordinance will take effect 30 days following its final passage and adoption.

PASSED AND ADOPTED this _____ day of _____, 2022.

_____
Drew Boyles, Mayor

ATTEST:

_____
Tracy Weaver, City Clerk

APPROVED AS TO FORM
MARK D. HENSLEY, CITY ATTORNEY

By: _____
Joaquin Vazquez,
Deputy City Attorney

CITY OF EL SEGUNDO

# SMOKING: Environmental Considerations & Recommendation

Environmental Committee
September 7, 2021

# Purpose

- Protecting our environment and promoting the public health and safety protections for our community by limiting the harmful impact of tobacco products

- Public dialogue has increased on this topic due to heightened restrictions on tobacco sales; more focus on lung functionality concerns as highlighted by COVID-19; and recent notable environmental incidents that directly impact our air quality

# Environmental Impacts of Tobacco Products

- Globally, more than 5.6 trillion cigarettes are discarded as litter each year.[1]
- Cigarette butts, which are made almost entirely of plastic and are not biodegradable, are the most-littered item in the U.S. and California by far.[2, 3]
- California beach cleanups find nearly 7x more cigarette butts than plastic straws.[3]
- Cigarette butts leak nicotine, cancer-causing and highly toxic chemicals, and pesticides into the environment, contaminating both soil and water systems.[4]
- Cigarette butt ingestion by pets and wildlife can cause tremors, weakness, vomiting, convulsions, respiratory failure and even death. An estimated 90% of seabirds have ingested plastics like cigarette butts.[5]
- When littered, vapes can discharge heavy metals (toxic chemicals like lead and mercury) and battery acid into the local environment, affecting both humans and animals.[6]

# Direct Health Impacts of Tobacco Smoking

- Smoking is the leading cause of preventable death. Cigarette smoking causes more than 480,000 deaths each year in the United States. This is nearly one in five deaths.[7] (data from pre-pandemic statistics.)

- If smoking continues at the current rate among U.S. youth, 5.6 million of today's Americans younger than 18 years of age are expected to die prematurely from a smoking-related illness. This represents about one in every 13 Americans aged 17 years or younger who are alive today.[7]

- More than 10 times as many U.S. citizens have died prematurely from cigarette smoking than have died in all the wars fought by the United States.[7]

- Smoking causes about 90% of all lung cancer deaths. More women die from lung cancer each year than from breast cancer.[8]

# Health Impacts of Secondhand Smoke

- Secondhand smoke causes nearly 34,000 premature deaths from heart disease each year in the United States among nonsmokers.[7]
- Non-smokers who are exposed to secondhand smoke at home or at work increase their risk of developing heart disease by 25–30% and increase the risk for stroke by 20−30%.[7]
- Secondhand smoke exposure causes more than 8,000 deaths from stroke annually.[7]

# Current Smoking Restrictions in El Segundo

- VEHICLES: Prohibited in any City-owned or City-operated vehicle (Title 5, Chapter 6, Article 3, Ord. 1140, 5-16-1989)
- PUBLIC PLACE: Prohibited in any enclosed area to which the public is invited or in which the public is permitted, including, but not limited to: banks, educational facilities, health facilities, public transportation facilities, reception areas, lobbies, restaurants, retail food production and marketing establishments, retail service establishments, retail stores, theaters, waiting rooms, offices, auditoriums, classrooms, conference and meeting rooms. A private residence is not a public place. (Title 5, Chapter 6, Article 3, Ord. 1140, 5-16-1989)
- PLACE OF EMPLOYMENT OR WORK PLACE: Restricted in any enclosed area of a structure or portion thereof under the control of a public or private employer which employees normally frequent during the course of employment, including, but not limited to, work areas, employee lounges, conference rooms, and employee cafeterias. A private residence is not a place of employment. Bars, banquet rooms used for private functions, buildings owned/eased by County, State Federal agencies and private homes that serve as offices exempted. (Title 5, Chapter 6, Article 4, Ord. 1140, 5-16-1989)
- EATING ESTABLISHMENTS: Regulated that every publicly or privately owned coffee shop, cafeteria, luncheonette, sandwich shop, soda fountain, restaurant, or other eating establishment serving food and/or any alcoholic beverage to the general public whose occupied capacity is more than forty (40) persons shall provide and maintain a nonsmoking area of at least fifty percent (50%) of the seating capacity. Excluded from the calculation of occupied capacity herein shall be those portions of such establishments which are located outdoors.(Title 5, Chapter 6, Article 4, Ord. 1140, 5-16-1989)
- BEACH: Prohibited on any public beach within the city of El Segundo. For the purpose of this section, "beach" does not include parking lots or roadways. (Title 10, Chapter 3, Ord. 1385, 8-2-2005)
- PARK SPACES: State law prohibits the use of cigarettes, cigars or other tobacco-related products within a playground (any park or recreational area with play equipment), or within tot lots (any sandbox area within a public park). This law also prohibits the disposal of cigarette and cigar butts in these areas. (2001 – AB 188)

# Other Municipal Smoking Restrictions

- More than 100 cities and counties in California have outdoor smoking bans
- South Bay outdoor smoking bans exist in Hermosa Beach, Redondo Beach, Manhattan Beach
  - Outdoor smoking bans benefit restaurant and tourism businesses, as shown in Beverly Hills study
- Manhattan Beach and Beverly Hills ban sales of all tobacco/flavored tobacco products, other local cities are considering adding this

# Smoking Restriction Expansion Options

- Prohibit in all outdoor open public areas (sidewalks, streets, parking lots, and locally mandated in parks, etc.)
- Prohibit in common areas and open spaces of multi-unit (3 or more) residential complexes.
  - Does not include hotels, motels
  - Does not include SFR and duplexes
- Prohibit tobacco product sales

# Considerations for Enforcement

- Police citations can be challenging; criminalization may not be the correct approach unless situation is public nuisance

- Alternative: offer support for “Public Enforcement”
  - Public education
  - Partner with health organizations to offer smoking cessation opportunities
  - Significant signage
  - Social pressure

# Considerations for Implementation

- Establish timeline for education and enforcement
- Develop code language
- Create and share FAQ
- Implement outreach
- Partner with health organizations to offer smoking cessation opportunities
- Create and install signage
- Breathe easier, enjoy cleaner streets and oceans

# Recommendation

- Direct staff to draft City of El Segundo Municipal Code ordinance to prohibit smoking in:
  - All outdoor open public areas
  - Common areas and open spaces of multi-unit (3 or more) residential complexes

# Questions?

# Citations


- 1) Hexum T, Kingston H. *Commercial Tobacco, Health, & the Environment: The Problems*. Saint Paul, MN: Public Health Law Center; 2019.
- 2) Proctor RN. Golden Holocaust: Origins of the Cigarette Catastrophe and the Case for Abolition. Berkeley, CA: University of California Press. 2011.
- 3) Ocean Conservancy, International Coastal Cleanup. The beach and beyond, 2019 report. Washington, DC: Ocean Conservatory, International Coastal Cleanup; 2019.
- 4) Mock J, Hendlin YH. Notes from the Field: Environmental Contamination from E-cigarette, Cigarette, Cigar, and Cannabis Products at 12 High Schools — San Francisco Bay Area, 2018–2019. MMWR Morb Mortal Wkly Rep. U.S. Geological Survey. Emerging Contaminants Targeted in a Reconnaissance of Ground Water and Untreated Drinking-Water Sources. toxics.usgs.gov. https://toxics.usgs.gov/highlights/gwsw_ec.html. Updated June 27, 2018. Accessed September 3, 2020.
- 5) Boleda MA, Galceran MA, Ventura F. Behavior of pharmaceuticals and drugs of abuse in a drinking water treatment plant (DWTP) using combined conventional and ultrafiltration and reverse osmosis (UF/RO) treatments. Environ Pollut. 2011;159(6):1584–1591. doi:10.1016/j.envpol.2011.02.051. https://www.ncbi.nlm.nih.gov/pubmed/21459501
- 6) U.S. Geological Survey. Emerging Contaminants Targeted in a Reconnaissance of Ground Water and Untreated Drinking-Water Sources. toxics.usgs.gov. https://toxics.usgs.gov/highlights/gwsw_ec.html. Updated June 27, 2018. Accessed September 3, 2020.
- 7) U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. Accessed January 30, 2019.
- 8) U.S. Department of Health and Human Services. Women and Smoking: A Report of the Surgeon General. Rockville (MD): U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General, 2001. Accessed April 20, 2017.

# City Council Agenda Statement

**Meeting Date:** February 1, 2022
**Agenda Heading:** Staff Presentations
**Item Number:** D.12

**TITLE:**

Alternate Use Concept for the Urho Saari Swim Stadium - "The Plunge"

**RECOMMENDATION:**

Review a proposed alternative use for The Plunge facility and direct staff accordingly.

**FISCAL IMPACT:**

Minimal indirect staff costs associated with preparing this staff report. If City Council directs staff to do additional research, there may be additional indirect and direct costs.

**BACKGROUND:**

At the January 18, 2022 City Council Meeting, Mr. Eric Bahor of Left Point Development LLC introduced a potential alternate use concept for the Urho Saari Swim Stadium, more commonly referred to as "The Plunge." His proposal included converting the indoor swimming pool to a wave pool concept. Following Mr. Bahor's comments, staff was directed to place this item on the next City Council meeting agenda (February 1, 2022) for City Council consideration.

**DISCUSSION:**

Attached is the concept that Mr. Bahor will present at the City Council meeting.

**CITY STRATEGIC PLAN COMPLIANCE:**

Goal 5: Champion Economic Development and Fiscal Sustainability

Objective 5A: El Segundo promotes economic growth and vitality for business and the community.
Objective 5B: El Segundo approaches its work in a financially strategic and responsible way.

