A. CALL TO ORDER:  7:00 p.m.

B. FLAG SALUTE

C. ROLL CALL:

D. MINUTES:  01/14/20

The Brown Act provides an opportunity for members of the public to directly address the Planning Commission on any item of interest to the public before or during the Planning Commission's consideration of the item. If you wish to speak regarding an agenda item, please fill out a speaker's slip and give it to the minutes clerk who will forward it to the chairman.

Electronic Media: Electronic media which members of the public wish to be used during any public comment period should be submitted to the Planning Division at least 24 hours prior to the meeting at which it is to be shown.

The electronic media will be subject to a virus scan and must be compatible with the City’s existing system. The media must be labeled with the name of the speaker, the comment period during which the media is to be played and contact information for the person presenting the media.

The time necessary to present any electronic media is considered part of the maximum time limit provided to speakers. City staff will queue the electronic information when the public member is called upon to speak. Materials shown to the Commission during the meeting are part of the public record and may be retained by the City.

The City of Escondido is not responsible for the content of any material presented, and the presentation and content of electronic media shall be subject to the same responsibilities regarding decorum and presentation as are applicable to live presentations.

If you wish to speak concerning an item not on the agenda, you may do so under “Oral Communications” which is listed at the beginning and end of the agenda. All persons addressing the Planning Commission are asked to state their names for the public record.

Availability of supplemental materials after agenda posting: any supplemental writings or documents provided to the Planning Commission regarding any item on this agenda will be made available for public inspection in the Planning Division located at 201 N. Broadway during normal business hours, or in the Council Chambers while the meeting is in session.

The City of Escondido recognizes its obligation to provide equal access to public services for individuals with disabilities. Please contact the A.D.A. Coordinator, (760) 839-4643 with any requests for reasonable accommodation at least 24 hours prior to the meeting.

The Planning Division is the coordinating division for the Planning Commission.

For information, call (760) 839-4671.
E. WRITTEN COMMUNICATIONS:

"Under State law, all items under Written Communications can have no action, and will be referred to
the staff for administrative action or scheduled on a subsequent agenda."

1. Future Neighborhood Meetings

F. ORAL COMMUNICATIONS:

"Under State law, all items under Oral Communications can have no action, and may be referred to
the staff for administrative action or scheduled on a subsequent agenda."

This is the opportunity for members of the public to address the Commission on any item of business
within the jurisdiction of the Commission.

G. PUBLIC HEARINGS:

Please try to limit your testimony to 3 minutes.

1. ZONING CODE AMENDMENT – AZ 20-0001:

REQUEST: A series of Escondido Municipal Code and Zoning Code Amendments to address
changes in state laws, correct errors, and improve existing regulations. The proposal involves minor
amendments to Chapter 16 of the Municipal Code (Mobile Food Facilities), and Article 49 (Air Space
Condominium and Community Apartment Projects), Article 67 (Density Bonus and Residential
Incentives), and Article 70 (Accessory Dwelling Units) of the Escondido Zoning Code. The proposal
also includes the adoption of the environmental determination prepared for the project.

PROPERTY SIZE AND LOCATION: Citywide

ENVIRONMENTAL STATUS: Exemption under the Common Sense (i.e. “General Rule”), CEQA
Section 15061(b)(3).

APPLICANT: City of Escondido

STAFF RECOMMENDATION: Approval to City Council

COMMISSION ACTION:

PROJECTED COUNCIL HEARING DATE:
H. CURRENT BUSINESS:

Note: Current Business items are those which under state law and local ordinances do not require either public notice or public hearings. Public comments will be limited to a maximum time of three minutes per person.

   1. Climate Action Plan Update
   2. General Plan Progress Report

I. ORAL COMMUNICATIONS:

"Under State law, all items under Oral Communications can have no action and may be referred to staff for administrative action or scheduled on a subsequent agenda."

This is the opportunity for members of the public to address the Commission on any item of business within the jurisdiction of the Commission.

J. PLANNING COMMISSIONERS

K. ADJOURNMENT
CITY OF ESCONDIDO

ACTION MINUTES OF THE REGULAR MEETING OF THE
ESCONDIDO PLANNING COMMISSION

January 14, 2020

The meeting of the Escondido Planning Commission was called to order at 7:00 p.m. by Chairman Spann, in the City Council Chambers, 201 North Broadway, Escondido, California.

Commissioners present: James Spann, Chairman; Don Romo, Vice-Chair; Michael Cohen, Commissioner; Joe Garcia, Commissioner; James McNair, Commissioner; and Stan Weiler, Commissioner.

Commissioners absent: None – 1 vacancy.

Staff present: Mike Strong, Assistant Planning Director; Gary McCarthy, Senior Deputy City Attorney; Elizabeth Lopez, Associate Engineer; Adam Finestone, Principal Planner; Ann Dolmage, Associate Planner; Darren Parker, Associate Planner; Jasmin Perunovich, Assistant Planner I; and Kirsten Peraino, Minutes Clerk.

MINUTES:

Moved by Commissioner Cohen, seconded by Commissioner Weiler to approve the Action Minutes of the December 10, 2019 meeting with the correction to Tuesday, January 14, 2020 for the adjournment date. Motion carried unanimously (6-0; 1 vacancy).

WRITTEN COMMUNICATIONS: – Received.

FUTURE NEIGHBORHOOD MEETINGS: – None.

ORAL COMMUNICATIONS: – None.

PUBLIC HEARINGS:
1. **CONDITIONAL USE PERMIT AND GRADING EXEMPTION – PHG 19-0015 / ENV 19-0003:**

REQUEST: The proposed project is a Conditional Use Permit for an assisted living and memory care facility, containing 78 studio, one-bedroom, and two-bedroom units, and a total of 99 beds. The facility would include one partial ground floor with lobby space, office and conference space, and service rooms, and three upper levels of resident units and recreational and operational amenities. Forty-one (41) off-street parking spaces would be provided, as well as landscaping and stormwater facilities. A Grading Exemption for a cut slope as steep as 1.5:1 and as tall as 26 feet (both of which are in excess of grading ordinance standards) is also proposed. The proposal also includes the adoption of the environmental determination prepared for the project.

PROPERTY SIZE AND LOCATION: The project site is approximately 3.31 acres and is located at the southeast corner of East Valley Parkway and Hidden Trails Road. It contains three lots (APNs 240-110-54, 240-110-55, and 240-110-56) and is addressed as 3141 East Valley Parkway.

ENVIRONMENTAL STATUS: A Draft Initial Study/Mitigated Negative Declaration (IS/MND) was issued for a 20-day public review, starting November 14, 2019, and ending December 3, 2019, in conformance with the California Environmental Quality Act (CEQA). No comments were received during the review period. The IS/MND incorporates mitigation measures that will avoid or mitigate impacts to a less than significant level.

STAFF RECOMMENDATION: Approval

PUBLIC SPEAKERS:
- **Joe Holasek, Project Architect**, provided a presentation
- **Rob D’ameo, Project Engineer** available for questions

COMMISSIONER DISCUSSION AND QUESTIONS:

The Commissioners discussed various aspects of the project.

COMMISSION ACTION: Motion by Weiler, seconded by Cohen to approve staff recommendation.

Motion carried unanimously (6-0, 1 vacancy).
2. **APPEAL OF A ZONING ADMINISTRATOR DECISION – PHG 19-0051:**

REQUEST: An Appeal of a Discretionary Decision per Article 61, Section 33-1319 (4) of the Escondido Zoning Code for a Minor Conditional Use Permit to install and operate an AT&T small cell wireless facility in the public right-of-way. The proposed facility, application No. PHG19-0029 involves the removal and replacement of an existing concrete street light pole with a new 27-foot-high street light pole with an additional three feet above designed to accommodate one canister-type antenna (24-inches tall x 8-inches in diameter) mounted on top of the pole, and four (4), 7.8-inch wide x 7.8-inch long radio units mounted vertically onto the pole. Additional associated equipment is proposed to be placed in new underground concrete vaults (handhole). The light fixture would be upgraded to an LED fixture. Trenching or boring is required to extend power and telecommunication lines underground to the new facility. The proposal also includes the adoption of the environmental determination prepared for the project.

PROPERTY SIZE AND LOCATION: The subject site is located in the public right-of-way on the western side of Vintage Place, just northwest of La Honda Drive, near 2094 Vintage Place.

ENVIRONMENTAL STATUS: The project is categorically exempt from the California Environmental Quality Act (CEQA), in conformance with section 15303, “New Construction.”

STAFF RECOMMENDATION: Deny the appeal and uphold the decision of the Zoning Administrator to approve the project.

PUBLIC SPEAKERS:
- **Charles Peck, Appellant**, opposed project.
- **Kevin McGee, Representative for AT&T**, spoke in favor of project.
- **Judy Backstead**, spoke in favor of project.

COMMISSIONER DISCUSSION AND QUESTIONS:

The Commissioners discussed various aspects of the project.

COMMISSION ACTION: Motion by Spann, seconded by Weiler to approve and uphold staff recommendation.

Motion carried unanimously (6-0, 1 vacancy).
CURRENT BUSINESS:

1. MODIFICATION TO THE PRECISE DEVELOPMENT PLAN – PHG 19-0076:

REQUEST: A modification to the Precise Development Plan for the Gateway Grand project (SUB 16-0001) to amend Planning Division conditions of approval related to allowable signage. The applicant is proposing to install two projecting wall signs in addition to the allowable monument and directional signs.

PROPERTY SIZE AND LOCATION: The project is located on a 2.6-acre site, between W. Grand Avenue and W. Valley Parkway, addressed as 700 – 730 W. Grand Avenue, in the Gateway Transit District of the Downtown Specific Plan.

ENVIRONMENTAL STATUS: The Project is Categorically Exempt from the provisions of the California Environmental Quality Act (CEQA), pursuant to Section 15311/Class 11 “Accessory Structures.”

STAFF RECOMMENDATION: Approval

PUBLIC SPEAKERS: Carolyn Hillgren, Applicant, spoke in favor of project.

COMMISSIONER DISCUSSION AND QUESTIONS:

The Commissioners discussed various aspects of the project.

COMMISSION ACTION: Motion by Spann, seconded by Weiler to approve staff’s recommendation.

Motion carried unanimously (6-0, 1 vacancy)

ORAL COMMUNICATIONS: The vacancy left by Mark Watson will be filled concurrently when the other positions are filled in March.

ADJOURNMENT: Chairman Spann adjourned the meeting at 8:30 p.m. The January 28, 2020 meeting was cancelled. The next regularly scheduled Planning Commission meeting will be held on Tuesday, February 11, 2020 in the City Council Chambers, 201 North Broadway Escondido, California.
**PROJECT NUMBER / NAME:** AZ 20-0001 / Omnibus Code Clean-Up

**REQUEST:** A series of proposed Zoning Code Amendments to address changes in state laws, correct errors, and improve existing regulations. The proposal involves minor amendments to Article 49 (Air Space Condominium), Article 67 (Density Bonus), Article 70 (Accessory Dwelling Units), and Article 73 (Temporary Uses) of the Escondido Zoning Code and Article 7 of Chapter 16 (Mobile Food Facilities) of the Municipal Code. The proposal also includes the adoption of the environmental determination prepared for the project.

**LOCATION:** Citywide

**APPLICANT:** City of Escondido

**APN / APNS:** N/A

**PRIMARY REPRESENTATIVE:** Planning Division

**GENERAL PLAN / ZONING:** N/A

**DISCRETIONARY ACTIONS REQUESTED:** Zoning Code Amendments

**PREVIOUS ACTIONS:** N/A

**PROJECT PLANNER:** Mike Strong, Assistant Planning Director

**mstrong@escondido.org**

**CEQA RECOMMENDATION:** Exempt (CEQA Guidelines Section 15378(b)(3) and CEQA Section 21080.17).

**STAFF RECOMMENDATION:** Provide a recommendation to City Council to approve the Project.

**REQUESTED ACTION:** Approve Planning Commission Resolution No. 2020-04

**CITY COUNCIL HEARING REQUIRED:** ☒ YES ☐ NO

**REPORT APPROVALS:** ☐ Bill Martin, Community Development Director

☒ Mike Strong, Assistant Planning Director
A. BACKGROUND:

It is important that municipalities periodically review and update their codes and regulations to ensure that they stay current and up-to-date. In 2017, the City initiated a new, recurring work program to annually review the Zoning Code to see if anything needs to be updated to reflect State mandated changes, correct errors or inconsistencies, and to address today’s land use challenges. Now, as established, the Planning Division is able to maintain a regular process and consistent schedule for maintaining the City’s codes and regulations. These amendments are combined into a single clean-up batch proposal, called Annual Omnibus Code Clean-Up, as a means of efficiently modifying the Zoning Code.

The 2020 batch of amendments affect many articles of the Zoning Code and includes amendments to the Municipal Code. Although most typical omnibus review cycles include relatively minor changes to clarify existing regulations, this batch consists of implementing ordinances. Because there is still a need to process other amendments to the Zoning Code, it is anticipated that the second batch of code amendments will be processed later this year. The second batch of amendments would focus more on the need to correct minor errors in the text, incorporate code interpretations, and improve existing regulations to eliminate uncertainty for staff, customers, and the public.

Zoning Code Amendments are prepared as ordinances and require Planning Commission recommendation and City Council adoption. As noted above, the 2020 batch of amendments also proposes Municipal Code Amendments to Chapter 16. Typically, the Planning Commission will not review proposed amendments to Municipal Code because the amendments are not within their purview. However, they have been included herein this staff report because of their relationship and co-dependence to the authorization of temporary uses and the rest of the omnibus. Furthermore, the February 25, 2020 public hearing with the Planning Commission will provide additional public input opportunities that can support the development of the final ordinance(s).

B. PROJECT ANALYSIS:

For the 2020 Omnibus Code Cleanup, the suggested amendment list includes amendments to various articles of the Municipal Code and Zoning Code. Many of the proposed changes are self-explanatory consisting of grammar and punctuation corrections or simple updates to position titles to reflect those currently used by the City. The proposed changes that require further explanation can be found below.

1. Mobile Food Facilities

Chapter 16 of the Municipal Code allows for a limited range of food truck vending services. However, mobile food facilities are often featured at some short-term activities and events at a temporary use, and on a more permanent basis at the swap meet. These vendors operate
without the benefit of receiving a city permit. The proposed code changes create allowances for these specific types of events. Furthermore, the Planning Division currently does not have a mobile food permit application form. The basis of the proposed code changes is to develop a framework for the permitting of this land use activity.

2. **Condominium Permits**

The existing provisions require City Council approval of all condominium permits. The proposed changes eliminate the requirement in certain specific plan areas where housing production and streamlined permitting is a goal. Many projects may still trigger City Council review if processed with a Development Agreement, Density Transfer, or Planned Development request. However, the proposed code change continues the City’s long-standing commitment to streamlining housing and the removes the constraint for home ownership housing applications.

3. **Density Bonus Law Changes**

Planning and Zoning Law requires an agency to provide developers with a density bonus and other incentives or concessions for the production of lower income housing units or for the donation of land within the development if the developer agrees to construct a specified percentage of units for very low-, low-, and/or moderate-income households or qualifying residents. In October 2019, Assembly Bill (AB) 1763 was adopted and chaptered by the State, expanding existing density bonus law for 100 percent affordable housing projects to include unlimited density around transit hubs with an additional three stories or 33 feet of height. The proposed code changes make our implementing ordinances comport with recent State law changes.

4. **Accessory Dwelling Unit Law Changes**

The California Legislature again embraced accessory dwelling units, with a package of laws that allow most single-family homes to be converted into three (3) separate housing units. The groundbreaking package of statutes create new incentives and streamlined processes to build accessory dwelling units and junior accessory dwelling units. The proposed code changes make our implementing ordinance comport with recent State law changes, as outlined below. In addition, the proposed code changes address some issues not contemplated by the Legislature including historic resources and accessory use rights of the premises (i.e. home occupation permits and animal regulations).

- AB 68: Allows two (2) accessory dwelling units on a single lot, as well as multiple units on multi-family lots. Also limits certain design requirements that cities can impose on ADUs, and requires ADU approvals be completed in 60 days.
- Senate Bill (SB) 13: Restricts the amount of impact fees that can be charged, among other things
• AB 881: Eliminates owner-occupancy requirements for five years.

5. **Temporary Use Permits**

The purpose and intent of these code changes are ancillary to expanding mobile food facility permitting, but is important as a standalone issue that needs to be addressed by the city. Currently, short term activities are authorized by Article 73 of the Zoning Code, but limited to special events on publicly owned land or outdoor sales and outdoor display permits in commercial areas. The Zoning Code does not address other temporary activities that might occur. The proposed code changes set forth reasonable regulations by establishing a process for permitting other short-term activities and events (“temporary uses”), to protect the rights and interest granted to permit holders, and to ensure the health and safety of surrounding properties.

The proposed Zoning Code Amendments would be consistent with the existing General Plan goals and policies. Goal 2 et. seq. policies of the Land Use and Community Form portion of the General Plan addresses the need for regulations that clearly and effectively implement land use development goals and objectives. The basis of establishing and updating, as necessary, local standards and guidelines for land use activities ensures land use compatibility is achieved. The batch of amendments relate to organizational effectiveness and efficiency and are considered a housekeeping measure. Recent changes in State law imposes new state housing mandates on California cities, and this batch of amendments consists of implementing ordinances. The proposed Zoning Code changes would also make the code more internally consistent and easier to understand and apply.

C. **ENVIRONMENTAL STATUS:**

The City finds that the adoption of the Zoning Code Amendments would be exempt from Environmental Review pursuant to General Rule 15061(b)(3) since there would be no possibility of a significant effect on the environment because the amendments will not directly result in development. Furthermore, the California Public Resources Code Section 21080.17 exempts the adoption of an ordinance by a city to implement the provisions of Accessory Dwelling Unit law. Any future project or development as defined by the California Environmental Quality Act (CEQA) that may occur as a result of the amended language would be subject to CEQA review and analysis.

D. **CONCLUSIONS:**

The Planning Division maintains a regular process and consistent schedule for maintaining the City’s codes and regulations. These amendments are combined into a single clean-up batch proposal, called Annual Omnibus Code Clean-Up, as a means of efficiently modifying the Zoning Code. The City proposes to amend the Municipal Code and Zoning Code to correct minor errors in the text, incorporate code interpretations, and improve existing regulations to eliminate
uncertainty for staff, customers, and the public. The batch of amendments relate to organizational effectiveness and efficiency and are considered a housekeeping measure. The Planning Commission has the authority under Section 33-1262 of Article 61 of the Escondido Zoning Code (Administration and Enforcement Ordinance) to review and consider amendments to the Zoning Code, which requires a Planning Commission recommendation to City Council. No other discretionary permits are requested or required.

**ATTACHMENT:**

1. Draft Planning Commission Resolution No. 2020-04
ATTACHMENT 1

Planning Commission
Hearing Date: February 25, 2020
Effective Date: February 26, 2019

PLANNING COMMISSION RESOLUTION NO. 2020-04

A RESOLUTION OF THE PLANNING COMMISSION
OF THE CITY OF ESCONDIDO, CALIFORNIA,
RECOMMENDING APPROVAL TO AMEND ARTICLE
49 (AIR SPACE CONDOMINIUM), 67 (DENSITY
BONUS), ARTICLE 70 (ACCESSORY DWELLING
UNITS), AND ARTICLE 73 (TEMPORARY USES) OF
THE ESCONDIDO ZONING CODE AND ARTICLE 7 OF
CHAPTER 16 (MOBILE FOOD FACILITIES) OF THE
MUNICIPAL CODE.

APPLICANT: City of Escondido

CASE NO: AZ 20-0001

WHEREAS, the Planning Commission of the City of Escondido did, on
February 25, 2020 hold a Public Hearing to consider the Municipal Code and Zoning Code
Amendments request, a proposal to modify Article 49 (Air Space Condominium), Article
67 (Density Bonus), Article 70 (Accessory Dwelling Units), and Article 73 (Temporary
Uses) of the Escondido Zoning Code; and Article 7 of Chapter 16 (Mobile Food Facilities)
of the Municipal Code; and

WHEREAS, the following determinations were made:

1. That a notice was published and mailed as required by the Escondido
   Zoning Code and applicable State law.

2. That the application was assessed in conformance with the
   California Environmental Quality Act.
3. That a staff report was presented discussing the issues in the matter.

4. That a Public Hearing was held and that all persons desiring to speak did so.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of Escondido:

1. That the above recitations are true and correct.

2. The proposed Municipal Code and Zoning Code Amendments are exempt from CEQA, pursuant to Section 15061(b)(3). The activity is covered by the general rule ("common sense rule") that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Furthermore, the portion of the amendment that implements changes to Government Code Section 65852.2, otherwise known as Accessory Dwelling Unit law,", is covered by the exemption in CEQA Section 21080.17, which exempts the adoption of an ordinance by a city to implement Accessory Dwelling Unit law. The proposed Municipal Code and Zoning Code Amendments would not, in and of themselves, result in development or any other material change to the environment. Projects seeking to implement the amended provisions would be subject to separate review under the California Environmental Quality Act (CEQA).

4. After consideration of all evidence presented, and studies and investigations made by the Planning Commission and in its behalf, the Planning Commission makes the following substantive findings and determinations, attached hereto as Exhibit “A,” relating to the information that has been considered. In accordance with the Findings of Fact and the foregoing, the Planning Commission reached a recommendation on the matter as hereinafter set forth.
5. That, considering the Findings of Fact and applicable law, the Planning Commission hereby makes a motion to recommend City Council approval of said amendments, attached as Exhibit “B.”
PASSED, ADOPTED AND APPROVED by a majority vote of the Planning Commission of the City of Escondido, California, at a regular meeting held on the 25th day of February 2020, by the following vote, to wit:

AYES: COMMISSIONERS:
NOES: COMMISSIONERS:
ABSTAINED: COMMISSIONERS:
ABSENT: COMMISSIONERS:

______________________________
JAMES SPANN, Chairman
Escondido Planning Commission

ATTEST:

______________________________
MIKE STRONG, Secretary of the Escondido Planning Commission

I hereby certify that the foregoing Resolution was passed at the time and by the vote above stated.

______________________________
KIRSTEN PERAINO, Minutes Clerk
Escondido Planning Commission
Municipal and Zoning Code Amendment Determinations:

1. Over the years, staff and customers have found certain sections of the Municipal Code and Zoning Code are vague, unclear, or conflicting, which results in confusion and disagreement in code interpretation. It is important that the City of Escondido review policies and procedures on an on-going basis to ensure a customer-focused government through transparent services and positive organizational culture.

2. The Planning Division maintains a regular process and schedule for maintaining the City's codes and regulations. Those issues that have been identified are being addressed as part of this clean-up effort, whereby all code amendments have been combined in a single batch, called an omnibus. Additional items to correct or improve the Zoning Code may be considered in the next annual omnibus code clean-up cycle.

3. In October 2019, the State adopted Assembly Bill (AB) 1763 and changed the State's density bonus law, which imposes new State housing mandates on California cities regarding required density bonuses and incentives for housing developers. The proposed Zoning Code Amendment would ensure compliance with Government Code Section 65915 et. seq., which requires cities to adopt an implementing ordinance that provides affordable housing density bonuses and offers concessions and incentives for specified housing developments.

4. In October 2019, AB 68, AB 881, and Senate Bill (SB) 13 reformed many aspects of the State accessory dwelling unit law. As amended, California’s accessory dwelling unit law establishes statewide standards for local regulations governing accessory dwelling unit and junior accessory dwelling unit development. The proposed Zoning Code Amendment would ensure compliance with Government Code Section 65852.2 et. seq.

5. This ordinance continues the City's long-standing commitment to affordable housing and the provision of incentives for the creation of this desired housing type and is integrated with the City's other existing regulations promoting affordable housing production.

6. The Planning Commission’s recommendation is based on applicable factors pursuant to Section 33-1263 of the Escondido Zoning Code. The public health, safety, and welfare would not be adversely affected by the proposed batch of Zoning Code Amendments because they correct internal inconsistencies, improve readability, update references to other code sections or regulatory documents, codify prior interpretations, and make the code consistent with changing state or federal regulations. The proposed batch of Zoning Code amendments would be consistent with the goals and policies of the General Plan because they address changes in state laws, correct errors, and improve existing
regulations to eliminate uncertainty for staff, customers, and the public. This effort is not intended to be a comprehensive update to the local code or change land use densities or intensities. The proposed Zoning Code amendments do not conflict with any specific plan.
SECTION I.

Amend the Chapter 16 of the Escondido Municipal Code and various sections of the Zoning Code to read as specified below. The changes are listed in order by section number, with strikeout typeface illustrating deletions and underline typeface illustrating new text. A clean-copy of the proposed changes will be attached as an exhibit to the ordinance that is presented to City Council for adoption.

CHAPTER 16. LICENSES AND BUSINESS REGULATIONS GENERALLY

ARTICLE 7. MOBILE FOOD FACILITIES

Sec. 16-406. Separate business license and permit required.

An operator shall have a business license and a responsible person shall obtain a mobile food facility permit, as required by this article.

   (a) It is unlawful for an operator to operate a mobile food facility without a separate business license for each vehicle.

   (b) It is unlawful for an operator or a responsible person to allow, authorize, operate, or use a mobile food facility without a mobile food facility permit unless otherwise permitted by city, state or federal law.

   (c) A mobile food facility permit is nontransferable and is valid only for the person and location of permit issued, unless it is suspended or revoked for cause, for the period indicated. If a permittee changes the location of his or her business, that permittee must obtain a new permit prior to acting as a retailer at the new location. If a business licensed is sold or transferred, the new owner must obtain business license for that location pursuant to section 16-406(a) before acting as a retailer.

CHAPTER 16. LICENSES AND BUSINESS REGULATIONS GENERALLY

ARTICLE 7. MOBILE FOOD FACILITIES

Sec.16.407. Permit requirements.

   (a) It shall be unlawful for any person to act as a mobile food facility retailer without first obtaining and maintaining a valid mobile food facility permit pursuant to this chapter for each location at which that activity is to occur, unless otherwise exempted by Section 16-407(d) and
Section 16-407 (e). The director of community development, or the director’s designees, shall administer mobile food facility permits issued pursuant to this article.

(b) An application for a mobile food facility permit shall be submitted on an application form obtained from the Planning Division and shall be accompanied by a nonrefundable fee. The application shall provide information necessary for review of the application by appropriate city departments.

(1) No such license or permit shall be issued for mobile food facilities, uses, or purposes where the same would be in conflict with the provisions of this article. The operating requirements of Section 16-409 shall be regarded and applied as the minimum requirements.

(2) When the review of a mobility facility permit application provides for discretion on the part of the director or designee, that discretion may be exercised to impose more stringent requirements than identified in Section 16-409, as may be necessary to promote the purposes of this article.

(c) Location requirements. The director shall may issue a mobile food facility permit to a responsible person, only for properties in the following zoning districts and locations:

(1) Residential or agricultural or industrial zones, as an accessory use to a beer or wine manufacturing business;

(2) Commercial or industrial zones, as an accessory and incidental use to a swap meet; or

(3) Designated districts of specific planning areas (SP zones), pursuant to specific plan use authorization.

(c) An application for a mobile food facility permit shall be submitted on an application form secured from the director and shall be accompanied by a nonrefundable fee. The application shall provide information necessary for review of the application by appropriate city departments.

(d) The following events An approved special event permit or facility use permit from the city, specifically authorizing a mobile food facility at the event or facility, shall exempt an operator or a responsible person from the mobile food facility permit required in section 16-406(b) and may exempt the operator or responsible person from the operating requirements in section 16-409.

(1) An approved special event permit or facility use permit from the city, specifically authorizing a mobile food facility at the event or facility.

(2) An approved temporary use permit from the city, pursuant to Section 33-1534(c)(7) of the Escondido Zoning Code.

(e) A mobile food facility that stops for not more than twenty (20) minutes on a scheduled route to provide service directly at a construction site or other business and does not vend to the general public during the scheduled stop will exempt any operator or responsible person from the requirements identified in sections 16-406(b) and 16-409.

CHAPTER 16. LICENSES AND BUSINESS REGULATIONS GENERALLY
ARTICLE 7. MOBILE FOOD FACILITIES

Sec. 16-408. Permit enforcement.

(a) Nothing in this chapter shall be construed to grant any person obtaining and maintaining a mobile food facility permit any status or right other than the right to act as a retailer at the location in the city identified on the face of the permit.

(b) The director of community development may issue administrative citations or take any other enforcement action authorized by this code, including permit revocation or suspension, upon finding a violation of this article.

ARTICLE 49. AIR SPACE CONDOMINIUM AND COMMUNITY APARTMENT PROJECTS

Sec. 33-951. Condominium or condominium conversion application.

(a) Permit required for new condominium projects and conversions to condominium ownership. A condominium permit and design review shall be required for all condominiums to be constructed or for existing buildings to be converted to condominiums in the City of Escondido.

(1) Application for a condominium permit in the Downtown Specific Plan, East Valley Specific Plan, and South Centre City Specific Plan shall be made to the director of community development, unless the action includes discretionary permits for which the Planning Commission or City Council is the decision-maker.

(2) Application for a condominium permit in any other area of the city not covered by subsection (a)(1) shall be made to the city council, through the planning division and planning commission in accordance with procedures set forth in this chapter.

(3) The director of community development shall prescribe the form and content of all condominium permit applications.

(b) Exceptions to required permits. The following projects are not required to process a condominium permit through this article:

(1) Condominiums requested concurrently with a planned development application pursuant to Article 19.

(2) Condominiums requested concurrently with resident purchase of mobilehome parks pursuant to section 32-401 of Article 4 of Chapter 32, subdivisions.

(3) Condominiums requested for a non-residential development entitlement application in conformance with the California Subdivision Map Act, and subject to the following provisions:

(A) The project is not a mixed-use development that includes residential units.

(B) A maintenance and replacement program, as well as a contingency fund is provided to adequately address required improvements to the satisfaction of the director of community development (for conversion projects only).

(C) The developer files with the city, a declaration of covenants, conditions and restrictions pursuant to section 33-1108.
(D) Public notice of the condominium project complies with section 33-1300(b) and (c).

ARTICLE 49. AIR SPACE CONDOMINIUM AND COMMUNITY APARTMENT PROJECTS

Sec. 33-952. Commission action.

If required under section 33-951(a)(2), the planning commission shall review the application for a condominium permit and recommendation of the planning division. A public hearing on the application shall be held in accordance with Division 6 of Article 61 of this chapter, and a recommendation shall be forwarded to the city council.

ARTICLE 49. AIR SPACE CONDOMINIUM AND COMMUNITY APARTMENT PROJECTS

Sec. 33-953. Findings of commission and council.

In order to grant a condominium permit, the city council shall find that:

(a) Except as specifically addressed in section 33-955 of this article, the project meets current zoning, design review, drainage, engineering, fire protection, seismic and building code requirements as if the project were newly constructed. However, the conversion of existing legal nonconforming multifamily residential developments to condominium units is exempt from current density requirements providing no increased density is proposed. Conversion requests may also utilize the same administrative adjustment procedures available to new construction as specified in the underlying zone;

(b) Required upgrades or modifications correcting a nonconforming condition may be permitted notwithstanding the provisions of section 33-1243 of this code, if the project otherwise conforms to applicable criteria;

(c) Residential projects will contain architectural and site-planning features commonly found in projects that maintain a majority of owner-occupied units;

(d) The project provides sufficient parking commensurate with its location and design;

(e) The project’s open space is well-designed, properly distributed, and does not unreasonably restrict disabled access;

(f) The project conforms to the general plan and applicable zoning provisions. However, a conversion to residential condominiums may occur notwithstanding the fact that existing densities exceed currently permitted general plan densities provided no additional units are proposed;

(g) The project’s maintenance and replacement program adequately addresses required improvements and appears to be sustainable;
That all tenant notification and information, as required by the California Subdivision Map Act, this chapter, and the City of Escondido subdivision ordinance has been, or will be provided; and

That provisions have been made for the timely release of security deposits and provision of rental payment history reports if requested by existing residential tenants.

ARTICLE 49. AIR SPACE CONDOMINIUM AND COMMUNITY APARTMENT PROJECTS

Sec. 33-954. City council action.

If required under section 33-951(a)(2), after the submission of a formal recommendation by the planning commission, the city council shall review the application and recommendation during a public hearing held in accordance with Division 6 of Article 61 of this chapter, and shall approve, modify or disapprove the action of the planning commission.

ARTICLE 49. AIR SPACE CONDOMINIUM AND COMMUNITY APARTMENT PROJECTS

Sec. 33-955. Development standards.