**PREPARED BY:**
Barbara Voss, Deputy City Manager
**REVIEWED BY:**
Scott Mitnick, City Manager
**APPROVED BY:**
Barbara Voss, Deputy City Manager

**ATTACHED SUPPORTING DOCUMENTS:**

1. Left Point Development - El Segundo Plunge Alternate Use Project

Copyright – Left Point Development – 2021
All Rights Reserved

# El Segundo Plunge

## Alternate Use Project

Left Point Development LLC

Eric Bahor

leftpointdevelopment@gmail.com

01 Feb 2022

# Table of Contents


- Introduction
- Project Concept
- Surfing Experience
- Plunge Update Plan
- Project Benefits
- Resident Expectations
- Financial Opportunity
- Summary
- Appendix

EpicSurf Experience: Click Here for Video


Copyright – Left Point Development – 2021; All Rights Reserved

# Introduction

## Left Point Development LLC (2021; El Segundo, CA)

- Eric Bahor, founder, El Segundo resident since 2014, Father, Husband, Surfer
  - 13+ years of project/program management experience; BS Engineering @ UW; MBA @ USC
- Advisors:
  - Trisha Hoss, CEO, Founder Bombora LLC
  - John Hoss, Inventor of EpicSurf technology (Patent Pending), Co-founder Bombora LLC
  - Billy Scott, Operations Manager, The Pool Company
  - Lew Wemple, Aquatic Development Group
  - Emily/Ethan/Benny Bahor, Family

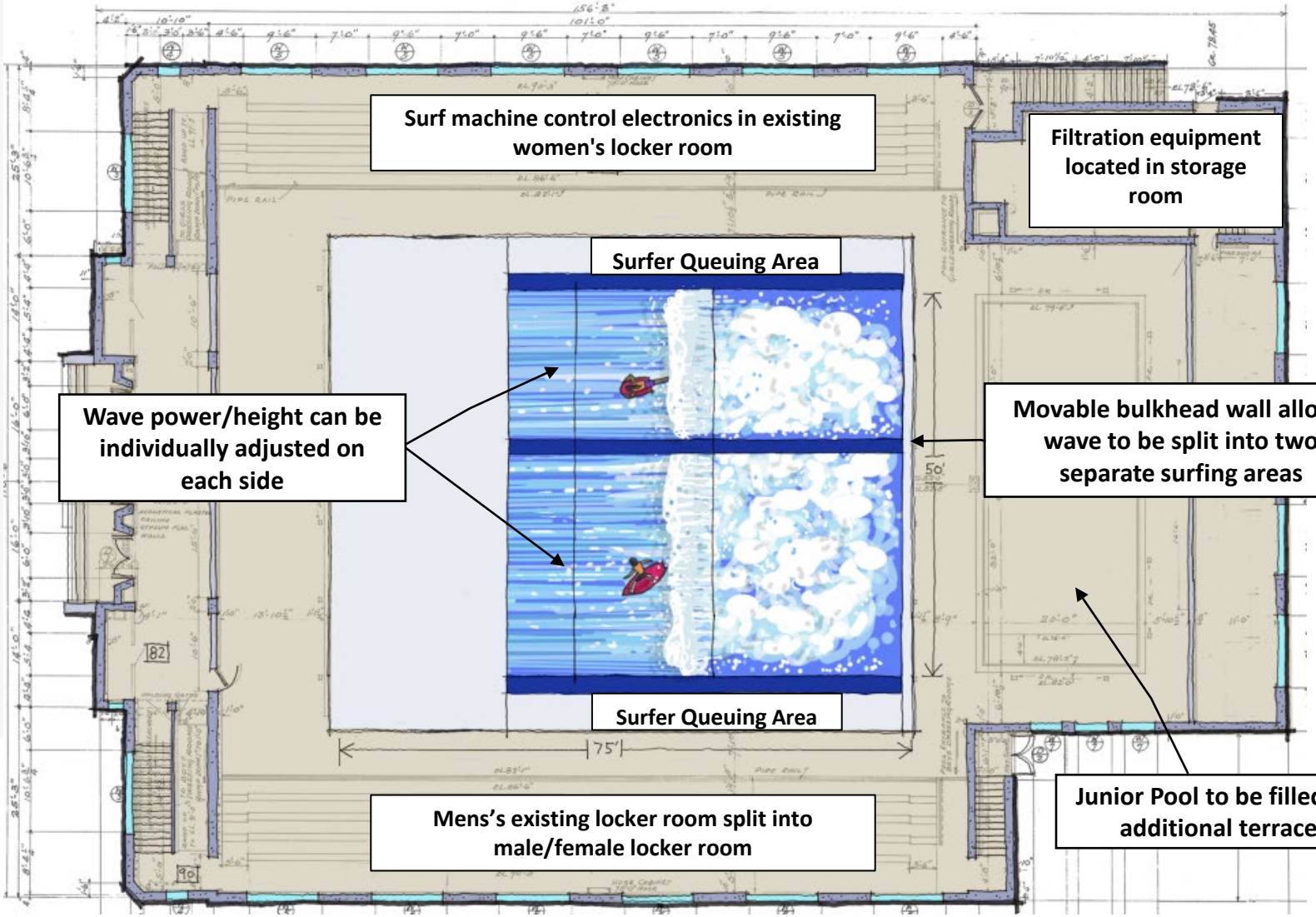
## Project Objective: Create a safe, fun, and unique surfing facility that adds value to the residents and city of El Segundo

Copyright – Left Point Development – 2021; All Rights Reserved

# Project Concept

Copyright – Left Point Development – 2021; All Rights Reserved

# Project Concept (Con't)




EpicSurf wave machine can be packaged into existing Plunge pool footprint



Copyright – Left Point Development – 2021; All Rights Reserved

# Surfing Experience

- Safe, fun experience for all (not just surfers)
  - Old and young, beginner to expert
- Deepwater allows normal boards with fins
  - Provides realistic surfing experience
- All types of boards can be used
  - Short, long, SUPs, boogies, kayaks, body surfing
- Social and memorable for all
  - Camaraderie amongst surfers during sessions
- An excellent compliment to ocean surfing
  - Perfect conditions all the time, & no sharks!

Ben Gravy, Pro Surfer



Copyright – Left Point Development – 2021; All Rights Reserved

# Plunge Update Plan & City Partnership

## Renovate Plunge with all Mithun *facility* related recommendations (City)

- Bring up to environmental/ADA compliance (MEP/HVAC/Abatement)
- Maintain Plunge front external façade, renovate/modernize all amenities

## Fill in junior pool & remove old MEP (City/Left Point Dev)

- Remove all old equipment, fill in pool and create terrace in existing area
- Create multi-use Food & Beverage/Event/Retail/Training Space

## Install 50’ wide EpicSurf standing wave in senior pool (Left Point Dev)

- Prep existing pool and install surf machine in senior pool
- Install filtration in NW storage room; Control electronics in women’s locker room

## Create variety of programming to maximize Plunge utilization (City/LPD)

- Dual use wave provides flexibility in programming for all users
- Increased capacity for events (birthdays, competitions, training)

Project details to be further refined at later date in partnership with City


Copyright – Left Point Development – 2021; All Rights Reserved

# Project Benefits

- Maintains soul of the Plunge as a water sports venue
- Significant positive economic impact on city of El Segundo
- Appeals to a wider demographic than swimming alone
- Promotes an active and healthy lifestyle
- Increased variety of programming available over swimming alone

Copyright – Left Point Development – 2021; All Rights Reserved

# Resident's expectations for the Plunge (Top 5)

## Expectation: The Plunge legacy is preserved

- Greater awareness generated for the Plunge as a prominent water sports facility
- Facility retains art deco style with historic artifacts prominently displayed

## Expectation: The Plunge is a facility that all can utilize

- Wave can be adjusted for users of all ages and physical capabilities
- Facilities modernized in alignment with city approved concept (ADA Compliant)

## Expectation: The Plunge provides value to the city and residents

- Fun/Unique feature to city of El Segundo; draws people to city and local businesses
- Project reduces city cost to renovate/operate; city can fund deferred improvement projects

## Expectation: The Plunge remains a community facility

- Reduced pricing will be available to residents with recreation passes
- Daily time slots for residents, and facility open to general public to hang out

## Expectation: The Plunge is "for the people, by the people"

- Facility renovated/wave pool operated in partnership between city/local group
- Project will create 20-25 jobs; staffed by El Segundo residents, wages paid by operator, not city

**Conversion of Plunge to wave pool facility will exceed resident expectations**


Copyright – Left Point Development – 2021; All Rights Reserved

# Plunge Financial Challenges & Opportunities

## Challenges with current renovation plan

### Plunge renovation expected to cost between $8.5M - $10M*

- Funding gap exists; ~$1.1M cost attributable to senior/junior pool related updates

### Minimal economic ROI for current renovation plan

- Low revenues due to operating costs/subsidized fees; cannibalization of Aquatic Center revenue

## Opportunities with surfing facility

### Reduced initial investment for city in partnership with Left Point Development

- Left Point to fund wave pool implementation & required senior pool modifications (~$3.4M)
- Creates renovation flexibility to further reduce city investment

### Increased tangible/intangible ROI with conversion to surfing facility

- Revenue generating opportunity for the city by pivoting utilization of Plunge
- Value increase for city with unique offering; enables allocation of resources to deferred projects

Implementing wave pool increases ROI for city & residents

*Mithun Renovation Package &
2021-10-19 City Council Agenda Package

Copyright – Left Point Development – 2021; All Rights Reserved

# Summary

Implementation of surf facility at the Plunge:

- Creates unique feature with significant positive impact on city
- Preserves legacy and creates greater awareness of the Plunge
- Reduces investment costs and increases revenue for city
- Will meet and exceed resident expectations
- Is a BIG idea that is aligned with El Segundo's Mission Statement

Copyright – Left Point Development – 2021; All Rights Reserved

# Thank you for your consideration!

Copyright – Left Point Development – 2021; All Rights Reserved

# Appendix


Copyright – Left Point Development – 2021; All Rights Reserved

# Additional Benefits and Programming

| Topic | BENEFIT TO EL SEGUNDO COMMUNITY | IMPLEMENTATION/NOTES |
|---|---|---|
| **Skills & Training** | Teaches wave sport skills that are transferable to the ocean, for those interested in learning to surf or improving their skills. | Each session has instruction and support, including a safety briefing and pre-surf stretch to ensure those learning to surf are prepared, and can transfer skills to the ocean. |
| **NSSA Training** | Provides alternative training platform for El Segundo High School Surf Team which trains at El Porto. ESHS Surf team would benefit from training on the perfect conditions of the EpicSurf wave when conditions are poor at El Porto (conditions are frequently poor; small waves, wind, etc.) | Would aim to partner with Tyler Contarsy, the El Segundo HS surf coach and adaptive PE teacher, to create plans for weekly HS training sessions, and accessible programming for adaptive individuals. |
| **Surf Competitions & Events** | Host competitions and events that engage and connect the community. | The Plunge wave pool will host fun events with pros, high schools, nonprofits and retailers to raise money and support their causes. Partnerships with foundations such as Heal The Bay, the Surfrider foundation, and the ES ED foundation will be created to support worthy causes and raise awareness for key issues in the community. |
| **Waves for All** (including the ocean-averse) | Wave alternatives for those seeking a safe, controlled environment for wave sports. | The Plunge wave pool will be a safe and controlled environment that can be tailored for all levels of ability and those who are averse to surfing in the ocean. (Sharks, currents, drowning and pollution are a non-starter for some.) |
| **Ocean Safety & Awareness** | Educates coastal community on ocean safety and conservation issues. | Partnerships with the Surf Rider Foundation Chapter will be formed to host events and teach ocean safety and conservation awareness to the patrons of the Plunge wave pool. Key safety areas for utilizing the Plunge wave pool will be tied back to ocean safety. |
| **Summer Camps** | Healthy, active summer camps for kids and teens. | El Segundo's proximity to the ocean allows for combined surf pool + ocean camps. The Plunge wave pool will look to establish partnerships with local surf camps to provide additional surfing opportunities when conditions deteriorate at the beaches. |
| **Surf Therapy** | Therapeutic programming for individuals with sensory issues. | The Plunge wave pool will partner with foundations like "A Walk on Water" and "Surfers Healing" to provide therapeutic programming for differently abled people. |
| **STEM & Surf** | STEM opportunities for El Segundo schools; a blended experience of science + surfing. | The Plunge wave pool will look to partner with El Segundo schools to implement STEM learning opportunities at the facility by teaching about the science of creating a perfect wave. Everything from fluid dynamics to mechanical and electrical engineering |
| **Youth Sponsorships** | Youth sponsorships for underserved communities. | The Plunge wave pool will look to partner with the city and other prominent organizations (Chevron, Boeing, Raytheon, Continental Dev Group) to provide surfing opportunities for the less fortunate. |
| **Corporate Team Building** | A unique opportunity to challenge and encourage team building while surfing. | The Plunge wave pool will offer a corporate event packages to local businesses that want to utilize the wave pool as a fun and safe opportunity to challenge and encourage team building. |


Copyright – Left Point Development – 2021; All Rights Reserved

# Facility Parking

## Average Facility Occupancy: 30-35 people/hour (~20-25 Cars)

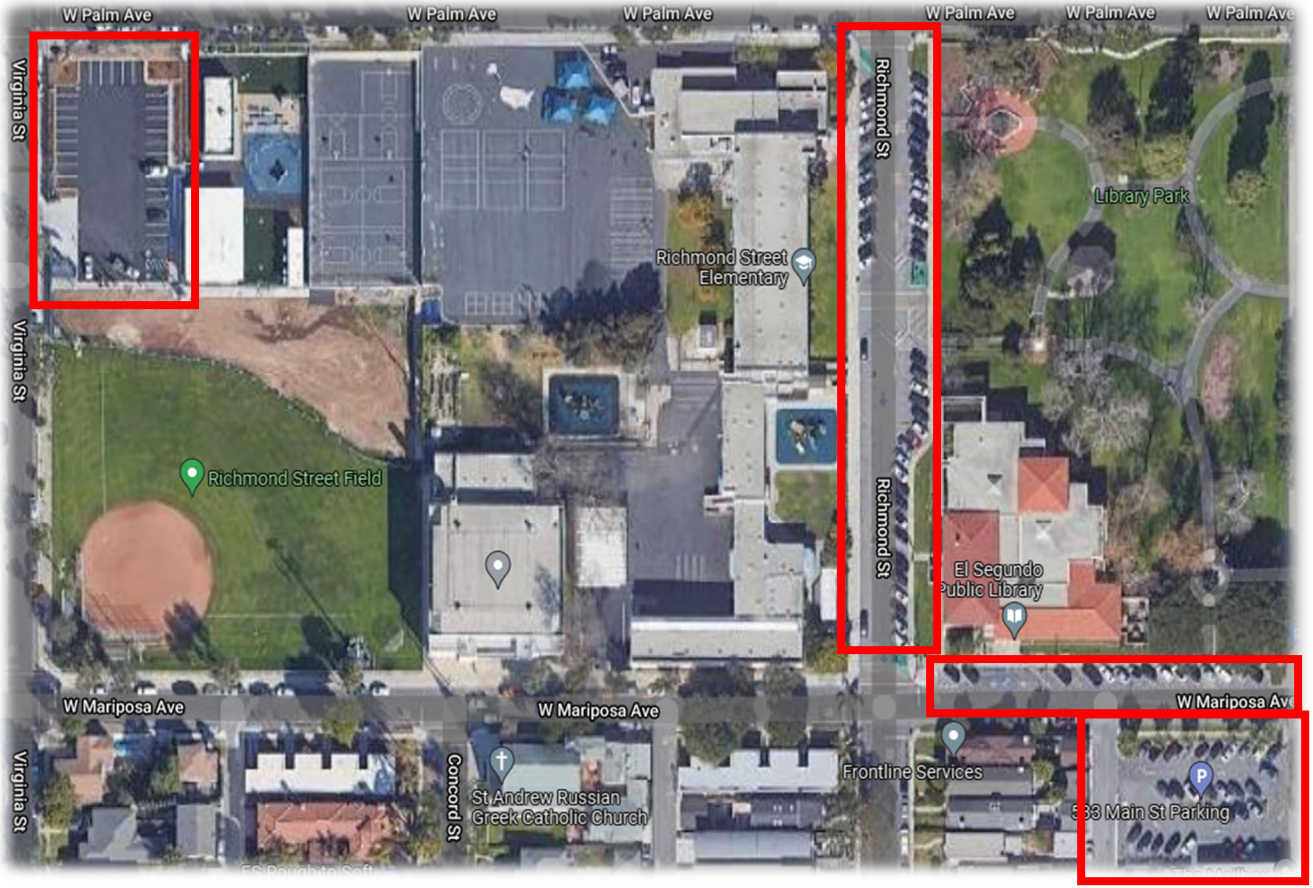
## Peak Facility Occupancy: 100 People (~75 Cars)

Weekday Parking (96 Spots)

- Main St Parking Lot (28 Spots)
- Street Parking (68 Spots) (Richmond/Mariposa)

Weekend Parking (127 Spots)

- Main St Parking Lot (28 Spots)
- Virginia/Palm Lot (31 Spots)
- Street Parking (68 Spots) (Richmond/Mariposa)




Sufficient Parking for surf facility operations



Copyright – Left Point Development – 2021; All Rights Reserved

# Surfing Market Data

Copyright – Left Point Development – 2021; All Rights Reserved

# City Council Agenda Statement

**Meeting Date:** February 1, 2022
**Agenda Heading:** Committees, Commissions and Boards Presentations
**Item Number:** E.13

## TITLE:

Diversity, Equity, and Inclusion Committee Public Safety Report

## RECOMMENDATION:

1. Receive and file the DEI Public Safety Report.

2. Direct staff to work with the DEI Committee to implement recommended activities.

## FISCAL IMPACT:

There will be direct and indirect fiscal impacts to the City's General Fund, including staff time and possibly funds for additional training and employee engagement activities. These costs will likely be absorbed via the current FY 2021-2022 General Fund Budget and future FY 2022-2023 General Fund Budget. If there are greater financial needs, staff will return to City Council for separate budget appropriation authority.

## BACKGROUND:

At its June 16, 2020 meeting, City Council directed staff to establish a new Diversity, Equity, and Inclusion (DEI) Committee to address El Segundo residents' concerns about local racial diversity issues, inclusion, police policy, experiences at local schools, and other matters.

City Council asked the DEI Committee to focus on the following study topics:

1. Citywide Organization (including a review of City government policies, practices, training, diversity, etc.)

2. Public Safety (including a review of Police Department policies, practices, training, diversity, and future direction)

3. Community at Large (including a review of City demographic data, history, trends, etc.)

4. Local Economy (including a review of private sector diversity policies, practices, training, etc.)

The DEI Committee established four subcommittees to research each of the study topics above and report findings and recommendations to City Council.

**DISCUSSION:**

The attached Diversity, Equity, and Inclusion Committee Public Safety Report includes a summary of research conducted, actions taken, key findings, and recommendations for City Council's consideration.

**CITY STRATEGIC PLAN COMPLIANCE:**

Goal 1: Enhance Customer Service, Engagement, and Communication; Embrace Diversity, Equity, and Inclusion

Objective 1A: El Segundo provides unparalleled service to internal and external customers.

Objective 1 B: El Segundo's engagement with the community ensures excellence.

**PREPARED BY:**
The Diversity, Equity, and Inclusion Committee – Public Safety Subcommittee
**REVIEWED BY:**
Barbara Voss, Deputy City Manager
**APPROVED BY:**
The Diversity, Equity, and Inclusion Committee

**ATTACHED SUPPORTING DOCUMENTS:**

1. DEI Committee - Public Safety Report

# City of El Segundo
# Diversity, Equity & Inclusion Committee
# Public Safety Report – Part I

*Submitted January 24, 2022*

---

**City Strategic Plan**

The DEI Public Safety Subcommittee had the opportunity to review and explore diversity, equity and inclusion efforts as it relates to public safety. The Subcommittee identified multiple actions to support and advance Goal 1 of the City of El Segundo's Strategic Plan.

| Strategic Plan – Goal |
| --- |
| Enhance customer service, engagement, and communications;<br>Embrace diversity, equity, and inclusion |

---

**Overview**

1. Public Safety Subcommittee: 2021 Overview & Takeaways
2. Public Safety DEI Status, Progress & Recommendations
    A. Diversity & Representation
    B. El Segundo Police Department Recruitment & Training
    C. El Segundo Police Department Policy Review
    D. El Segundo Police Department Culture & Community
    E. El Segundo Fire Department Status Update
3. Conclusion & Next Steps

---

## DEI Public Safety Subcommittee: 2021 Overview & Takeaways

The Public Safety Subcommittee has met regularly (every other week) starting March 5, 2021, shortly after subcommittees were assigned. The Subcommittee also participated in the nine-week Community Police Academy. Especially during the first few meetings of the DEI Committee, the monthly agenda included a presentation from ESPD, in-depth Q&A sessions with former Chief Whalen, and ESPD updates and insight on recent events and efforts. This report includes the results, actions, and recommendations from the Public Safety Subcommittee's review over the past year.

### 2021 AREAS OF FOCUS

1. Review of El Segundo Police Department (ESPD) policies, practices, training, diversity and future direction.

2. Review of El Segundo Fire Department (ESFD) policies, practices, training, diversity and future direction.

### KEY TAKEAWAYS

1. ESPD is committed to collaborating with the DEI Committee and continues to be forthcoming with data and information.

2. ESPD is invested in DEI-related practices, policies and training. For example, all ESPD officers have undergone DEI training in the past year.

3. ESPD is ahead of schedule to collect Stats on Stops. Data collection with the new system began in October 2021.

4. The data related to use of force (UOF) shows that the UOF ratio is a small fraction of all arrests or service calls due to training and tools used by ESPD. There is concern regarding use of force disproportionately impacting people of color. For example, of the 17 incidents of UOF in 2020, 53% involved non-white people.

5. Automated License Plate Readers (ALPRs) are set to notify ESPD of amber alerts, stolen vehicles and other felony violations. They are not set to alert ESPD to unregistered/expired plates and other non-felony violations.

6. The overall ESFD workforce is less diverse than the community it serves, with 14.2% of all full-time employees falling into the minority/non-white demographic categories.