Condominiums approved and authorized by the city council shall be developed or upgraded to comply with the city’s current design review, building, seismic, drainage, engineering, zoning and fire protection standards for new construction. Limited departures, in accordance with applicable building code provisions, may be granted for condominium conversions providing that proposed conditions will substantially conform to current requirements, feasible upgrades have been provided, and no health and safety issues will exist.

Condominium permit approvals shall comply with the findings outlined in section 33-953 of this article. Additionally, minimum standards for residential condominium units include the following:

(a) Minimum square footages as follows:

<table>
<thead>
<tr>
<th>Type of Unit</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio</td>
<td>600</td>
</tr>
<tr>
<td>One-bedroom units</td>
<td>700</td>
</tr>
<tr>
<td>Two-bedroom units</td>
<td>800</td>
</tr>
<tr>
<td>Three-bedroom units</td>
<td>1,000</td>
</tr>
<tr>
<td>Additional bedrooms</td>
<td>150 for each additional bedroom</td>
</tr>
</tbody>
</table>

(b) Washer and dryer hook-ups in each unit.

(c) Minimum of eighty (80) cubic feet of private storage area for each unit with minimum dimensions of at least two (2) feet. Said storage shall be in addition to normally expected cabinets and closets.
ARTICLE 67. DENSITY BONUS AND RESIDENTIAL INCENTIVES

Sec. 33-1412. Implementation.

(b) For projects proposing a density bonus:

(1) The city shall grant, according to Government Code Section 65915, a density bonus and/or concession(s) or incentive(s), waiver(s) or reductions of development standards and parking ratios, or financially equivalent incentive(s) as required by State Density Bonus Law. Each housing development is entitled to only one (1) density bonus. If a housing development qualifies for more than one (1) density bonus based on the number of target units provided, or as otherwise granted under State Density Bonus Law, the developer shall select the category under which the density bonus is granted and may not combine bonus density calculations.

(2) In order to qualify for this bonus, a housing development must consist of five (5) or more dwelling units, including mixed use developments, except those housing developments located within the South Centre City Specific Plan, may consist of three (3) dwelling units to qualify for this bonus. In determining the total number of units to be granted, a developer for a housing development must seek and agree to construct a housing development, excluding any units permitted by the density bonus awarded pursuant to this article, that will contain at least any one (1) of the following target households:

(A) At least ten (10) percent of the total units allowed by the maximum permitted density at affordable housing costs for and occupied by low-income households; and/or

(B) At least five (5) percent of the total units allowed by the maximum permitted density at affordable housing costs for and occupied by very low-income households; or

(C) At least ten (10) percent of the total dwelling units in a common interest development, as defined in Section 4100 of the Civil Code, for persons and families of moderate-income, as defined in Section 50093 of the Health and Safety Code, provided that all units in the development are offered to the public for purchase; or

(D) At least ten (10) percent of the total units of a housing development for transitional foster youth, as defined in Section 66025.9 of the Education Code, disabled veterans, as defined in Section 18541, or homeless persons, as defined in the federal McKinney-Vento Homeless Assistance Act (42 U.S.C. Section 11301 et seq.); or

(E) Twenty (20) percent of the total units for lower income students in a student housing development that meets the following requirements:

(i) All units in the student housing development will be used exclusively for undergraduate, graduate, or professional students enrolled full time at an institution of higher education accredited by the Western Association of Schools and Colleges or the Accrediting Commission for Community and Junior Colleges. In order to be eligible, the developer shall, as a condition of receiving a certificate of occupancy, provide evidence to the director that the developer has entered into an operating agreement or master lease with one or more institutions of higher education for the institution or institutions to occupy all units of the student housing development with students from that institution or institutions. An operating agreement or master lease entered into pursuant to this section is not violated or breached if, in any subsequent year, there are not sufficient students enrolled in an institution of higher education to fill all units in the student housing development.
(ii) The applicable twenty (20) percent units will be used for lower income students. For purposes of this clause, “lower income students” means students who have a household income and asset level that does not exceed the level for Cal Grant A or Cal Grant B award recipients as set forth in Section 69432.7(k) of the Education Code. The rent provided in the applicable units of the development for lower income students shall be calculated at 30 percent of 65 percent of the area median income for a single-room occupancy unit type.

(F) One hundred (100) percent of the total units, exclusive of a manager’s unit or units, are for lower income households, except that up to twenty (20) percent of the total units in the development may be for moderate-income households. The rent for at least twenty (20) percent of the units in the development shall be set at an affordable rent, as defined in Section 50053 of the Health and Safety Code. The rent for the remaining units in the development shall be set at an amount consistent with the maximum rent levels for a housing development that receives an allocation of state or federal low-income housing tax credits from the California Tax Credit Allocation Committee.

(G) The project proposes to convert apartments to a condominium project agrees to provide at least fifteen (15) percent of the total units of the proposed condominium project to very low-income households, or at least thirty-three (33) percent of the total units of the proposed condominium project to low-income households, at least thirty-three (33) percent of the total units for moderate-income as defined in Section 50093 of the Health and Safety Code; or

(H) The project is a senior citizen housing development; or

(I) The project donates at least one (1) acre of land to the city in compliance with Government Code Section 65915(g) and the land has the appropriate general plan designation, zoning, permits and approvals, and access to public facilities needed for such housing; or

(J) The project is the result of a bona fide joint commercial and housing partnership, where the housing developer provides at least fifteen (15) percent of the total units for very low-income households or at least thirty (30) percent of the total units for low-income households.

ARTICLE 67. DENSITY BONUS AND RESIDENTIAL INCENTIVES

Sec. 33-1414. Project application procedure.

(a) Density Bonus Projects. After notification to the applicant regarding the city’s determination on the preliminary application review and/or granting additional concessions or incentives, or waiver of development standard(s), the applicant may submit the development application, which shall be subject to a separate permit. The proposal shall be submitted in conjunction with a subdivision map, conditional use permit application, plot plan, or planned development application. All appropriate requirements shall be delivered to the planning division in order for the application to be deemed complete. Not later than thirty (30) calendar days after the city has received the planning application, the planning division shall notify the developer in writing whether the application is complete as required by Government Code Section 65943.

At time of application, a notice shall be posted on the project site detailing a general description of the proposal in conformance with section 33-1300 of this chapter.
ARTICLE 67. DENSITY BONUS AND RESIDENTIAL INCENTIVES

Sec. 33-1415. Concessions, incentives, equivalent financial incentives.

(a) In addition to the density bonus, the city shall also provide one (1) or more “incentives” or “concessions” to each housing development project, which qualifies for a density bonus.

(1) A concession or incentive is defined as a reduction in site development standards or a modification of zoning code or architectural design requirements, such as a reduction in setback or minimum square footage requirements; or approval of mixed use zoning; or other regulatory incentives or concessions which actually result in identifiable and financially sufficient cost reductions.

(2) The number of required incentives or concessions is based on the percentage of affordable units in the housing development project:

(A) One (1) incentive or concession for projects that include at least five (5) percent of the total units for very low-income households, or at least ten (10) percent for low-income households, or at least ten (10) percent for moderate-income households in a common interest development.

(B) Two (2) incentives or concessions for projects that include at least ten (10) percent of the total units for very low-income households, at least twenty (20) percent for low-income households, or at least twenty (20) percent for moderate-income households in a common interest development.

(C) Three (3) incentives or concessions for projects that include at least fifteen (15) percent of the total units for very low-income households, at least thirty (30) percent for lower income households, or at least thirty (30) percent for moderate-income in a common interest development.

(D) Four (4) incentives or concessions for projects meeting the criteria of Section 33-1412(b)(2)(F). If the project is located within one-half mile of a major transit stop, as defined in Section 21155(b) of the Public Resources Code, the applicant shall also receive a height increase of up to three (3) additional stories, or thirty (33) feet.

(E) An additional concession or incentive that contributes significantly to the economic feasibility of the construction of the child care facility.

(3) A concession or incentive shall also mean approval of mixed-use zoning in conjunction with the housing project if commercial, office, industrial, or other land uses will reduce the cost of the housing development and if the commercial, office, industrial, or other land uses are compatible with the housing project and the existing or planned development in the area where the proposed housing project will be located.

(4) Nothing in this section shall be construed as to limit or require the provision of direct financial incentives for the housing development, including the provision of publicly owned land, by the city, county, or city and county, or the waiver of fees or dedication requirements.

(5) The granting of a density bonus shall not require or be interpreted to require the waiver of a local ordinance or provisions of a local ordinance unrelated to development standards.

(b) The city shall grant the concession or incentive proposed by the developer unless it finds that the proposed concession or incentive is not required in order to achieve the required
affordable housing costs or rents, or would cause a public health or safety problem, cause an environmental problem, harm historical property, or would be contrary to law.

(c) A developer shall be ineligible for concessions or incentives when the housing development provides any of the following:

1. Market-rate senior citizen housing development (with no affordable units); or
2. Land donated/transferred to the city as specified elsewhere in this article; or
3. A density bonus project that is proposed on any property that includes rental dwelling units that are, or if the units have been vacated or demolished in the five (5) year period preceding the application, subject to a recorded covenant, ordinance, or law that restricts rents to affordable levels or subject to any other form of rent or price control; or occupied by very low- or low-income households, unless the proposed housing development replaces those units and meeting the requirements of Government Code Section 65915(c)(3).

(d) A development qualifying for a density bonus also receives two (2) additional forms of assistance, which the State Legislature has determined to have important benefits for a housing development project. The following additional forms of assistance do not count as an incentive or concession as described herein this section.

1. Waiver or Reduction of Development Standard(s). If any other development standard would physically prevent the project from being built by the developer at the permitted density and with the granted concessions or incentives permitted by State Density Bonus Law, the developer may propose to have those standards waived or reduced. The city is not required to waive or reduce development standards that would cause a public health or safety problem, cause an environmental problem, harm a historical building, or would be contrary to law.

2. Parking Requirements. Upon the developer’s request, the city or county may not require more than one (1) on-site parking space for studio and one-bedroom units, two (2) on-site parking spaces for two- and three-bedroom units, two and one-half (2-1/2) on-site parking spaces for units with four (4) or more bedrooms, and other on-site parking requirement reductions identified by Government Code Section 65915(k). On-site spaces may be provided through tandem or uncovered parking, but not on-street parking.

   A) If a development includes the maximum percentage of low-income or very low income units provided for in paragraphs (1) and (2) of Government Code Section 65915(f) and is located within one-half mile of a major transit stop, as defined in Public Resources Code Section 21155(b), and there is unobstructed access to the major transit stop from the development, then, upon the request of the developer, the city shall not impose a vehicular parking ratio, inclusive of handicapped and guest parking, that exceeds 0.5 spaces per bedroom. For purposes of this subdivision, a development shall have unobstructed access to a major transit stop if a resident is able to access the major transit stop without encountering natural or constructed impediments.

   B) If a development consists solely of rental units, exclusive of a manager’s unit or units, with an affordable housing cost to lower income families, as provided in Section 50052.5 of the Health and Safety Code, then, upon the request of the developer, a city, county, or city and county shall not impose a vehicular parking ratio, inclusive of handicapped and guest parking, that exceeds the following ratios:
(i) If the development is located within one-half mile of a major transit stop, as defined in Public Resources Code Section 21155(b), and there is unobstructed access to the major transit stop from the development, the ratio shall not exceed 0.5 spaces per unit.

(ii) If the development is a for-rent housing development for individuals who are 62 years of age or older that complies with Sections 51.2 and 51.3 of the Civil Code, the ratio shall not exceed 0.5 spaces per unit. The development shall have either paratransit service or unobstructed access, within one-half (1/2) mile, to fixed bus route service that operates at least eight (8) times per day.

(C) If a development consists solely of rental units, exclusive of a manager’s unit or units, with an affordable housing cost to lower income families, as provided in Section 50052.5 of the Health and Safety Code, and the development is either a special needs housing development, as defined in Section 51312 of the Health and Safety Code, or a supportive housing development, as defined in Section 50675.14 of the Health and Safety Code, then, upon the request of the developer, the city shall not impose any minimum vehicular parking requirement. A development that is a special needs housing development shall have either paratransit service or unobstructed access, within one-half (1/2) mile, to fixed bus route service that operates at least eight (8) times per day.

ARTICLE 70. ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS

Sec. 33-1470. Purpose and intent.

The purpose of this article is to provide regulations for the establishment of accessory dwelling units and junior accessory dwelling units in residential zones. The intent of the article is to provide additional affordable housing opportunities in areas where adequate public facilities and services are available, and where impacts upon the residential neighborhoods directly affected would be minimized. Notwithstanding the intent of California Government Code Section 65852.2 or Section 65852.22, should any provision of this article be found not to be in compliance with state law, that provision should be severed and stricken from Article 70 as if it had never been adopted.

ARTICLE 70. ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS

Sec. 33-1472. Permitted zones.

Accessory dwelling units and junior accessory dwelling units shall be permitted in the RA, RE, R1, R2, R3, R4, and R5 zones on properties with only one (1) single-family residence on the lot areas zoned to allow single-family or multi-family dwelling residential use, subject to the approval of an accessory dwelling unit permit. Accessory dwelling units within the Old Escondido Neighborhood shall observe the same standards and review procedures required of similar building expansions in that neighborhood. Accessory dwelling units shall not be permitted on property developed in a planned development zone or as a part of a planned unit approval, unless
approved as a part of the original PD or PUA and the subject lot is not less than six thousand (6,000) square feet in size.

ARTICLE 70. ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS

Sec. 33-1473. Occupancy limitations.

(a) Allowed use.
   (1) One attached or detached accessory dwelling unit may be permitted in conjunction with an existing or proposed single-family residence on a lot zoned for single-family or multi-family residential use.
      (A) The accessory dwelling unit is either attached to, or located within, the proposed or existing main building or attached garages, storage areas, or similar use; or a detached accessory structure and located on the same lot as the proposed or existing single-family home.
      (B) An accessory dwelling unit may be permitted on a lot where a junior accessory dwelling unit exists or is proposed.
   (2) One junior accessory dwelling unit may be permitted in conjunction with an existing or proposed single-family residential use.
      (A) The junior accessory dwelling unit is located within the proposed or existing main building or attached garages, storage areas, or similar use.
      (B) A junior accessory dwelling unit may be permitted on a lot where an accessory dwelling unit exists or is proposed.
   (3) Number of accessory dwelling units on legal lots with existing or proposed multifamily dwelling units:
      (A) Shall be permitted to construct at least one accessory dwelling unit within the portions of existing multifamily dwelling structures that are not used as livable space and shall allow up to twenty-five (25) percent of the existing multifamily dwelling units.
      (B) Not more than two (2) accessory dwelling units are permitted that are located on a lot that has an existing multifamily dwelling, but are detached from that multifamily dwelling.

(b) Owner-occupied.
   (1) The owner-occupancy requirement shall not be applied to any accessory dwelling unit.
   (2) The owner of the property shall reside on the parcel on which the accessory dwelling unit is located. A junior accessory dwelling unit may be used as habitable space, only so long as either the remaining portion of the main dwelling unit, or the newly created junior accessory dwelling unit is occupied by the owner of record of the property, unless otherwise exempted by this section.
      (A) Owner-occupancy for a junior accessory dwelling unit shall not be required if the owner is an agency, land trust, or housing organization.
      (3) Deed restriction. The City shall require the recordation of a deed restriction if owner-occupancy is required pursuant to this section.
(A) Prior to issuance of a building permit, the property owner shall execute a deed restriction setting forth the owner-occupancy requirements, in a form and substance satisfactory to the director of community development and City Attorney’s Office, which shall be recorded in the office of the County Recorder. The covenant shall also include the following terms and limitations:

(i) A prohibition on the sale of the junior accessory dwelling unit separate from the sale of the single-family residence, and shall not be subdivided in any manner that would authorize such sale or ownership.

(ii) A statement that the deed restriction may be enforced against future purchasers and the restrictions shall be bindings upon any successor in ownership of the property.

(iii) The junior accessory dwelling unit shall be a legal unit, and may be used as habitable space, only so long as the owner of record of the property occupies the premises.

(iv) A restriction on the size and attributes of the junior accessory dwelling unit that conforms with this section, and if applicable the occupancy limitations of the California Health and Safety Code Section 17958.1.

(c) All local building and fire code requirements apply, as appropriate, to accessory dwelling units and junior accessory dwelling units.

(1) A certificate of occupancy shall not be issued for the accessory dwelling unit and/or junior accessory dwelling unit until the Building Official issues a certificate of occupancy for the main building.

(2) Prior to approval on properties with a private sewage system, approval by the County of San Diego Department of Environmental Health, or any successor agency, may be required.

(d) The accessory dwelling unit and/or junior accessory dwelling unit is not intended for sale, except in conjunction with the sale of the primary residence and property.

(b) Deed restriction. Building permits will not be issued for the establishment of an accessory dwelling unit or its occupancy prior to the applicant’s submittal of evidence that a deed restriction, which sets forth the occupancy limitations prescribed by the ordinance, has been filed with the county recorder. This deed restriction shall run with the land; inure to the benefit of the city as well as to the benefit of the other residential property owners within the subdivision; and, be coterminous in tenure with the life of the accessory dwelling unit.

(e) The accessory dwelling unit and junior accessory dwelling unit may be rented separate from the primary residence, but only with a rental agreement and with terms greater than thirty (30) days.

(f) The accessory dwelling unit and/or junior accessory dwelling unit shall be deemed to be a residential use that is consistent with the existing general plan and zoning designations for the premises. However, accessory dwelling units and/or junior accessory dwelling units shall be incidental, appropriate, and clearly subordinate to the primary use of the property.

(1) The accessory dwelling unit and/or junior unit shall be deemed to be a legal unit and permit such accessory use of property, which use is specifically identified by the accessory
use regulations for the underlying zone; and shall allow such other accessory uses which are necessarily and customarily associated with, and are appropriate, incidental, and subordinate to, such principal residential use of the premises, except as otherwise provided by this subsection.

(A) An accessory dwelling unit and/or junior accessory dwelling unit shall be deemed an independent dwelling unit for the sole purpose of establishing a home occupation permit within the accessory dwelling unit, subject to the terms and limitations of Article 44. The limitations for home occupations shall be shared with the principal use and/or main building.

(B) No more than the quantities of animals specifically listed in Table 33-95(a) of Article 6 or Section 33-1116 of Article 57 is permitted on the premises. The limitations for animal keeping and household pets shall be shared with the principal use and/or main building.

(C) For all other accessory use of property, the accessory dwelling units and/or junior accessory dwelling unit shall be controlled in the same manner as the principal use within each zone, and shall not expand or be conveyed separately from the primary use. When provided by these regulations, it shall be the responsibility of the director of community development to determine if a proposed accessory use is necessarily and customarily associated with, and is appropriate, incidental, and subordinate to the principal use, accessory dwelling unit, and/or junior accessory dwelling unit, based on the director's evaluation of the resemblance of the proposed accessory use and the relationship between the proposed accessory use and the principal use.

ARTICLE 70. ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS

Sec. 33-1474. Development standards.

(a) Accessory dwelling units shall be subject to all development standards of the zone in which the property is located, except as modified below. Notwithstanding, this section shall be interpreted liberally in favor of accessory dwelling unit and/or junior accessory dwelling unit construction. Furthermore, any property development standard provided herein that regulates the minimum or maximum size for an accessory dwelling unit, size based upon a percentage of the proposed or existing primary dwelling, or limits on lot coverage, floor area ratio, open space, and minimum lot size, for either attached or detached dwellings shall permit at least an 800 square foot accessory dwelling unit to be constructed in compliance with all other local development standards and building code requirements.

(a) Lot area. Construction of one (1) accessory dwelling unit shall be permitted, subject to the following minimum parcel standards.

(1) The minimum lot size for the development of an accessory dwelling unit is eight thousand (8,000) square feet if the permit application involves the construction of a new structure or an exterior addition to an existing structure.

(2) There is no minimum lot size requirement for the development of an accessory dwelling unit within the Old Escondido Neighborhood on properties that have public street and alley access.

(3) Notwithstanding subdivisions (1) and (2), accessory dwelling units may be constructed on any legal lot in a residential zone provided all requirements of this article and the
zoning and building codes are met and the unit is located entirely within the building envelop of a single-family dwelling or detached accessory structure and involves no expansion of the existing structure.

(b)(1) Number of bedrooms. For units eight hundred (800) square feet or less, a maximum of one (1) bedroom shall be permitted. Two (2) bedrooms may be permitted if the living area of the accessory dwelling unit exceeds eight hundred (800) square feet. No more than two (2) bedrooms shall be permitted.

(c) Location on lot. An accessory dwelling unit may be established within the existing interior of a single-family residence, or attached as an addition to a single-family residence, or established as a new detached structure. With the exception of properties located within the Old Escondido Neighborhood historic district, the minimum lot area for the construction of a detached accessory dwelling unit is ten thousand (10,000) square feet. Attached accessory dwelling units shall have an independent, exterior access.

(2) The accessory dwelling unit shall be provided with a separate exterior entry. The accessory dwelling unit shall not have direct, interior access into the main building.

(3) The accessory dwelling unit shall include separate bath/sanitation facilities and include a separate kitchen.

(d)(4) Setbacks. Attached accessory dwelling units shall conform to the setback requirements of the underlying residential zone for the primary structure. Detached accessory dwelling units, other than those structures otherwise regulated within this section, may have a building height and setbacks as outlined for accessory residential structures of the underlying zone, except that a setback of no more than four (4) feet from the side and rear lot lines shall be required for a detached accessory dwelling unit. Roof eaves and other architectural projections for accessory dwelling units shall comply with Section 33-104.

(1)(A) An accessory dwelling unit proposed to be constructed above an existing detached garage shall have a minimum five (5) foot setback to side and rear property lines.

(B) No setback shall be required for an existing living area or accessory structure or a structure constructed in the same location and to the same dimensions as an existing structure that is converted to an accessory dwelling unit or to a portion of an accessory dwelling unit. The accessory dwelling unit may include an expansion of not more than 150 square feet beyond the same physical dimensions as the existing accessory structure. An expansion beyond the physical dimensions of the existing accessory structure shall be limited to accommodating ingress and egress, subject to the terms and limitations of this article.

(e)(5) Maximum unit size. The maximum accessory dwelling unit size is determined by the size of the lot as provided in Table 33-1474. The living area of the accessory dwelling unit shall not exceed more than fifty (50) percent of the existing or proposed living area of the primary residence.

(A) If authorized by the underlying zoning, an accessory dwelling unit may be attached to a guest house provided that the overall combined floor area of the combined building or structure does not exceed seventy-five (75) percent of the main unit.

(B) When an accessory dwelling unit is attached to other accessory building(s) or structure(s), such as a garage, carport, or patio cover, the overall combined building area of the structure(s) shall not exceed the existing floor area of the main residence.
ARTICLE 70. ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS

Table 33-1474

<table>
<thead>
<tr>
<th>Lot size</th>
<th>Maximum Permitted Accessory Dwelling Unit Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10,000 square feet</td>
<td>500-850 square feet</td>
</tr>
<tr>
<td>10,001 to 15,000 square feet</td>
<td>640 square feet</td>
</tr>
<tr>
<td>15,001 to 20,000 square feet</td>
<td>800 square feet</td>
</tr>
<tr>
<td>&gt; 20,000 square feet</td>
<td>1,000 square feet</td>
</tr>
</tbody>
</table>

(f)(6) Minimum unit size. The minimum permitted size of an accessory dwelling unit shall be the size of an efficiency unit as defined by the California Health and Safety Code Section 17958.1. The minimum unit size of the residential zone shall not apply to the accessory dwelling unit that is built on the same legal lot as the primary residence in compliance with all local development standards.

(g)(7) Height. Accessory dwelling units shall conform to the height limits of the zone.

(h)(8) Lot coverage. The combined area of all structures on a lot shall conform to the lot coverage limitation of the zone in which the property is located.

(b) Junior accessory dwelling units, as constructed within the existing or proposed single-family residence, shall be subject to all development standards of the zone in which the property is located, except as modified below.

(1) Number of bedrooms. A maximum of one (1) bedroom shall be permitted.

(2) The junior accessory dwelling unit shall be provided with a separate exterior entry and may have direct, interior access into the main building.

(3) A junior accessory dwelling unit may include separate sanitation facilities, or may share sanitation facilities with the existing structure.

(4) The junior accessory dwelling unit shall include an efficiency kitchen.

(5) Maximum unit size. The maximum junior accessory dwelling unit size shall not exceed 500 square feet in total floor area and shall be contained entirely within an existing or proposed single-family residence and may include an expansion of not more than 150 square feet beyond the same physical dimensions of the existing residence to accommodate ingress and egress.

(6) Minimum unit size. The minimum permitted size of a junior accessory dwelling unit shall be the size of an efficiency unit as defined by the California Health and Safety Code Section 17958.1. The minimum unit size of the residential zone shall not apply to the junior accessory dwelling unit that is built on the same legal lot as the primary residence in compliance with all local development standards.

(7) Except as provided herein, a junior accessory dwelling unit shall comply with all other zoning code standards, including but not limited to setbacks, building height, floor area ratio, and lot coverage.
Parking requirements. Off-street parking for the primary dwelling shall conform to the current parking standards, as required in Article 39 of the Escondido Zoning Code and:

1. One additional off-street parking space, covered or uncovered, shall be provided for an accessory dwelling unit. Parking provisions may be provided as tandem parking on an existing driveway or permitted within a setback area in accordance with sections 28-300 and 33-110 of the Escondido Zoning Code, in locations determined to be satisfactory by the director of community development, unless the director determines that parking in setback areas or tandem parking is not feasible based on specific site or regional topographical or fire and life safety conditions, or not permitted anywhere else in the jurisdiction.

2. Required parking for the accessory dwelling unit shall be permitted in a side yard or rear yard only when said yard is abutting an alley and a minimum backup of twenty-four (24) feet is provided.

3. Parking for the accessory dwelling unit shall be located to minimize impacts on adjacent properties through landscaping, a wall/fence, or other screening treatment.

4. Notwithstanding any other law, the city will not impose parking standards for an accessory dwelling unit or junior accessory dwelling unit when the unit is located within a half-mile of public transit, located within the Old Escondido Neighborhood or when there is a car share vehicle located within one block of the unit. The city will also waive parking requirements for new accessory dwelling units when the accessory dwelling unit is contained within the existing space of a single-family residence or accessory structure, has independent exterior access from the existing residence, and the side and rear setbacks are sufficient for fire safety.

5. When a garage, carport, or covered parking structure is demolished in conjunction with the construction of an accessory dwelling unit, replacement parking may be located in any configuration on the same lot as the accessory dwelling unit.

Garage conversions and personal storage. If an existing garage is converted to an accessory dwelling unit or junior accessory dwelling unit and no replacement garage space is provided, a minimum of one hundred sixty (160) additional cubic feet of lockable, enclosable storage must be provided on the same lot to mitigate the loss of personal storage space.

Design of the unit. Accessory dwelling units shall be designed to minimize the effect of the new accessory dwelling unit on adjacent properties.

1. Any potential impacts shall be oriented to the primary residence. Access doors and entry for the accessory dwelling unit shall not be oriented to the nearest adjacent property line or create a second “front door” that is comparable to the main entrance. The design, construction, and presence of the accessory dwelling unit shall conform with the single-family character of the neighborhood.

2. Proposed accessory dwelling units shall respect the residential scale and design character of existing homes. The accessory dwelling unit’s color and materials must match those of the primary residence, maintaining compatibility with the neighborhood. The director shall review accessory dwelling unit applications to ensure the addition is integrated with the primary structure with respect to roof design, height, compatible materials, color, texture, and design details. If the accessory dwelling unit is an addition to a site with known historic resources or has been determined to have historic value by the director, all improvements shall retain the historical...
and/or architectural value and significance of the landmark, historical building, or historical district as specified by Section 33-1475. The improvements shall be compatible with and retain the texture and material of the primary building(s) and/or structure(s) or its appurtenant fixtures, including signs, fences, parking, site plan, landscaping and the relationship of such features to similar features of other buildings within an historical district.

(f) Addresses. The addresses of both units shall be displayed in such a manner that they are clearly seen from the street.

(g) Fire sprinklers. Accessory dwelling units and junior accessory dwelling units shall not be required to provide fire sprinklers if they are not required for the primary residence.

ARTICLE 70. ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS

Sec. 33-1475. Other regulations.

(a) Garage conversions. Converted garages must meet all building code requirements for a dwelling unit and provisions of the ordinance. No setback shall be required for an existing garage that is converted to an accessory dwelling unit.

(a) Historic Buildings.

(1) An accessory dwelling unit and/or junior accessory dwelling unit proposed for any lot that includes a building listed in the National Register of Historic Places, California Register of Historic Places, or the local historic inventory shall conform to the requirements for the historic structure.

(2) An accessory dwelling unit and/or junior accessory dwelling unit proposed for a property under a Mills Act Contract must comply with all Mills Act guidelines, including design conformance with the United States Secretary of the Interior Standards.

(3) An accessory dwelling unit and/or junior accessory dwelling unit proposed for any lot that includes a building listed in the National Register of Historic Places, California Register of Historic Places, or the local historic inventory are encouraged to comply with any historic preservation plans as may be approved by the City Council. Notwithstanding the foregoing, if the City Council acts to establish mandatory design standards for historically classified structures, the accessory dwelling unit and/or junior accessory dwelling unit shall conform to the mandatory standards.

(b) Guest house. An attached guest house may be converted to an accessory dwelling unit provided all provisions of this article and the building code and zoning code are met. A guest house and an accessory dwelling unit and/or a junior accessory dwelling unit may occur on the same lot provided the lot is over twenty thousand (20,000) square feet in area and provided the guest house does not contain kitchen facilities and is not rented. No more than one (1) accessory dwelling unit or no more than one (1) guest house are permitted on a lot. Nothing in this section shall be construed to prohibit the construction of an accessory dwelling unit and/or junior accessory dwelling unit in compliance with this article.
The city may require a new or separate utility connection for any attached or detached accessory dwelling units that are not contained within the existing space of a single-family residence or accessory structure.

ARTICLE 70. ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS

Sec. 33-1476. Existing nonpermitted accessory units.

This article shall apply to all accessory dwelling units or junior accessory dwelling units which exist on the date of passage of the ordinance. All units which do not have a permit, or cannot receive a permit, upon passage of the ordinance codified herein shall be considered in violation and shall be subject to code enforcement action.

(a) Existing nonconforming units. Accessory dwelling units or junior accessory dwelling units that exist as of the effective date of this section that have previously been legally established may continue to operate as legal nonconforming units. Any unit that exists as of the effective date of this section, and has not previously been legally established, is considered an unlawful use, unless the director of community development determines that the unit meets the provisions of this section and a permit is approved and issued.

(1) Conversion of legally established structures. The conversion of legally established structures that exist as of the effective date of this section shall require that the unit meet the provisions of this Code. Any legally established waivers or nonconformity that exist on the effective date of this section may continue, provided that in no manner shall such waiver or nonconformity be expanded.

ARTICLE 70. ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS

Sec. 33-1477. Application and procedure.

The director of community development shall approve or disapprove an application for an accessory dwelling unit or junior accessory dwelling unit, ministerially, within one hundred twenty (120) sixty (60) days after receiving the complete application if there is an existing single-family or multifamily dwelling on the lot. If the permit application to create an accessory dwelling unit or a junior accessory dwelling unit is submitted with a permit application to create a new single-family dwelling on the lot, the director may delay acting on the permit application for the accessory dwelling unit or the junior accessory dwelling unit until the director acts on the permit application to create the new single-family dwelling, but the application to create the accessory dwelling unit or junior accessory dwelling unit shall be considered without discretionary review or hearing. If the applicant requests a delay, the sixty (60) day time period shall be tolled for the period of the delay. The director may refer any application to the planning commission or historic preservation commission prior to the director’s decision for conformance with the specific criteria outlined in
ARTICLE 73. TEMPORARY USES, OUTDOOR DISPLAY AND SALE OF RETAIL MERCHANDISE

Sec. 33-1530. Purpose.

Short-term activities and events can enhance the city’s lifestyle and provide benefits to area residents, businesses, and other community members through the creation of unique venues for expression, recreation, and entertainment that are not normally provided. However, the city council recognizes that short-term activities and events, if unregulated, can have an adverse effect on the public health, safety and welfare due to noise, traffic, safety, and health hazard impacts. The purpose of this article is to authorize limited and/or short-term activities or events to which public may be invited (with or without charge) and set forth reasonable regulations by establishing a process for permitting short-term activities and events. Temporary activities or events may occur indoors or outdoors, on improved or unimproved property, and may include outdoor displays, temporary outdoor sales, temporary uses, and special events. Such uses are appropriate when regulated as set out herein.