7. Continue to build relationships with ESFD, specifically with Fire Chief Deena Lee.

For this report, 12 actionable items were explored. The items are in various phases of completion which are highlighted below.

| | Item | Progress | Relevant Information |
|---|---|---|---|
| 1. | Participate in ESPD's Community Police Academy | Completed | All four Public Safety Subcommittee members completed the nine-week program which began April 7, 2021 as Community Police Academy's Class #10. |
| 2. | Establish relationships between ESPD and ESFD | Completed / Ongoing | Subcommittee meets regularly with Police Chief Bermudez and has engaged with several officers during Community Police Academy. Meetings and conversations have started with Fire Chief Lee. |
| 3. | Review 2021 Employment & Residential Demographics | Completed | Race, ethnicity and gender are included in this report for ESPD and ESFD. Data includes a breakdown of leadership/ management diversity. |
| 4. | Review ESPD policies, including data collection, stops and arrests, and use of force | Completed | Analysis and data related to DEI and these policies are included in this report. |
| 5. | Review ESPD recruitment, hiring and training processes | Completed | Analysis and data related to DEI and these policies are included in this report. |
| 6. | Review of DEI-related citizen complaints to ESPD | Ongoing | Data received to date are included in this report. Next steps will include a deeper dive and analysis. |
| 7. | Participate in ESFD ride-along and shadowing opportunities | On hold | While on hold due to the pandemic, we are exploring learning opportunities similar to ESPD's Community Police Academy are being explored. |
| 8. | Review ESFD policies, including recruitment, hiring and training | Initial planning | This is scheduled to begin shortly. |
| 9. | Review of DEI-related citizen complaints to ESFD | Initial planning | This is scheduled to begin shortly. |
| 10. | Future collaborations | Initial Planning | As pandemic restrictions ease, there are plans to explore events and activities co-presented by DEI and ESPD/ESFD. |

| | | | |
|---|---|---|---|
| 11. | Develop opportunities for community communication | Completed / Ongoing | In addition to public comment during meetings, the *Let Us Know!* online form is available. |
| 12. | Implementation of routine surveys | Initial Planning | As part of the Citywide Organization Subcommittee recommendations, an annual Employee Wellness Survey is in development, and the City is evaluating incorporating DEI-specific questions. Community-at-Large Subcommittee also plans to issue a community-wide DEI survey in 2022 that will include public safety-related questions. |

## Public Safety DEI Status, Progress & Recommendations

## A. PUBLIC SAFETY DIVERSITY & REPRESENTATION

| | Sworn Police Employees | | | Residents | |
|---|---|---|---|---|---|
| DEMOGRAPHIC | Full-Time Police Employees | Male Full-Time Police Employees | Female Full-Time Police Employees | Resident Population (% of 17,271) | Full-Time City Employee Under/Over Resident Population |
| White/ Caucasian | 39 (65%) | 36 (60%) | 3 (5%) | 62% | +3% Points |
| Black/ African-American | 3 (5%) | 3 (5%) | 0 | 2% | +3% Points |
| Asian | 2 (3.3%) | 2 (3.3%) | 0 | 10% | -6.7% Points |
| Hispanic/ LatinX | 16 (26.6%) | 13 (21.6%) | 3 (5%) | 17% | +9.6% Points |
| American Indian or Alaska Native | 0 | 0 | 0 | 0.3% | -0.3% Points |
| Native Hawaiian or Pacific Islander | 0 | 0 | 0 | 0.4% | -0.4% Points |
| Two Or More Races | 0 | 0 | 0 | 7% | -7% Points |
| Other | 0 | 0 | 0 | 0.5% | -0.5% Points |
| **Total** | **60 (100%)** | **54 (90%)** | **6 (10%)** | 99.2% | |

*Resident percentage does not equal 100% due to rounding.

| | Sworn Fire Employees | | | Residents | |
|---|---|---|---|---|---|
| DEMOGRAPHIC | Full-Time Fire Employees | Male Full-Time Fire Employees | Female Full-Time Fire Employees | Resident Population (% of 17,271) | Full-Time City Employee Under/Over Resident Population |
| White/ Caucasian | 36 (85.7%) | 34 (78.5%) | 2 (7.1%) | 62% | +23.7% Points |
| Black/ African-American | 0 | 0 | 0 | 2% | -2% Points |
| Asian | 2 (4.7%) | 2 (4.7%) | 0 | 10% | -5.3% Points |
| Hispanic/ LatinX | 4 (9.5%) | 4 (9.5%) | 0 | 17% | -7.5% Points |
| American Indian or Alaska Native | 0 | 0 | 0 | 0.3% | -0.3% Points |
| Native Hawaiian or Pacific Islander | 0 | 0 | 0 | 0.4% | -0.4% Points |
| Two Or More Races | 0 | 0 | 0 | 7% | -7% Points |
| Other | 0 | 0 | 0 | 0.5% | -0.5% Points |
| **Total** | **42 (100%)** | **39 (92.9%)** | **2 (7.1%)** | 99.2% | |

*Resident percentage may not equal 100% due to rounding.

## KEY FINDINGS

1. The City's overall residential population is 38% minority/non-white.

2. The overall ESPD workforce is more diverse than the community it serves, with 45% of all full-time and part-time employees (35% of full-time employees) falling into the minority/non-white demographic categories.

3. The overall ESFD workforce is less diverse than the community it serves, with 14.2% of all full-time employees falling into the minority/non-white demographic categories.

### Importance of Diversity & Representation in Public Safety

Diverse teams are 87% better at making decisions.[1]

According to an ABC7 analysis of 2019 FBI arrest data, across the largest 100 metro areas in the United States, police forces with a larger population of people of color had smaller racial disparities in arrests.[2]

A 2020 study by Stephan Wu, a professor of economics at Hamilton College, found that rates of officers shooting and killing people were almost 50% higher in cities with police forces led by white

[1] Cloverpop Study, Hacking Diversity With Inclusive Decision Making, 2017
[2] Equity Report – Policing: Law enforcement diversity can lessen policing disparities, but SoCal has room to improve, data shows

police chiefs than cities with black police chiefs.[3] Dr. Wu adds that leaders are important in determining culture "from the very top."

"It's one thing to have diversity in the force. And I think that's an important thing, and there's research that's shown that's important, but I would say that even on top of that, leaders still matter, that whoever is at the top is really setting an agenda," Wu said.
Organizations with greater gender diversity are 25% more likely to outperform their counterparts. Similarly, companies with greater ethnic and cultural diversity are 36% more likely to outperform their counterparts.[4]

## B. ESPD & ESFD RECRUITMENT & TRAINING

### RECRUITMENT & TRAINING

ESPD and ESFD seek new recruits through several approaches to help ensure a diverse candidate pool, including, but not limited to: social media campaigns; outreach to local colleges/universities such as CSU Dominguez Hills, CSU Long Beach, El Camino Community College and Santa Monica College; and advertisements on buses and in magazines with a large female readership.

ESPD
All standards, policies, operating procedures and education/training materials are available on the Transparency section of the ESPD website. ESPD officers receive up to twice the number of hours of training than most departments in the country, including training in de-escalation and tactical/strategic communication ("verbal judo"), non-lethal force like Krav Maga and Brazilian Jiu Jitsu, and safer handcuffing techniques. ESPD also continues to stay informed of new methods, tools and techniques, such as drones and the BolaWrap.

All ESPD officers have received DEI-related trainings in the past year. Available and required trainings cover topics including implicit bias, cultural diversity, community-oriented policing, ethics and integrity.

### RECOMMENDATIONS & NEXT STEPS

1. Evaluate the diversity of those in management/leadership positions within ESPD and ESFD to ensure different perspectives are considered in top down decision-making.

2. Work with Citywide Organization Subcommittee to explore and recommend DEI competencies for leadership and other roles.

3. Review industry best practices for equitable hiring, such as blinding personally identifiable information on job applications, and using standardized interview rubric and scoring.

[3] Leadership Matters: Police Chief Race and Fatal Shootings by Police Officers
[4] McKinsey & Company, Diversity wins: How inclusion matters, May 2020

## C. PUBLIC SAFETY POLICY REVIEW

### ESPD COMMUNITY POLICE ACADEMY (CPA)

All four Public Safety Subcommittee members completed the nine-week program which began April 7, 2021 as Community Police Academy's Class #10. With a small class (eight people total), the group was provided the unique opportunity to explore ESPD's culture, gather information, gain understanding of the police perspective, ask in-depth questions and have quality conversations with many different officers around partnership potential between the DEI and ESPD (such as community engagement efforts and events).

All standards, policies, operating procedures and education/training materials are available on the Transparency section of the ESPD website, including their Use of Force policy, which is further explained in the Where We Stand document also available on their website.

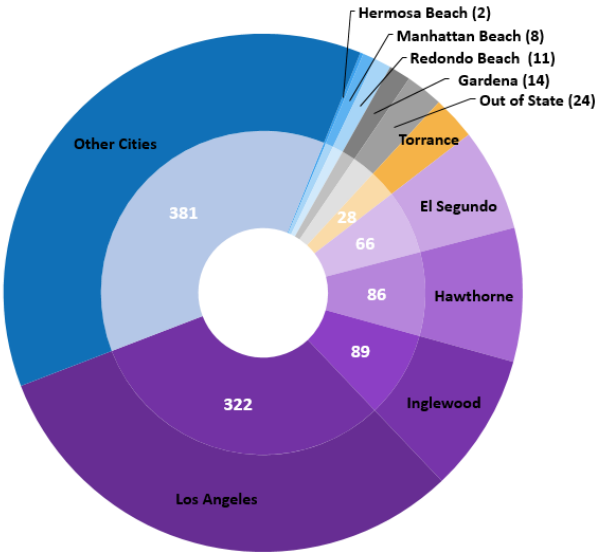
### ESPD INCIDENTS OF USE OF FORCE *(Provided by ESPD)*

| YEAR | Hispanic/LatinX | Black | White | Other | Male | Female | Total |
|---|---|---|---|---|---|---|---|
| 2016 | 4 | 9 | 8 | 3 | | | 24 |
| 2017 | 8 | 7 | 2 | 1 | | | 18 |
| 2018 | 5 | 7 | 6 | 1 | | | 19 |
| 2019 | 4 | 10 | 8 | 3 | | | 25 |
| 2020 | 5 | 3 | 8 | 1 | | | 17 |
| 2020-2022 | 8 | 4 | 10 | 0 | 21 | 1 | 22 |