This article also encourages the economic vitality of established commercial areas, public property, facilities, or parks; sidewalks, streets, or other areas of the public right-of-way; and developed or undeveloped private property. This article also affords increased merchandise visibility through the establishment of standards for the outdoor display of special interest retail items in an ongoing manner, and the allowance of temporary parking lot sales for other retail items as a limited special use. The safe and orderly outdoor display of merchandise can be beneficial by attracting interest, adding character, and increasing pedestrian traffic to a commercial area which can extend economic benefits to all commercial enterprises within that area.

ARTICLE 73. TEMPORARY USES, OUTDOOR DISPLAY AND SALE OF RETAIL MERCHANDISE

Sec. 33-1531. Definitions.

(a) Outdoor display. Outdoor display refers to the outdoor display of retail goods on a daily basis during business operating hours in a manner which is incidental to and a part of the operation of the adjacent indoor use. The merchandise would be removed at the close of business and securely stored inside the building.

(b) Temporary outdoor sales. Temporary outdoor sales refers to outdoor sales events or promotions of a limited duration and frequency. Events include, but are not limited to, weekend parking lot sales, tent sales, and seasonal or promotional events.
Temporary uses are activities, which by their nature are non-recurring, and are beneficial to the public for a limited and/or specific period of time.

Special events mean the temporary use of public property, facilities, parks, sidewalks, streets, or public right-of-way as and that as defined in Section 16-201 of Article 4 in Chapter 16 of the Municipal Code.

ARTICLE 73. Temporary Uses, Outdoor Display and Sale of Retail Merchandise

Sec. 33-1532. Permitted zones.

(a) The outdoor display of retail merchandise shall be permitted as an accessory use subject to the approval of an outdoor display permit as discussed in section 33-1534 in the commercially zoned districts of the city (CG, CBD, CP, CT, CN, and existing PD-C zones, and to the extent permitted in the South Centre City Specific Plan and East Valley Parkway Area Plan).

(b) Temporary outdoor sales are permitted in the aforementioned zones and specific and area plans subject to the approval of a temporary use permit as discussed in section 33-1534.

(c) Other temporary uses in various residential, commercial, and industrial zoning districts, subject to the approval of the permit required under Section 33-1534.

(d) Special events permitted in the locations as designated by Article 4 of Chapter 16.

ARTICLE 73. Temporary Uses, Outdoor Display and Sale of Retail Merchandise

Sec. 33-1533. Permitted uses and permit type.

(a) Outdoor display.
   (1) The following items are acceptable for outdoor display if permitted by the applicable zone in which the associated business is located.
      (A) Antiques
      (B) Artwork
      (C) Automotive supplies (gas stations only)
      (D) Bicycles
      (E) Books
      (F) China and glassware
      (G) Clothing
      (H) Crafts
      (I) Firewood
      (J) Flowers and plants
(K) Food sales
(L) Hardware
(M) Gardening and landscape equipment and supplies
(N) Jewelry
(O) Motorcycles and scooters
(P) Newspapers and magazines
(Q) Sporting goods
(R) Tires
(S) Propane tank exchange units
(T) Retail vending machines.

(2) The director of community development is authorized to permit additional retail items to be displayed outdoors if it can be determined that the use is consistent with the purpose of this article.

(3) All outdoor displays shall be subject to the issuance of an outdoor display permit. Prior to the issuance of an outdoor display permit, an application shall be submitted and approved by the planning department. Outdoor display permits shall be valid for a maximum of one (1) year from the date of issuance; provided, that the permit shall be extended automatically for an additional year unless written notice of termination is given to the permittee no less than thirty (30) days prior to the expiration of the permit.

(b) Temporary outdoor sales. All retail items proposed for temporary outdoor sales will be reviewed for consistency with the purpose of this article on a case-by-case basis through the temporary use permit process as discussed in section 33-1536.

(1) Merchandise displayed or sold must be customarily sold on the premises. All such sales shall be conducted by a business located on and conducting business within a building on the property upon which the temporary use is proposed.

(2) All temporary outdoor sales shall be subject to the issuance of a temporary use permit. A temporary use permit can be issued for multiple events on the same site for the length of time specified under section 33-1534(c)(1) and shall be valid for no longer than one (1) year from the date of issuance; provided, that the permit shall be extended automatically for an additional year unless written notice of termination is given to the permittee no less than thirty (30) days prior to the expiration of the permit.

(c) Temporary uses as permitted and regulated by this article.

(1) The following some short-term activities and events can be approved with a temporary use permit.

(A) Amusement, entertainment or recreation activities or events, often upon payment of a fee, or nonprofit or government entity-sponsored, including concerts, carnivals, attractions, circuses, fairs, festivals, and amusement rides.

(B) Animal displays.

(C) Historical re-enactments.

(D) Special temporary seasonal sales such as Christmas trees, wreaths, pumpkin retail sales or similar sales are limited to the period of time around the holiday.
(E) Temporary health care structures.
(F) Temporary modular school classrooms.
(G) Temporary structures and tents for social or religious groups for services.
(2) Some short-term activities and events can be approved through the issuance of a special temporary use permit or agreement, as provided herein.
   (A) Community gardens with an agricultural operations permit.
   (B) Donation bins through an administrative permit, subject to Section 33-694.
   (C) Off-site staging areas or off-site storage yards with a city agreement.
   (D) Real estate model homes and/or sales offices with a model home permit/agreement.
   (E) Roadside sales of agricultural products with an agricultural operations permit, subject to Section 33-1534(e).
   (F) Special events on public property as defined by Article 4 of Chapter 16 with a special event permit.
   (3) Some short-term activities and events can be authorized without additional or special zoning clearances (i.e. otherwise exempt from needing a temporary use permit or special temporary use permit or agreement).
      (A) Activities of an organization which is receiving governmental grant funds to be used for public or community purposes when holding an event less than three (3) days in duration for the purpose of raising funds to supplement the governmental grant funds and to support the public or community purpose for which the grant funds were received.
      (B) City, state, federal, school district, community college district or other public agencies’ event when conducted wholly on that agency’s public property or with the consent of another public property owner and which will not require public road closures or significantly impact on traffic on adjacent public streets.
      (C) Garage or yard sales conducted at the same residential location more than four (4) times per year, subject to Section 16-116 of Article 2 in Chapter 16 of the Municipal Code.
      (D) Groundbreaking, ribbon-cutting, or similar initiation event for an active or completed construction project for not more than one (1) day conducted wholly on the same site as the project.
      (E) Homeowners association events for not more than one (1) day conducted wholly in common areas within the boundaries of the association and which do not impact public streets or other public facilities.
      (F) On-site staging of construction equipment or trailers necessary for a specific aspect of a construction project. On-site storage yards shall screen storage of construction equipment, vehicles, and/or excavated materials to the extent practicable for the duration of the construction project, not to exceed fifteen (15) calendar days before project commencement and fifteen (15) days after task completion. A copy of the active construction permit, or permit number, is required.
      (G) Outdoor fire sales (duration not to exceed three (3) calendar days) for a business with an active business license, for the site where the fire occurred.
      (H) Portable on-site storage and cargo containers, subject to Article 36.
      (I) Temporary dumpsters for the sole purpose of collecting and removing refuse or excavated material generated from the same property of the dumpster location, associated with
an active grading or building permit. A copy of the active construction permit, or current permit number, is required.

(4) Other temporary uses that are not specifically listed in the zoning code. The director of community development at his/her discretion may determine whether such use should be authorized and regulated by this section. This determination shall be based on the similarities and differences with those listed uses and an assessment of the proposed temporary use's compatibility with the zoning district and the surrounding land uses. Those uses and activities which do not fit within the criteria for a temporary use permit shall be addressed through a Plot Plan, Minor Conditional Use Permit, or other type of permit identified by the Zoning Code; or be expressly prohibited as an authorized land use activity.

(5) Approval of any type of permit addressed within this article that authorizes a temporary use for a specific time period does not waive the permit holder from obtaining other city, state, or federal permits or licenses, which may also be required as determined by the appropriate regulatory agency.

ARTICLE 73. TEMPORARY USES, OUTDOOR DISPLAY AND SALE OF RETAIL MERCHANDISE

Sec. 33-1534. Development standards.

All short-term activities, events, and outdoor displays of retail merchandise and temporary outdoor sales shall be subject to the following development standards:

(a) Outdoor displays on private property.

(1) The outdoor display area shall not extend beyond the actual frontage of the associated commercial use. Displays shall be identical and accessory to items sold indoors. Displays shall be temporary and removed at the end of each business day. A display/use may, on a case-by-case basis, be displayed permanently outdoors, as determined by the director. The director may refer a request for a permanent display to the planning commission for review and comment.

(2) Parking lot circulation and all required parking spaces shall remain unobstructed at all times. Private sidewalks, courtyards, or entry areas may be utilized for display provided a minimum four (4) foot wide pedestrian area remains clear and unobstructed and all fire, building and handicapped access requirements are met. See subsection (b) of this section for clearance requirements for displays within the right-of-way.

(3) All displays shall be located in such a manner so that vehicular sight distance is not impeded to the satisfaction of the engineering department.

(4) Display and sale of merchandise is permitted only by the tenant of an existing commercial development on the same site. Outdoor displays are not permitted on vacant property. Christmas tree and seasonal agricultural product sales on vacant property shall be subject to sections 33-331(a), 33-361(a), 33-461(a), and 33-501(a) of the zoning code.

(5) No sales or display of merchandise from cars, trucks, or any other vehicle is permitted. Vending from pushcarts may be permitted subject to compliance with all development
standards in this section. Specialized food sales from pushcarts either on private property or within the public right-of-way shall be subject to applicable code requirements.

6 All signage associated with an outdoor display shall be as approved pursuant to an outdoor display permit and shall be limited to a maximum of four (4) square feet per commercial tenant.

7 All displays shall be located within hardscape areas. No merchandise may be displayed in any landscaped area, or be situated in such a manner as to be detrimental to any existing landscaping on the site.

8 All food sales shall be correlated with food that is customarily sold on the same premises and be conducted in compliance with health department regulations.

9 All exterior lighting utilized in conjunction with outdoor displays shall conform to the requirements of Article 35, Outdoor Lighting.

10 No electricity shall be utilized, nor any noise generated by an outdoor display.

(b) Outdoor displays within the public right-of-way.

1 Display of merchandise within the public right-of-way is permissible only within the downtown retail core district subject to approval of an encroachment permit (an approved copy must be submitted concurrently with the application for an outdoor display permit), proof of insurance, and compliance with all development standards in this section.

A Proof of insurance can be satisfied by documentation of an insurance policy issued by an insurance company licensed to do business in the State of California, protecting the licensee and the city from all claims for damages to properly and bodily injury, including death, which may arise from operations in connection with the display activity. Such insurance shall name as additionally insured the city for an amount of three hundred thousand dollars ($300,000.00) or more and shall provide that the policy shall not terminate or be canceled prior to the expiration date without thirty (30) days’ advance written notice to the city.

B The merchandise display shall be permitted only within the four (4) feet of public right-of-way nearest the property line, and parallel to the curb in front of the business to which it pertains. The merchandise display shall be limited to fifty (50) percent of the lineal length of the associated commercial frontage or sixty (60) square feet whichever is less.

C In front of the displayed merchandise there shall be at all times a minimum four (4) foot wide sidewalk area clear of any obstructions and in conformance with all fire, building and handicapped access requirements.

D The merchandise is not permitted within any landscaped area of the right-of-way.

E All merchandise shall be located in such a way that it does not block the sight distance of the streets to the satisfaction of the engineering department. Any merchandise found obstructing the sight distance will be subject to removal by the city and the encroachment permit canceled.

F All merchandise items and displays should have no sharp edges or corners.

G The city also reserves the right to remove merchandise which causes any interference with vehicular traffic or pedestrian traffic, or in the event of any emergency situation or if the merchandise interferes with any work that is to be performed upon the street by or on the behalf of the city or a public utility.
All merchandise and display racks shall be removed from the public right-of-way at the end of business hours.

No sales or display of merchandise from cars, trucks, or any other vehicle is permitted. Vending from pushcarts may be permitted subject to compliance with all development standards in this section. Specialized food sales from pushcarts either on private property or within the public right-of-way shall be subject to applicable code requirements.

All signage associated with an outdoor display within the public right-of-way shall be as approved pursuant to an outdoor display permit and shall be limited to a maximum of two (2) square feet per commercial tenant.

All displays shall be located within hardscape areas. No merchandise may be displayed in any landscaped area, or be situated in such a manner as to be detrimental to any existing landscaping on the site.

All food sales shall be conducted in compliance with health department regulations.

All exterior lighting utilized in conjunction with outdoor displays shall conform to the requirements of Article 35, Outdoor Lighting.

No electricity shall be utilized, nor any noise generated by an outdoor display.

General development standards for other temporary uses and Temporary outdoor sales.

Short-term activities and sales. Sales events at any (1) location or commercial center shall not exceed three (3) calendar days during any three (3) month period and are subject to the issuance of a temporary use permit as discussed in section 33-1535.

Some short-term activities of the type as described herein will be allowed to recur on a property for longer than that provided in subsection (c)(1):

- Amusement, entertainment, or recreation activities and events for up to ten (10) calendar days within a six (6) month period.
- Community gardens, for the duration as stated on the agricultural operations permit.
- Donation bins in commercial zoning districts, excluding specific plan areas, for the duration as stated on the administrative permit.
- Off-site staging areas, for the duration as stated on the off-site staging area agreement/permit.
- Real estate model homes and/or sales offices, for the duration as stated on the model home permit.
- Roadside sales of agricultural products in residential zoning districts for up to forty-five (45) days within a three (3) month period in the residential zoning districts, pursuant to Section 33-1534(e).

Exception in R-A and R-E Zones. Pursuant to Article 6 of the Zoning Code, roadside sales are permitted as an accessory use in the R-A and R-E Zones. As such, sales may be continued beyond the forty-five (45) day limitation on the parcel of land on which such produce is grown in the R-A and R-E Zones. Such authorization shall be made by approval of an agricultural operations permit and design review permit provided that the principal use of said parcel is agricultural or plotted for community gardening and the use is consistent with the terms and limitations of Section 33-1534(e).
(F) Special temporary seasonal sales for up to forty-five (45) days within a three (3) month period.
(G) Temporary health care structures for up to sixty (60) days within a twelve (12) month period only by the tenant of an existing commercial development on the same site.
(H) Temporary modular school classrooms for sixty (60) days within a twelve (12) month period as a temporary use. A time extension may be provided through the approval of a Plot Plan or Conditional Use Permit (based on the use allowance of the underlying zoning district).
(I) Temporary structures and tents for social or religious groups for services for up to ten (10) days within a six (6) month period.

(3) Location of each event shall be restricted to private property only and shall not adversely impact parking lot circulation. Events shall not be permitted within parking areas containing less than twenty (20) spaces. A maximum of twenty (20) percent of the required parking spaces for the sponsoring business, or five (5) percent of the spaces within a commercial center containing multiple tenants may be utilized for the display and sale of merchandise. No encroachment into the public right-of-way shall be permitted.

(3) Special temporary seasonal sales: Christmas tree sales and recycling and seasonal agricultural product sales shall be exempt from the time restrictions set forth in section 33-1534(c)(1).

(4) Any structure used in conjunction with a sales event shall be subject to all building, engineering, and fire department requirements.
(5) All merchandise and/or temporary structures shall be set back a minimum of five (5) feet from any public right-of-way or driveway.
(6) All exterior lighting utilized in conjunction with a temporary sales event shall conform to the requirements of Article 35, Outdoor Lighting.
(7) All food sales shall be conducted in compliance with health department regulations.
(A) Through the approval and issuance of a temporary use permit, some amusement, entertainment, or recreation attractions or events; and/or special temporary seasonal sales events may accommodate a food truck or mobile food facility as defined by Article 7 of Chapter 16 of the Municipal Code. If the mobile food facility is authorized by this section, the mobile food facility must be parked in a legal parking space, or other area subject to approval of the director, and must not occupy the premises past 10:00 p.m. Not more than one (1) mobile food facility and one (1) operator is permitted to park on the premises, for the duration of time authorized by this section and for the period of time provided by the permit. Any mobile food facility or mobile food facility operation or activity not exercised within the days and duration specified on an approved temporary use permit shall automatically forfeit the time, day, and duration not utilized and/or become void.
(8) All businesses participating in a temporary outdoor sales event must have a valid City of Escondido business license to conduct business at the site of the event. Each participating business or entity shall be listed on the permit application prior to approval of the permit.
(9) All noise/sound generated by a temporary outdoor sales event shall conform to the noise level limits established in the noise ordinance (Ord. No. 90-08) for commercial zones. If an event is located adjacent to a residential zone, all noise generated shall conform to the noise level limits of the affected residential zone.
(10) Signs for temporary outdoor sales are permitted provided adequate detail is shown on the temporary use permit application to determine that the following standards are met:

(A) Signs shall be limited to balloons, flags, pennants and streamers, banners, or other similar devices. Balloons may not exceed twenty-four (24) inches in any dimension.

(B) Large inflatable displays must be ground-mounted and may not exceed thirty (30) feet in height.

(C) One (1) banner is allowed for each street frontage and each banner shall not exceed sixty (60) square feet in area.

(D) No event signage (of any type) may be displayed on or attached to any public property including telephone or utility poles, traffic control signs or devices, street lights or other structures located on public property without the express written consent of the City of Escondido.

(E) No signage of any type shall interfere with or restrict vehicular or pedestrian access or visibility.

(d) Outdoor retail vending machines. Outdoor retail vending machines are allowed in all commercial zones subject to the following standards:

(1) Retail vending machines shall not sell, store, or dispense anything other than the commercial products, merchandise, food or beverages permitted by the underlying zone or authorized by the Escondido Municipal Code.

(2) Retail vending activities may be established only in conjunction with an otherwise allowed and authorized principal land use activity and may not exceed a maximum of two (2) machines per site or occupy not more than twenty (20) feet of the wall facing the street or access drive.

(3) Retail vending machines shall be located along the face of a building or flush against a structure designed to accommodate them and be located on the site in a manner which will ensure compatibility with surrounding uses. The machine(s) shall not be within ten (10) feet of an entranceway to any business open to the public nor block any store window.

(4) All machines shall be visible in well-lit areas from access drives or public streets and be maintained in a litter free condition.

(5) Retail vending machines shall not obstruct private pedestrian walkways. A minimum four-(4) foot-wide pedestrian area remains clear and unobstructed and all fire, building and handicapped access requirements shall be kept clear of obstructions, or more if pedestrian traffic volume warrants.

(6) Retail vending machines are not allowed on public sidewalks, alleys, drive-aisles, or within the public right-of-way.

(7) The business owner or operator of said principal land use activity is responsible for the accessibility, maintenance, appearance, and safety in regards to retail vending.

(8) Business owner or operator shall not utilize or permit the utilization of any device which produces loud noise, or use and operate any loudspeaker, public address system, radio, sound amplifier, or similar noise creating device to attract the attention of the public, subject to the noise restrictions of the underlying zone.

(e) Roadside Sales of Agricultural Products. Operation of a stand, by the owner/occupant of the premises, for the display and sale of agricultural products primarily produced on the premises.
This category includes flower sales (nonmobile), vendor stands (nonmobile), and seasonal sales of agricultural products for limited periods of time, which at no time may be conducted in the public right-of-way. All roadside sales of agricultural products covered by this article shall be submitted on an agricultural operations permit application form obtained from the Planning Division and shall be accompanied by a nonrefundable fee.

(1) Location and size requirements.

(A) In the R-A and R-E Zones, the ground coverage of the stand shall not exceed 300 square feet, and it shall be set back from the street or highway right-of-way line a distance of at least 20 feet.

(B) The stand shall not exceed an area of 200 square feet in the R-1, R-2, R-3, R-4, and R-5 Zones. The stand shall not be closer than 24 feet to any street or highway.

ARTICLE 73. TEMPORARY USES, OUTDOOR DISPLAY AND SALE OF RETAIL MERCHANDISE

Sec. 33-1535. Permit required. Reserved

(a) Outdoor displays. All outdoor displays shall be subject to the issuance of an outdoor display permit. Prior to the issuance of an outdoor display permit, an application shall be submitted and approved by the planning department. Outdoor display permits shall be valid for a maximum of one (1) year from the date of issuance; provided, that the permit shall be extended automatically for an additional year unless written notice of termination is given to the permittee no less than thirty (30) days prior to the expiration of the permit.

(b) Temporary outdoor sales. All temporary outdoor sales shall be subject to the issuance of a temporary use permit. Prior to the issuance of a temporary use permit, an application shall be submitted and approved by the planning department. A temporary use permit can be issued for multiple events on the same site for the length of time specified under section 33-1534(c)(1) and shall be valid for no longer than one (1) year from the date of issuance; provided, that the permit shall be extended automatically for an additional year unless written notice of termination is given to the permittee no less than thirty (30) days prior to the expiration of the permit.

ARTICLE 73. TEMPORARY USES, OUTDOOR DISPLAY AND SALE OF RETAIL MERCHANDISE

Sec. 33-1536. Application and determination.

(a) All outdoor display permit and temporary use permit applications covered by this article shall be submitted to the planning department in a form provided by the planning department. The application form and content required may be modified as determined by the director for a recurring type of application request so that the permit can be renewed by providing the same documentation as done with the original permit issuance.

(1) Fee. A nonrefundable fee, as set forth in the schedule of service costs approved by city council resolution, reasonably calculated to reimburse the city for its reasonable and
necessary costs in receiving, processing, and reviewing applications for permits to hold a short-
term activity or event must be paid to the City of Escondido when an application is filed.

(A) If the application includes the use of any city facility and/or property, or if any city
services are required for the special event, the applicant must file a special event permit in
accordance with agree to pay for the services in accordance with a schedule of service costs
approved by city council resolution.

(B) Third Party Fee. If the permittee provides for or allows third party vendors to
participate in the special event, the permittee shall pay an additional nonrefundable fee, as set
forth in the schedule of service costs approved by city council resolution, reasonably calculated
to reimburse the city for its actual and necessary costs in receiving, processing and reviewing
the application that includes third party vendors. The amount of the additional fee shall be established
by resolution of the city council and shall be based on whether the application is for a major or
minor event.

(b) City staff shall review outdoor display permit and temporary use permit applications, or
and any other permit prescribed by this article, for planning and zoning compliance.

(c) Applications for outdoor display permits and temporary use permits, or any other permit
prescribed by this article, shall be made at least thirty (30) days in advance of the event. Within
twenty (20) days from the submittal of a complete application, staff may approve, conditionally
approve or deny the proposed application. Any aggrieved party may appeal a decision of the staff
to the planning commission using the provisions outlined in Division 6 of Article 61 of this chapter.

(1) The City shall require evidence that all related permits and approvals, such as fire
prevention, health and sanitation, police, animal regulations, and business licenses, have been
obtained for each outdoor display and temporary use permit or any other permit prescribed by
this article. Under the authority of the California Health and Safety Code, the County of San Diego
Environmental Health Department has the responsibility to regulate the selling of food.

(2) The application shall be accompanied by:

(A) A map showing the area on which the event will be conducted.

(B) A description of the event for which the permit is requested.

(C) The name(s) of the organization or business and principals within the organization
or business applying for the permit.

(D) An estimate of the number of persons who will attend, all vendors who are
anticipated to operate at the event, and a description of hours, noise, security, trash collection
and disposal, occupant loads, lighting, sanitary facilities, traffic control, dust control, and/or other
related concerns that are correlated with the proposed use.

(E) Such additional information as may be required by the director to determine
whether the event will be compatible with the surrounding uses, satisfy applicable laws, and to be
consistent with the public health, safety, and welfare.

(F) Written assurance that all conditions of the permit shall be complied with, and that
in the event the permittee fails to perform any obligation covered by the conditions or terms and
limitations of this ordinance, the owner of the property shall perform such obligations upon notice
of violation. Property owner and permittee are subject to enforcement and citation, subject to
Section 33-1537.

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The City may require building and/or engineering design of the temporary buildings, certification of the structure, mechanical, electrical, and other equipment and devices.

The police chief may determine whether and to what extent additional police protection, civilian traffic control personnel, private security and volunteer staff are reasonably necessary to ensure traffic control and public safety for the short-term activity, event, outdoor display and temporary use. The police chief will base this decision on the size, location, duration, time and date of the permitted use, the expected sale or service of alcoholic beverages, the number of streets and intersections blocked off from use by the public, and the need to detour or preempt pedestrian and vehicular travel from the use of public streets and sidewalks. The police chief shall provide an estimate of the cost of extraordinary city services and equipment required in writing, if police protection and/or other emergency and safety services or equipment is deemed necessary for the permitted use. The applicant will be billed for services after the event.

Appeal. Appeals from the decision of the director shall be made pursuant to Article 61. The decision of city staff, or on appeal the planning commission, to grant an outdoor display permit or a temporary use permit or other permit prescribed by this article shall be made based on the following finding:

1. The proposed short-term activity, event, or outdoor display or temporary outdoor sales event conforms with all development standards for said events and will not negatively impact adjacent commercial or residential areas.

2. The nature of the proposed use is not detrimental to the public health, safety, or welfare of the community.

Conditions. Failure to comply with the following requirements and conditions shall be cause for revocation of the permit and enforcement under this chapter.

1. Any permit prescribed by this article not exercised within the duration specified or withdrawn by the applicant shall automatically become void.

2. Expiration. Each valid permit, unless earlier revoked, shall expire and become null and void at the time specified in the permit. An extension of outdoor display permits and temporary use permits or any other permit prescribed by this article cannot be granted; a new use for a different timeframe requires a new application. If the use is discontinued or abandoned, the site must be cleaned up within seven (7) calendar days of the discontinuance or abandonment.

3. Transfer. No permit shall be transferrable to another location or to another permittee.

4. Posting. The permit (along with any other required permits) shall be posted on the premises where the event is conducted and/or a copy of the permit must be in the possession of the person responsible for the event at all times while it is occurring.

5. Permittee agrees to waive and release the City of Escondido and its officers, agents, employees and volunteers from and against any and all claims, costs, liabilities, expenses or judgments including attorney’s fees and court costs arising out of the activities of this temporary use or event or any illness or injury resulting therefrom, and hereby agree to indemnify and hold harmless the City of Escondido from and against any and all such claims, whether caused by negligence or otherwise, except for illness and injury resulting directly from gross negligence or willful misconduct on the part of the city or its employees.
The director may attach whatever additional conditions and limitations necessary to protect public health, safety, and welfare that the director determines are reasonably required and roughly proportionate to the proposed use, activity, or event in order to make the finding that the characteristics of such are compatible with the uses in the surrounding area. Such conditions may include, but not be limited to, items that address the following topic areas: hours, noise, security, trash collection and disposal, occupant loads, lighting, sanitary facilities, traffic control, dust control, and/or other related concerns.

ARTICLE 73. TEMPORARY USES, OUTDOOR DISPLAY AND SALE OF RETAIL MERCHANDISE

Sec. 33-1537. Violations.

(a) Any person, firm or corporation violating any of the provisions of this article, or disregarding any condition or term imposed by the planning department, or on appeal, the planning commission, shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in an amount not exceeding one thousand dollars ($1,000.00) or imprisonment in the county jail for a period not exceeding six (6) months, or by both such fine and imprisonment. Each separate offense, or each day on which an ongoing offense is committed shall be a separate violation. Any violation as described in this section shall be subject to immediate revocation of the permit to display outdoors or conduct a temporary outdoor sales event.

(b) The police chief may revoke a special event permit without prior notice upon violation of the permit or when a public emergency arises where the police resources required for that emergency are so great that deployment of police services for the special event would have an immediate and adverse effect upon the health, safety, and welfare of persons or property. Written notice of the revocation setting forth the reasons therefor, shall be hand delivered or mailed to the applicant at the address provided on the application.

(c) Reinstatement. When a permit has been revoked, it may not be reinstated. A new Temporary Use Permit application for the same activity shall not be approved until the causes of revocation have been corrected and all costs incurred by the City have been paid as estimated by the building official.
**PROJECT NUMBER / NAME:** PHG 18-0009 / Climate Action Plan Update

**REQUEST:** The overall work program to update the Escondido CAP includes periodic study sessions with the Planning Commission. On February 24, 2020, the Planning Commission will receive a preliminary overview of measuring, planning, and reducing the City’s share of greenhouse gas emissions.

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<tr>
<th>LOCATION:</th>
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<td>APN / APNS:</td>
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<td>GENERAL PLAN / ZONING:</td>
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<tr>
<td><strong>APPLICANT:</strong></td>
<td>City of Escondido</td>
</tr>
<tr>
<td><strong>PRIMARY REPRESENTATIVE:</strong></td>
<td>Planning Division</td>
</tr>
</tbody>
</table>

**DISCRETIONARY ACTIONS REQUESTED:** N/A

**PREVIOUS ACTIONS:** Status report on November 27, 2018.

**PROJECT PLANNER:** Mike Strong, Assistant Planning Director  
*mstrong@escondido.org*

**CEQA RECOMMENDATION:** Exempt (CEQA Guidelines Section 15262).

**STAFF RECOMMENDATION:** Receive and file report.

**REQUESTED ACTION:** None.

**CITY COUNCIL HEARING REQUIRED:** ☑ NO

**REPORT APPROVALS:**  
☑ Bill Martin, Community Development Director  
☑ Mike Strong, Assistant Planning Director
A. BACKGROUND:

Climate change is a global problem and can lead to significant fluctuations in regional climates and environmental impacts. While there is consensus that global climate change is occurring and that it is exacerbated by human activity, there is less certainty as to the timing, severity, and potential consequences of climate change, particularly at the local level. Many levels of government have been implementing strategies to reduce the impacts of climate change. One of those strategies, called a Climate Action Plan (“CAP”), is a planning tool to provide a course of action or comprehensive roadmap to reduce greenhouse gas emissions while supporting and adapting to changing climate over the long term.

Cities and counties looking to prepare or amend their CAPs need to focus on broader statewide objectives, including the goals to reduce greenhouse gas emissions consistent with Assembly Bill (AB) 32, Senate Bill (SB) 32, and move towards Executive Order (EO) S-3-05 compliance. AB 32 requires the State to reduce greenhouse gas emissions to 1990 levels by 2020. Under SB 32, the State would reduce its emissions to 40 percent below 1990 levels by 2030. The emissions reduction target under EO S-3-05 is 80 percent below 1990 levels by 2050. Although these are statewide directives that cover the next 30 years of planning and implementation, continued coordination with counties and cities will be crucial to ultimately achieving these reduction goals. Local governments are viewed as “essential partners” in achieving California’s goals because cities and counties can ultimately deliver additional emissions reductions beyond what State policy can, along with local economic benefits. Local governments have broad jurisdiction and in some cases, unique authorities, through community-scale planning and permitting processes, discretionary actions, local codes and ordinances, outreach and education efforts, and local government operations. Generally, cities and counties can set targets for reductions, but the overall stringency can vary. Identifying emission reduction goals, how best to achieve reductions, target setting, and determining where to minimize local environmental impacts in cities and counties is left best decided by each respective local agency.

The City of Escondido’s CAP was first adopted in 2013. A lot has changed since then and the existing CAP needs to be amended. As part of the CAP update process, the City developed and implemented a Public Participation Plan in 2018 providing local residents, stakeholders, interested parties, and other agencies and/or individuals with the opportunity to participate in the climate action planning process. The goals of the outreach and engagement were to: (1) raise awareness; (2) educate the public and other organizations about the CAP; (3) provide opportunities for input; and (4) provide opportunities to influence decision-making. Accordingly, public feedback received during the first phase of the CAP update work program established local policy priorities and program preferences. Since then, a strategic framework for measuring, planning, and reducing the City’s share of greenhouse gas emissions was developed. At the February 24, 2020 Planning Commission meeting, City staff will present an overview of the CAP update work program, the results of the first phase of outreach, and the strategic framework for draft CAP reduction measures. The methods for estimating greenhouse gas emissions is
provided in Attachment 1. The attachment shows how the City can document and synthesize information from the emissions inventory, account for the future build-out of the General Plan, and reflect community-based solutions to create a draft greenhouse gas mitigation plan. The framework to reduce emissions is also provided in the attachment, which outlines all of the things the City will need to do over the next 15 years to help achieve statewide goals. The list of local policies, programs, and actions would also help establish a monitoring program to allow the City to monitor the progress of greenhouse gas emissions reduction after the CAP update has been completed.

Local action on climate change cannot be addressed insularly by one agency or community - it requires active and ongoing partnerships between residents, businesses, and other community members. Although the two attachments reflect potential policies, programs, and actions based on the input received during the first phase of the work program, it will be punctuated with additional input and refinement over the next couple of months. Additional feedback is needed to confirm community-supported solutions on how the City can meet its 2035 greenhouse gas emissions target, while addressing a number of environmental and equity issues. For this reason, the goal of the second phase of outreach will be to confirm the earlier results, build on existing networks, and develop a draft CAP for the Planning Commission and City Council adoption. Once adopted, these measures would be administered through multiple City departments and guide future decision-making and environmental commitments as the preferred path forward.

B. ENVIRONMENTAL STATUS:

The action before the Planning Commission is statutorily exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15262, Feasibility and Planning Studies. This organizational and administrative activity relates to the ongoing study of preparing a CAP update. The Planning Commission will provide direction as appropriate to facilitate the public's review of the CAP update. This general direction does not have a legally binding effect on any possible future discretionary action.

Public input received and technical information prepared during the proposed process will be utilized in preparing a future environmental review document to support the CAP update work program. It is anticipated that the updated CAP would facilitate streamlined environmental review of future development projects in Escondido by following the CEQA Guidelines for a Qualified GHG Reduction Strategy.

ATTACHMENT:


Draft
February 2020

Prepared for the City of Escondido

Prepared by the Energy Policy Initiatives Center
About EPIC

The Energy Policy Initiatives Center (EPIC) is a non-profit research center of the USD School of Law that studies energy policy issues affecting California and the San Diego region. EPIC’s mission is to increase awareness and understanding of energy- and climate-related policy issues by conducting research and analysis to inform decision makers and educate law students.

For more information, please visit the EPIC website at [www.sandiego.edu/epic](http://www.sandiego.edu/epic).
Prepared in partnership with the San Diego Association of Governments (SANDAG) and the Roadmap Program. This Program is partially funded by California utility customers and administered by San Diego Gas & Electric Company under the auspices of the California Public Utilities Commission.
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1 OVERVIEW

The City of Escondido’s Climate Action Plan (“CAP”) Greenhouse Gas (“GHG”) Reduction Methods (document) provides a summary of the methods used to calculate GHG emissions reductions for the strategies and measures included in the City of Escondido’s (referred to as “the City” or “Escondido”) CAP.

Section 2 of the document details the emission reduction targets for Escondido in the years 2020, 2030, and 2035. Section 3 provides a summary of emissions reduction estimates from federal and State (California) actions, as well as nine CAP strategies, used to meet 2030 and 2035 targets. Section 4 outlines the common data sources and methods used throughout the document, while Sections 5 and 6 detail the methods used to estimate emissions reductions from each specific strategy and measure.

Unless stated otherwise, all activity data and GHG emissions reported in this document are annual values for the calendar year, and all emission factors reported in this document are annual average values for the calendar year.

1.1 Rounding of Values in Tables and Figures

Rounding is used for the final GHG values within the tables and figures throughout the document. Values are not rounded in the intermediary steps in any calculation. Because of rounding, some totals may not equal the values summed in any table or figure.

2 EMISSION REDUCTION TARGETS

California has a statewide target of reaching the 1990 GHG emissions levels, equal to an annual value of 431 million metric tons of carbon dioxide equivalent (MMT CO₂e), by 2020. At the State level, the emissions reduction target for 2020 can be calculated from any previous year for which a State inventory is available. For example, the State 2020 target is 4 percent below its 2012 inventory value, and 11 percent below its 2005 inventory value. Based on California’s long-term climate goals, all state agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets as set forth in Executive Orders S-3-05 and B-30-15. The State target for 2030 is 40 percent below its 1990 level, or 260 MMT CO₂e. This is equivalent to 42 percent below its 2012 inventory value, and 47 percent below its 2005 value. Similarly, the 2035 goal is 52 percent below its 2012 inventory value. Such equivalencies are illustrated in Figure 1. It is important to note that these mid-term targets are critical to help frame the suite of planning efforts and strategies in clean technology and infrastructure (energy, transportation, agriculture, water, waste management, etc.) needed to continue driving down emissions to meet the 2050 goal of reducing emissions to 80 percent below 1990 levels. Implementing this type of methodology would put the City of track to reach the long-term sector target established by Executive Order S-3-05, to reduce emissions in year 2050 to 80 percent below 1990 levels, although no specific recommendations are made.

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The Escondido CAP utilizes a baseline year of 2012 for the purposes of calculating targets. As emissions from transportation account for more than half of the City’s total emissions, the inventory year should align with the best available transportation data, which is from 2012. Therefore, the target emissions levels for Escondido are set at 4 percent below the 2012 emissions level by 2020, 42 percent below the 2012 emissions level by 2030, and 52 percent below 2012 emissions level by 2035. These mass reduction targets are consistent with the emissions reduction targets at the State level, explained above.

Table 1 shows the business-as-usual (BAU) emissions projections, which represent emissions levels in the absence of any new policies and programs, targets, as well as CO₂e reductions needed in 2020, 2030, and 2035 to achieve the target levels.³

---

³ The method to project emissions is provided in Appendix A: City of Escondido Greenhouse Gas Emissions Inventories and Projections (EPIC, 2018).
Table 1 Emissions Projections, Targets, and Emissions Reductions Needed

<table>
<thead>
<tr>
<th>Year</th>
<th>Business-as-usual Projection (MT CO\textsubscript{2}e)</th>
<th>Target Emissions Level (% below baseline)</th>
<th>Target Emissions Level (MT CO\textsubscript{2}e)</th>
<th>Emissions Reduction Needed to Meet Target (MT CO\textsubscript{2}e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>943,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2020</td>
<td>831,000</td>
<td>-4%</td>
<td>907,000</td>
<td>none</td>
</tr>
<tr>
<td>2030</td>
<td>833,000</td>
<td>-42%</td>
<td>547,000</td>
<td>286,000</td>
</tr>
<tr>
<td>2035</td>
<td>842,000</td>
<td>-52%</td>
<td>456,000</td>
<td>386,000</td>
</tr>
</tbody>
</table>

Emissions projection and reduction values are rounded.

No local actions are needed for Escondido to reach its 2020 target. A reduction of 286,000 MT CO\textsubscript{2}e is needed to meet the 2030 target, and a reduction of 386,000 MT CO\textsubscript{2}e is needed to reach the 2035 target. This document focuses on the State and local measures needed to reach the 2030 and 2035 targets. Implementing this plan would help the City achieve its 2035 target consistent with state goals.

3 SUMMARY OF EMISSIONS REDUCTION ESTIMATES

This section summarizes the GHG emissions reductions from strategies and measures included in the Escondido CAP. Table 2 below presents a summary of emissions reductions from the nine local strategies in the Escondido CAP, as well as the reductions from federal and State actions.

Table 2 Summary of 2030 and 2035 GHG Emissions Reduction by Strategy in the Escondido CAP

<table>
<thead>
<tr>
<th>CAP Strategies</th>
<th>Emissions Reduction (MT CO\textsubscript{2}e)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2030</td>
</tr>
<tr>
<td>Strategy 1: Increase the Use of Zero-Emission or Alternative Fuel Vehicles (T)</td>
<td>4,348</td>
</tr>
<tr>
<td>Strategy 2: Reduce Fossil Fuel Use (T)</td>
<td>6,421</td>
</tr>
<tr>
<td>Strategy 3: Reduce Vehicle Miles Traveled (T)</td>
<td>20,058</td>
</tr>
<tr>
<td>Strategy 4: Increase Building Energy Efficiency (E)</td>
<td>935</td>
</tr>
<tr>
<td>Strategy 5: Increase Renewable and Zero-Carbon Energy (E)</td>
<td>44,992</td>
</tr>
<tr>
<td>Strategy 6: Increase Water Efficiency (W)</td>
<td>53</td>
</tr>
<tr>
<td>Strategy 7: Diversify Local Water Supply (W)</td>
<td>3,541</td>
</tr>
<tr>
<td>Strategy 8: Reduce and Recycle Solid Waste (S)</td>
<td>23,588</td>
</tr>
<tr>
<td>Strategy 9: Carbon Sequestration and Land Conservation (C)</td>
<td>734</td>
</tr>
<tr>
<td>Total Reduction from Federal and State Regulations</td>
<td>235,062</td>
</tr>
<tr>
<td>Total Reduction (Federal, State and CAP Measures)*</td>
<td>340,000</td>
</tr>
</tbody>
</table>

*Total emissions reduction values in 2030 and 2035 are rounded.

Each strategy has several measures. Table 3 presents a detailed summary of the emissions reductions from each CAP measure and from each federal and State action.
<table>
<thead>
<tr>
<th>CAP Strategies</th>
<th>CAP Measures</th>
<th>Emissions Reduction (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy 1: Increase the Use of Zero-Emission or Alternative Fuel Vehicles (T)</strong></td>
<td>T-1.1 Transition to a clean and more fuel-efficient municipal vehicle fleet</td>
<td>33 33</td>
</tr>
<tr>
<td></td>
<td>T-1.2 Install electric vehicle charging stations at Park and Ride Lots</td>
<td>463 737</td>
</tr>
<tr>
<td></td>
<td>T-1.3 Adopt an ordinance to require electric vehicle charging stations at new developments</td>
<td>3,513 5,732</td>
</tr>
<tr>
<td></td>
<td>T-1.4 Require electric vehicle charging stations at new single-family model homes</td>
<td>339 520</td>
</tr>
<tr>
<td><strong>Strategy 2: Reduce Fossil Fuel Use (T)</strong></td>
<td>T-2.1 Synchronize traffic signals</td>
<td>289 408</td>
</tr>
<tr>
<td></td>
<td>T-2.2 Install Roundabouts</td>
<td>811 1,145</td>
</tr>
<tr>
<td></td>
<td>T-2.3 Increase renewable or alternative fuel construction equipment</td>
<td>5,321 9,032</td>
</tr>
<tr>
<td><strong>Strategy 3: Reduce Vehicle Miles Traveled (T)</strong></td>
<td>T-3.1 Participate in SANDAG Vanpool Program</td>
<td>837 787</td>
</tr>
<tr>
<td></td>
<td>T-3.2 Improve pedestrian infrastructure at priority areas</td>
<td>44 59</td>
</tr>
<tr>
<td></td>
<td>T-3.3 Continue to implement Safe Routes to School Program at Escondido Union School District</td>
<td>60 82</td>
</tr>
<tr>
<td></td>
<td>T-3.4 Develop a citywide Transportation Demand Management (TDM) Plan</td>
<td>533 820</td>
</tr>
<tr>
<td></td>
<td>T-3.5 Update Bicycle Master Plan</td>
<td>231 335</td>
</tr>
<tr>
<td></td>
<td>T-3.6 Increase transit commuters among new downtown residents</td>
<td>84 177</td>
</tr>
<tr>
<td></td>
<td>T-3.7 Develop an intra-city shuttle program</td>
<td>4,463 6,540</td>
</tr>
<tr>
<td></td>
<td>T-3.8 Increase mass transit mode share</td>
<td>7,977 11,671</td>
</tr>
<tr>
<td></td>
<td>T-3.9 Other Actions to reduce VMT</td>
<td>5,829 11,075</td>
</tr>
<tr>
<td><strong>Strategy 4: Increase Building Energy Efficiency (E)</strong></td>
<td>E-4.1 Require new residential developments to install alternative-fuel water heaters</td>
<td>629 822</td>
</tr>
<tr>
<td></td>
<td>E-4.2 Require new multi-family residential developments to install electric cooking appliances</td>
<td>143 172</td>
</tr>
<tr>
<td></td>
<td>E-4.3 Retrofit high-pressure sodium streetlights with LED lights</td>
<td>3 3</td>
</tr>
<tr>
<td></td>
<td>E-4.4 Require non-residential alterations and additions to install alternative-fuel water heaters</td>
<td>160 263</td>
</tr>
<tr>
<td><strong>Strategy 5: Increase Renewable and Zero-Carbon Energy (E)</strong></td>
<td>E-5.1 Supply municipal facilities with on-site renewable electricity</td>
<td>292 745</td>
</tr>
<tr>
<td></td>
<td>E-5.2 Adopt a reach code to require new commercial developments to achieve zero net energy</td>
<td>1,618 2,668</td>
</tr>
<tr>
<td></td>
<td>E-5.3 Increase grid-supply renewable and/or zero-carbon electricity</td>
<td>42,134 29,486</td>
</tr>
<tr>
<td></td>
<td>E-5.4: Support Escondido Union School District’s Efforts to Install PV Systems</td>
<td>947 965</td>
</tr>
<tr>
<td><strong>Strategy 6: Increase Water Efficiency (W)</strong></td>
<td>W-6.1 Install smart irrigation controllers at City Parks and Landscape Maintenance District</td>
<td>45 64</td>
</tr>
<tr>
<td></td>
<td>W-6.2 Require greywater systems and rain barrels at new single-family model homes</td>
<td>8 12</td>
</tr>
<tr>
<td><strong>Strategy 7: Diversify Local Water Supply (W)</strong></td>
<td>W-7.1 Develop local water supply for agricultural water use</td>
<td>3,541 3,571</td>
</tr>
<tr>
<td><strong>Strategy 8: Reduce and Recycle Solid Waste (S)</strong></td>
<td>S-8.1 Increase citywide waste diversion</td>
<td>23,588 25,535</td>
</tr>
<tr>
<td><strong>Strategy 9: Carbon Sequestration and Land Conservation (C)</strong></td>
<td>C-9.1 Enforce landscape tree requirements at new developments</td>
<td>183 239</td>
</tr>
<tr>
<td></td>
<td>C-9.2 Develop a citywide Urban Forestry Program</td>
<td>36 48</td>
</tr>
<tr>
<td></td>
<td>C-9.3 Develop an Agricultural Land and Open Space Conservation Program</td>
<td>515 762</td>
</tr>
<tr>
<td><strong>Federal and State Regulations</strong></td>
<td>Federal and California Vehicle Efficiency Standards</td>
<td>87,981 103,866</td>
</tr>
<tr>
<td></td>
<td>California Energy Efficiency Programs</td>
<td>16,778 15,836</td>
</tr>
<tr>
<td>CAP Strategies</td>
<td>CAP Measures</td>
<td>Emissions Reduction (MT CO₂e)</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2030</td>
</tr>
<tr>
<td>Renewables Portfolio Standard</td>
<td></td>
<td>79,088</td>
</tr>
<tr>
<td>California Solar Policy, Programs and 2019 Mandates</td>
<td></td>
<td>51,215</td>
</tr>
<tr>
<td>Total Reduction from Federal and State Regulations</td>
<td></td>
<td>235,062</td>
</tr>
<tr>
<td>Total Reduction from CAP Measures</td>
<td></td>
<td>104,670</td>
</tr>
<tr>
<td>Total Reduction (Federal, State and CAP Measures)*</td>
<td></td>
<td>340,000</td>
</tr>
</tbody>
</table>

*Total emissions reduction values in 2030 and 2035 are rounded.

Figure 2 provides a visualization of the emissions trend for the CAP horizon year through 2035.

In Figure 2, the BAU emissions projection is represented along the top of the graph. The black dots represent the target emissions levels in 2020, 2030, and 2035 and the emissions goal in 2050. The colored wedges represent the reduction from each local CAP strategy and from federal and State actions. Each wedge represents the cumulative GHG reduction from each strategy from when the strategy is initiated through 2035. The grey area beneath the colored wedges represents the remaining emissions after all the actions have taken place. As shown in Figure 2, the City meets its 2020, 2030, and 2035 targets with the federal and State actions and local measures identified in the CAP.
4 BACKGROUND AND COMMON ASSUMPTIONS

A set of common assumptions and sources was used to calculate potential emissions reductions for many of the measures included in the CAP. The following section describes the assumptions that are applied to measures related to electricity, natural gas, and on-road transportation. Measures related to other categories do not have common assumptions. The detailed methods and data for each measure are provided in Sections 5 and 6.

4.1 Common Background Data

Table 4 presents a summary of common data used to estimate overall GHG emissions levels and the reduction estimates across several CAP measures.

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>146,781</td>
<td>172,332</td>
<td>172,892</td>
</tr>
<tr>
<td>Labor Force</td>
<td>69,300</td>
<td>79,608</td>
<td>81,903</td>
</tr>
<tr>
<td>VMT (annual miles)</td>
<td>1,856,972,636</td>
<td>2,020,248,005</td>
<td>2,034,021,525</td>
</tr>
<tr>
<td>Electricity Gross Generation (GWh)</td>
<td>762</td>
<td>890</td>
<td>909</td>
</tr>
</tbody>
</table>

VMT projections are based on the SANDAG Series 13 forecast. 2012 is the Series 13 Base Year. Data in 2012 are historical data and data in 2030 and 2035 are the latest available forecasted data. The next version of SANDAG forecast will revised based on updated historical information, market trends, and new housing accommodation requirements provided by the Regional Housing Needs Assessment. SANDAG Data Surfer, accessed on November 15, 2017.

4.2 Common Assumptions and Methods for Calculating Electricity Emissions Reductions

The following overall assumptions and methods are used in the calculation of emissions reductions related to electricity, including both those from federal and State actions and local CAP measures. Details for the calculation of each action are provided in Sections 5 and 6.

4.2.1 GHG Emission Factor for Electricity

The GHG emission factor for electricity for a city, expressed in pounds of CO$_2$e per megawatt-hour (lbs CO$_2$e/MWh), is specific to each city and depends upon the sources of electricity supplied to the city.

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4 The 2012 population is from SANDAG’s Demographic & Socio-Economic Estimates (March 9, 2017 version). The population in 2030 and 2035 are from SANDAG’s Series 13 Regional Growth Forecast (Updated in October 2013). SANDAG Data Surfer, accessed on November 15, 2017. Series 13 has a base year of 2012. Projections from 2012 may differ from more recent estimates by the State, such as from the Department of Finance (DOF).


6 Based on SANDAG Series 13 Origin-Destination weekday VMT, provided by SANDAG (March 23, 2017 and November 7, 2017). Weekday VMT were converted to annual VMT using the methods described in Appendix A: City of Escondido Greenhouse Gas Emissions Inventories and Projections (EPIC, 2018).

7 Gross generation is the sum of the forecasted utility electricity sales, electricity generated from behind-the-meter PV systems, additional load from electric vehicles and transmission and distribution losses.

Energy Policy Initiatives Center (EPIC)
Therefore, for the purpose of estimating GHG reductions, the GHG emission factor for electricity in Escondido is the weighted average emission factor of gross generation from four sources of supply: San Diego Gas & Electric (SDG&E), other electric retail suppliers for SDG&E’s Direct Access (DA) customers, a local renewables and zero-carbon program, and behind-the-meter photovoltaic (PV) systems. This citywide emission factor is needed to estimate the effects of State actions and local CAP measures that increase the grid-supply of renewable and zero-carbon electricity, as well as the impact of adding behind-the-meter PV systems and increasing building energy efficiency.

The citywide emission factor is calculated based on the percentage of renewable and zero-carbon content in, and the percentage of, gross generation from each source of supply as described below. This method is applied to 2016, the starting year for emissions projections, as well as to each year included in the CAP horizon.\(^8\) As the percentage of renewable and zero-carbon supply in the mix increases, the weighted average emission factor of electricity supply decreases.

4.2.1.1 Supply from SDG&E

SDG&E’s power mix includes electricity generated from SDG&E’s own power plants and electricity procured by SDG&E (both specified and unspecified sources), known as bundled power. As of 2016, SDG&E’s bundled power mix is 43 percent renewable.\(^9\) SDG&E has already met the 2020 mandate of 33 percent renewable energy required by the Renewables Portfolio Standard (RPS) under SB 100 (de León) (Chapter 312, Statutes of 2016).\(^10\) It is assumed that SDG&E will be at 60 percent renewable by 2030 and beyond 73 percent renewable by 2035, in line with the mandates in SB 100.\(^11\) These mandates are discussed in Section 5.1.

4.2.1.2 Supply from Electric Retail Suppliers of SDG&E Direct Access Customers

Like SDG&E, electric retail suppliers of SDG&E DA customers are required to meet RPS targets.

4.2.1.3 Supply from Renewables and Zero-Carbon Program

Under CAP Measure E-5.3, the City would present options to the City Council to increase grid-supply renewable and zero-carbon electricity. As of this writing, the City is pursuing a joint, Community Choice Energy feasibility study, with the Cities of San Marcos and Vista, which, if implemented, would accomplish this goal. It is assumed that such a program, Community Choice Energy or other commensurate program, would increase the renewable and zero-carbon electricity to 100 percent in and after 2030, or 40 percent beyond the current RPS mandates for 2030.

The renewable and zero-carbon content of the program would affect the citywide weighted average emission factor. Because the RPS requires all of California’s retail electricity suppliers to meet the RPS requirement, a portion of the emissions reduction from RPS compliance is credited to State actions. The remaining portion of reductions, beyond 60 percent in 2030 and 73 percent in 2035, is attributed to the City under Measure E-5.3.

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\(^8\) The method to project emissions is provided in the *Appendix A: City of Escondido Greenhouse Gas Emissions Inventories and Projections* (EPIC, 2018).


\(^10\) SB 100 (de León) *California Renewables Portfolio Standard Program: emissions of greenhouse gases* (2017–2018). The interim RPS targets are 44 percent by 2024 and 52 percent by 2027 from eligible renewable energy resources.

\(^11\) 73 percent renewable by 2035 target is linearly interpolated between the 60 percent renewable mandate by 2030 and the 100 percent renewable and zero-carbon mandate by 2045 under SB 100.
4.2.1.4 Supply from behind-the-meter PV Systems

Electricity generation from behind-the-meter PV systems, including residential and non-residential PV systems, is considered a part of the overall electricity supply. Electricity generation from PV is considered 100 percent zero-carbon (i.e., GHG-free). The State’s solar policies and programs, the 2019 California Building Energy Efficiency Standards (Title 24, Part 6) residential PV mandates, and CAP Measure E-5.1: Supply Municipal Facilities with On-Site Renewable Electricity, Measure E-5.2: Require New Commercial Developments to Achieve Zero Net Energy, and Measure E-5.4: Support Escondido Union School District’s Efforts to Install PV Systems all increase behind-the-meter PV systems in the City; they are discussed in Section 6.5.

Considering behind-the-meter PV as a source that contributes to the citywide emission factor helps to calculate the effects of energy efficiency programs that may reduce behind-the-meter electricity use, or from additional electric vehicle (EV) charging load, which may come from behind-the-meter electricity sources and not just from grid supply.

4.2.1.5 Weighted Average GHG Emission Factor for Electricity

The weighted average GHG emission factor for electricity is based on the percentage of gross generation from each previously referenced supply, as well as the percentage of renewable and zero-carbon content in each supply.

Table 5 shows the contribution from each supply to gross generation and its renewable and zero-carbon content, as well as the resulting overall citywide annual weighted average emission factors for 2016, 2030, and 2035.

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Renewables and Zero-Carbon Program</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Gross Generation Supplied</td>
<td>-</td>
<td>57%</td>
<td>57%</td>
</tr>
<tr>
<td>Zero-Carbon Content in Supply</td>
<td>-</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Other Electric Retail Suppliers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Gross Generation Supplied</td>
<td>10%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Renewable Content in Supply</td>
<td>21%</td>
<td>60%</td>
<td>73%</td>
</tr>
<tr>
<td><strong>SDG&amp;E</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Gross Generation Supplied</td>
<td>79%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Renewable Content in Supply</td>
<td>43%</td>
<td>60%</td>
<td>73%</td>
</tr>
<tr>
<td><strong>Behind-the-meter PV</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Gross Generation Supplied</td>
<td>11%</td>
<td>29%</td>
<td>29%</td>
</tr>
<tr>
<td>Renewable Content in Supply</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Overall Citywide</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citywide Renewable and Zero-Carbon Supply</td>
<td>47%</td>
<td>94%</td>
<td>96%</td>
</tr>
<tr>
<td>Electricity Emission Factor (lbs CO2e/MWh)</td>
<td>486</td>
<td>53</td>
<td>36</td>
</tr>
</tbody>
</table>

2016 is the latest year with utility data available. The 2016 electricity emission factor is used for BAU emissions projections in future years, including 2030 and 2035. 2030 and 2035 data are projections based on CAP assumptions, current status, and future impact of State policies and programs.

In 2016, SDG&>E and other electric retail suppliers supplied accounted for 89 percent of the gross generation, and behind-the-meter PV systems supplied the remainder. SDG&>E’s 2016 bundled emission factor was 525 lbs CO₂e/MWh, resulting in a citywide emission factor of 486 lbs CO₂e/MWh in 2016.\(^\text{12}\)

In 2030, the projected electricity supply from behind-the-meter PV systems is estimated to be 29 percent of gross generation. To comply with the 2030 RPS target, the renewable content in the supply of both SDG&>E and other electric retail suppliers will increase to 60 percent; this document assumes the renewable supply is fixed at the RPS mandate level to avoid overestimating the emissions reductions from their renewable supplies. The renewables and zero-carbon program (CAP Measure E-5.3) is assumed to have 100 percent renewable and zero-carbon sources in 2030. Based on these supply contributions, the citywide annual weighted electricity emission factor in 2030 is projected to be 253 lbs CO₂e/MWh (94 percent renewable or zero-carbon).\(^\text{13}\) Using the same method, the projected overall citywide electricity emission factor in 2035 would be 36 lbs. CO₂e/MWh (94 percent renewable or zero-carbon).

These annual weighted citywide electricity emission factors are used to calculate the GHG reductions from CAP measures that both increase renewable and zero-carbon supply or reduce electricity use.

### 4.2.2 Allocation of GHG Emissions Reductions from Actions that Increase Renewables in Electricity to State Actions and Local CAP Measures

The projected citywide electricity emission factor is used to estimate the GHG emissions reductions from any measures that increase the overall renewable and zero-carbon supply. The total reduction resulting from State and local CAP measures to increase renewable and zero-carbon supply is given in Table 6. It is calculated using the projected gross generation in target years, as well as the difference in the 2030 and 2035 citywide emissions and BAU emission factors.

#### Table 6 Emissions Reductions from All Actions Increasing Renewable and Zero-Carbon Supply in Escondido

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Generation (GWh)</th>
<th>BAU Projections</th>
<th>Projections with State and Local Actions in Increasing Renewable and Zero-Carbon Supply</th>
<th>Emissions Reduction from Increased Renewable and Zero-Carbon Supply (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>890</td>
<td>486</td>
<td>196,254</td>
<td>21,218</td>
</tr>
<tr>
<td>2035</td>
<td>909</td>
<td>486</td>
<td>200,484</td>
<td>14,693</td>
</tr>
</tbody>
</table>

The projections with increasing renewable and zero-carbon supply are based on CAP assumptions and State policies and programs. Energy Policy Initiatives Center 2019.

The BAU emission factor for 2016 (Table 5) is kept constant through the year 2035, as opposed to using the emission factor for the 2012 baseline year. This is because the additional renewable content in

\(^{12}\) The SDG&>E bundled emission factor is calculated by EPIC and the methodology is reported in the SANDAG Regional Climate Planning Framework (ReCAP) Technical Appendix I, Table 6 (2018).

\(^{13}\) Starting with SDG&>E’s 2016 bundled emission factor of 525 lbs CO₂e/MWh (43 percent renewable), the projected 2030 SDG&>E and other electric retail provider’s emission factor is 368 lbs CO₂e/MWh (60 percent renewable) and the projected 2030 local program emission factor is zero (100 percent renewable or zero-carbon). The 2030 citywide emission factor is then 368 lbs CO₂e/MWh \(*15\) percent.
SDG&E’s supply and behind-the-meter PV supply in 2016 are already included in the BAU emissions projection.\textsuperscript{14}

The total emissions reduction from increasing renewable and zero-carbon supply, as calculated above (Table 6), is attributed to each supply based on its renewable (or zero-carbon, if beyond the RPS mandate) contribution to the total citywide renewable content. This attribution and impact on GHG reductions from each supply are shown in Table 7.

**Table 7 Attribution of Emissions Reductions to Supplies that Increase Renewable and Zero-Carbon Supply in Escondido**

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity Supply</th>
<th>Total</th>
<th>Renewables and Zero-Carbon Program</th>
<th>Other Electric Retail Suppliers</th>
<th>SDG&amp;E</th>
<th>Behind-the-meter PV</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>% of Gross Generation Supplied by Renewables and Zero-Carbon Sources</td>
<td>94%</td>
<td>57%</td>
<td>5%</td>
<td>4%</td>
<td>29%</td>
</tr>
<tr>
<td></td>
<td>Emissions Reduction from Increased Renewables and Zero-Carbon Supply (MT CO\textsubscript{2}e)</td>
<td>175,036</td>
<td>105,336</td>
<td>8,576</td>
<td>7,310</td>
<td>53,814</td>
</tr>
<tr>
<td>2035</td>
<td>% of Gross Generation Supplied by Renewables and Zero-Carbon Sources</td>
<td>96%</td>
<td>57%</td>
<td>6%</td>
<td>5%</td>
<td>29%</td>
</tr>
<tr>
<td></td>
<td>Emissions Reduction from Increased Renewables and Zero-Carbon Supply (MT CO\textsubscript{2}e)</td>
<td>185,791</td>
<td>109,209</td>
<td>10,923</td>
<td>9,286</td>
<td>56,373</td>
</tr>
</tbody>
</table>

2030 and 2035 data are the projections based on CAP assumptions and the future impact of State policies and programs. Energy Policy Initiatives Center 2019.

### 4.3 Common Assumptions and Methods for Calculating Natural Gas Emissions Reductions

The default emission factor of 0.0054 MT CO\textsubscript{2}e per therm is used for all years to estimate the emissions reductions for the CAP measures related to reducing natural gas use.\textsuperscript{15}

### 4.4 Common Assumptions and Methods for Calculating On-Road Transportation Emissions Reductions

The following assumptions and methods are used to calculate emissions reductions for strategies related to on-road transportation, including federal and State actions and local CAP measures.

#### 4.4.1 GHG Emission Factor for On-Road Transportation

The GHG emission factor for on-road transportation, expressed in grams of CO\textsubscript{2}e per mile (g CO\textsubscript{2}e/mile), is used in several ways throughout the document. It is used to estimate the effect of State actions to increase the vehicle fuel efficiency standard, the impact of reduced VMT, and the effect of State and local actions to increase the miles driven by EVs.

\textsuperscript{14} The method to project emissions is provided in the *Appendix A: City of Escondido Greenhouse Gas Emissions Inventories and Projections* (EPIC, 2018).

\textsuperscript{15} Emission factor for natural gas is from CARB, *Documentation of California’s GHG Inventory – Index*.
The default outputs of CARB’s Mobile Source Emissions Inventory EMFAC2014 model are used to determine the average vehicle emission rates for the San Diego region. The average vehicle emission rates for the San Diego region were used as proxies for Escondido. The EMFAC2014 model outputs include effects of all key federal and State regulations related to tailpipe GHG emissions reductions that were adopted before the model release date in 2015. The regulations embedded in the outputs are:

- For passenger cars and light-duty vehicles – Federal Corporate Average Fuel Economy (CAFE) standards and California Advanced Clean Car (ACC) Program
- For heavy-duty vehicles (heavy-duty trucks, tractors, and buses) – U.S. Environmental Protection Agency’s Phase-I GHG Regulation and CARB Tractor-Trailer GHG Regulation

Using the EMFAC2014 default output, the average vehicle emission rates (g CO₂/mile) are calculated based on the distribution of VMT for each vehicle class and its emission rate. The results are adjusted to convert from g CO₂/mile to g CO₂e/mile to account for total GHG emissions, including CO₂, CH₄, and N₂O. The average vehicle emission rates (Table 8) are used to estimate the GHG emissions reduction impact of policies that increase vehicle efficiency and increase the number of zero emission vehicles (ZEVs) on the road.

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Vehicle Emission Rate—with the Impact of all Adopted State and Federal Policies (g CO₂e/mile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>446</td>
</tr>
<tr>
<td>2030</td>
<td>297</td>
</tr>
<tr>
<td>2035</td>
<td>279</td>
</tr>
</tbody>
</table>

The projected average vehicle emission rates in Table 8 are also used to estimate the emissions reductions from CAP measures that reduce VMT. Because vehicle efficiency improves and the population of ZEVs increase over time, the average vehicle emission rate decreases. Therefore, measures that reduce the same amounts of VMT would lead to decreasing amounts of GHG emissions throughout the CAP horizon.

---

16 CARB: Mobile Source Emissions Inventory. EMFAC2014 was the latest model available at the beginning of the CAP development process (early 2018). The latest model is EMFAC2017 released in March 2018.
18 EPA’s Phase-I GHG regulation includes GHG emission standards for heavy-duty vehicle model years 2014–2018. CARB’s Tractor-Trailer GHG Regulation includes the aerodynamic and tire improvements requirements to reduce GHG emissions from heavy-duty trucks. CARB: EMFAC2014 Technical Documentation, Section 1.4.
19 The calculation and adjustment method are described in Section 4.1 of the Appendix A: City of El Cajon Greenhouse Gas Emissions Inventories and Projections (EPIC, 2018).
20 EVs are ZEVs, however, ZEVs may include vehicles with other technologies such as fuel cell vehicles. EMFAC2014 only models the impact of EVs as ZEVs, therefore, in this document EVs and ZEVs are interchangeable.
4.4.2 GHG Emissions Reduction from Increasing Zero Emission Vehicles

CAP Measure T-1.2: Install Electric Vehicle Charging Stations at Park and Ride Lots, Measure T-1.3: Adopt an Ordinance to Require Electric Vehicle Charging Stations at New Developments, and Measure T-1.4: Require Electric Vehicle Charging Stations at new Single-Family Model Homes all assist in the implementation of the State ZEV program that requires manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles (PHEVs).