**Total arrests for 2019 and 2020 by Arrestee's City of Residence**

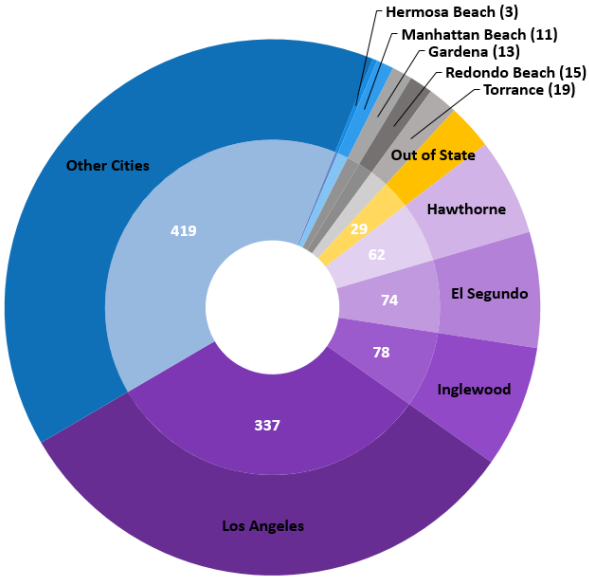
**2019 Total – 1,031 Arrests**

Other Cities - 381
Los Angeles - 322
Inglewood - 89
Hawthorne - 86
El Segundo - 66
Torrance - 28
Out of State - 24
Gardena - 14
Redondo Beach - 11
Manhattan Beach – 8
Hermosa Beach - 2



**2020 Total – 1,060 Arrests**

Other Cities - 419
Los Angeles - 337
Inglewood - 78
El Segundo - 74
Hawthorne - 62
Out of State - 29
Torrance - 19
Redondo Beach - 15
Gardena - 13
Manhattan Beach - 11
Hermosa Beach - 3




## KEY FINDINGS

1. ESPD use of force (UOF) ratio to arrests is a small fraction of all arrests or service calls due to training and tools used by ESPD officers (see *Recruitment & Training above).*

2. ESPD utilizes an effective Mental Evaluation Tech (MET) Team to help respond to calls. MET services are available Monday to Friday, and are shared with other beach cities including Manhattan Beach, Hermosa Beach and Redondo Beach. The MET Team is typically in El Segundo on Thursdays. On average, MET is needed for approximately 25-26 incidents per quarter.
3. Use of force disproportionately impacts people of color. For example, of the 17 incidents of UOF in 2020, 9 (53%) involved non-white people.

4. Of the arrests in 2020, 986 (93%) are suspects from outside of El Segundo, and 17 (1.6%) of arrests included use of force. This is a slight decrease compared to 2019 where 965 (93.6%) of arrests were non-residents, and 25 (2.4%) of arrests included use of force.

## ESPD AUTOMATED LICENSE PLATE READERS (ALPR)

ALPRs are currently set to notify ESPD of amber alerts, stolen vehicles and other felony violations. On average, this amounts to 2-5 alerts per day, with most activity occurring between 1am-4am.

## ESPD STATS ON STOPS

The ESPD is ahead of schedule in implementing the system to collect statistical data on stops, as required by California AB 953: The Racial & Identity Profiling Act of 2015 (RIPA). Below is the update that was shared with the DEI Committee in July 2021:

ESPD is a member city of the South Bay Regional Dispatch Center. The Center is working with all member cities to implement a stop data collection system with member cities, including Manhattan Beach, Hawthorne, and Gardena. This includes formal agreements and selecting a system that will meet requirements (tech, logistics, equipment, and network) for all partners involved.

A system was initially selected, but due to delays by the vendor, the decision was made in June 2021 to shift gears and work with Veritone. As part of the stop data collection process, 22 categories of data are required to be collected in each incident. Veritone will include automated features to increase efficiencies and better support our officers with this task.

Due to the amount of data required, contract processing, data integrity, IT support and more, the city is not using a system in the interim (such as requiring officers to collect data with pen and paper in each stop).
Veritone has been a great partner to date and the process is underway! Training and testing of the system began in October 2021 and ESPD is on track to begin data reporting to CA DOJ in January, as required by RIPA.

## RECOMMENDATIONS & NEXT STEPS

1. ESPD has committed to work with the Subcommittee to further monitor and evaluate practices, demographics and data around use of force, stats on stops and arrests as they relate to DEI.

2. Evaluate further the demographics of use of force and arrests, especially as compared to the greater LA County population.

3. Work with Community-at-Large Subcommittee to host regularly-scheduled opportunities for dialogue and information-sharing between ESPD and the community. This may include a "Chief's Corner" in the El Segundo Herald.

4. Select 2-3 areas, such as ALPRs, Use of Force and RIPA, to dive deeper into an analysis report and presentation to the City/community. This can be through panel discussions, Q&A with the Chief and so forth.

5. Once 2021 metrics are available, review with ESPD and analyze, as needed for further recommendations.

## D. ESPD CULTURE & COMMUNITY

### ESPD, DEI & AEROSPACE CORP

On August 10, 2021, representatives from the DEI Local Economy and Public Safety Subcommittees helped facilitate a face-to-face discussion with ESPD and The Aerospace Corporation (Aerospace). A meeting of this nature is not common, and Committee is proud and grateful to have a Police Department that makes itself available to its community.

The request for this meeting came up as the Local Economy Subcommittee was planning the July, 2021 online panel discussion with Aerospace. It came to the Committee's attention that several Aerospace employees of color had been pulled over in El Segundo on their way to work. This was troubling as there are no accounts of white Aerospace employees experiencing this, and Aerospace management wanted more clarity on policy and ways to address this.

The DEI Committee offered to help facilitate this conversation with ESPD, and Aerospace was excited to move forward. Chief Bermudez quickly agreed to attend the meeting himself, along with Lieutenant Delmendo (Investigative Division). The meeting took place outdoors at Aerospace and approximately ten Aerospace employees attended. The meeting started with introductions and background, followed by a candid discussion about some of the employees' experiences.

The Chief and Lieutenant provided an understanding of policies and procedures in place, but more importantly offered Aerospace employees the opportunity to reach out directly to them for any future incidents or concerns. ESPD agreed to quickly schedule a time to walk through the incident together. Access to the top of the ESPD had a positive impact. The Committee members and Aerospace employees did not know this was an option. Everyone left the meeting agreeing to keep the lines of communication open and to continue open dialogue.

### ESPD DISCUSSES "BAD APPLES"

During one of the Community Police Academy sessions, the topic of "bad apples" was discussed, led by Police Officer Beardmore. In 2020, there were almost 700,000 police officers employed in the US (696,644). If 1% of these officers are "bad apples," then that could mean approximately 7,000 problematic/dangerous officers actively impacting local communities and police departments. Officer Beardmore made a point to show that this is a high number, and this is especially significant when considering those officers in leadership and/or training new officers.

Background checks, screening, performance reviews and training are taken seriously at ESPD. There is a solid understanding that troublesome officers are a liability, and that ESPD officers must model best practices and good behavior, call out and address inappropriate and damaging

actions, and deal with problematic officers as quickly and effectively as possible. ESPD holds daily briefings of recent incidents in El Segundo and around the country to discuss what went well, identify areas of improvement, and share opportunities to learn and be better.

## ESPD CITIZEN COMPLAINTS

ESPD receives complaints, with most being related to perceived discourtesy and/or rudeness. The process in handling a citizen complaint starts with the supervisor who conducts a preliminary investigation into the allegation(s). The complaint is assigned to a division lieutenant who then conducts a review of the incident. In cases when the investigation reveals a sustained finding into the allegation(s), Police Chief renders a decision with respect to discipline. The decision to either suspend, demote or discharge an employee is reliant upon on several factors, such as which department policies and/or laws were violated. The more egregious the violation the higher the likelihood of suspension or termination and vice versa. A minor violation of department policy typically results in additional training, verbal counseling, a warning or written reprimand. However, sustained violations of dishonesty, insubordination, or serious violations of state and/or federal law may result in suspension or termination.

### Civilian Complaints Received

| Year | Number of Complaints |
|---|---|
| 2018 | 7 |
| 2019 | 8 |
| 2020 | 3 |

## RECOMMENDATIONS & NEXT STEPS

1. Continue to build relationships with ESPD, specifically with Police Chief Jaime Bermudez.

2. Partner with the other subcommittees to survey the community for resident perspectives on ESPD and DEI public safety-related priorities. Schedule a meeting with the City's survey contractor to launch the first survey in 2022.

3. Work with the City, schools and other community partners to promote the **Let Us Know! online form**. Our online form was launched on the website in August 2021 and this has been used by one community member.

4. As pandemic restrictions loosen, sit down with the Community Lead Officers to explore opportunities for collaboration. For example, together ESPD and DEI could host a community version of the briefings ESPD officers receive to discuss high-profile incidents.

## E. ESFD STATUS UPDATE

A Subcommittee representative, Fire Chief Deena Lee, and her team have had a few preliminary conversations and meetings, and a couple Subcommittee members attended Chief Lee's pinning ceremony.

ESFD is in the process of gathering and sharing statistical and demographic data, as well as any DEI-related policies. This information is not currently available on their website. The Subcommittee and ESFD are in the process of scheduling ride-alongs and other learning opportunities similar to the Community Police Academy. The Subcommittee looks forward to sharing its analysis, findings and next steps in the next Public Safety status report to City Council.

## RECOMMENDATIONS & NEXT STEPS

1. Collect ESFD data on policies, procedures, training, protocols, demographics, etc. for review and analysis.

2. Schedule ESFD ride-alongs and other opportunities (similar to the Community Police Academy) for the Public Safety Subcommittee to attend.

3. Continue to build relationships with ESFD, specifically with Fire Chief Deena Lee.

## Conclusion & Next Steps

DEI's Public Safety Subcommittee looks forward to continuing to partner with ESPD to further analyze and determine action items to improve DEI in the City of El Segundo. The Subcommittee is excited to engage with ESFD and move forward with the City's new and first-ever female Fire Chief. Below is a summary of action items outlined above:

### RECOMMENDATIONS & NEXT STEPS

1. Evaluate the diversity of those in management/leadership positions within ESPD and ESFD to ensure different perspectives are considered in top down decision-making.

2. Work with Citywide Organization Subcommittee to explore and recommend DEI competencies for leadership and other roles.

3. Evaluate the diversity of those in management/leadership positions within ESPD and ESFD to ensure different perspectives are considered in top down decision-making.

4. Work with Citywide Organization Subcommittee to explore and recommend DEI competencies for leadership and other roles.

5. Review industry best practices for equitable hiring, such as blinding personally identifiable information on job applications, and using standardized interview rubric and scoring.

6. ESPD has committed to work with the Subcommittee to further monitor and evaluate practices, demographics and data around use of force, stats on stops and arrests as they relate to DEI.

7. Evaluate further the demographics of use of force and arrests, especially as compared to the greater LA County population.

8. Work with Community-at-Large Subcommittee to host regularly scheduled opportunities for dialogue and information-sharing between ESPD and the community, such as a "Chief's Corner" in the El Segundo Herald.