The total effect of the ZEV program in future years is estimated by comparing the emissions rate in the BAU projection with no additional policy impacts after 2016 (a fixed 2016 ZEV penetration rate for the CAP horizon) and the emissions rate with the impact of the ZEV program (EMFAC2014’s default ZEV penetration rate), as shown in Table 9.\(^{21}\) The BAU projection is based on the year 2016, not the 2012 baseline year, to be consistent with the projection methodology in the electricity category. The additional 2016 model year vehicle fuel efficiency and ZEVs are already taken into consideration in the BAU emissions projection.

<table>
<thead>
<tr>
<th>Year</th>
<th>Projected VMT (annual million miles)</th>
<th>BAU Projection - With No Policy Impact after 2016</th>
<th>With Impact of Adopted ZEV Program</th>
<th>Total Emissions Reduction from ZEVs (MT CO(_2)e)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>BAU Average Vehicle Emission Rate* (g CO(_2)e/mile)</td>
<td>BAU Emissions from On-Road Transportation (MT CO(_2)e)</td>
<td>Average Vehicle Emission Rate (g CO(_2)e/mile)</td>
</tr>
<tr>
<td>2030</td>
<td>1,123</td>
<td>379</td>
<td>425,403</td>
<td>361</td>
</tr>
<tr>
<td>2035</td>
<td>1,134</td>
<td>377</td>
<td>427,295</td>
<td>355</td>
</tr>
</tbody>
</table>

*Despite the absence of additional policies and programs to increase vehicle efficiency, the BAU average vehicle emission rate decreases with natural turnover of the fleet as newer vehicles replace old vehicles.

The 2030 and 2035 VMT projection is based on the SANDAG Series 13 Growth Forecast. The projected emission rates are the projections under CAP assumptions, including future impact of State policies and programs used in the CARB EMFAC2014 model.


Portions of the total emissions reduction from ZEVs (20,401 MT CO\(_2\)e in 2030 and 24,577 MT CO\(_2\)e in 2035) are attributed to Measures T-1.2 through T-1.4 in proportion to each measure’s contribution of electric vehicle miles (e-VMT). Table 10 provides the key assumptions and results of the attribution.

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\(^{21}\) The method to project emissions is provided in the *Appendix A: City of Escondido Greenhouse Gas Emissions Inventories and Projections* (EPIC, 2018).

Energy Policy Initiatives Center (EPIC)
Table 10 Allocation of GHG Emissions Reduction from Increasing Zero Emission Vehicles

<table>
<thead>
<tr>
<th>Year</th>
<th>Projected e-VMT of Total VMT</th>
<th>Projected e-VMT Due to ZEV Program (annual million miles)</th>
<th>Emissions Reduction from EVs Due to (MT CO\textsubscript{2}e)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Measure T-1.2</td>
<td>Measure T-1.3</td>
</tr>
<tr>
<td>2030</td>
<td>7.6%</td>
<td>85</td>
<td>1.9</td>
</tr>
<tr>
<td>2035</td>
<td>8.9%</td>
<td>101</td>
<td>3.0</td>
</tr>
</tbody>
</table>

e-VMT: electric vehicle miles  
Projected e-VMT percent of total VMT is based on the assumptions in the CARB EMFAC2014 model for the San Diego Region. The emissions reduction from EVs is the projection under the CAP assumptions, including future impact of State policies and programs used in the CARB EMFAC2014 model and assumptions used for local CAP actions.  

Based on the EMFAC2014 model assumptions, in 2030, 7.6 percent of all VMT in the San Diego region will be driven by EVs, corresponding to 85 million e-VMT in Escondido. The requirement through Measure T-1.2 would result in about 1.9 million e-VMT in 2030. Therefore, 2.3 percent (the ratio of 1.9 million miles to 85 million miles) of emissions reductions from the ZEV program are attributed to Measure T-1.2. The emissions reductions from Measures T-1.3 and T-1.4 and target year 2035 are attributed using the same method.

5 FEDERAL AND STATE ACTIONS

Federal and State actions are expected to reduce emissions significantly over the CAP horizon. This section provides a summary of the methods used to estimate the emissions reductions associated with the following federal and State actions to increase renewable electricity, building energy efficiency, and clean and efficient transportation:

- California RPS  
- California Solar Programs, Policies and 2019 Mandates  
- California Energy Efficiency Programs  
- Federal and California Vehicle Efficiency Standards

5.1 California Renewables Portfolio Standard

SB 100, the 100 Percent Clean Energy Act of 2018, adopts a 60 percent RPS for all of California’s retail electricity suppliers by 2030; this increases the current RPS standard from 50 percent to 60 percent. The legislation also provides goals for the intervening years before 2030 and establishes a State policy requiring that “zero-carbon” resources supply 100 percent of all retail electricity sales to end-user customers and all State agencies by December 31, 2045.\textsuperscript{22} If interpolated linearly between 60 percent renewables in 2030 and 100 percent zero-carbon in 2045, the interim 2035 target would be 73 percent renewables. The SB 100 renewables and zero-carbon targets are shown in Figure 3 below.

\textsuperscript{22} SB 100 (de León): California Renewables Portfolio Standard Program: emissions of greenhouse gases (2017–2018). The interim RPS targets are 44 percent by 2024 and 52 percent by 2027 from eligible renewable energy resources.

Energy Policy Initiatives Center (EPIC)
All retail electricity suppliers are required to meet the State’s RPS requirements, including SDG&E, retail electricity suppliers for SDG&E’s DA customers, and any other renewables and zero-carbon programs. In this document, a conservative approach is taken which assumes all providers for current utility customers, including electricity sales to DA customers, will meet, but not surpass, the RPS requirements for 2030 and 2035. Under this assumption, all emissions reductions from SDG&E and electric retail suppliers reaching 60 percent renewables in 2030 and 73 percent renewables in 2035 are credited to the State under the RPS requirements.

For the renewables and zero-carbon program considered under Measure E-5.3, the target is to reach 100 percent renewables and zero-carbon in 2030. A portion of the emissions reductions from the program will be credited to the State under RPS compliance, and the remaining reduction will be attributed to local Measure E-5.4, as described in Section 6.5.3. Table 11 shows results from RPS mandates in target years.
Table 11 Electricity Suppliers and Projected Emissions Reduction from California Renewables Portfolio Standard

<table>
<thead>
<tr>
<th>Year</th>
<th>(a) RPS-Related Emissions Reduction from the Utility* (MT CO₂e)</th>
<th>(b) RPS-Related Emissions Reduction from Renewables and Zero-Carbon Program Under Measure E-5.3 (MT CO₂e)</th>
<th>(a + b) All RPS-Related Emissions Reductions (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>15,886</td>
<td>63,201</td>
<td>79,088</td>
</tr>
<tr>
<td>2035</td>
<td>20,209</td>
<td>79,723</td>
<td>99,932</td>
</tr>
</tbody>
</table>

*Includes SDG&E and electric retail suppliers of SDG&E Direct Access customers. 2030 and 2035 data are projections under the CAP based on current status, future impact of State policies and programs, and CAP measures assumptions.

5.2 California Solar Programs, Policies and 2019 Mandates

5.2.1 Solar Policies and Programs

California has several policies and programs to encourage customer-owned, behind-the-meter PV systems, including the California Solar Initiatives, New Solar Home Partnership, Net Energy Metering, and electricity rate structures designed for solar customers.

The California Energy Demand 2018–2030 Revised Forecast, developed by the CEC, has projections for behind-the-meter PV generation in the SDG&E planning area through 2030. The demand forecast provides three cases: high-demand, mid-demand, and low-demand. The PV projection from 2018–2030 in the SDG&E planning area mid-demand case is used to forecast the PV generation in Escondido.²³

The California Distributed Generation (DG) Statistics database includes capacities of behind-the-meter PV systems interconnected in a jurisdiction in a given year for each of the three Investor Owned Utility (IOU) planning areas, including SDG&E. The DG Statistics database also provides detailed information about the behind-the-meter PV systems installed in a jurisdiction from the start year of incentive programs through the current year. This provides a historical record used to determine the capacity in GHG inventory years and can also help determine trends in PV installation.

A comparison of the estimated capacity and electricity generation from PV systems in Escondido and in the SDG&E planning area are given in Table 12.²⁴

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²⁴ The capacity of all interconnected PV systems in Escondido are from the California Distributed Generation Statistics NEM Currently Interconnected Data Set (current as of May 31, 2017), download date: September 12, 2017.
### Table 12 Behind-the-meter PV Capacity and Estimated Electricity Generation

<table>
<thead>
<tr>
<th>Year</th>
<th>PV Capacity (MW)</th>
<th>Estimated Electricity Generation (GWh)</th>
<th>Estimated Electricity Generation (GWh)</th>
<th>Historical Ratio of Electricity Generation from PV (Escondido to SDG&amp;E)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Escondido*</td>
<td>SDG&amp;E Planning Area**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>9</td>
<td>17</td>
<td>238</td>
<td>7.0%</td>
</tr>
<tr>
<td>2013</td>
<td>14</td>
<td>25</td>
<td>335</td>
<td>7.4%</td>
</tr>
<tr>
<td>2014</td>
<td>22</td>
<td>38</td>
<td>496</td>
<td>7.7%</td>
</tr>
<tr>
<td>2015</td>
<td>34</td>
<td>59</td>
<td>744</td>
<td>8.0%</td>
</tr>
<tr>
<td>2016</td>
<td>51</td>
<td>89</td>
<td>1,129</td>
<td>7.9%</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td></td>
<td></td>
<td>7.6%</td>
</tr>
</tbody>
</table>

*Estimated electricity generation based on PV capacity and 20% capacity factor.
**California Energy Demand 2018–2030 Revised Forecast mid-demand case (February 2018 version).

For future years, the electricity generation and capacity of behind-the-meter PV systems in the City are estimated based on the PV generation in CEC’s mid-demand forecast for SDG&E’s planning area, and the average ratio of PV generation in the City to that of SDG&E’s planning area from 2012–2016 (7.6 percent). Because of California’s solar programs and policies, the estimated PV capacity in 2030 in Escondido is projected to be 139 megawatts (MW). It is assumed the PV capacity from State programs will remain at 139 MW due to the lack of statewide PV projections beyond 2035. The trend of behind-the-meter PV in the City is shown in Figure 4.
5.2.2 2019 Building Energy Efficiency Standards PV Mandates

The new California 2019 Building Energy Efficiency Standards, which went into effect on January 1, 2020, require all newly constructed single-family homes, low-rise multi-family homes, and detached accessory dwelling units (ADUs) to have PV systems installed, unless the building receives an exception.25

The San Diego Association of Governments (SANDAG) Series 13 Forecast assumes that 254 new single-family homes and 2,431 new multi-family homes will be added in Escondido from 2020 to 2035.26 In this document, it is assumed that all new single-family and low-rise multi-family homes are subject to the mandate. For the PV system size requirement of each housing unit type, the minimum size required by the 2019 Building Energy Efficiency Standards is calculated based on the average unit size of the housing type, as shown in Table 13.27

25 CEC: 2019 Building Energy Efficiency Standards – 2019 Residential Compliance Manual (December 2018). For the requirements on newly constructed single-family and low-rise multi-family homes, see Section 7.2 Prescriptive Requirements for Photovoltaic System. For the requirements on newly constructed and detached ADU, see Section 9.3.5 Accessory Dwelling Units.
Table 13 Estimated PV Requirement for New Homes after 2020 in Escondido

<table>
<thead>
<tr>
<th>Housing Unit Type</th>
<th>Average Size of Unit (sq. ft.)*</th>
<th>Minimum PV Required for the Unit Size (kWdc)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-family 1</td>
<td>2,700</td>
<td>3.1</td>
</tr>
<tr>
<td>Single-family 2</td>
<td>2,100</td>
<td>2.7</td>
</tr>
<tr>
<td>Average of Single-family</td>
<td></td>
<td>2.9</td>
</tr>
<tr>
<td>Multi-family</td>
<td>870</td>
<td>2.0</td>
</tr>
</tbody>
</table>

* Based on the prototype home, multi-family prototype is 8,760 sq. ft. with eight units
** Calculated based on unit size (sq. ft.) and 2019 Building Energy Efficiency Standards Residential Compliance Manual Equation 7-1 and Table 7-1. Escondido is in Climate Zone 10.


It is assumed that 20 percent of the new homes would be exempt for other reasons, which is consistent with the assumptions in the CEC’s mid-demand case for additional achievable PV. The Energy Demand 2018–2030 Revised Forecast (Revised Forecast) already assumes that a certain percentage of new single-family homes will install PV systems regardless of these mandates; therefore, the result of the PV mandate is assumed to be the additional installation not captured in the Revised Forecast and beyond the baseline assumption for single-family PV installation. The number of new homes with PV systems as a result of the PV mandate, as well as the estimated minimum system capacity, are given in Table 14. The number of new homes with PV systems and estimated system capacity are those added between 2020 and 2030, and between 2020 and 2035.

Table 14 New Homes with PV Systems after 2020 in Escondido due to PV Mandates

<table>
<thead>
<tr>
<th>Year</th>
<th>New Single-family Homes after 2020 with PV Systems due to State Mandates</th>
<th>New Multi-family Homes after 2020 with PV Systems due to State Mandates</th>
<th>All New Homes after 2020 with PV Systems due to State Mandates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Additional Homes with PV Systems</td>
<td>PV System Capacity (kW)</td>
<td>Number of Homes with PV Systems</td>
</tr>
<tr>
<td>2030</td>
<td>83</td>
<td>240</td>
<td>1,779</td>
</tr>
<tr>
<td>2035</td>
<td>166</td>
<td>481</td>
<td>1,945</td>
</tr>
</tbody>
</table>

PV system capacities are the additional capacities in 2030 and 2035 from all systems added to new homes after 2020 as a result of PV mandates. The capacities do not include existing PV, PV installation at new single-family homes already shown in the projection in Figure 4, or PV added on other new non-residential projects.


5.2.3 All Solar Policies, Programs and Mandates

The California Energy Demand 2018–2030 Revised Forecast, discussed in Section 5.2.1, does not include the additional impact of the 2019 PV mandates; therefore, the PV installation trend shown in Figure 4...
does not include the additional MW PV capacity from new homes after 2020.\textsuperscript{29} The total estimated PV capacity in Escondido resulting from California solar policies, programs, and PV mandates is projected to be 142.9 MW in 2030 and 143.3 MW in 2035.

Through CAP Measure E-5.2: *Require New Commercial Developments to Achieve Zero Net Energy*, the City plans to require PV installation at new non-residential developments. Like the residential PV mandates, this measure is not captured in the Revised Forecast and would result in additional PV installations. CAP Measure E-5.1: *Supply Municipal Facilities with On-Site Renewable Electricity* includes the PV installation goal for 2035; since the Revised Forecast only includes projections up to 2030, this results in additional PV capacity. However, for CAP Measure E-5.4: *Support Escondido Union School District’s Efforts to Install PV Systems*, the PV installations started in 2019 and are projected to be completed by 2020; therefore, they are likely captured in the Revised Forecast. As a result, the estimated PV capacities of Measures E-5.1 E-5.2 would be 4.5 MW in 2030 and eight MW in 2035, as discussed in detail in Sections 6.5.1 and 6.5.2. This brings the projected total PV capacity in the City to 147 MW in 2030 and 151 MW in 2035.

The emissions reductions from all State and City CAP measures that increase behind-the-meter renewable supply are 53,814 MT CO\textsubscript{2}e in 2030 and 56,373 MT CO\textsubscript{2}e in 2035, as shown in Table 7 (Attribution of Emissions Reductions to Supplies that Increase Renewable and Zero-Carbon Supply in Escondido). The total reduction is allocated based on estimated capacity (MW) that would result from each action. As shown in Table 15, GHG emissions reductions are the projected reduction amounts in the years 2030 and 2035 only, not the sum of the annual reductions from the 2012 baseline year to 2030 or 2035.

### Table 15 Key Assumptions and Results for California Solar Policies, Programs and Mandates

<table>
<thead>
<tr>
<th>Year</th>
<th>State or City Action</th>
<th>Total</th>
<th>Measure E-5.1: Supply Municipal Facilities with On-Site Renewable Electricity</th>
<th>Measure E-5.2: Require New Commercial Developments to Achieve Zero Net Energy*</th>
<th>Measure E-5.4: Support Escondido Union School District’s Efforts to Install PV Systems</th>
<th>California Solar Policies, Programs, and Mandates**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>Projected Behind-the-meter PV Capacity (MW)</td>
<td>147</td>
<td>0.8</td>
<td>3.7</td>
<td>2.6</td>
<td>140.2</td>
</tr>
<tr>
<td></td>
<td>Projected Emissions Reduction (MT CO\textsubscript{2}e)</td>
<td>53,814</td>
<td>292</td>
<td>1,360</td>
<td>947</td>
<td>51,215</td>
</tr>
<tr>
<td>2035</td>
<td>Projected Behind-the-meter PV Capacity (MW)</td>
<td>151</td>
<td>2.0</td>
<td>6.0</td>
<td>2.6</td>
<td>140.8</td>
</tr>
<tr>
<td></td>
<td>Projected Emissions Reduction (MT CO\textsubscript{2}e)</td>
<td>56,373</td>
<td>745</td>
<td>2,252</td>
<td>965</td>
<td>52,411</td>
</tr>
</tbody>
</table>

*Does not represent all emissions reduction from Measure E-5.2

**Solar policies, programs and mandates include the impact of the PV mandates from the 2019 Building Energy Efficiency Standard. The projected capacity and emissions reductions based on current conditions, the future impact of State policies and programs, and CAP assumptions.


In 2030, 95 percent (140.2 MW out of 147 MW) of the projected citywide PV capacity will be due to State policies, programs, and mandates; therefore, 95 percent of the total emissions reduction from

\textsuperscript{29} The 2018–2030 Revised Forecast assumes a percentage of new single-family homes will install PV systems without the mandates. The 2020–2030 percentages vary by year. However, it does not model the impact of PV mandates on low-rise multi-family homes. Personal communication with CEC staff, December 14, 2018.

Energy Policy Initiatives Center (EPIC)
increasing behind-the-meter PV (53,814 MT CO₂e) is attributed to this State action (51,215 MT CO₂e). The reductions and attribution from other measures and in target year 2035 are calculated using the same method.

5.3 California Energy Efficiency Program

In September 2017, the California Public Utilities Commission (CPUC) adopted energy efficiency goals for ratepayer-funded energy efficiency programs (Decision 17-09-025); these went into effect in 2018. The adopted energy saving goals for SDG&E’s service territory are given in the Decision on an annual basis from 2018 to 2030. The sources of the energy savings include, but are not limited to, rebated technologies, building retrofits, behavior-based initiatives, and codes and standards.

To evaluate the impact of the energy efficiency program on Escondido, the total energy savings in SDG&E’s service territory by 2030 are allocated to the City using a ratio of the City’s natural gas and electricity demand to those of SDG&E’s entire service territory. In the past three years, the ratios have been 4.5 percent for electricity and 4.3 percent for natural gas. SDG&E’s service territory electricity and natural gas savings were allocated accordingly to Escondido, as shown in Table 16.

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity Savings* (GWh)</th>
<th>Natural Gas Savings (Million Therms)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SDG&amp;E Service Territory</td>
<td>Allocation of Savings to Escondido</td>
</tr>
<tr>
<td>2030</td>
<td>3,564</td>
<td>123</td>
</tr>
</tbody>
</table>

*Include transmission and distribution losses. SDG&E service territory savings are the cumulative savings after 2018 based on the 2018–2030 annual saving goals in CPUC Decision 17-09-025.

The utility’s energy efficiency goal is not estimated by the CPUC beyond 2030; therefore, it is assumed the electricity and natural gas savings in 2035 from energy efficiency programs will be the same as in 2030. Emissions reductions from electricity savings are calculated by multiplying the electricity savings by the citywide GHG emission factor for electricity, discussed in Section 4.2.1 (GHG Emission Factor for Electricity) and shown in Table 5 (2016 and Projected 2030 and 2035 GHG Emission Factor for Electricity in Escondido). As the renewable and zero-carbon content in electricity increases, the emissions reduction from the electricity portion of the energy efficiency program decreases. Emissions reductions from natural

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31 Navigant Consulting: Energy Efficiency Potential and Goals Study for 2018 and Beyond (August 2017), accessed December 12, 2018. Rebated technologies are the energy efficiency technologies from the utility’s historic incentive programs, including equipment and retrofits.

32 SDG&E’s service territory demand is from California Energy Demand 2018–2030 Revised Forecast, SDG&E’s planning area load 2014–2016. 2016 is the latest year with historical data in the demand forecast. Electricity and natural gas demand in Escondido were provided to EPIC by SDG&E for the GHG inventory. Appendix A: City of Escondido Greenhouse Gas Emissions Inventory and Projection (EPIC, 2018).

33 CPUC: Decision 17-09-025, Adopting Energy Efficiency Goals for 2018–2030, accessed December 12, 2018. The 2018 and beyond goals are given on an annual basis for each year from 2018 to 2030, different from previous studies, in which the cumulative goals are given. The cumulative savings in 2030 from 2018 are the sum of the annual savings.
gas savings were calculated using the natural gas savings amount and natural gas emission factor. Table 17 summarizes the energy savings and GHG emissions reductions in the years 2030 and 2035.

Table 17 Emission Reductions from California Energy Efficiency Programs

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity Savings (GWh)</th>
<th>Emission Factor (lbs CO2e/MWh)</th>
<th>GHG Reduction from Electricity Savings (MT CO2e)</th>
<th>Natural Gas Savings (million therms)</th>
<th>Emission Factor (MT CO2e/therm)</th>
<th>GHG Reduction from Natural Gas Savings (MT CO2e)</th>
<th>Total Emissions Reduction (MT CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>123</td>
<td>53</td>
<td>2,925</td>
<td>2.5</td>
<td>0.0055</td>
<td>13,854</td>
<td>16,778</td>
</tr>
<tr>
<td>2035</td>
<td>123</td>
<td>36</td>
<td>1,983</td>
<td>2.5</td>
<td>0.0055</td>
<td>13,854</td>
<td>15,836</td>
</tr>
</tbody>
</table>

The emissions reductions are projected based on CAP assumptions and future impact of State policies and programs. Energy Policy Initiatives Center 2019.

5.4 Federal and California Vehicle Efficiency Standards

As discussed in Section 4.4 (Common Assumptions and Methods for Calculating On-Road Transportation Emissions Reductions), CARB’s EMFAC2014 model includes all key federal and State regulations related to tailpipe GHG emissions reductions for both light-duty and heavy-duty vehicles that were in place before the 2015 model release date.

Table 18 compares the average vehicle emission rate and emissions from on-road transportation under the BAU projection, as well as with the impact of policies that increase vehicle efficiency and ZEVs. As discussed in Section 4.4.2 (GHG Emissions Reduction from Increasing Zero Emission Vehicles), to avoid double-counting, the maximum emission reductions related to all measures in the CAP facilitating ZEV-driven miles are set at the amount expected from statewide programs and policies.

In order to attribute these reductions to the City, the effects of CAP Measure T-1.2: Install Electric Vehicle Charging Stations at Park and Ride Lots, Measure T-1.3: Adopt an Ordinance to Require Electric Vehicle Charging Stations at New Developments, and Measure T-1.4: Require Electric Vehicle Charging Stations at new Single-Family Model Homes are subtracted from the maximum emissions reductions from State policies. Table 18 summarizes the key assumptions and results. The GHG emissions reductions are the projected reduction amount in the years 2030 and 2035 only, not the sum of the annual reductions from the 2012 baseline year to 2030 or 2035.
Table 18 Key Assumptions and Results for Federal and California Vehicle Efficiency Standards

<table>
<thead>
<tr>
<th>Year</th>
<th>Projected City VMT (annual million miles)</th>
<th>BAU Projection – With No Policy Impact after 2016</th>
<th>With Impact of Adopted Statewide Policies</th>
<th>Emissions Reduction (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average Vehicle Emission Rate* (g CO₂e/mile)</td>
<td>Average Vehicle Emission Rate (g CO₂e/mile)</td>
<td>Emissions from On-Road Transportation (MT CO₂e)</td>
</tr>
<tr>
<td>2030</td>
<td>1,123</td>
<td>379</td>
<td>297</td>
<td>333,108</td>
</tr>
<tr>
<td>2035</td>
<td>1,134</td>
<td>377</td>
<td>279</td>
<td>316,441</td>
</tr>
</tbody>
</table>

*Despite the absence of additional policies and programs to increase vehicle efficiency, the BAU average vehicle emission rate decreases with natural fleet turnover as new vehicles replace old vehicles.


The 2030 VMT projections are based on SANDAG’s Series 13 Growth Forecast. The emission rates and emissions reductions are projected based on CAP assumptions and future impact of State policies and programs used in the CARB EMFAC2014 model.

6 CAP STRATEGIES AND MEASURES

The following section describes the methods used to estimate the GHG reductions from local CAP measures, which are organized into the following nine strategies:34

- Strategy 1: Increase the Use of Zero-Emission or Alternative Fuel Vehicles (T)
- Strategy 2: Reduce Fossil Fuel Use (T)
- Strategy 3: Reduce Vehicle Miles Traveled (T)
- Strategy 4: Increase Building Energy Efficiency (E)
- Strategy 5: Increase Renewable and Zero-Carbon Energy (E)
- Strategy 6: Increase Water Efficiency (W)
- Strategy 7: Diversify Local Water Supply (W)
- Strategy 8: Reduce and Recycle Solid Waste (S)
- Strategy 9: Carbon Sequestration and Land Conservation (C)

6.1 Strategy 1: Increase the Use of Zero-Emission or Alternative Fuel Vehicles (T)

The goal of this strategy is to reduce on-road transportation fossil fuel use by increasing the use of ZEVs or alternative fuel vehicles (AFVs) citywide through the following four measures.

6.1.1 Measure T-1.1: Transition to a Clean and More Fuel-Efficient Municipal Vehicle Fleet

The City’s Public Works Department is currently pursuing the installation of electric vehicle charging stations (EVCSs) at its Policy and Fire Headquarters. The plan is to set up approximately 30 EVCSs which will be used to support the vehicle charging needs of current EVs and PHEVs on order and allow for charging of approximately 20 additional PHEVs. As of February 2020, the City has installed 9 EVCSs at the Police and Fire Headquarters and has purchased or is going through the requisition process to have a total of 44 gasoline hybrid vehicles, one diesel hybrid truck, 11 PHEVs, 9 all electric utility charts, and two all-electric forklifts, and 1 electric vehicle.

34 Transportation (T), Energy (E), Water (W), Solid Waste (S) and Carbon Sequestration (C).
The average annual fuel use for a hybrid sedan in the fleet is 375 gallons of gasoline per year. Assuming the 11 PHEVs will have similar use profile, the GHG emissions reductions in 2030 and 2035 are shown in Table 19.36

Table 19 Key Assumptions and Results for Measure T-1.1: Transition to a Clean and More Fuel-Efficient Municipal Vehicle Fleet

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of New PHEVs</th>
<th>Gasoline Reduction *(gallons)</th>
<th>Gasoline Carbon Content** (lbs CO2/gallon)</th>
<th>GHG Emission Reduction (MT CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>11</td>
<td>4,125</td>
<td>17.8</td>
<td>33</td>
</tr>
<tr>
<td>2035</td>
<td>11</td>
<td>4,125</td>
<td>17.8</td>
<td>33</td>
</tr>
</tbody>
</table>

*Annual fuel saving per vehicle is 375 gallons **California gasoline blend has 10% ethanol. The emissions reduction is based on the projection under the CAP assumptions.

6.1.2 Measure T-1.2: Install Electric Vehicle Charging Stations at Park and Ride Lots

Currently, there are nine active Park and Ride parking lots within Escondido, which offer parking spaces for ride share (carpool and vanspool) and transit commuters. The Park and Ride lots are owned and operated by California Department of Transportation (CalTrans), North County Transit District (NCTD), SANDAG, or private organizations. Some Park and Ride lots are available for transit riders only, and others are available for both transit riders and ride share commuters.37

The City plans to add 281 EVCSs (approximately 25 percent of all nine Park and Ride lots’ parking spaces) by 2035 that will be available for ride share commuters and/or transit riders. It is assumed that Level 2, or better, chargers will be installed and that the EVCSs will be available when the Park and Ride lot is available.38 However, because not all parking spaces at the Park and Ride lots are utilized on an average workday, EVCSs are assumed to have the same utilization rate (53 percent) as an average parking space in a Park and Ride lot.39 One EVCS will be used to support one commuter’s personal vehicle, either a battery electric vehicle (BEV) or a PHEV, per workday, and the vehicle is assumed to be fully charged by the end of the workday. The vehicle charging load depends on the electric range of the EV, 210 miles for a BEV and 40 miles for a PHEV.40 Currently, 60 percent of all EVs are BEVs, and the rest are PHEVs; assuming that ratio continues, the e-VMT charged a Park and Ride lot EVCS is 142 miles per workday.41

35 Fuel use per vehicle and list of alternative fuel vehicles were provided by City (June 2019).
37 California Department of Transportation (CalTrans): San Diego Park and Ride Facilities, accessed June 26, 2019. The list of Park and Ride lots in the San Diego region and their locations, status, number of parking spaces and utilization rates were provided by SANDAG (October 2018), current as of August 2018.
38 Some Park and Ride lots are available 9am to 6pm, while others are available all day.
39 Average utilization rate across all Park and Ride lots in Escondido. The utilization rate varies from 16 percent to 94 percent, which were estimated based on data from 2014 to 2017. Utilization rates were provided by SANDAG (October 2018), current as of August 2018.
40 Bedir et al., 2018. California Plug-In Electric Vehicle Infrastructure Projections: 2017-2025. CEC. Publication Number: CEC-600-2018-001. The electric range assumptions are for model year 2025 vehicles, which are higher than current EVs on the market and kept constant through CAP horizon.
The GHG emissions reduction is estimated based on the ratio of projected e-VMT due to Measure T-1.2 compared with the total e-VMT from EMFAC2014 model estimates, as discussed in Section 4.4.2 (GHG Emissions Reduction from Increasing Zero Emission Vehicles) and shown in Table 10 (Allocation of GHG Emissions Reduction from Increasing Zero Emission Vehicles). It is assumed that not all e-VMT from the vehicles charging at Park and Ride lot EVCSs will result in miles driven only in Escondido. The e-VMT allocated to Escondido is based on Origin-Destination VMT allocation methods and assumes trips driven by EVs will have at least one trip-end within Escondido. The number of EVCSs, projected e-VMT, and GHG emissions reductions in 2030 and 2035 are shown in Table 20.

Table 20 Key Assumptions and Results for Measure T-1.2: Install Electric Vehicle Charging Stations at Park and Ride Lots

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Number of Park &amp; Ride Parking Spaces*</th>
<th>% of Parking Spaces with EVCS</th>
<th>Number of Parking Spaces with EVCS</th>
<th>Average Number of EVCSs Utilized per workday**</th>
<th>e-VMT from Charging at the EVCSs (miles per workday)</th>
<th>e-VMT from Charging at the EVCSs (miles per year)</th>
<th>Escondido e-VMT from Charging at the EVCSs*** (miles per year)</th>
<th>Emissions Reduction (MT CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>1,125</td>
<td>16%</td>
<td>181</td>
<td>96</td>
<td>142</td>
<td>3,492,860</td>
<td>1,939,717</td>
<td>463</td>
</tr>
<tr>
<td>2035</td>
<td>1,125</td>
<td>25%</td>
<td>281</td>
<td>150</td>
<td>142</td>
<td>5,433,338</td>
<td>3,017,338</td>
<td>737</td>
</tr>
</tbody>
</table>

*Spaces at all nine active Park & Ride lots within Escondido as of 2018 **Utilization rate the same as the rest of parking spaces (53%) ***The difference between the “e-VMT from Charging at the EVCSs” and the “Escondido e-VMT from Charging at the EVCSs” is due to the allocation of miles to jurisdictions in the methodology. Not all the charging will result in miles driven only in Escondido. 56% of all EV miles are allocated to Escondido based on the Origin-Destination VMT allocation methods, assuming trips driven by EVs will have at least one trip-end within Escondido. 255 Workdays per year.