9. Select 2-3 areas, such as ALPRs, Use of Force and RIPA, to dive deeper into a report and presentation to the City/community. This can be through town hall meetings, panel discussions, Q&A with the Chief and so forth.

10. Once 2021 metrics are available, review with ESPD and analyze, as needed for further recommendations.

11. Promote participation in ESPD and ESFD community outreach event and activities.

12. Continue to build relationships with ESPD, specifically with Police Chief Jaime Bermudez.

13. Partner with the other subcommittees to survey the community for their perspective on ESPD and DEI public safety-related priorities. Schedule a meeting with the City's survey contractor to launch the first survey in 2022.

14. Work with the City, schools and other community partners to promote the **Let Us Know! online form**, launched on the website in August 2021 and this has been used by one community member.

15. As pandemic restrictions loosen, sit down with the Community Lead Officers to explore opportunities for collaboration. For example, together ESPD and DEI could host a community version of the briefings ESPD officers receive to discuss high-profile incidents.

16. Collect ESFD data on policies, procedures, training, protocols, demographics, etc. for review and analysis.

17. Schedule ESFD ride-alongs and other opportunities (similar to the Community Police Academy) for the Public Safety Subcommittee to attend.

18. Continue to build relationships with ESFD, specifically with Fire Chief Deena Lee.

# City Council Agenda Statement

**Meeting Date:** February 1, 2022
**Agenda Heading:** Reports - City Clerk
**Item Number:** F.14

## TITLE:

Resolution Updating City's Conflict of Interest Code

## RECOMMENDATION:

Adopt a resolution updating the City's 2022 Conflict of Interest Code

## FISCAL IMPACT:

No fiscal impact

## BACKGROUND:

The Political Reform Act (Gov't. Code §§ 81000, *et seq.*; the “PRA”) and regulations adopted pursuant to the PRA (2 Cal. Code of Regs. §§ 18700, *et seq.*; “FPPC Regs.”) require local government agencies to adopt a conflict of interest code, review it every even-numbered year, and update it accordingly if the review indicates required modificaitons. The code is to list those city officials -- employees, elected and appointed board members and consultants -- whose position may present potential conflicts of interest and requires them to file an annual Statement of Economic Interest (FPPC Form 700) with the City Clerk's Office. The City of El Segundo last updated it's Conflict of Interest Code in December 2018, via Resolution 5118, and must update the code to remain compliant with FPPC regulations.

## DISCUSSION:

On or about January 4, 2022, the City Clerk's Office conducted a review of the City's conflict of interest code in accordance with Government Code § 87306.5 and determined that changes to the code were needed at that time. To fulfill its obligations under the PRA and FPPC Regs., the City Council needs to repeal Resolution No. 5118, adopted December 4, 2018, and adopt a revised conflict of interest code.

The positions listed in the attached resolution are designated positions. Officers and employees holding those positions are designated employees and are deemed to make or participate in making decisions which may foreseeably have a material effect on a financial interest. Disclosure includes specific types of investments, business positions, interests in real property, and sources of income which may foreseeably be materially affected by any decision made or participated in by the designated employee.

Designated employees must disclose all interests as required by the PRA and regulations promulgated thereto. When a new position classification is created by the Human Resources Department for City Council approval, the Human Resources Department will recommend that the City Council decide whether the new position will be required to file a Statement of Economic Interest and be included as a designated position in the Conflict of Interest Code.

When the City Council establishes a Commission, Committee, or Board, the City Council will decide whether the members of the Commission, Committee or Boards be included as a designated position in the Conflict of Interest Code and the members of the Commission, Committee or Board so designated by the City Council, will be required to file a Statement of Economic Interest.

## CITY STRATEGIC PLAN COMPLIANCE:

Goal 1: Enhance Customer Service, Engagement, and Communication; Embrace Diversity, Equity, and Inclusion

Objective 1A: El Segundo provides unparalleled service to internal and external customers.

**PREPARED BY:**
Georgeann Hanna, Special Project Coordinator
**REVIEWED BY:**
Tracy Weaver, City Clerk
**APPROVED BY:**
Barbara Voss, Deputy City Manager

## ATTACHED SUPPORTING DOCUMENTS:

1. Resolution Updating City's Conflict of Interest Code

**RESOLUTION NO. xxx**

**A RESOLUTION ADOPTING THE 2022 CONFLICT OF INTEREST CODE FOR THE CITY OF EL SEGUNDO IN ACCORDANCE WITH THE POLITICAL REFORM ACT.**

The City Council of the City of El Segundo does resolve as follows:

**SECTION 1:** The City Council finds and declares as follows:

A. The Political Reform Act (Gov't. Code §§ 81000, *et seq.*; the "PRA") and regulations adopted pursuant to the PRA (2 Cal. Code of Regs. §§ 18700, *et seq.*; "FPPC Regs.") require local governments adopt conflict of interest codes.

B. Section 18730 of the FPPC Regs. sets forth a standard conflict of interest code that may be adopted by local agencies.

C. On or about January 4, 2022, the City Clerk's Office conducted a review of the City's conflict of interest code in accordance with Government Code § 87306.5 and determined that changes to the code were needed at that time.

D. To fulfill its obligations under the PRA and FPPC Regs., the City Council will repeal Resolution No. 5118, adopted December 4, 2018 and adopt a new conflict of interest code as set forth below.

**SECTION 2:** *2022 Conflict of Interest Code; Generally.* FPPC Regs. § 18730 is adopted by reference as the City of El Segundo's 2022 Conflict of Interest Code. Except as modified in this Resolution, all requirements of FPPC Regs. § 18730 apply as if fully set forth in this Resolution.

**SECTION 3:** *2022 Conflict of Interest Code; Changes.* The 2022 Conflict of Interest Code includes the following changes:

A. The term "Appendix," as used in FPPC Regs. § 18730, refers to Section 4 of this Resolution.

**SECTION 4:** *Designated Officials, Employees and Consultants.* For purposes of FPPC Regs. § 18730, designated employees and consultants are set forth below:

**A. Designated Officials and Employees:**

The positions listed below are designated positions. Officers and employees holding those positions are designated employees and are deemed to make or participate in making decisions which may foreseeably have a material effect on a financial interest. Disclosure includes specific types of investments, business positions, interests in real property, and sources of income which may foreseeably be materially

affected by any decision made or participated in by the designated employee. Such disclosures must be made at the times and circumstances described by the City's Conflict of Interest Code.

Designated employees must disclose all interests as required by the PRA and regulations promulgated thereto. When a new position classification is created by the Human Resources Department for City Council approval, the Human Resources Department will recommend that the City Council decide whether the new position will be required to file a Statement of Economic Interest and be included as a designated position in the Conflict of Interest Code.

When the City Council establishes a Commission, Committee, or Board, the City Council will decide whether the members of the Commission, Committee or Boards be included as a designated position in the Conflict of Interest Code and the members of the Commission, Committee or Board so designated by the City Council, will be required to file a Statement of Economic Interest.

COUNCIL, COMMISSIONS, COMMITTEES, & BOARDS

* Members of the City Council
* Members of the Planning Commission
  Members of the Arts and Culture Advisory Committee
  Members of the Capital Improvement Program Advisory Committee
  Members of the Environmental Committee
  Members of the Investment Advisory Committee
  Members of the Library Board of Trustees
  Members of the Recreation & Parks Commission
  Members of the Senior Citizen Housing Board

OFFICE OF THE CITY MANAGER:

* City Manager
  Assistant City Manager
  Deputy City Manager
  Emergency Management Coordinator

OFFICE OF THE CITY ATTORNEY:

* City Attorney
  Assistant City Attorney

OFFICE OF THE CITY CLERK:

City Clerk

Deputy City Clerk II

OFFICE OF THE CITY TREASURER:

* City Treasurer
Deputy City Treasurer II

FINANCE DEPARTMENT:

Chief Financial Officer
Finance Manager
Accounting Manager
Revenue Manager
Manager Purchasing Agent
Risk Manager

FIRE DEPARTMENT

Fire Chief
Fire Marshal
Environmental Safety Manager
Battalion Chief
Senior Management Analyst

HUMAN RESOURCES DEPARTMENT

Director of Human Resources
Human Resources Manager

INFORMATION SYSTEMS DEPARTMENT

Director of Information Systems
Information Systems Manager

COMMUNITY SERVICES DEPARTMENT

Community Services Director

LIBRARY DIVISION:

Librarian II
Senior Librarian

RECREATION AND PARKS DIVSION

Park Maintenance Superintendent

Recreation Superintendent
Senior Administrative Analyst

DEVELOPMENT SERVICES DEPARTMENT:

Director of Development Services
Planning Manager
Building Safety Manager
Principal Planner
Assistant Planner
Associate Planner
Senior Plan Check Engineer
Plan Check Engineer
Senior Building Inspector
Building Inspector I
Code Compliance Inspector
License Permit Specialist II
License Permit Specialist I

POLICE DEPARTMENT

Police Chief
Police Captain

PUBLIC WORKS DEPARTMENT

Director of Public Works
City Engineer
Assistant City Engineer
Principal Engineer
General Services Manager
Street Maintenance Supervisor
Water Supervisor
Wastewater Supervisor
Senior Management Analyst
Management Analyst

* Listed in the code for information purposes only. These positions file under Government Code Section 87200 with the Fair Political Practices Commission.

**B. Consultants:**

The City Manager may determine in writing that a particular consultant, although a "designated position," is hired to perform a range of duties that requires the consultant to fully comply with the disclosure requirements described in this section. Such written determination must include a description of the consultant's duties and, based upon that description, a statement of the extent of disclosure requirements. The City Manager

determination is a public record and must be retained for public inspection in the same manner and location as this conflict of interest code.

**SECTION 5:** *Statement of Economic Interests: Place of Filing*. Designated employees must file Statements of Economic Interests with the City of El Segundo, on forms created by the Fair Political Practices Commission, in conformance with the individual disclosure categories and state guidelines, when requested by the City Clerk. The City Clerk will retain custody of the Statements and make them available for public inspection and reproduction. Designated employees listed in the Code with an asterisk (*) must either file their Statements directly with the Fair Political Practices Commission in conformance with state guidelines, or file an electronic copy of their Statement of Economic Interest with the City Clerk, using the City's e-filing system, Netfile, which automatically files the document with the California Fair Political Practices Commission. All other designated employees must use the city's e-filing program, Netfile, to file their Statement of Economic Interest with the City Clerk.

**SECTION 6:** *Disclosure and Disqualification – Interest and Positions in Non-Profit Organizations*. Whenever a disclosure category requires disclosure of specific financial interests or positions in business entitles, disclosure of equivalent financial interests or positions in non-profit organizations is required. Disqualification must be required as to a disclosed interest or position in a non-profit organization whenever disqualification would have been required as a result of an equivalent financial interest or position in a business entity.