The emissions reduction is projected based on CAP assumptions and future impact of State policies and programs used in the CARB EMFAC2014 model. Energy Policy Initiatives Center 2019.

6.1.3 Measure T-1.3: Adopt an Ordinance to Require Electric Vehicle Charging Stations at New Developments

To facilitate the increasing demand of EV infrastructure at commercial developments and multi-family homes, the City will adopt an ordinance requiring new multi-family and commercial developments to install EVCSs at 10 percent of parking spaces provided. The estimated effective year of the ordinance is 2023.

Based on recent permitting data, approximately 134,750 square feet (sq. ft.) of new commercial development would have been subject to the EV requirement on average per year. The Escondido Municipal Code off-street parking regulations require, on average, one parking space per 250 sq. ft. gross floor area of commercial, retail, and office use; therefore, approximately 539 parking spaces will be added every year at these new commercial developments.

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42 The average annual new non-residential development sq. ft. is calculated based on new office spaces (86,000 sq. ft. in last two years) and new retail commercial spaces (183,500 in last two years) square footage, as provided by the City (June 2019). The sq. ft. is new gross floor area.

43 Escondido Municipal Code: Off-street Parking Requirement (Section 33-765), accessed on August 1, 2019. The minimum parking requirements for commercial, office, restaurant/food, retail, etc., are different, the average is used here.
For the EVCSs to be installed at the new developments parking spaces, it is assumed that Level 2 chargers, or better, will be installed. The e-VMT resulting from the EVCSs are estimated based on the charging capacity of a Level 2 charger, EV drive efficiency, and hours in use, as shown in Table 21.\textsuperscript{44} On average, it is assumed that 70,628 e-VMT per year are attributed to charging at an EVCS, and the EVCS would be at least a high-capacity Level 2 charger.

Table 21 Electric Vehicle Charging Efficiency by Level 2 Charger Type

<table>
<thead>
<tr>
<th>Type of Charging (Level 2)</th>
<th>Capacity (kW)*</th>
<th>Hours in Use per Day</th>
<th>EV load (kWh/day)</th>
<th>Vehicle Drive Efficiency (kWh/mile) **</th>
<th>EV miles per Day of Charge</th>
<th>EV miles per Year per Commercial EVCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>3.3</td>
<td>5</td>
<td>20</td>
<td>0.25</td>
<td>66</td>
<td>24,090</td>
</tr>
<tr>
<td>Medium</td>
<td>6.6</td>
<td>5</td>
<td>40</td>
<td>0.25</td>
<td>132</td>
<td>48,180</td>
</tr>
<tr>
<td>High</td>
<td>9.6</td>
<td>5</td>
<td>58</td>
<td>0.25</td>
<td>192</td>
<td>70,080</td>
</tr>
<tr>
<td>Highest</td>
<td>19.2</td>
<td>5</td>
<td>115</td>
<td>0.25</td>
<td>384</td>
<td>140,160</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>70,628</td>
</tr>
</tbody>
</table>


The estimated number of new EVCSs and e-VMT due to the requirement for new commercial developments in Measure T-1.3 are shown in Table 22.

Table 22 Assumptions for New Commercial Electric Vehicle Charging Stations under Measure T-1.3: Adopt an Ordinance to Require Electric Vehicle Charging Stations at New Developments

<table>
<thead>
<tr>
<th>Year</th>
<th>New Annual Non-Residential Development Space Added after 2023* (sq. ft. per year)</th>
<th>Total Number of New Parking Spaces at Commercial Developments after 2022</th>
<th>% of Parking Spaces with EVCSs</th>
<th>Number of New EVCSs after 2023</th>
<th>Annual e-VMT Charged at the EVCSs (Miles per year)</th>
<th>Annual Escondido e-VMT due to the EVCSs** (Miles per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>134,750</td>
<td>4,312</td>
<td>10%</td>
<td>388</td>
<td>24,668,208</td>
<td>13,699,189</td>
</tr>
<tr>
<td>2035</td>
<td>134,750</td>
<td>7,007</td>
<td>10%</td>
<td>631</td>
<td>40,085,838</td>
<td>22,261,182</td>
</tr>
</tbody>
</table>

*New gross floor area. Based on recent years’ new development data. ** The difference between the “e-VMT from Charging at the EVCSs” and the “Escondido e-VMT from Charging at the EVCSs” is due to the allocation of miles to jurisdictions in the methodology. Not all the charging will result in miles driven only in Escondido. 56% of all EV miles are allocated to Escondido based on the Origin-Destination VMT allocation methods, assuming trips driven by EVs will have at least one trip-end within Escondido. The number of parking spaces is based on Escondido off-street parking requirements and assumes 10% of new non-residential development would qualify for an exemption of the requirement. The projections are based on the current conditions and CAP assumptions. Energy Policy Initiatives Center 2019.

\textsuperscript{44} The Level 2 charger capacity range comes from the Center for Sustainable Energy: Electric Vehicle Charging Station Installation Best Practice (June 2016). The vehicle drive efficiency assumption is based on Bedir et al., 2018. California Plug-In Electric Vehicle Infrastructure Projections: 2017–2025, CEC. Publication Number: CEC-600-2018-001.
For multi-family developments in Escondido, SANDAG Series 13 projects that 1,061 new multi-family units will be added from 2023 to 2030, and an additional 207 units will be added from 2030 to 2035.\(^{45}\) The Escondido Municipal Code off-street parking regulations require, on average, 1.5 parking spaces for each multi-family unit.\(^{46}\) At new multi-family developments, the EVCSs will be used to charge the residents’ personal EVs. Based on the EMFAC2014 model, approximately 35 miles per day are driven by an average EV in the San Diego region.\(^{47}\) The estimated number of new EVCSs and e-VMT are shown in Table 23.

Table 23 Assumptions for New Multi-family Electric Vehicle Charging Stations under Measure T-1.3: Adopt an Ordinance to Require Electric Vehicle Charging Stations at New Developments

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of New Multi-Family Units after 2023*</th>
<th>Number of New Parking Spaces at Multi-Family Developments after 2023</th>
<th>% of Parking Spaces with EVCSs</th>
<th>Number of New EVCSs after 2023</th>
<th>Annual e-VMT Charged at the EVCSs (Miles per year)</th>
<th>Annual Escondido e-VMT due to the EVCSs** (Miles per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>1,061</td>
<td>1,592</td>
<td>10%</td>
<td>143</td>
<td>1,830,517</td>
<td>1,016,555</td>
</tr>
<tr>
<td>2035</td>
<td>1,268</td>
<td>1,903</td>
<td>10%</td>
<td>171</td>
<td>2,187,514</td>
<td>1,214,809</td>
</tr>
</tbody>
</table>

*Based on SANDAG Series 13 Regional Growth Forecast.

**The difference between the “e-VMT from Charging at the EVCSs” and the “Escondido e-VMT from Charging at the EVCSs” is due to the allocation of miles to jurisdictions in the methodology. Not all the charging will result in miles driven only in Escondido. 56% of all EV miles are allocated to Escondido based on the Origin-Destination VMT allocation methods, assuming trips driven by EVs will have at least one trip-end within Escondido.

The number of parking spaces is based on Escondido off-street parking requirements and assumes 10% of new multi-family developments would qualify for exemption of the requirement. The projections are based on the current conditions and CAP assumptions.


The GHG emissions reduction from this measure is estimated based on the ratio of projected e-VMT due to this Measure T-1.3 to the total e-VMT from EMFAC2014 model estimates, as discussed in Section 4.4.2 (GHG Emissions Reduction from Increasing Zero Emission Vehicles) and shown in Table 10 (Allocation of GHG Emissions Reduction from Increasing Zero Emission Vehicles). The total number of parking spaces with EVCSs, projected e-VMT, and GHG emissions reductions are shown in Table 24. The GHG emissions reductions are the projected reduction amounts in 2030 and 2035 only, not the sum of the annual reductions from the 2012 baseline year to 2030 or 2035.

\(^{45}\) SANDAG Series 13 Regional Growth Forecast (October 2013). SANDAG Data Surfer, accessed November 15, 2017. The annual new multi-family units added from 2023 and 2030 are estimated using linear interpolation between 2020 and 2030.

\(^{46}\) Escondido Municipal Code: Off-street Parking Requirement (Section 33-765), accessed on August 1, 2019. The minimum parking requirements are different for studio and other apartments, the average is used here.

\(^{47}\) CARB: Mobile Source Emissions Inventory. EMFAC2014 San Diego County 2020–2030 estimates.
Table 24 Key Assumptions and Results for Measure T-1.3: Adopt an Ordinance to Require Electric Vehicle Charging Stations at New Developments

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of EVCS added due to the Ordinance</th>
<th>Annual Escondido e-VMT due to the EVCSs (Miles per year)</th>
<th>Emissions Reduction (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>531</td>
<td>14,715,744</td>
<td>3,513</td>
</tr>
<tr>
<td>2035</td>
<td>802</td>
<td>23,475,992</td>
<td>5,732</td>
</tr>
</tbody>
</table>

The emissions reduction is projected based on CAP assumptions and future impact of State policies and programs used in the CARB EMFAC2014 model.


6.1.4 Measure T-1.4: Require Electric Vehicle Charging Stations at new Single-Family Model Homes

The 2019 California Green Building Standards Code, Title 24, Part 11 (CALGreen 2019) requires new single-family units and townhouses with attached private garages to have “EV capable” parking spaces for each unit. To further advance EV infrastructure, the City will require each single-family model home, including townhouse model homes, to be fully equipped with one EVCS. The developers would also be required to provide information about having EVCS installation as an add-on option to potential homebuyers. The estimated effective year of this requirement is 2021.

Having model homes equipped with EVCS will encourage homebuyers to choose the add-on EVCS option. To further facilitate installation, the City will allow for no-fee permitting for developers and a waiver of fees for homebuyers of that subdivision at initial occupancy. On average, it is assumed that 20 EVCSs would be installed at new single-family homes due to this requirement each year: 12 through model home construction, and eight through the homebuyer add-on option.49

Like the assumption for EVCS usage at multi-family homes (Measure T-1.3), the EVCSs at single-family homes will be used to charge the residents’ personal EVs. The GHG emissions reduction from this measure is estimated based on the ratio of projected e-VMT due to this (Measure T-1.4) compared to the total e-VMT from EMFAC2014 model estimates, as discussed in Section 4.4.2 (GHG Emissions Reduction from Increasing Zero Emission Vehicles) and shown in Table 10 (Allocation of GHG Emissions Reduction from Increasing Zero Emission Vehicles). The total number of parking spaces with EVCSs, projected e-VMT, and GHG emissions reductions are shown in Table 25. The GHG emissions reductions are the projected reduction amounts in the years 2030 and 2035 only, not the sum of the annual reductions from the 2012 baseline year to 2030 or 2035.

49 Assumptions were provided by the City (October 2019).
Table 25 Key Assumptions and Results for Measure T-1.4: Require Electric Vehicle Charging Stations at new Single-Family Model Homes

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Number of EVCSs added at New Single-Family Homes due to T-1.4*</th>
<th>Number of EVCS due to T-1.4 after 2021</th>
<th>Annual e-VMT Charged at the EVCSs (miles per year)</th>
<th>Annual Escondido e-VMT due to the EVCSs** (miles per year)</th>
<th>Emissions Reduction (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>20</td>
<td>200</td>
<td>2,555,000</td>
<td>1,418,888</td>
<td>339</td>
</tr>
<tr>
<td>2035</td>
<td>20</td>
<td>300</td>
<td>3,832,500</td>
<td>2,128,332</td>
<td>520</td>
</tr>
</tbody>
</table>

*EVCSs added through model home construction requirements and homebuyer optional add-on interest do not include homeowners or developers installing EVCSs on their own

**The difference between the “e-VMT from Charging at the EVCSs” and the “Escondido e-VMT from Charging at the EVCSs” is due to the allocation of miles to jurisdictions in the methodology. Not all the charging will result in miles driven only in Escondido. 56 percent of all EV miles are allocated to Escondido based on the Origin-Destination VMT allocation methods, assuming trips driven by EVs will have at least one trip-end within Escondido. The projections are based on the current status and CAP assumptions.

6.2 Strategy 2: Reduce Fossil Fuel Use (T)

The goal of this strategy is to reduce on-road transportation fossil fuel use by improving traffic flow and to reduce off-road vehicle and equipment fuel use through increasing renewable or alternative fuel use. The strategy includes the following three measures.

6.2.1 Measure T-2.1: Synchronize Traffic Signals

The City maintains traffic signals on city corridors, while CalTrans maintains signals located at freeway ramps and along State highways within Escondido city limits. The City maintains a traffic signal priority list that identifies where new or modified traffic signals are needed. The goal is to synchronize traffic signals at 35 intersections by 2035 to obtain more efficient fuel use through smoother traffic flow. It is important to note that this estimate (35 intersections) is conservative; however, it is a base of analysis to estimate emission reductions.

The effect of traffic signal synchronization on fuel reduction depends on the traffic volume, number of intersections, and size of the intersections on the arterials. Based on a study of a project of similar size, the annual fuel savings per intersection is around 2,400 gallons. However, as the vehicles in the region become more efficient and the number of ZEVs increases, fuel savings per synchronized intersection will decrease. Assuming the 2,400 gallons of annual fuel savings per intersection could be realized in the 2012 CAP baseline year, the increase in vehicle fuel efficiency would reduce the fuel savings per intersection to approximately 1,500 gallons in 2030 and 1,400 gallons in 2035. The GHG emissions reductions in 2030

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51 Generally, the City completes traffic signal synchronization of 5–10 signals each year, assuming on average 2–4 signals at each intersection, City will complete the signal synchronization at approximately two intersections a year.
53 The average vehicle emission rate in 2030, 297 g CO₂e/mile, is 39 percent less than that in 2012, 483 g CO₂e/mile, as discussed in Section 4.4.
and 2035 from traffic signal synchronization are shown in Table 26.\textsuperscript{54} The GHG emissions reductions are the projected reduction amounts in the years 2030 and 2035 only, not the sum of the annual reductions from the 2012 baseline year to 2030 or 2035.

### Table 26 Key Assumptions and Results for Measure T-2.1: Synchronize Traffic Signals

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Intersections with Traffic Signal Synchronization</th>
<th>Increase in Vehicle Fuel Efficiency Comparing with Baseline Year 2012</th>
<th>Equivalent Fuel Saving per Intersection (Gallons per year)</th>
<th>Fuel Saving from All Intersections (Gallons per year)</th>
<th>GHG Emission for Fuel* (lbs CO\textsubscript{2}e/gallon)</th>
<th>GHG Emissions Reduction (MT CO\textsubscript{2}e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>23</td>
<td>39%</td>
<td>1,474</td>
<td>34,383</td>
<td>18.5</td>
<td>289</td>
</tr>
<tr>
<td>2035</td>
<td>35</td>
<td>42%</td>
<td>1,386</td>
<td>48,508</td>
<td>18.5</td>
<td>408</td>
</tr>
</tbody>
</table>

*Emissions per gallon of fuel use for an average vehicle in the San Diego region, regardless of fuel type, vehicle type, or fuel economy. Increases in vehicle fuel efficiency in 2030 and 2035 compared with 2012 are based on the decreases in the average vehicle emission rates in the San Diego region. The 2012 annual fuel saving per intersection is assumed to be about 2,400 gallons. The emissions reduction is based on the CAP assumptions, including future impact of State policies and programs used in CARB EMFAC2014 model and CAP assumptions. Energy Policy Initiatives Center 2019.

#### 6.2.2 Measure T-2.2: Install Roundabouts

Through Measure T-2.2, the City plans to install 12 roundabouts by 2035. The effect of roundabouts on fuel reduction depends on the traffic volume and size of the intersections on the arterials. Based on a study of small roundabouts with similar sizes, the annual fuel savings per roundabout is around 19,000 gallons.\textsuperscript{55} Similar to estimating the impact of traffic signal synchronization, as vehicles get more efficient and the number of ZEVs increases, the fuel savings per intersection in 2030 would be less than those in previous years. Assuming the gallons of annual fuel savings per roundabout could be realized in the 2012 CAP baseline year, the increase in vehicle fuel efficiency would reduce the fuel savings to approximately 12,000 gallons in 2030.\textsuperscript{56}

The GHG emissions reductions in 2030 and 2035 from traffic signal synchronization are shown in Table 26.\textsuperscript{57} The GHG emissions reductions are the projected reduction amounts in 2030 and 2035 only, not the sum of the annual reductions from the 2012 baseline year to 2030 or 2035.

\textsuperscript{54} Emissions per gallon of fuel use for an average vehicle calculated based on 2030 CO\textsubscript{2} emissions from on-road transportation and total vehicle fuel use.

\textsuperscript{55} Varhelyi: The Effects of Small Roundabouts on Emission and Fuel Consumption: A Case Study (2002). The study estimated the traffic volume of the intersection and the fuel consumption before and after the roundabout. The traffic volume is 23,500 vehicles per day and the fuel savings are approximately 144 kg per day after the roundabout installation.

\textsuperscript{56} The average vehicle emission rate in 2030, 289 g CO\textsubscript{2}e/mile, is 40 percent less than that in 2012, 483 g CO\textsubscript{2}e/mile, as discussed in Section 4.4.

\textsuperscript{57} Emissions per gallon of fuel use for an average vehicle calculated is based on 2030 CO\textsubscript{2} emissions from on-road transportation and total vehicle fuel use.
Table 27 Key Assumptions and Results for Measure T-2.2: Install Roundabouts

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of New Roundabouts</th>
<th>Increase in Vehicle Fuel Efficiency Baseline Year 2012</th>
<th>Equivalent Fuel Saving per Intersection (Gallons per year)</th>
<th>Fuel Saving for All Intersections (Gallons per year)</th>
<th>GHG Emission for Fuel* (lbs CO₂e/gallon)</th>
<th>GHG Emissions Reduction (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>8</td>
<td>39%</td>
<td>12,074</td>
<td>96,595</td>
<td>18.5</td>
<td>811</td>
</tr>
<tr>
<td>2035</td>
<td>12</td>
<td>42%</td>
<td>11,357</td>
<td>136,278</td>
<td>18.5</td>
<td>1,145</td>
</tr>
</tbody>
</table>

*Emissions per gallon of fuel use for an average vehicle in the San Diego region, regardless of fuel type, vehicle type, or fuel economy.

Increase in vehicle fuel efficiency in 2030 compared with 2012 is based on the decrease of the average vehicle emission rate in San Marcos. It is assumed that the annual fuel savings per intersection is about 19,000 gallons in 2012.

The emissions reduction is projected under the CAP assumptions, including future impact of State policies and programs used in CARB EMFAC2014 model, as well as CAP assumptions. Energy Policy Initiatives Center 2019.

6.2.3 Measure T-2.3: Increase Renewable or Alternative Fuel Construction Equipment

Through the construction permitting process, the City will require a certain percentage of fuel reduction from construction equipment in new developments through the use of electric-powered or alternatively-fueled. The standard would require 30 percent fuel reduction in 2030, and 50 percent in 2035, which would yield an approximately 30 percent reduction in construction GHG emissions in 2030, and 50 percent reduction in 2035.58 The method to project 2030 and 2035 construction emissions are based on CARB’s In-Use Off-Road Equipment 2011 Inventory and the number of construction jobs in Escondido.59 The GHG emissions reductions in 2030 and 2035 are shown in Table 28.

Table 28 Key Assumptions and Results for Measure T-2.3: Increase Renewable or Alternative Fuel Construction Equipment

<table>
<thead>
<tr>
<th>Year</th>
<th>Projected Emissions from Construction Equipment (MT CO₂e)</th>
<th>Percent Reduction in Emissions</th>
<th>GHG Emissions Reduction (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>19,707</td>
<td>30%</td>
<td>5,321</td>
</tr>
<tr>
<td>2035</td>
<td>20,071</td>
<td>50%</td>
<td>9,032</td>
</tr>
</tbody>
</table>

The construction emissions are projected based on San Diego region’s construction emissions and the ratio of construction jobs in Escondido to those in the region. It is assumed that 10% of new developments would qualify for an exemption of the requirement.


6.3 Strategy 3: Reduce Vehicle Miles Traveled (T)

The goal of this strategy is to reduce the labor force commute VMT citywide by increasing alternative modes of transportation, which avoid use of single-occupancy vehicles (SOVs), and to reduce household VMT by encouraging transit-oriented development (TOD). The strategy includes the following measures.

---

58 The requirement would be based on the construction equipment’s horsepower.
59 The method to project construction emissions is provided in Appendix A: City of Escondido Greenhouse Gas Emissions Inventories and Projections (EPIC, 2018).

Energy Policy Initiatives Center (EPIC)
6.3.1 Measure T-3.1: Participate in the SANDAG’s iCommute Vanpool Program

SANDAG’s iCommute Vanpool Program provides a convenient way for groups of five or more people to get to work in and around the San Diego region. The Vanpool Program provides a subsidy of up to $400 per month to offset the vehicle lease cost, and vanpool participants share the remaining vehicle lease and gas cost. Vanpools generally exceed average commute distance of approximately 25 miles round trip. The number of vanpools that are in operation varies from year to year. On an annual average, from 2015 to 2018, 36 SANDAG vanpools were in operation that either started or ended within Escondido. Through this measure, the City would promote the SANDAG Vanpool Program through the CAP target years to Escondido residents and business-owners to encourage ongoing participation. The specific goal is to maintain the 36 SANDAG vanpools that start or end in Escondido through 2035.

The vanpools in the program have different commute distances, trip frequencies, and number of participants. The estimated average commute distance, commute VMT avoided due to vanpools, and the GHG emissions reductions are shown in Table 62.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of SANDAG Vanpools</th>
<th>Average Number of Passengers in the Vanpool*</th>
<th>Average Vanpool Distance* (Miles per roundtrip per workday)</th>
<th>Annual VMT Avoided due to Vanpool (Miles per year)</th>
<th>Annual Escondido VMT Avoided due to Vanpool** (Miles per year)</th>
<th>Average Vehicle Emission Rate (g CO₂e/mile)</th>
<th>GHG Emissions Reduction (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>36</td>
<td>7</td>
<td>102</td>
<td>6,733,940</td>
<td>3,737,208</td>
<td>297</td>
<td>1,109</td>
</tr>
<tr>
<td>2035</td>
<td>36</td>
<td>7</td>
<td>102</td>
<td>6,733,940</td>
<td>3,737,208</td>
<td>279</td>
<td>1,043</td>
</tr>
</tbody>
</table>

*Average number of passengers and commute distance of the SANDAG vanpools in recent years. 255 workdays per year.

** The difference between the “Annual VMT Avoided due to Vanpool” and the “Annual Escondido VMT Avoided due to Vanpool” is due to the allocation of miles to jurisdictions in the methodology. Not all miles are driven only in Escondido. 56% of all miles are allocated to Escondido based on the Origin-Destination VMT allocation methods. The emissions reduction is projected under the CAP, including future impact of State policies and programs used in CARB EMFAC2014 model, as well as CAP assumptions. Energy Policy Initiatives Center 2019.

A portion of the emissions avoided from reducing SOV trips is offset by the emissions from operating the vanpool vehicles. As the vehicle fleet becomes more efficient, the fuel economy of a potential vanpool vehicle also improves. Assuming the average fuel economy (miles per gallon, or “MPG”) of the vanpool vehicle is 20 MPG in 2019 and that it will improve to 29 MPG in 2035 due to more stringent vehicle efficiency standards, there will be reduced fuel use and reduced GHG emissions from operating the vanpool vehicles. GHG emissions resulting from vanpool vehicles are shown in Table 30.

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60 SANDAG: [iCommute Vanpool](#).
61 SANDAG Vanpool Program: active vanpools as of November 16, 2018. 2006 to 2018 vanpool data were provided by SANDAG to EPIC (November 2018). If the vanpool has an origin or a business city identified as Escondido, they are accounted for here. All Escondido vanpools as of November 2018 started in Escondido.
62 SANDAG Vanpool Program: active vanpools as of November 16, 2018. 2006 to 2018 vanpool data were provided by SANDAG to EPIC (November 2018). The average number of passengers are estimated based on van capacity and the 80 percent capacity requirement. All vanpools start or end in Escondido run from Monday to Friday, therefore, the 255 workdays to year conversion is used.
63 Based on the SANDAG Vanpool Program data the most common vanpool vehicles are Ford Traverse, Dodge Grand Caravan, and Buick Enclave. The 2019 new vehicle fuel economy of these vehicle models are approximately 20 MPG. U.S. Department of Energy Policy Initiatives Center (EPIC)
### Table 30 GHG Emissions Added from Projected SANDAG Vanpools in Escondido

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of SANDAG Vanpools</th>
<th>Average Fuel Economy of Vanpool Vehicle (Miles per gallon)</th>
<th>Average Fuel Use of Vanpool Vehicle (Gallons per year)</th>
<th>Carbon Content of Vanpool Gasoline Use* (lbs CO\textsubscript{2}e/gallon)</th>
<th>GHG Emissions Resulting from Vanpools (MT CO\textsubscript{2}e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>36</td>
<td>28</td>
<td>936</td>
<td>17.8</td>
<td>272</td>
</tr>
<tr>
<td>2035</td>
<td>36</td>
<td>29</td>
<td>880</td>
<td>17.8</td>
<td>256</td>
</tr>
</tbody>
</table>

*California gasoline has 10% ethanol. Vehicle fuel economy in 2030 and 2035 are based on the decreases in the average vehicle emission rates in San Diego and the 2019 vanpool vehicle fuel economy. Annual fuel use is calculated based on commute distance of the SANDAG vanpools in recent years (64 mile per roundtrip per workday) and 255 workdays per year. The emissions reduction is projected under the CAP, including future impact of State policies and programs used in CARB EMFAC2014 model, as well as CAP assumptions. Energy Policy Initiatives Center 2019.

The net GHG emissions reductions in 2030 and 2035, which combine the reductions from avoiding SOV trips and emissions resulting from vanpool vehicles, are shown in Table 31.

#### Table 31 Results for Measure T-3.1: Participate in the SANDAG’s iCommute Vanpool Program

<table>
<thead>
<tr>
<th>Emissions Reduction from SANDAG Vanpool Program</th>
<th>GHG Emissions Reduction (MT CO\textsubscript{2}e)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2030</td>
</tr>
<tr>
<td>Emissions Reduction from Avoiding Single Occupancy Vehicle Commute</td>
<td>1,109</td>
</tr>
<tr>
<td>Emissions Resulting from Operating Vanpool Vehicles</td>
<td>-272</td>
</tr>
<tr>
<td>Net Emissions Reduction due to SANDAG Vanpool Program</td>
<td>837</td>
</tr>
</tbody>
</table>

The emissions reduction is projected under the CAP, including future impact of State policies and programs used in CARB EMFAC2014 model, as well as CAP assumptions. Energy Policy Initiatives Center 2019.

#### 6.3.2 Measure T-3.2: Improve Pedestrian Infrastructure at Priority Areas

From 2016 to 2018, the City installed an average of 2,600 linear feet (0.5 miles) of sidewalk annually. Through Measure T-3.2, City plans to continue new sidewalk installation and improvements at 0.5 miles per year, and identify priority areas (e.g., at downtown employment centers, near transit stations) for the pedestrian infrastructure improvements.

Walking trips will have an impact on VMT only if they replace vehicle travel. Therefore, walking solely for recreation does not have an impact on VMT reduction. The impact of pedestrian improvement on VMT reduction depends on the street characteristics (e.g., sidewalk width, coverage), pedestrian environment quality (e.g., street crossings, topography), and neighborhood type (e.g., neighborhood density, proximity

---

*Energy: [Fuel Economy Estimates](#), accessed January 10, 2019. The San Diego regional average vehicle emission rate in 2030, 297 g CO\textsubscript{2}e/mile, is 28 percent less than that in 2019, 410 g CO\textsubscript{2}e/mile. [EMFAC2014](#). The ratio of emission rates is used to estimate 2030 MPG, and similar method is used to calculate 2035 MPG.

64 Sidewalk data from 2016 to 2018 were provided by the City (June 2019).
to destinations). Based on various studies, the elasticity of a 1 percent increase in sidewalk coverage is a 0.27 percent increase in walk mode choice.\(^{65}\) At the time of CAP development, the specific priority areas for sidewalk improvement were not identified. It is assumed that pedestrian infrastructure will be added to Escondido’s downtown employment centers, and the additional sidewalk coverage is calculated based on the ratio of the length of new sidewalks added and the length of local roads. Once the priority areas are determined, the impact may be re-evaluated based on the number of employees and percentage of employees eligible to commute by walking in the areas. The goal, 0.5 miles new sidewalk per year, translates to 0.6 percent sidewalk coverage at the Escondido’s downtown employment centers.\(^{66}\) For this measure, only the impact on avoiding commute VMT is quantified due to data availability. However, pedestrian infrastructure improvements also encourage non-commute trips by walking rather than by car.

The avoided VMT are estimated based on the number of additional downtown employees walking to work and miles avoided per trip. Miles avoided were converted to GHG emissions reductions using the average vehicle emission factors discussed in Section 4.4.1 (GHG Emission Factor for On-Road Transportation). The GHG emissions reductions in 2030 and 2035 are shown in Table 32.\(^{67}\)

**Table 32 Key Assumptions and Results for Measure T-3.2: Improve Pedestrian Infrastructure at Priority Areas**

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Average Miles of New or Improved Sidewalk (Miles per year)</th>
<th>Cumulative Miles of New or Improved Sidewalk (Miles)</th>
<th>New or Improved Sidewalk Cover in Downtown Employment Center Area (%)</th>
<th>Increase in Walk Commuters (%)</th>
<th>Number of Additional Employees Commute by Walking*</th>
<th>Miles Avoided (Miles per year)**</th>
<th>Average Vehicle Emission Rate (g CO\textsubscript{2}e/mile)</th>
<th>GHG Emissions Reduction (MT CO\textsubscript{2}e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>0.5</td>
<td>5.8</td>
<td>7%</td>
<td>2%</td>
<td>301</td>
<td>149,064</td>
<td>297</td>
<td>44</td>
</tr>
<tr>
<td>2035</td>
<td>0.5</td>
<td>8.3</td>
<td>10%</td>
<td>3%</td>
<td>427</td>
<td>211,174</td>
<td>279</td>
<td>59</td>
</tr>
</tbody>
</table>

*15,130 employees as of 2019 **Average VMT avoided by commuting by walking is assumed to be 1.1 mile one-way per workday based on Escondido Centre City employment center data, with 255 workdays per year.

The emissions reduction is the projection under the CAP, including future impact of State policies and programs used in CARB EMFAC2014 model, and CAP assumptions.


### 6.3.3 Measure T-3.3: Continue to Implement Safe Routes to School Program at the Escondido Union School District

The City has an ongoing effort with the Escondido Union School District (EUSD) to implement the Safe Routes to School (SRTS) program. In the last three years, the City has completed infrastructure improvement projects near Juniper Elementary School (ES), Central ES, Farr Avenue ES, Rose ES, and Glen View ES. The infrastructure improvement projects include installation of new sidewalks, signals and high visibility crosswalk upgrades, countdown pedestrian indications at crossings, and other similar projects.\(^{68}\)

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\(^{66}\) The total miles of local road segment (centerline) at the Escondido downtown employment center, including major roads, arterial or collectors, local streets, and alleys, is 39.6. Assuming sidewalks are in both directions of the roads, the miles of roads (both directions) is 79.2 miles. Mileage estimated by EPIC using SANGIS “Roads_all” data, assessed July 31, 2019.


\(^{68}\) Information on completed SRTS programs were provided by the City (June 2019).
Through Measure T-3.3, the City will continue the implementation of the SRTS program at all schools in EUSD to increase the number of students walking and riding bicycles to and from school. The SRTS program would include infrastructure improvements surrounding schools that are similar to those completed, as well as educational programs (e.g., develop pedestrian and bicycle safety education curriculum, organize safety trainings, and safety awareness campaigns) at schools.