**SECTION 7:** *Travel Payments, Advances and Reimbursements*. If a payment, including an advance or reimbursement, for travel is required to be reported pursuant to Government Code § 87207, it may be reported on a separate travel reimbursement schedule which must be included in the filer's statement of economic interests. A filer who chooses not to use the travel schedule must disclose payments for travel as a gift, unless it is clear from all surrounding circumstances that the services provided were equal to or greater in value than the payments for the travel, in which case the travel may be reported as income.

**SECTION 8:** Resolution No. 5881 (adopted December 04, 2018) and any other resolution or policy purporting to establish a conflict of interest code, are superseded by this Resolution and thus repealed in their entirety.

**SECTION 9:** Repeal of any provision of any resolution or policy herein will not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before, this Resolution's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Resolution.

**SECTION 10:** The City Clerk will certify to the passage and adoption of this Resolution and enter it into the book of original resolutions.

**SECTION 11:** This Resolution will become effective immediately upon adoption.

PASSED AND ADOPTED this 1st day of February 2022.

_____
Drew Boyles, Mayor

ATTEST:

_____
Tracy Weaver, City Clerk

APPROVED AS TO FORM:
MARK D. HENSLEY, CITY ATTORNEY

_____
Joaquin Vazquez, Deputy City Attorney

# City Council Agenda Statement

**Meeting Date:** February 1, 2022
**Agenda Heading:** Reports - City Clerk
**Item Number:** F.15

## TITLE:

Ordinance Requiring E-Filing of Statement of Economic Interests and Campaign Finance Forms

## RECOMMENDATION:

Waive first reading and introduce an ordinance to mandate electronic and paperless filing of Fair Political Practices Commission campaign disclosure statements and statements of economic interest (Form 700).

## FISCAL IMPACT:

The contract amount for the NetFile system is $4,900 per year for up to five years, for a total of $24,500 through FY 2026-27. Funds are available in the City Clerk's budget allocation for FY 2021-22 and will be included in the Recommended Budget for FY 2022-23. The FPPC requires a fee of $1,000 to register as an electronic filing agency. However, NetFile has agreed to pay this cost on behalf of the City.

## BACKGROUND:

California Government Code Section 84615 provides that a legislative body of a local government agency may adopt an ordinance that requires an elected officer, candidate, committee, or other person required to file statements, reports, or other documents required by Chapter 4 of the Political Reform Act to file such statements, reports, or other documents online or electronically with the City Clerk.

The City of El Segundo City has entered into an agreement with Netfile, a vendor approved by the California Secretary of State that meets the requirements set by Government Code Section 84615, to provide an online electronic filing system for the California Fair Political Practices Commission campaign statements and Statements of Economic Interests. The FPPC recently approved the City as an e-filing agency based on the contract with Netfile. The system will operate securely and effectively and will not unduly burden filers. Specifically: (1) the System will ensure the integrity of the data and includes safeguards against efforts to tamper with, manipulate, alter, or subvert the

data; (2) the System will only accept a filing in the standardized record format developed by the Secretary of State and compatible with the Secretary of State's system for receiving an online or electronic filing; and (3) the System will be available free of charge to filers and to the public for viewing filings.

## DISCUSSION:

The City of El Segundo is currently a paper-filing agency for statutory Fair Political Practices Commission (FPPC) campaign disclosure forms and statements of economic interest, commonly referred to as Form 460s and Form 700s, respectively.
The City Clerk's Office proposes moving to an electronic filing system (e-filing) using NetFile, a web-based, vendor-hosted application that utilizes "industry best practices" for securing data, using the same data encryption for online filings used by banks for online banking. Implementation of the NetFile system will promote transparency and provide convenience for committees, individuals, and the public. It provides 24-hour filing and viewing accessibility of campaign finance information from any computer, anywhere. In certain instances, the NetFile program will also increase the accuracy of filed campaign statements by prohibiting any filings that may have inadvertently omitted required information under the Act (e.g. missing addresses or the stated occupation of individual donors).

### Campaign Finance Disclosure Statements (Form 460, Form 496, Form 497)

Adoption of the proposed ordinance is required to implement electronic filings of the campaign finance component of the NetFile system, and will only apply to those filers that exceed a threshold of $2,000 for expending or receiving campaign funds. This threshold is consistent with the Political Reform Act (the "Act"), which recognizes campaigns that spend or raise more than $2,000 as "Controlled Committees." Under the Act, these types of committees are obligated to file detailed campaign finance disclosure statements, also known as Form 460s. For those smaller campaigns that do not exceed the $2,000 threshold, they may continue to file paper versions of the Form 470 disclosure forms. It should be noted that the NetFile system is able to accommodate the online filing of several types of required forms by the FPPC, including Forms 460, 470, 496, and 497, which are the most commonly used in the City of El Segundo's local election campaigns.

### Statement of Economic Interest (Form 700)

On January 25, 2022, the FPPC certified the City as an e-filing agency for its "Statement of Economic Interest" Form 700, clearing the way for filers within the City to use the online system. The Form 700 component of NetFile does not require an ordinance; however, staff recommends that all designated Form 700 filers identified in the City's Conflict of Interest Code also be required to file electronically, to fully transition the City to electronic, paperless filing pursuant to Government Code 84615.

There are about 100 employees, board members and contractors currently required to file an annual SEI. Some filers, such as the City Manager, City Attorney, Councilmembers and Planning Commissioners (GC 87200 filers) already have the option of using the FPPC's e-filing system. A distinction between NetFile and the FPPC e-filing system is that the FPPC system requires users to create separate forms for each outside agency that requires a Form 700 from the official. In NetFile they can add any number of outside boards, commissions, or JPAs, so all of the reports are created in one filing. The filer can print and sign and forward the report to those agencies for which they must file a Form 700, but who do not have FPPC approval for e-filing.

Adopting the ordinance would make e-filing consistent among all filers in the City of El Segundo. An added benefit of the system is that the Form 700 electronic filing incorporates an initial review process and alerts the filer of errors at the time they are entering information, thereby minimizing the need for the City Clerk to request amendments.

In addition to increased efficiency, electronic filing will eliminate the need for wet signatures, will redact statements posted online, and will automatically link to the FPPC’s system. If approved, all filers will be required to submit their statutory filings through the automated system, and paper filings will no longer be accepted. However, to support the City’s efforts towards diversity, equity and inclusion, the City Clerk, as the City’s filing officer, will have the right to accept a paper filing in lieu of an electronic filing at the City Clerk’s discretion, under certain circumstances, and to accommodate an Americans with Disabilities Act (ADA) request. Examples of exceptions may include limited access to an electronic device or internet connection.

To ensure a smooth transition, and as part of the agreement and acquisition of the system, NetFile and the City Clerk’s Office will offer extensive training to filers and campaign committees. Staff can schedule one-on-one training with NetFile staff and individual filers and treasurers that will cover the entire electronic filing process including the set-up of filer accounts, explanation of the online filing process, demonstration of the data input and saving reports, preparation of statements for e-signature, and finalizing statements for electronic filing.

A local government agency may require an elected officer, candidate, committee, or other person required to file statements, reports, or other documents required by Chapter 4 (commencing with Section 84100) to file online or electronically, unless the officer, candidate, or committee receive less than $2000 in contributions and have less than $2000 in expenditures in a calendar year.

The following is a summary of requirements that local government agencies must meet:

1. Local legislative bodies must adopt an ordinance approving such online filing and include a legislative finding that the online or electronic filing system will operate securely and effectively and would not unduly burden filers;

2. Electronic systems used must accept filings that are compatible with the format developed by the Secretary of State, must ensure security and integrity of data, and must provide a way for electronic filers to sign under penalty of perjury;

3. No charge to file;

4. File date will be the date received by the local filing officer;

5. Specifies that a timely electronic confirmation along with a copy of the filing kept by the filer constitute a rebuttable presumption that the filing was timely;

6. Filings must be made available on the Internet, with certain information removed, and requires local filing officers to make complete and unredacted copies of electronic filings available to any person upon request;

7. Data shall be maintained for at least 10 years for audit purposes and then may then be archived in a secure format;

8. Notwithstanding any other provision of law, any statement, report, or other document filed online or electronically pursuant to this section shall not be required to be filed with the local filing officer in paper format.

In order to comply with state law, the requirements from Government Code Section 84615 have been incorporated in the proposed ordinance for the City to transition to an electronic filing system (Attachment A).

**CITY STRATEGIC PLAN COMPLIANCE:**

Goal 4: Develop and Maintain Quality Infrastructure and Technology

Objective 4B: El Segundo's technology supports effective, efficient, and proactive operations.

**PREPARED BY:**
Georgeann Hanna, Special Project Coordinator
**REVIEWED BY:**
Tracy Weaver, City Clerk
**APPROVED BY:**
Barbara Voss, Deputy City Manager

**ATTACHED SUPPORTING DOCUMENTS:**

1. eFILING_ORDINANCE_DRAFT
2. Form700brochure
3. CampaignDisclosurebrochure

**ORDINANCE NO. _____**

**AN ORDINANCE ADDING NEW CHAPTER 12 TO TITLE 1 OF THE EL SEGUNDO CITY CODE TO MANDATE ELECTRONIC AND PAPERLESS FILING OF FAIR POLITICAL PRACTICES COMMISSION CAMPAIGN DISCLOSURE STATEMENTS AND STATEMENTS OF ECONOMIC INTEREST.**

**THE CITY COUNCIL DOES ORDAIN AS FOLLOWS:**

SECTION 1. *Findings. The City Council finds and declares as follows:*

A. California Government Code Section 84615 provides that a legislative body of a local government agency may adopt an ordinance that requires an elected officer, candidate, committee, or other person required to file statements, reports, or other documents required by Chapter 4 of the Political Reform Act to file such statements, reports, or other documents online or electronically with the City Clerk.

B. The City of El Segundo City ("City") has entered into an agreement with a vendor approved by the California Secretary of State and meets the requirements set by Government Code Section 84615, to provide an online electronic filing system ("System") for the California Fair Political Practices Commission campaign statements.

C. The System will operate securely and effectively and will not unduly burden filers. Specifically: (1) the System will ensure the integrity of the data and includes safeguards against efforts to temper with, manipulate, alter, or subvert the data; (2) the System will only accept a filing in the standardized record format developed by the Secretary of State and compatible with the Secretary of State's system for receiving an online or electronic filing; (3) the System will be available free of charge to filers and to the public for viewing filings; and (4) the City Clerk will operate the electronic filing system in compliance with the requirements of California Government Code Section 84615 and any other applicable laws.