Assuming the City completes an SRTS program at all EUSD schools by 2035, the numbers of additional students walking or riding bicycles to school are shown in Table 33.69

Table 33 Number of Additional Escondido School District Students Walking or Riding Bicycles to School

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Students in Escondido School District*</th>
<th>Students Walking to School</th>
<th>Students Riding Bicycle to School</th>
<th>Number of Additional Students Walking to School</th>
<th>Number of Additional Students Riding Bicycle to School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline (%) **</td>
<td>Baseline (%) **</td>
<td>With Safe Routes to School (%)</td>
<td>With Safe Routes to School (%)</td>
<td>Baseline (%) **</td>
</tr>
<tr>
<td>2030</td>
<td>15,377</td>
<td>21%</td>
<td>27%</td>
<td>999</td>
<td>2.0%</td>
</tr>
<tr>
<td>2035</td>
<td>15,377</td>
<td>21%</td>
<td>30%</td>
<td>1,453</td>
<td>2.0%</td>
</tr>
</tbody>
</table>


The avoided VMT were estimated based on the number of additional students walking or riding bicycles to school and miles avoided per trip. Miles avoided per year were converted to GHG emissions reductions using the average vehicle emission factors, discussed in Section 4.4.1 (GHG Emission Factor for On-Road Transportation). The GHG emissions reductions in 2030 and 2035 are shown in Table 34.70

Table 34 Key Assumptions and Results for Measure T-3.3: Continue to Implement Safe Routes to School Program at the Escondido Union School District

<table>
<thead>
<tr>
<th>Year</th>
<th>VMT Avoided from Students Walking or Riding Bicycles to School* (miles per year)</th>
<th>Average Vehicle Emission Rate (g CO₂e/mile)</th>
<th>GHG Emissions Reduction (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>202,659</td>
<td>297</td>
<td>60</td>
</tr>
<tr>
<td>2035</td>
<td>294,777</td>
<td>279</td>
<td>82</td>
</tr>
</tbody>
</table>

70 The current trip distance of students who walk or ride bicycles to school in EUSD is not available. The results are based on a San Diego Unified School District 2015–2016 student-parent survey (EPIC), unpublished.

Energy Policy Initiatives Center (EPIC)
6.3.4 Measure T-3.4: Develop a Citywide Transportation Demand Management (TDM) Plan

Through this measure, the City would develop a Transportation Demand Management (TDM) Plan that will include: 1) adoption of a TDM ordinance that would specify alternative modes of transportation required at new non-residential developments; and 2) working with Escondido downtown employment center businesses to develop TDM policies. The TDM plan would require new non-residential developments or existing Escondido downtown employment center businesses to include a list of TDM activities. The list of TDM activities at new non-residential development is required to lead to a 5 percent increase in alternative travel modes from employee commuting; the list of TDM activities at existing downtown employment center businesses is required to lead to a 7 percent increase in alternative travel modes.

Table 35 lists potential TDM activities that would lead to an increase in alternative modes of transportation. However, other TDM activities may be recommended or required in the ordinance.71 The ordinance is anticipated to be effective in 2022. The TDM plan may also include a list of potential designated areas for transportation network company (TNC) vehicles (e.g., Uber, Lyft) to pick-up and drop-off. However, the impact of this policy on alternative modes cannot be estimated due to limited available information.

Table 35 Examples of TDM Activities and Effects on Increasing Alternative Transportation Modes

<table>
<thead>
<tr>
<th>TDM Activity Number</th>
<th>Activity Details</th>
<th>Effect on Alternative Transportation Modes</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDM-1</td>
<td>Provide “end-of-trip” facilities for bicycle riders including secure bicycle parking spaces or bicycle racks, showers and clothes lockers (Number of amenities will be based on occupied floor areas and/or number of employees)</td>
<td>2% of additional employees will bicycle to work</td>
<td>CAPCOA - SDT-6 and SDT-7 San Francisco TDM Ordinance Active - 2 and 3</td>
</tr>
<tr>
<td>TDM-2</td>
<td>Provide discounted monthly NCTD transit passes or provide at least 25% transit fare subsidies to employees (if employees are using daily or multi-day MCTD transit pass)</td>
<td>2% of additional employees will use mass transit to work</td>
<td>CAPCOA - TRT-4 San Francisco TDM Ordinance HOV - 1</td>
</tr>
<tr>
<td>TDM-3</td>
<td>Provide transportation marketing services and communication campaigns including carpool and vanpool ride-matching services</td>
<td>1% of additional employees will carpool to work</td>
<td>San Francisco TDM Ordinance INFO - 1</td>
</tr>
<tr>
<td>TDM-4 for downtown employees only</td>
<td>Develop a parking cash out policy. That is if employer offer subsidized parking, for the employees not using parking spot, the employer would provide cash payment equivalent to cost of parking spaces will be provided to the employees.</td>
<td>2% of employees will not drive alone to work</td>
<td>San Francisco TDM Ordinance PKG-3</td>
</tr>
</tbody>
</table>

CAPCOA – California Air Pollution Control Officers Association. CAPCOA 2010, City of San Francisco 2018.

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Although TDM activities may also lead to additional VMT reductions (e.g., reduce business trip VMT), the reduction in employee commute VMT can be more readily monitored (e.g., commuter surveys). Therefore, only avoided commute VMT is quantified for this measure.

Increasing each type of alternative transportation mode leads to different reductions in VMT. For example, the commute distance by a bicycle rider and by a vanpooler are different. The estimated VMT reduction as a result of said mode are shown in Table 36.72

<table>
<thead>
<tr>
<th>Increase in Alternative Modes of Transportation</th>
<th>Goal (% Increase)</th>
<th>Miles Avoided per Workday*</th>
<th>Miles Avoided per Year**</th>
<th>Escondido Miles Avoided per Year***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commute by Bicycle</td>
<td>2%</td>
<td>6</td>
<td>1,305</td>
<td>1,305</td>
</tr>
<tr>
<td>Commute by Mass Transit</td>
<td>2%</td>
<td>21</td>
<td>4,635</td>
<td>2,577</td>
</tr>
<tr>
<td>Commute by Carpool</td>
<td>1%</td>
<td>21</td>
<td>4,680</td>
<td>2,602</td>
</tr>
<tr>
<td>Alternative Modes to Avoid Drive Alone</td>
<td>2%</td>
<td>21</td>
<td>4,680</td>
<td>2,602</td>
</tr>
</tbody>
</table>

*Based on SANDAG activity-based travel model results for Escondido Centre City employment center. **225 workdays per year. ***Miles associated with commuting by bicycling are all within Escondido and miles associated with the rest of the modes are allocated to Escondido based on Origin-Destination VMT allocation methods. Energy Policy Initiatives Center 2019.

To calculate emissions avoided in 2030 and 2035, miles avoided per year were converted to GHG emissions reductions using the number of new commuters using alternative modes of transportation and the average vehicle emission factors, discussed in Section 4.4.1 (GHG Emission Factor for On-Road Transportation). The GHG emissions reductions in 2030 and 2035 are shown in Table 37.73

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73 Number of employees in Escondido employment center are based on SANDAG: Escondido Centre City employment center, May 2019, accessed June 26, 2019.
### Table 37 Key Assumptions and Results for Measure T-3.4: Develop a Citywide Transportation Demand Management (TDM) Plan

<table>
<thead>
<tr>
<th>Year</th>
<th>New Labor Force Added after 2022</th>
<th>New Commuters Using Alternative Modes of Transportation</th>
<th>VMT Avoided from Increasing Alternative Modes (miles per year)</th>
<th>Number of Employees in Escondido Employment Center</th>
<th>New Commuters Using Alternative Modes of Transportation</th>
<th>VMT Avoided from Increasing Alternative Modes (miles per year)</th>
<th>Average Vehicle Emission Rate (g CO₂e/mile)</th>
<th>GHG Emissions Reduction (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>3,344</td>
<td>167</td>
<td>346,649</td>
<td>15,130</td>
<td>652</td>
<td>1,449,713</td>
<td>297</td>
<td>533</td>
</tr>
<tr>
<td>2035</td>
<td>5,638</td>
<td>282</td>
<td>584,471</td>
<td>15,130</td>
<td>1,059</td>
<td>2,355,784</td>
<td>279</td>
<td>820</td>
</tr>
</tbody>
</table>

The emissions reduction is the assumption under the CAP, including future impact of State policies and programs used in CARB EMFAC2014 model, and CAP assumptions. Energy Policy Initiatives Center 2019.

#### 6.3.5 Measure T-3.5: Update Bicycle Master Plan

Bicycle facilities are categorized as follows: 1) Class I bicycle paths, which have a completely separated right-of-way designed for the exclusive use of bicycles and pedestrians; 2) Class II separated bicycle lanes, typically designated with striping; 3) Class III bicycle routes, where bicyclists share streets with motor traffic; and 4) Class IV cycle tracks, that provide a right-of-way designated exclusively for bicycle travel which are physically protected from vehicular traffic.

Through this measure, the City plans to update the existing Bicycle Master Plan and add or improve/upgrade 15 miles of new Class II, or better, bicycle lanes by 2035 (an average of one mile per year), as well as bicycle parking standards for all residential and commercial zones. The 15 miles represents the length of roadway segments for which two-way bicycle lanes would be added. Bicycle lanes are used for both recreational and commuting purposes. For this measure, only the impact on avoiding commute VMT is quantified. The increase in percentage of bicycle commuters is assumed to be proportional to the increase in bicycle lane miles per square mile. The elasticity of adding one additional mile of Class II, or better, bicycle lane per square mile is roughly one percent for commuters. In other words, one additional mile of Class II, or better, bicycle lanes per square mile would lead to roughly one additional percent of commuters riding bicycles to work. In 2035, Escondido’s developed area will be approximately 27 square miles in 2035, and new bicycle lanes would lead to an additional 1.1 mile of bicycle lane per square mile, assuming the new bicycle lanes are installed in both directions.

To calculate annual commute VMT avoided, the increase in the percentage of commuters by bicycle was multiplied by the average commute distance avoided per workday (5.8 miles), assuming bicycle commuters are traveling within Escondido. The avoided VMT is converted to GHG emissions reductions using the average vehicle emission factors, discussed in Section 4.4.1 (GHG Emission Factor for On-Road Transportation). The GHG emissions reductions in 2030 and 2035 are shown in Table 38.

---

74 Dill and Carr (2013): [Bicycle Commuting and Facilities in Major U.S. Cities: If you build them, commuters will use them – another look.](#)

75 Developed based on SANDAG’s Series 13 Regional Growth Forecast (Updated in October 2013). [SANDAG Data Surfer](#), accessed on November 15, 2017.


---

Energy Policy Initiatives Center (EPIC)
Table 38 Key Assumptions and Results for Measure T-3.5: Update Bicycle Master Plan

<table>
<thead>
<tr>
<th>Year</th>
<th>Labor Force</th>
<th>Additional Bicycle Lanes Added (bicycle lane miles per square mile)</th>
<th>% of Additional Labor Force Using Bicycle to Commute</th>
<th>Additional Labor Force Using Bicycles to Commute</th>
<th>Commute VMT Avoided (miles per year)</th>
<th>Average Vehicle Emission Rate (g CO$_2$e/mile)</th>
<th>GHG Emissions Reduction (MT CO$_2$e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>79,608</td>
<td>0.7</td>
<td>0.7%</td>
<td>597</td>
<td>778,878</td>
<td>297</td>
<td>231</td>
</tr>
<tr>
<td>2035</td>
<td>81,903</td>
<td>1.1</td>
<td>1.1%</td>
<td>921</td>
<td>1,201,986</td>
<td>279</td>
<td>335</td>
</tr>
</tbody>
</table>

The average VMT avoided by commuting by bicycle is assumed to be 5.8 miles per workday (roundtrip) based on Escondido Centre City employment center data, with 255 workdays per year. The emissions reduction is projected based on CAP assumptions and future impact of State policies and programs used in the CARB EMFAC2014 model.

6.3.6 Measure T-3.6: Increase Transit Commuters among New Downtown Residents

The City’s Downtown Specific Plan, adopted in 2013, identifies a range of residential developments (e.g., multi-family, mixed use, shopkeeper, artisan lofts) and adopts smart growth policies to take advantage of the convenient access to the nearby Escondido Transit Center and high-density urban residential developments. To further encourage more transit riders in the downtown area, the City will develop a Safe Routes to Transit program that improves accessibility around transit areas and rider amenities at boarding areas. For projects in the Downtown Specific Plan area, any reduction in parking over 15 percent will be required to provide six-month transit pass purchase program at initial occupancy. The goal is to increase commuting by transit among downtown residents by five percent.

The Downtown Specific Plan area accommodates up to 5,275 residential units. As of late 2019, 2,025 units have built, with 3,250 units remaining. Assuming the remaining units will be built by 2035 with an average of 1.3 commuters per household, the number of new commuters in the Downtown Specific Plan area will be 4,348.

To calculate annual avoided VMT, the number of new commuters was multiplied by the percent increase in commuting by transit and miles avoided per transit trip, then converted to GHG emissions reductions using the average vehicle emission factor described in Section 4.4.1 (GHG Emission Factor for On-Road Transportation). The GHG emissions reductions in 2030 and 2035 are shown in Table 39.

---

78 The balance of units was provided by the City (October 2019).
79 Average commuters per household is calculated using total workers 16 years and over who do not work at home (71,591) divided by the number of households in Escondido (53,516) from the American Community Survey (ACS). ACS: 2018 1-year Estimates, accessed November 13, 2019. Number of households in Escondido from other sources is available, however, to ensure consistency with the number of workers data, the number of households from ACS is used.
Table 39 Key Assumptions and Results for Measure T-3.6: Increase Transit Commuters among New Downtown Residents

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of New Units in Downtown Specific Plan Area after 2019</th>
<th>Number of New Commuters Live in Downtown Specific Plan*</th>
<th>Increase in Commuting by Transit (%)</th>
<th>Number New Commuters Taking Transit</th>
<th>Annual Total VMT Avoided** (Miles per year)</th>
<th>Annual Escondido VMT Avoided*** (Miles per year)</th>
<th>Average Vehicle Emission Rate (g CO₂e/mile)</th>
<th>GHG Emissions Reduction (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>2,167</td>
<td>2,898</td>
<td>3%</td>
<td>97</td>
<td>507,518</td>
<td>282,178</td>
<td>297</td>
<td>84</td>
</tr>
<tr>
<td>2035</td>
<td>3,250</td>
<td>4,348</td>
<td>5%</td>
<td>217</td>
<td>1,141,915</td>
<td>634,901</td>
<td>279</td>
<td>177</td>
</tr>
</tbody>
</table>

*Assumes average 1.3 commuters per household in Escondido  
**Assumes 10.3 mile one-way per workday based on Escondido Centre City employment center data, with 255 workdays per year.  
***Miles avoided are allocated to Escondido based on Origin-Destination VMT allocation methods.

The emissions reduction is the projection under CAP assumptions, including future impact of State policies and programs used in the CARB EMFAC2014 model.


### 6.3.7 Measure T-3.7 Develop an Intra-City Shuttle Program

Through Measure T-3.7, the City plans to develop an intra-city shuttle system that operates multiple routes to reduce miles driven from internal city trips. The goal is to reduce the projected 2035 VMT within city boundaries by 10 percent, or 23 million miles, in 2035.

The potential routes and the schedule of the intra-city shuttle system have not yet been identified. The City would work with proprietors, including NCTD, residents and businesses to explore the feasibility of an intra-city shuttle program and the efficiency of routes and times selected. However, to be able to achieve the goal, the shuttle system would need to include multiple routes that connect activity centers within the city, not overlap with existing transit service area, and run on high-frequency (with at least 10 minutes headways during peak periods).

To avoid double-counting with other measures in the CAP that increase mass transit ridership, the miles avoided per passenger trip may not include the full miles avoided by commuters using the intra-shuttle to connect mass transit (SPRINTER or bus service) to or from other cities. The miles avoided per passenger trip will have to be all internal miles within city boundaries and account for the miles the passengers would otherwise have to drive to the destination. The passengers would instead take the shuttle alone or take the shuttle combined with other modes of transportation (e.g., shuttle and bicycle, shuttle and bus within the City).

The avoided VMT is converted to GHG emissions reductions using the average vehicle emission factor, discussed in Section 4.4.1 (GHG Emission Factor for On-Road Transportation). The GHG emissions reduction in 2030 is shown in Table 40.
Table 40 Key Assumptions and Results for Measure T-3.7 Develop an Intra-City Shuttle Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Miles from Escondido Internal Trips* (Miles per weekday)</th>
<th>% Reduction from Internal Trip Miles</th>
<th>VMT Avoided due to Intra-City Shuttle (Miles per weekday)</th>
<th>VMT Avoided due to Intra-City Shuttle** (Miles per year)</th>
<th>Average Vehicle Emission Rate (g CO\text{2}e/mile)</th>
<th>GHG Emissions Reduction (MT CO\text{2}e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>650,422</td>
<td>7%</td>
<td>43,361</td>
<td>15,046,437</td>
<td>297</td>
<td>4,463</td>
</tr>
<tr>
<td>2035</td>
<td>675,570</td>
<td>10%</td>
<td>67,557</td>
<td>23,442,262</td>
<td>279</td>
<td>6,540</td>
</tr>
</tbody>
</table>

*SANDAG Series 13 Forecast with base year 2012 **347 weekdays per year conversion
The emissions reduction is the projection under CAP assumptions, including future impact of State policies and programs used in CARB EMFAC2014 model.

6.3.8 Measure T-3.8: Increase Mass Transit Mode Share

Escondido is served by both San Diego Metropolitan Transit System (MTS) and NCTD. MTS only provides bus service; MTS Route 235 from Downtown San Diego to Escondido has one of the highest ridership among buses serving Escondido. NCTD has both bus and light rail (SPRINTER) services in the City. The NCTD bus routes in Escondido with the highest ridership are Route 350 (from Del Lago Station to Escondido Transit Center) and Route 351/352 loop within the city. These mass transit services bring commuters to or from Escondido and currently make up approximately two percent of mode share.\(^{80}\) Under Measure T-3.8, the City will work with MTS and NCTD to optimize ridership by coordinating land use and mobility planning for operations and more frequent services. The goal is to increase the mode share for commuters traveling to and from work or on mass transit to six percent by 2035.

In 2017, the two SPRINTER stations in Escondido (Escondido Transit Center and Nordahl Road Station) served a total of 3,291 passengers on an average weekday, and all the bus routes in Escondido served a total of 8,228 passengers on an average weekday. Assuming 70 percent of SPRINTER passengers and 50 percent of bus passengers are commuters travelling to and from work, the baseline number of mass transit commuters is approximately 6,417 per weekday.\(^{81}\) The VMT avoided are calculated based on the number of mass transit commuters, assumed to triple by 2035 with Measure T-3.8, and the miles avoided per trip. The VMT avoided are then converted to GHG emissions reductions using the average vehicle emission factors discussed in Section 4.4.1 (GHG Emission Factor for On-Road Transportation). The GHG emissions reductions in 2030 and 2035 are shown in Table 39.\(^{82}\)

---


\(^{81}\) FY2017 mass transit ridership by routes and stops were provided to EPIC by SANDAG (November 2018). The percentage of SPRINTER passengers that are commuters are based on MTS trolley (similar light rail service) passenger boarding data by hour and assume that peak hour passengers are commuters. MTS: Community Impact and Performance Report 2016, accessed September 3, 2019.

Table 41 Key Assumptions and Results for Measure T-3.8: Increase Mass Transit Mode Share

<table>
<thead>
<tr>
<th>Year</th>
<th>Target Mass Transit Mode Share* (%)</th>
<th>Travel to and from Work by Bus</th>
<th>Travel to and from Work or Colleges by Sprinter</th>
<th>Miles Avoided (Miles per year)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number of Commuters - Baseline**</td>
<td>Number of Commuters with Target Mode Share **</td>
<td>Number of Commuters - Baseline**</td>
<td>Number of Additional Commuters with Target Mode Share **</td>
</tr>
<tr>
<td>2030</td>
<td>4%</td>
<td>4,114</td>
<td>6,689</td>
<td>2,304</td>
<td>3,746</td>
</tr>
<tr>
<td>2035</td>
<td>6%</td>
<td>4,114</td>
<td>10,406</td>
<td>2,304</td>
<td>5,827</td>
</tr>
</tbody>
</table>

*The current mass transit mode share is 2%. **2017 fiscal year ridership is used as the baseline, assuming 70% Sprinter riders and 50% bus riders travel to work.

The average VMT avoided by mass transit commuters is assumed to be 20.6 miles per workday based on Escondido Centre City employment center data, with 255 workdays per year. VMT is allocated to Escondido based on Origin-Destination VMT allocation methods, assuming trips will have at least one trip-end within Escondido.

The emissions reduction is the projection under the CAP assumptions, including future impact of State policies and programs used in CARB EMFAC2014 model.


6.3.9 Measure T-3.9: Additional Actions to Reduce VMT

To close the emissions reduction gap in 2035, the City will implement additional actions to reduce projected 2035 VMT. The goal is to reduce projected 2035 VMT by 3.5 percent. The additional actions would require the City to develop and monitor a VMT threshold of significance on a jurisdiction-wide basis, and/or attempt to reach a significance conclusion on a project-by-project basis. This new way to look at new development projects will allow the City to consider how to mitigate for VMT-based impacts, and how those mitigation measures differ from traditional LOS-based measures.

After implementation, the City would be able to assess how the project increase in the total daily vehicle miles traveled per service population (population plus employment) (VMT/SP) above the baseline level for the jurisdiction. The GHG emissions reductions in 2030 and 2035 are shown in Table 42.83

Table 42 Key Assumptions and Results for Measure T-3.9: Additional Actions to Reduce VMT

<table>
<thead>
<tr>
<th>Year</th>
<th>Reduction from Projected VMT (%)</th>
<th>VMT Avoided (Miles per weekday)</th>
<th>VMT Avoided (Miles per year)</th>
<th>Average Vehicle Emission Rate (g CO₂e/mile)</th>
<th>GHG Emissions Reduction (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>1.8%</td>
<td>56,634</td>
<td>19,652,015</td>
<td>297</td>
<td>5,829</td>
</tr>
<tr>
<td>2035</td>
<td>3.5%</td>
<td>114,403</td>
<td>39,697,772</td>
<td>279</td>
<td>11,075</td>
</tr>
</tbody>
</table>

The emissions reduction is the projection under the CAP assumptions, including future impact of State policies and programs used in CARB EMFAC2014 model.


6.4 Strategy 4: Increase Building Energy Efficiency (E)

The goal of this strategy is to increase building energy efficiency and reduce building electricity and natural gas use through the following four measures.

6.4.1 Measure E-4.1 Require New Residential Developments to Install Alternative-Fuel Water Heaters

To reduce reliance on natural gas end-use at residential buildings, the City will develop and implement an ordinance requiring new single-family and multi-family residential units to install non-natural gas water heaters. The anticipated effective year of the ordinance is 2023.

The energy savings from installing a non-natural gas water heater assumes replacement of a natural gas storage water heater with an electric heat pump water heater (HPWH). The energy use of these two water heaters is shown in Table 43.84

<table>
<thead>
<tr>
<th>Residential Type</th>
<th>Natural Gas Use from a Gas Storage Water Heater</th>
<th>Electricity Use from a Heat Pump Water Heater</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Therms/year)</td>
<td>(MMBtu/year)*</td>
</tr>
<tr>
<td>Single-Family 1</td>
<td>137</td>
<td>14</td>
</tr>
<tr>
<td>Single-Family 2</td>
<td>146</td>
<td>15</td>
</tr>
<tr>
<td>Single-Family (Average of 1&amp;2)</td>
<td>142</td>
<td>14</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>117</td>
<td>12</td>
</tr>
</tbody>
</table>

*99,976 Btu per therm and 3,312 Btu per kWh.

Residential types are based on prototypes developed by the CEC for the Title 24 2019 Building Energy Efficiency Standard. The two single-family prototypes have different floor areas (square footage) and number of stories, therefore different water heating energy use.

Energy use are modeled with CEC CBECC-Res tool, March 2018 version, for Climate Zone 10 where Escondido is located. Energy Policy Initiatives Center 2019.

While HPWH is used as an example here, other types of non-natural gas water heater may be used as a replacement water heater.85 In Escondido, SANDAG Series 13 projects that 1,061 new multi-family units will be added from 2023 to 2030, and an additional 207 multi-family units will be added from 2030 to 2035. Similarly, for single-family developments in Escondido, 45 new multi-family units will be added from 2023 to 2030, and an additional 104 single-family units will be added from 2030 to 2035.86 All units will be subject to this requirement beginning in 2023. Assuming 10 percent of the units will be exempt from the requirement due to certain limitations, the emissions reduced from natural gas savings and emissions added from electricity use are shown in Table 44 and Table 45.

84 CEC: CBECC-Res, version dated March 9, 2018, model run by EPIC.
85 Other options include, but are not limited to, instantaneous electric, tank-based electric water heater, solar water heater with HPWH back up, and solar water heater with electric tank back up.
86 SANDAG Series 13 Regional Growth Forecast (October 2013). SANDAG Data Surfer, accessed November 15, 2017. The annual new units added from 2023 and 2030 are estimated using linear interpolation between 2020 and 2030.
Table 44 Emissions Reduction from Natural Gas Savings for Measure E-4.1 Require New Residential Developments to Install Alternative-Fuel Water Heaters

<table>
<thead>
<tr>
<th>Year</th>
<th>Residential Unit Type</th>
<th>Total New Alternative-Fuel Water Heaters after 2023*</th>
<th>Natural Gas Savings Per Alternative-Fuel Water Heater (Therms/year)</th>
<th>Total Natural Gas Savings (Therms/year)</th>
<th>Natural Gas Emission Factor (MT CO₂e/Therm)</th>
<th>Emissions Reductions from Natural Gas Savings (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>Single-Family</td>
<td>40</td>
<td>142</td>
<td>5,705</td>
<td>0.0054</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Multi-Family</td>
<td>955</td>
<td>117</td>
<td>111,765</td>
<td>0.0054</td>
<td>612</td>
</tr>
<tr>
<td>2035</td>
<td>Single-Family</td>
<td>134</td>
<td>142</td>
<td>18,950</td>
<td>0.0054</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>Multi-Family</td>
<td>1,142</td>
<td>117</td>
<td>133,563</td>
<td>0.0054</td>
<td>731</td>
</tr>
</tbody>
</table>

*Assumes 10% of water heaters will be exempt from this requirement due to limitations.

The natural gas savings and emissions reduction are the projections under the CAP assumptions, including the future impact of State policies and programs.


Table 45 Emissions from Electricity use for Measure E-4.1 Require New Residential Developments to Install Alternative-Fuel Water Heaters

<table>
<thead>
<tr>
<th>Year</th>
<th>Residential Unit Type</th>
<th>Total New Alternative-Fuel Water Heaters after 2023*</th>
<th>Electricity Added from Alternative-Fuel Water Heaters** (kWh/year)</th>
<th>Total Electricity Use (kWh/year)</th>
<th>Electricity Emission Factor (lbs CO₂e/MWh)</th>
<th>Emissions from Additional Electricity Use (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>Single-Family</td>
<td>40</td>
<td>869</td>
<td>35,038</td>
<td>53</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Multi-Family</td>
<td>955</td>
<td>559</td>
<td>533,990</td>
<td>53</td>
<td>13</td>
</tr>
<tr>
<td>2035</td>
<td>Single-Family</td>
<td>134</td>
<td>869</td>
<td>116,376</td>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Multi-Family</td>
<td>1,142</td>
<td>559</td>
<td>638,132</td>
<td>36</td>
<td>10</td>
</tr>
</tbody>
</table>

*Assumes 10% of water heaters will be exempt from this requirement due to limitations. **The alternatively-fueled water heater type used here is heat pump water heater.

The projected electricity use and emissions added are the projections under the CAP based on current status, future impact of State policies and programs, and CAP assumptions.


The net emissions reductions from Measure E-4.1 in 2030 and 2035 are shown in Table 46. The GHG emissions reductions are the projected reduction amounts in 2030 and 2035 only, not the sum of the annual reductions from the 2012 baseline year to 2030 or 2035.
6.4.2 Measure E-4.2: Require New Multi-Family Residential Developments to Install Electric Cooking Appliances

Another way to reduce reliance on natural gas end-use at residential buildings is to switch to electric cooking appliances. The City will develop and implement an ordinance requiring new multi-family residential units to install electric cooking appliances. The anticipated effective year of the ordinance is 2023.

As discussed in Section 6.4.1 above, SANDAG Series 13 projects that 1,061 new multi-family units will be added from 2023 to 2030, and an additional 207 units will be added from 2030 to 2035. All units will be subject to the requirement beginning in 2023, and assuming 10 percent of units will be exempt from the requirement due to certain limitations, the emissions reduced from natural gas savings and emissions added from electricity use are show Table 47 and Table 48.

---

*SANDAG Series 13 Regional Growth Forecast (October 2013). SANDAG Data Surfer, accessed November 15, 2017. The annual new units added from 2023 and 2030 are estimated using linear interpolation.

*KEMA, Inc. 2010. 2009 California Residential Appliance Saturation Study, California Energy Commission. Publication Number: CEC-200-2010-004. Table 2-5 and Table 2-21. Statewide results are used instead of SDG&E area results, because only statewide results have the breakdown of residence type. 5+ Unit Apartment is the multi-family residence type used here.

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Energy Policy Initiatives Center (EPIC)
Table 47 Emissions Reduction from Natural Gas Savings for Measure E-4.2: Require New Multi-Family Residential Developments to Install Electric Cooking Appliances

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Electric Cooking Appliances at New Multi-Family Units after 2023</th>
<th>Natural Gas Use per Natural Gas Cooking Appliance at Multi-Family Units* (Therms/year)</th>
<th>Total Natural Gas Savings (Therms/year)</th>
<th>Natural Gas Emission Factor (MT CO(_2)e/Therm)</th>
<th>Emissions Reductions from Natural Gas Savings (MT CO(_2)e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>955</td>
<td>28</td>
<td>26,747</td>
<td>0.0054</td>
<td>146</td>
</tr>
<tr>
<td>2035</td>
<td>1,142</td>
<td>28</td>
<td>31,964</td>
<td>0.0054</td>
<td>175</td>
</tr>
</tbody>
</table>

*Natural gas range/oven, assume multi-family units are in 5+ unit apartment buildings.

The natural gas savings and emissions reduction are projections under the CAP assumptions including the future impact of State policies and programs.


Table 48 Emissions from Electricity Use for Measure E-4.2: Require New Multi-Family Residential Developments to Install Electric Cooking Appliances

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Electric Cooking Appliances at New Multi-Family Units after 2023</th>
<th>Electricity Added Per Electric Cooking Appliance at Multi-Family Units* (kWh/year)</th>
<th>Total Electricity Use (kWh/year)</th>
<th>Electricity Emission Factor (lbs CO(_2)e/MWh)</th>
<th>Emissions from Electricity Use (MT CO(_2)e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>955</td>
<td>165</td>
<td>157,618</td>
<td>53</td>
<td>4</td>
</tr>
<tr>
<td>2035</td>
<td>1,142</td>
<td>165</td>
<td>188,357</td>
<td>36</td>
<td>3</td>
</tr>
</tbody>
</table>

*Electric range/oven, assume multi-family units are in 5+ unit apartment buildings.

The electricity use and emissions added are projections under the CAP assumptions including the future impact of State policies and programs.


The net emissions reductions are 143 MT CO\(_2\)e in 2030 and 172 MT CO\(_2\)e in 2035.

6.4.3 Measure E-4.3: Retrofit High Pressure Sodium Street Lights to LED Lights

The City plans to reduce electricity use from City-owned street lights by converting the current high-pressure sodium (HPS) lights to LED lights. The goal is to retrofit 450 lights by 2035 or 30 lights per year starting in 2021. It is important to note that this estimate (450 lights) is conservative, as the City already has 750 lights retrofitted; however, it is a base of analysis to estimate emission reductions.

A streetlight inventory or energy use audit was not available at the time of CAP development. Based on a street lights retrofit study, the estimated annual electricity savings from replacing a 100-Watt HPS light with an LED light of similar lumens is 372 kWh.\(^{89}\) Reducions from electricity savings are calculated by multiplying the electricity savings by the GHG emission factor for electricity, discussed in Section 4.2.1 (GHG Emission Factor for Electricity) and Table 5 (2016 and Projected 2030 and 2035 GHG Emission Factor for Electricity in Escondido). As the renewable and zero-carbon content in electricity increases, the emissions reduction decreases correspondingly. The GHG emissions reductions in 2030 and 2035 are shown in Table 49.

\(^{89}\) Replace a 100-W HPS light with a 50 W-LED light. Lighting retrofits data from Escondido were not available at the time of CAP development. The lighting retrofit savings were the estimated savings from a Solana Beach Municipal Retrofit Report on street lights retrofits (unpublished).

Energy Policy Initiatives Center (EPIC)
# Table 49 Key Assumptions and Results for Measure E-4.3: Retrofit High Pressure Sodium Street Lights to LED Lights

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Number of Streetlights Retrofitted to LED</th>
<th>Total Number of Streetlights Retrofitted to LED after 2021</th>
<th>Electricity Savings* (kWh per year)</th>
<th>Electricity Emission Factor (lbs CO\textsubscript{2}e/MWh)</th>
<th>Emissions Reductions from Electricity Savings (MT CO\textsubscript{2}e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>30</td>
<td>300</td>
<td>111,600</td>
<td>53</td>
<td>3</td>
</tr>
<tr>
<td>2035</td>
<td>30</td>
<td>450</td>
<td>167,400</td>
<td>36</td>
<td>3</td>
</tr>
</tbody>
</table>

*Assumes retrofit of a 100 W HPS streetlight to LED with the same lumens and the electricity saving is 31 kWh per month. The emissions reductions are the projection under the CAP assumptions.