SECTION 2. Title 1 (Administration and Personnel) of the El Segundo Municipal Code is amended to add new Chapter 12 to read as follows:

CHAPTER 12 - ELECTRONIC FILING OF CAMPAIGN DISCLOSURE STATEMENTS AND STATEMENTS OF ECONOMIC INTEREST

**Section 1-12-1. Purpose and Authority.**

A. The purpose of this chapter is to require the filing of Campaign Disclosure Statements and Statements of Economic Interest by elected officials, candidates, staff, consultants or committees to be completed electronically. The City Council implements this chapter in accordance with the authority granted to cities by

state law, and this chapter is intended to supplement, and not conflict with, the Political Reform Act.

B. While electronic filing of statements will be mandated under this chapter, the City Clerk, as the City's filing officer, will have the right to accept a paper filing in lieu of an electronic filing at the City Clerk's discretion, under certain circumstances, including without limitation, accommodations under the Americans with Disabilities Act.

**Section 1-12-2. Basic Requirement.**

A. An elected officer, candidate, committee, or other person required to file statements, reports, or other documents required by Chapter 4 of the Political Reform Act or designated in the City's local conflict of interest code adopted pursuant to Government Code Section 87300 must file any required Statement of Economic Interests (Form 700) online or electronically with the City Clerk. Electronic filing is mandatory unless the officer, candidate, or committee is exempt as described Government Code 8415(a).

B. The City Clerk shall issue an electronic confirmation that notifies the filer that the Statement was received, and the notification shall include the date and the time that the Statement was received and the method by which the filer may view and print the data received by the City Clerk. The date of filing for a Statement filed online shall be the day that it is received by the City Clerk.

C. If the City Clerk's system is not capable of accepting a Statement due to technical difficulties, a Statement in paper format shall be filed with the City Clerk.

D. The City Clerk will operate the electronic filing system in compliance with the requirements of California Government Code Section 84615.

SECTION 3. *Environmental Review*: This ordinance has been reviewed with respect to applicability of the California Environmental Quality Act ("CEQA") and the State CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000 et seq.). The ordinance is not a project under CEQA Guidelines Section 15378 because it involves administrative activities that will not result in direct or indirect physical changes in the environment.

SECTION 4. *Electronic Signatures*. This Ordinance may be executed with electronic signatures in accordance with Government Code §16.5. Such electronic signatures will be treated in all respects as having the same effect as an original signature.

SECTION 5. *Construction*. This Ordinance must be broadly construed to achieve the purposes stated in this Ordinance. It is the City Council's intent that the provisions of

this Ordinance be interpreted or implemented by the City and others in a manner that facilitates the purposes set forth in this Ordinance.

SECTION 6. *Enforceability*. Repeal or amendment of any provision of the MPMC will not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before this Ordinance's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

SECTION 7. *Severability*. If any part of this Ordinance or its application is deemed invalid by a court of competent jurisdiction, the city council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Ordinance are severable.

SECTION 8. *Recording*. The City Clerk is directed to certify the passage and adoption of this Ordinance; cause it to be entered into the city of El Segundo's book of original ordinances; make a note of the passage and adoption in the records of this meeting; and, within 15 days after the passage and adoption of this Ordinance, cause it to be published or posted in accordance with California law.

SECTION 9. *Execution*. The Mayor, or presiding officer, is hereby authorized to affix his signature to this Ordinance signifying its adoption by the City Council of the City of El Segundo, and the City Clerk, or duly appointed deputy, is directed to attest thereto.

SECTION 10. *Effectiveness*. This Ordinance will take effect 30 days following its final passage and adoption.

PASSED AND ADOPTED this _____ day of _____, 2022.

_____
Drew Boyles, Mayor

ATTEST:

_____
Tracy Weaver, City Clerk

APPROVED AS TO FORM
MARK D. HENSLEY, CITY ATTORNEY

By: _____
Joaquin Vazquez,
Deputy City Attorney

# FPPC Form 700
## STATEMENT OF ECONOMIC INTERESTS

Paperless Filing Solution

NetFile

NetFile's advantages..

- Hosted Platform
- FPPC Approved
- Setup Included
- Ethics & Sexual Harassment Training Tracking
- Filer Application
- Video Tutorials
- Public Portal
- Internal Kiosk
- Unlimited Support
- Unlimited Training
- Industry Innovator
- Industry Leader
- Support Driven
- Data Security

# E-FILING & ADMIN SYSTEM

### Forms 700/800/Plus Forms Training Tracking

Make your hard to track paper filing system obsolete with the most experienced and leading provider of e-filing systems! NetFile does support paperless as well as paper-filed documents. Being hosted online, the agency, filer, and public can access the system at any time day or night. NetFile is an extremely affordable solution for all sizes of local government agencies. Our system comes with around the clock support that is 100% based in California – no need to worry about foreign based programming or support.

Fact: NetFile's support is based from the top down.

Fact: NetFile considers itself to be a support and service company.

Fact: Nobody takes care of their clients like NetFile!

## Electronic Filing

Filers can no longer make mistakes that would cause them to amend their filings for missing required fields. All the filers' data from previous filings that can be used for future filings is retained to make their next filing extremely easy! Drafts can be generated at any time for review prior to filing. A link from your website starts the process. NetFile servers ensure fast and efficient filings. Online video tutorials and documentation makes it easy for filers!

## Agency Management Tool

The system acts as your repository of filers and filings. Create the filers in the database just once. Notifications can be sent out through the system to filers. Track your filers and their deadlines through our advanced filing status report. Includes several industry exclusive tools to push information to staff regarding filers and their filings.

# FPPC FORM 700 INFO SHEET

**Document Viewing Portal - Public Transparency Site**

You can choose to have your filers' documents shown over the internet in redacted form with your own redaction specifications. You can even narrow down which filers you would want to show.

**ADVANCED PUBLIC SEARCH INCLUDED!** This means you can search for elements across all your electronically filed data. This guarantees the utmost in transparency for the public to view the filed data.

**Document Viewing Portal - Private Site**

The system also comes with a kiosk mode that allows you to show filings in unredacted form, but only in your office. That way if someone walks in requesting to view a filing, you can just point them to one of your computers to search for the filings. They could print to your internal printer if they want to purchase a hard copy. No more pulling files and making copies that waste valuable staff time!

**NetFile is Number One in California**

NetFile is California's first internet based accounting, disclosure, and data management system. Our clients accounts for well over half of all electronic disclosure document filings in the state of California. For our local government platform, there have been hundreds of thousands of e-filings made from both our Form 700 SEI filing and admin system as well as our Campaign Disclosure filing and admin system.

**Unparalleled Training and Technical Support**

Our business model is based on an ongoing service with no long term contractual commitments from our clients. This guarantees you the best in training and support!

## Contact Information:


| | |
|---|---|
| **Company Name:** | NetFile, Inc. |
| **Address:** | 2707 Aurora Road<br>Mariposa, CA, 95338 |
| **Phone:** | (209) 742-4100 (Main Line & Support) |
| **Phone:** | (559) 250-4847 (Local Government Sales) |
| **Fax:** | (209) 391-2200 |
| **E-mail:** | sales@netfile.com |
| **Website:** | www.netfile.com |


NetFile also has an e-filing system for local governments for their Campaign Disclosure filings and administration of **FPPC Forms 410, 450, 460, 461, 470, 496 & 497**.

NetFile THE E-FILING LEADER

# Campaign Disclosure

## FPPC CAMPAIGN FORMS

Paperless Filing Solution

NetFile

## NetFile's advantages..

- Hosted Platform
- Setup Included
- Filer Application
- Public Portal
- Internal Kiosk
- Unlimited Support
- Unlimited Training
- Free Filer Training
- 3rd Party Uploads
- CA Based Support
- Preferred by CPTA
- Industry Innovator
- Industry Leader
- Support Driven
- Data Security

# E-FILING & ADMIN SYSTEM

**Campaign Statements** Made Simple and Secure

Make your hard to track paper filing system obsolete with the most experienced provider of Campaign Disclosure systems! NetFile supports paperless as well as paper filed documents. Being hosted online, the agency, filer, and public can access the system any time day or night. NetFile is an extremely affordable solution for all sizes of local government agencies. Our system comes with around the clock support that is 100% based in California - no need to worry about foreign based programming or support.

Fact: NetFile's support is based from the top down.

Fact: NetFile considers itself to be a support and service company.

Fact: NetFile DOES NOT make contributions to local candidate controlled committees!

## Electronic Filing

First time filers can request free live software training from NetFile staff! Filers can input their data as they go or all at one time. Drafts can be generated at any time for review prior to filing. A link from your website starts the filing process. The site is hosted by NetFile but looks just like your site. NetFile servers ensure fast and efficient filings. The submitted filing is validated to stop amendments from happening in the first place. Online documentation available for the filer to make filing easy!

## Agency Management Tool

The system acts as your repository of filers and filings. Create the filers in the database just once. Notifications can be sent out through the system to filers. Track your filers and their deadlines through our advanced filing status report. Includes several industry exclusive tools to push information to staff regarding filers and their filings.

# Campaign Disclosure INFO SHEET

**Document Viewing Portal - Public Transparency Site**

You can choose to have your filers' documents shown over the internet in redacted form with your own redaction specifications. You can even narrow down which filers you would want to show.

**ADVANCED PUBLIC SEARCH INCLUDED!** This means you can search for elements across all your electronically filed data. This guarantees the utmost in transparency for the public to view the filed data.

**Document Viewing Portal - Private Site**

The system also comes with a kiosk mode that allows you to show filings in unredacted form, but only in your office. That way if someone walks in requesting to view a filing, you can just point them to one of your computers to search for the filings. They could print to your internal printer if they want to purchase a hard copy. No more pulling files and making copies that waste valuable staff time!

**NetFile is Number One in California**

NetFile is California's first internet based accounting, disclosure, and data management system. Our clients accounts for well over half of all electronic disclosure document filings in the state of California. For our local government platform, there have been hundreds of thousands of e-filings made from both our Form 700 SEI filing and admin system as well as our Campaign Disclosure filing and admin system.

**Unparalleled Training and Technical Support**

Our business model is based on an ongoing service with no long term contractual commitments from our clients. This guarantees you the best in training and support!

## Contact Information:


| | |
|---|---|
| **Company Name:** | NetFile, Inc. |
| **Address:** | 2707 Aurora Road<br>Mariposa, CA, 95338 |
| **Phone:** | (209) 742-4100 (Main Line & Support) |
| **Phone:** | (559) 250-4847 (Local Government Sales) |
| **Fax:** | (209) 391-2200 |
| **E-mail:** | sales@netfile.com |
| **Website:** | www.netfile.com |


NetFile also has an e-filing system for local governments for Statements of Economic Interests FPPC Form 700 as well as Ethics Training Tracking and Sexual Harassment Training Tracking.

NetFile THE E-FILING LEADER