## 6.4.4 Measure E-4.4: Require Non-Residential Alterations and Additions to Install Alternative-Fuel Water Heaters

To reduce reliance on natural gas end-use at non-residential buildings, the City will develop and implement an ordinance requiring all non-residential alterations or additions with permit value of $200,000 or more to install alternatively-fueled water heaters. The anticipated effective year of the ordinance is 2023. This ordinance does not include requirements for new construction, because new construction will have separate and more stringent requirements under the ordinance proposed through Measure E-5.2: Require New Commercial Developments to Achieve Zero Net Energy, discussed in Section 6.5.2.

Energy savings from installing a non-natural gas water heater are calculated based on using a HPWH on a per-gross floor area basis. As of November 2019, the City of Carlsbad was the only jurisdiction in the San Diego region to have a water heating ordinance related to non-residential projects. However, the ordinance only covers non-residential new construction, and Carlsbad is in a different Climate Zone (Climate Zone 7) from Escondido. Therefore, the energy savings from the ordinance proposed under Measure E-4.4 are modified based on the difference in energy uses in Climate Zones 7 and 10, as well as the difference in energy uses at newly constructed versus existing buildings, as shown in Table 50.

### Table 50 Potential Energy Savings from Measure E-4.4: Require Non-Residential Alterations and Additions to Install Alternative-Fuel Water Heaters

<table>
<thead>
<tr>
<th>Commercial Building Type</th>
<th>Building Size (sq. ft.)</th>
<th>Electricity Added with HPWH (kWh per year)</th>
<th>Electricity Added with HPWH (kWh/year/sq. ft.)</th>
<th>Natural Gas Savings with HPWH (Therms per year)</th>
<th>Natural Gas Savings with HPWH (Therms/year/sq. ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Construction Small Office with HPWH (Climate Zone 7)</td>
<td>5,502</td>
<td>1,241</td>
<td>0.23</td>
<td>249</td>
<td>0.05</td>
</tr>
<tr>
<td>New Construction Medium Office with HPWH (Climate Zone 7)</td>
<td>53,628</td>
<td>6,311</td>
<td>0.12</td>
<td>433</td>
<td>0.01</td>
</tr>
<tr>
<td>Average of New Construction Office with HPWH</td>
<td>-</td>
<td>-</td>
<td>0.17</td>
<td>-</td>
<td>0.03</td>
</tr>
</tbody>
</table>


91 City of Carlsbad: [Energy Conservation Ordinance Cost Effectiveness Analysis](#), February 20, 2019, accessed November 18, 2019. The cost effectiveness analysis was done based on 2016 Energy Code, however, there is no significant difference in the water heating section of the 2016 and 2019 Energy Code.
### Commercial Building Type

<table>
<thead>
<tr>
<th>Building Size (sq. ft.)</th>
<th>Electricity Added with HPWH (kWh per year)</th>
<th>Electricity Added with HPWH (kWh/year/sq. ft.)</th>
<th>Natural Gas Savings with HPWH (Therms per year)</th>
<th>Natural Gas Savings with HPWH (Therms/year/sq. ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Climate Zone 7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjustment Factor of Climate Zone Difference (%)*</td>
<td>-</td>
<td>-</td>
<td>95%</td>
<td>-</td>
</tr>
<tr>
<td>Adjustment Factor of Building Age Difference (%)**</td>
<td>-</td>
<td>-</td>
<td>110%</td>
<td>-</td>
</tr>
</tbody>
</table>

| Estimates used for Measure E-4.4 | 0.18 | - | 0.03 |

Measure E-4.4: Require Non-Residential Alterations and Additions to Install Alternative-Fuel Water Heater

*Ratio of water heating energy use at buildings in Climate Zone 7 (where Carlsbad is located) to Climate Zone 10 (where Escondido is located)

**Ratio of water heating energy use at existing buildings to newly constructed buildings


HPWH is used as an example here; however, other types of non-natural gas water heaters may be used to replace existing water heaters. Similarly, office buildings were used as a commercial building type example; however, other types of buildings (e.g., retail, restaurant) have different water heating energy use on a per-square-footage basis and are not included here.

Based on recent permitting data, an annual average of approximately 144,000 sq. ft. of commercial additions and alterations would have been subject to this requirement. Assuming this trend continues, they will be subject to the requirement beginning in 2023. Certain buildings would be exempt from this requirement due to building age or other limitations. It is assumed 10 percent of the projects would be exempt.

Emissions reductions from natural gas savings were calculated using the natural gas savings per square footage, gross floor area, and the natural gas emission factor discussed in Section 4.3. The emissions reductions from natural gas savings due to E-4.4 are summarized in Table 51.

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92 Other options include, but are not limited to, instantaneous electric, electric tank solar water heater with HPWH back up, and solar water heater with electric tank back up.

93 Projects with permits valued at $200,000 or greater were provided by the City (November 2019). Not all permits have information on the square footage of the project, for these projects, the square footages were estimated based on a $ per sq. ft. basis from the projects with both $ and sq. ft. available.
Table 51 Natural Gas and Emissions Savings from Measure E-4.4: Require Non-Residential Alterations and Additions to Install Alternative-Fuel Water Heaters

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Commercial Developments Subject to the Requirement after 2023* (sq. ft. per year)</th>
<th>Total Non-Residential Projects with Alternative-Fuel Water Heaters after 2023** (sq. ft.)</th>
<th>Natural Gas Savings from Using Alternative-Fuel Water Heater*** (Therms/sq. ft./year)</th>
<th>Total Natural Gas Savings (Therms/year)</th>
<th>Natural Gas Emission Factor (MT CO\textsubscript{2}e/Therm)</th>
<th>Emissions Reductions from Natural Gas Savings (MT CO\textsubscript{2}e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>150,000</td>
<td>1,080,000</td>
<td>0.03</td>
<td>30,094</td>
<td>0.0054</td>
<td>165</td>
</tr>
<tr>
<td>2035</td>
<td>150,000</td>
<td>1,755,000</td>
<td>0.03</td>
<td>48,903</td>
<td>0.0054</td>
<td>268</td>
</tr>
</tbody>
</table>

*Estimated gross floor area of non-residential major additions and alterations with permit value $200,000 or more, based on recent year’s data. 
**Assume 10% major renovations will be exempt from this requirement due to building age or other limitations. 
***Assume the alternatively-powered water heaters are HPWH

The projections are based on current status, future impact of State policies and programs, and CAP assumptions.


Emissions from added electricity use are calculated by multiplying the electricity use per square foot and gross floor area by the GHG emission factor for electricity, discussed in Section 4.2.1 (GHG Emission Factor for Electricity) and Table 5 (2016 and Projected 2030 and 2035 GHG Emission Factor for Electricity in Escondido). As the renewable and zero-carbon content in electricity increases, the emissions decrease correspondingly. The emissions from electricity uses due to Measure E-4.4 are summarized in Table 52.

Table 52 Electricity and Emissions from Measure E-4.4: Require Non-Residential Alterations and Additions to Install Alternative-Fuel Water Heaters

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Non-Residential Projects Subject to the Requirement after 2023* (sq. ft. per year)</th>
<th>Total Non-Residential Projects with Alternatively-Powered Water Heaters after 2023** (sq. ft.)</th>
<th>Electricity Added from Alternatively-Powered Water Heater*** (kWh/sq. ft./year)</th>
<th>Total Electricity Use (kWh/year)</th>
<th>Electricity Emission Factor (lbs CO\textsubscript{2}e/MWh)</th>
<th>Emissions from Additional Electricity Use (MT CO\textsubscript{2}e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>150,000</td>
<td>1,080,000</td>
<td>0.18</td>
<td>193,688</td>
<td>53</td>
<td>5</td>
</tr>
<tr>
<td>2035</td>
<td>150,000</td>
<td>1,755,000</td>
<td>0.18</td>
<td>314,743</td>
<td>36</td>
<td>5</td>
</tr>
</tbody>
</table>

*Estimated gross floor area of non-residential major additions and alterations with permit value $200,000 or more, based on recent years' data. 
**Assume 10% major renovations will be exempt from this requirement due to building age or other limitations. 
***Assume the alternatively-powered water heaters are HPWH

The projections are based on current status, future impact of State policies and programs, and CAP assumptions.


The net emissions reductions from Measure E-4.4 are 160 MT CO\textsubscript{2}e in 2030 and 263 MT CO\textsubscript{2}e in 2035.

6.5 Strategy 5: Increase Renewable and Zero-Carbon Energy (E)

The goal of this strategy is to increase both grid-supply and behind-the-meter generation of renewable and zero-carbon electricity through the following four measures.
6.5.1 Measure E-5.1: Supply Municipal Facilities with On-Site Renewable Electricity

Currently, there are eight Escondido municipal sites with on-site renewable electricity systems; there are PV systems at seven municipal sites and a small hydroelectric system at the City dam. The total capacity of the seven PV systems is 832 kW (0.8 MW). 94

Through Measure E-5.1, the City plans to install additional PV systems at municipal facilities and parking lots to increase the amount of on-site renewable electricity generation. The goal is to install two MW of PV by 2035, which is equivalent to approximately 3.5 MWh a year of renewable electricity generation. 95 The City’s municipal operation electricity use in 2018 was approximately 8.8 MWh (not including the utilities department). The City is not anticipating new municipal buildings during the CAP horizon. Therefore, the renewable generation from the additional two MW PV system would cover approximately 40 percent of the total municipal electricity use.

The emissions reductions from all State and CAP actions that increase behind-the-meter renewable supply are given in Table 7 (Attribution of Emissions Reductions to Supplies that Increase Renewable and Zero-Carbon Supply in Escondido). The total reduction is attributed based on estimated capacity (MW) that would result from each measure. As shown in Table 53, GHG emissions reductions from Measure E-5.1 are the projected reduction amounts in the years 2030 and 2035 only, not the sum of the annual reductions from the 2012 baseline year to 2030 or 2035.

Table 53 Key Assumptions and Results for Measure E-5.1: Supply Municipal Facilities with On-Site Renewable Electricity

<table>
<thead>
<tr>
<th>Year</th>
<th>State or City Action</th>
<th>Total</th>
<th>Measure E-5.1: Supply Municipal Facilities with On-Site Renewable Electricity</th>
<th>Measure E-5.2: Require New Commercial Developments to Achieve Zero Net Energy*</th>
<th>Measure E-5.4: Support Escondido Union School District’s Efforts to Install PV Systems</th>
<th>California Solar Policies, Programs, and Mandates**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>Projected Behind-the-meter PV Capacity (MW)</td>
<td>147</td>
<td>0.8</td>
<td>3.7</td>
<td>2.6</td>
<td>140.2</td>
</tr>
<tr>
<td></td>
<td>Projected Emissions Reduction (MT CO2e)</td>
<td>53,814</td>
<td>292</td>
<td>1,360</td>
<td>947</td>
<td>51,215</td>
</tr>
<tr>
<td>2035</td>
<td>Projected Behind-the-meter PV Capacity (MW)</td>
<td>151</td>
<td>2.0</td>
<td>6.0</td>
<td>2.6</td>
<td>140.8</td>
</tr>
<tr>
<td></td>
<td>Projected Emissions Reduction (MT CO2e)</td>
<td>56,373</td>
<td>745</td>
<td>2,252</td>
<td>965</td>
<td>52,411</td>
</tr>
</tbody>
</table>

*Does not represent all emissions reduction from E-5.2
**Solar policies, programs and mandates include the impact of the PV mandates from the 2019 Building Energy Efficiency Standard. The projected capacity and emissions reductions based on current conditions, the future impact of State policies and programs, and CAP assumptions.


94 Information provided by the City (April 2019).
95 Information provided by the City (April 2019).
6.5.2 Measure E-5.2: Require New Commercial Developments to Achieve Zero Net Energy

A zero net energy building produces renewable energy equal to or greater than its own annual consumption. This reduces or eliminates reliance on natural gas end-use. The City will develop and implement an ordinance requiring all new commercial developments to achieve zero net energy. The anticipated effective year of the ordinance is 2023.

As of November 2019, there is no statewide modeled reach code (a local energy ordinance that exceeds the minimum standards defined by Title 24) study on achieving zero net energy at newly-constructed non-residential buildings. However, the latest 2019 Nonresidential New Construction Reach Code Cost Effectiveness Study (Study) covers several cost-effective reach code options, including a combination of all-electric design with energy efficiency measures and PV installation that would nearly offset annual electricity use. This combination is cost-effective in Climate Zone 10 and used as a proxy for the zero net energy requirement of the potential ordinance. However, other options to achieve zero net energy may be studied during the design and implementation of the ordinance.

Based on recent permitting data, an annual average of approximately 43,000 sq. ft. of new office development and 91,750 sq. ft. of new retail development would have been subject to the ordinance. Assuming this trend continues, those averages will be subject to the annual requirement beginning in 2023. It is assumed that 10 percent of the projects would be exempt due to other limitations. Because office and retail building types are modeled separately in the Study, the impacts are examined separately, as well. The energy savings and PV capacity needed on a square footage basis are provided in Table 54.

Table 54 Assumptions of Energy Savings and PV Capacity Needed for Measure E-5.2: Require New Commercial Developments to Achieve Zero Net Energy

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Medium Office</th>
<th>Medium Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditioned Floor Area (sq. ft.)</td>
<td>53,628</td>
<td>24,697</td>
</tr>
<tr>
<td>Electricity Savings from All-electric + Energy</td>
<td>12,344</td>
<td>11,737</td>
</tr>
<tr>
<td>Efficiency Design (kWh)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity Savings from All-electric + Energy</td>
<td>0.23</td>
<td>0.48</td>
</tr>
<tr>
<td>Efficiency Design (kWh per sq. ft.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Gas Savings from All-electric + Energy</td>
<td>2,053</td>
<td>1,262</td>
</tr>
<tr>
<td>Efficiency Design (Therms)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Gas Savings from All-electric + Energy</td>
<td>0.04</td>
<td>0.05</td>
</tr>
<tr>
<td>Efficiency Design (Therms per sq. ft.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV Installation (kW)</td>
<td>135</td>
<td>110</td>
</tr>
<tr>
<td>PV Installation (W per sq. ft.)</td>
<td>2.5</td>
<td>4.5</td>
</tr>
</tbody>
</table>

97 New office spaces (86,000 sq. ft. in last two years) and new retail spaces (183,500 in last two years) square footage were provided by the City (June 2019). The sq. ft. is new gross floor area.
98 TRC and EnergySoft: 2019 Nonresidential New Construction Reach Code Cost Effectiveness Study, last modified July 15, 2019, accessed August 11, 2019. The PV system measure is discussed in Section 3.2.1, and the energy savings are discussed in Figure 21 and Figure 28, Climate Zone 10, Utility SDG&E. The all-electric measure includes changing baseline gas-fueled equipment (HVAC and water heating system) to electric. The energy efficiency measures are listed in Figure 4, including building envelop, HVAC, and lighting.
Building Type | Medium Office | Medium Retail
---|---|---
Based on 2019 Nonresidential New Construction Reach Code Cost Effectiveness Study results of prototype medium office and medium retail spaces in Climate Zone 10, where Escondido is located. The electricity and natural gas savings are based on the energy uses of mixed-fuel designs and all-electric + energy efficiency designs. TRC and EnergySoft 2019.

The emissions reduction from natural gas savings, emissions added from additional electricity use, and emissions reduction from added PV systems are shown in Table 55 through Table 57.

Table 55 Emissions Reduction from Natural Gas Savings due to Measure E-5.2: Require New Commercial Developments to Achieve Zero Net Energy

<table>
<thead>
<tr>
<th>Year</th>
<th>Office Space</th>
<th>Retail Space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New Floor Area Added after 2023* (sq. ft)</td>
<td>New Floor Area Added after 2023* (sq. ft)</td>
<td>New Floor Area Added after 2023* (sq. ft)</td>
</tr>
<tr>
<td>2030</td>
<td>309,600</td>
<td>660,600</td>
<td>45,608</td>
</tr>
<tr>
<td>2035</td>
<td>503,100</td>
<td>1,073,475</td>
<td>74,114</td>
</tr>
</tbody>
</table>

*Assumes 10 percent new development will be exempt from this requirement due to other limitations.

The projected natural gas savings and emissions reduction are the projections under the CAP, based on current status, future impact of State policies and programs, and CAP assumptions.


Table 56 Emissions Reduction from Electricity Savings due to Measure E-5.2: Require New Commercial Developments to Achieve Zero Net Energy

<table>
<thead>
<tr>
<th>Year</th>
<th>Office Space</th>
<th>Retail Space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New Floor Area Added after 2023* (sq. ft)</td>
<td>New Floor Area Added after 2023* (sq. ft)</td>
<td>Total Electricity Savings (kWh/year)</td>
</tr>
<tr>
<td>2030</td>
<td>309,600</td>
<td>660,600</td>
<td>385,207</td>
</tr>
<tr>
<td>2035</td>
<td>503,100</td>
<td>1,073,475</td>
<td>625,961</td>
</tr>
</tbody>
</table>

*Assumes 10 percent new development will be exempt from this requirement due to other limitations.

The projected electricity savings and emissions reduction are the projections under the CAP, based on current status, future impact of State policies and programs, and CAP assumptions.

Table 57 Emissions Reduction from PV Systems due to Measure E-5.2: Require New Commercial Developments to Achieve Zero Net Energy

<table>
<thead>
<tr>
<th>Year</th>
<th>Office Space</th>
<th>Retail Space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New Floor Area Added after 2023* (sq. ft)</td>
<td>Additional PV Capacity due to PV Requirement (kW/sq. ft./year)</td>
<td>New Floor Area Added after 2023* (sq. ft)</td>
</tr>
<tr>
<td>2030</td>
<td>309,600</td>
<td>2.5</td>
<td>660,600</td>
</tr>
<tr>
<td>2035</td>
<td>503,100</td>
<td>2.5</td>
<td>1,073,475</td>
</tr>
</tbody>
</table>

*Assumes 10 percent new development will be exempt from this requirement due to other limitations.

The total emissions reductions from Measure E-5.2 are shown in Table 58. The reductions are the projected reduction amounts in the years 2030 and 2035 only and do not represent the cumulative reductions from the 2012 baseline year to 2030 or 2035.

Table 58 Results for Measure E-5.2: Require New Commercial Developments to Achieve Zero Net Energy

<table>
<thead>
<tr>
<th>Emissions Reduction</th>
<th>GHG Emissions Reduction in 2030 (MT CO₂e)</th>
<th>GHG Emissions Reduction in 2035 (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions Reductions from Natural Gas Savings</td>
<td>250</td>
<td>406</td>
</tr>
<tr>
<td>Emissions Reductions from Electricity Savings</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Emissions Reduction from Additional PV</td>
<td>1,360</td>
<td>2,252</td>
</tr>
<tr>
<td>Total Emissions Reductions</td>
<td>1,618</td>
<td>2,668</td>
</tr>
</tbody>
</table>

The emission reductions projections are based on CAP assumptions including future impact of State policies and programs.


6.5.3 Measure E-5.3: Increase Grid-Supply Renewable and Zero-Carbon Electricity

As discussed in Section 5.1, SB 100 (100 Percent Clean Energy Act of 2018) adopts a 60 percent RPS for all of California’s retail electric suppliers by 2030 and 100 percent zero-carbon electricity by 2045. Through Measure E-5.3, the City would present options to City Council to increase grid-supply to 100 percent renewable or zero-carbon electricity by 2030.

Based on the assumptions used in the most recent Community Choice Aggregation feasibility study in the San Diego region, it is assumed 95 percent of SDG&E’s residential bundled customers’ electric load and 85 percent of SDG&E’s commercial bundled customers’ electric load would be supplied by the local renewable and zero-carbon program. SDG&E DA customers, whose electric load is supplied by other retail electric suppliers, will stay with their current electric suppliers and not participate in the local renewable program.

As previously explained in Section 5.1 and Table 7 Attribution of Emissions Reductions to Supplies that Increase Renewable and Zero-Carbon Supply in Escondido, because the local renewables and zero-carbon program is required to comply with the State’s RPS mandates, a portion of the total emissions reduction from Measure E-5.4 is credited to the State’s RPS compliance. The remaining emissions reduction beyond RPS compliance is allocated to local Measure E-5.3. The allocation of GHG emissions reduction in 2030 from this measure to the State and to the City is shown in Table 59.

### Table 59 Key Assumptions and Results for Measure E-5.3: Increase Grid-Supply Renewable and Zero-Carbon Electricity

<table>
<thead>
<tr>
<th>Year</th>
<th>State or City Action</th>
<th>Total for Local Renewables and Zero-Carbon Program</th>
<th>Local Renewables and Zero-Carbon Program to Complying with RPS</th>
<th>Local Renewables and Zero-Carbon Program above RPS (E-5.3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>Projected Renewables and Zero Carbon (%)</td>
<td>100%</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>Emissions Reduction (MT CO₂e)</td>
<td>105,336</td>
<td>63,201</td>
<td>42,134</td>
</tr>
<tr>
<td>2035</td>
<td>Projected Renewables and Zero Carbon (%)</td>
<td>100%</td>
<td>73%</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>Emissions Reduction (MT CO₂e)</td>
<td>109,209</td>
<td>79,723</td>
<td>29,486</td>
</tr>
</tbody>
</table>

*Calculated in Table 7. The emissions reduction is the projection under the CAP assumptions including future impact of State policies and programs. Energy Policy Initiatives Center 2019.

#### 6.5.4 Measure E-5.4: Support Escondido Union School District’s Efforts to Install PV Systems

In November 2019, the EUSD started phase 1 of PV system construction at school playgrounds and carports. The project includes four phases and is anticipated to be completed by summer 2020. Table 60 below includes the sites and their PV system capacities.¹⁰⁰

### Table 60 Escondido Union School District’s Sites with PV Systems

<table>
<thead>
<tr>
<th>Sites</th>
<th>Modeled System Size (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bernardo ES</td>
<td>165.6</td>
</tr>
<tr>
<td>Quantum Academy</td>
<td>129.6</td>
</tr>
<tr>
<td>Hidden Valley MS</td>
<td>266.4</td>
</tr>
<tr>
<td>Rocks Spring ES</td>
<td>187.2</td>
</tr>
<tr>
<td>Bear Valley MS</td>
<td>280.8</td>
</tr>
<tr>
<td>Reidy Creek ES</td>
<td>208.8</td>
</tr>
<tr>
<td>Farr Avenue ES</td>
<td>216.8</td>
</tr>
<tr>
<td>Rinco MS</td>
<td>237.6</td>
</tr>
<tr>
<td>Oak Hill ES</td>
<td>172.8</td>
</tr>
<tr>
<td>L.R. Green ES</td>
<td>194.4</td>
</tr>
<tr>
<td>District Office</td>
<td>187.2</td>
</tr>
<tr>
<td>Orange Glen ES</td>
<td>158.4</td>
</tr>
<tr>
<td>Del Dios ES</td>
<td>187.2</td>
</tr>
</tbody>
</table>

¹⁰⁰School sites and PV capacities were provided by the City (October 2019).
The total PV capacity from all the sites is 2.6 MW.

The emissions reductions from all State actions and CAP measures that increase the behind-the-meter renewable supply are given in Table 7 (Attribution of Emissions Reductions to Supplies that Increase Renewable and Zero-Carbon Supply in Escondido). The total reduction is allocated based on estimated capacity (MW) that would result from each action. As shown in Table 61, GHG emissions reductions from Measure E-5.4 are the projected reduction amounts in the years 2030 and 2035 only, not the sum of the annual reductions from the 2012 baseline year to 2030 or 2035.

Table 61 Key Assumptions and Results for Measure E-5.4: Support Escondido Union School District’s Efforts to Install PV Systems

<table>
<thead>
<tr>
<th>Year</th>
<th>State or City Action</th>
<th>Total</th>
<th>Measure E-5.1: Supply Municipal Facilities with On-Site Renewable Electricity</th>
<th>Measure E-5.2: Require New Commercial Developments to Achieve Zero Net Energy*</th>
<th>Measure E-5.4: Support Escondido Union School District’s Efforts to Install PV Systems</th>
<th>California Solar Policies, Programs, and Mandates**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>Projected Behind-the-meter PV Capacity (MW)</td>
<td>147</td>
<td>0.8</td>
<td>3.7</td>
<td>2.6</td>
<td>140.2</td>
</tr>
<tr>
<td></td>
<td>Projected Emissions Reduction (MT CO₂e)</td>
<td>53,814</td>
<td>292</td>
<td>1,360</td>
<td>947</td>
<td>51,215</td>
</tr>
<tr>
<td>2035</td>
<td>Projected Behind-the-meter PV Capacity (MW)</td>
<td>151</td>
<td>2.0</td>
<td>6.0</td>
<td>2.6</td>
<td>140.8</td>
</tr>
<tr>
<td></td>
<td>Projected Emissions Reduction (MT CO₂e)</td>
<td>56,373</td>
<td>745</td>
<td>2,252</td>
<td>965</td>
<td>52,411</td>
</tr>
</tbody>
</table>

*Does not represent all emissions reduction from E-5.2  
**Solar policies, programs and mandates include the impact of the PV mandates from the 2019 Building Energy Efficiency Standard. The projected capacity and emissions reductions are based on current conditions and CAP assumptions including the future impact of State policies and programs. Energy Policy Initiatives Center 2019.

6.6 Strategy 6: Increase Water Efficiency (W)

The goal of this strategy is to increase indoor and outdoor water efficiency through the following two measures.

6.6.1 Measure W-6.1: Install Smart Irrigation Controllers at City Parks and Landscape Maintenance District

The City’s Landscape Maintenance District (LMD) area had 43 smart irrigation controllers and 2,698 water efficient rotator nozzles installed in early 2017 using the SoCal Water$mart rebate program. All the controllers are connected to the internet through cell, radio, or both. Smart irrigation controllers have also been installed at several City parks; going forward, if existing irrigation controllers fail, they will be replaced with smart controllers. The estimated water savings of these smart irrigation controller
replacements are 40 percent. In the 2018–2019 fiscal year, the City’s water use in its parks was 84,397,000 gallons. Assuming the reduction in water use is 40 percent of the current level in 2035, the water savings would be 33,758,800 gallons.\(^{101}\)

The water savings are converted to GHG reductions based on the imported water GHG intensities in 2030 and 2035. The imported water GHG intensities are calculated based on projected water use and the GHG emissions from water, as assumed in the BAU emissions projection.\(^{102}\) Table 62 summarizes the key assumptions and results. The GHG emissions reductions projected are the reduction amounts in the years 2030 and 2035 only, not the sum of the annual reductions from the 2012 baseline year to 2030 or 2035.

**Table 62 Key Assumptions and Results for Measure W-6.1: Install Smart Irrigation Controllers at City Parks and Landscape Maintenance District**

<table>
<thead>
<tr>
<th>Year</th>
<th>Reduction in Water Use at City Parks (%)</th>
<th>Reduction in Water Use at City Parks (Gallons)</th>
<th>Reduction in Water Use at Landscape Maintenance District (Gallons)</th>
<th>Total Reduction in Water Use (Gallons)</th>
<th>Total Reduction in Water Use (Acre-feet)</th>
<th>Water-GHG Intensity (MT CO(_2)e/Acre-foot)*</th>
<th>Emission Reduction (MT CO(_2)e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>27%</td>
<td>22,505,867</td>
<td>4,770,589</td>
<td>27,276,456</td>
<td>84</td>
<td>0.54</td>
<td>45</td>
</tr>
<tr>
<td>2035</td>
<td>40%</td>
<td>33,758,800</td>
<td>4,770,589</td>
<td>38,529,389</td>
<td>118</td>
<td>0.54</td>
<td>64</td>
</tr>
</tbody>
</table>

\(^{*}\)Water-GHG intensity of imported water.

6.6.2 Measure W-6.2: Require Greywater Systems and Rain Barrels at New Single-Family Model Homes

To reduce residential water use, the City will require each single-family model home, including townhouse model homes, to be fully equipped with greywater systems and rain barrels, or other rainwater capture systems. The requirement is similar to that in Measure T-1.4: Require Electric Vehicle Charging Stations at new Single-Family Model Homes. The developers would also be required to provide information about having greywater systems and rain barrels as an add-on option to potential homebuyers. The estimated effective year of this requirement is 2021.

Having model homes equipped with such systems will encourage homebuyers to choose the add-on option. The City will allow for no-fee permitting for developers and waive fees for homebuyers of that subdivision at initial occupancy to further facilitate the implementation. On average, it is assumed that 13 new single-family homes will have such systems due to the requirement (12 through model home construction and one through a homebuyer add-on option).\(^{103}\)

---

\(^{101}\) The water savings since the installation are not available. However, the cost for water has been reduced by 15 percent; therefore, the water savings were estimated based on this change. Water use and estimated savings are provided by the City (July 2019). For LMD, water savings are estimated based on cost savings and water rate of $8.13 per 1,000 gallons, [User Rates for Potable Water, Effective March 1, 2019](https://www.ci.escondido.ca.us/index.cfm?FuseAction=Clk.Access&PageID=128999& jurisdictionid=2), accessed July 29, 2019.

\(^{102}\) Emissions from water and projected water use are provided in [Appendix A: City of Escondido Greenhouse Gas Emissions Inventories and Projections (EPIC, 2018)](https://www.epicinc.org/).  

\(^{103}\) Assumptions were provided by the City (October 2019).
A California study indicates that, on average, households installing greywater systems reduce their water use by 26 percent over a year.\textsuperscript{104} In Escondido, the water use at a single-family home is approximately 143,000 gallons a year; therefore, the water savings from a greywater system would be 37,000 gallons a year.\textsuperscript{105} For rain barrels, based on SoCal WaterSmart rebate program data, the average savings are 420 gallons a year.\textsuperscript{106}

The water savings are converted to GHG reductions based on the imported water GHG intensities in 2030 and 2035. The imported water GHG intensities are calculated based on projected water use and the GHG emissions from water, as assumed in the BAU emissions projection.\textsuperscript{107} Table 63 summarizes the key assumptions and results.

Table 63 Key Assumptions and Results for Measure W-6.2: Require Greywater Systems and Rain Barrels at New Single-Family Model Homes

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Number of Homes with Greywater Systems and Rain Barrels due to W-6.2</th>
<th>Number of Greywater Systems and Rain Barrels due to W-6.2 after 2021</th>
<th>Water Saving per Home with Greywater System (Gallon per year)</th>
<th>Water Saving per Rain Barrel (Gallon per year)</th>
<th>Total Water Use Reduction (gallons)</th>
<th>Total Water Use Reduction (Acre-Foot)</th>
<th>Water-GHG Intensity (MT CO$_2$e/Acre-Foot)$^*$</th>
<th>Emission Reduction (MT CO$_2$e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>13</td>
<td>130</td>
<td>37,221</td>
<td>420</td>
<td>4,893,396</td>
<td>15</td>
<td>0.5</td>
<td>8</td>
</tr>
<tr>
<td>2035</td>
<td>13</td>
<td>195</td>
<td>37,221</td>
<td>420</td>
<td>7,340,094</td>
<td>23</td>
<td>0.5</td>
<td>12</td>
</tr>
</tbody>
</table>


6.7 Strategy 7: Diversify Local Water Supply (W)

The goal of this strategy is to reduce water-related energy use by diversifying local water supply through the following measure.

6.7.1 Measure W-7.1 Develop Local Water Supply for Agriculture Water Use

Most of the water-related energy use is from upstream energy use (e.g., importing water from outside of San Diego region). The City plans to construct and operate a new Membrane Filtration/Reverse Osmosis Facility (MFRO) to produce a high-quality water supply for local agriculture water, which will increase local water supply and reduce the reliance on imported water. Once in operation, the MFRO will produce up to six million gallons of water per day (MGD, equivalent to 6,721 acre-feet per day) for agriculture irrigation use.\textsuperscript{108}

\textsuperscript{104}Greywater Action: Residual Greywater Irrigation Systems in California, September 2013, accessed November 18, 2019. Water savings vary by month, this is the annual saving.

\textsuperscript{105}The single-family potable water use was 9,679 acre-feet in 2015 based on the Escondido 2015 Urban Water Management Plan, May 2016. Table 2-3. The number of single-family homes in Escondido in 2015 was 22,031 based on SANDAG Demographic and Socioeconomic Estimates (May 25, 2019 version). SANDAG Data Surfer, accessed on November 18, 2019.

\textsuperscript{106}Rebate data from Escondido are not available, data from Helix Water District were used as proxy.

\textsuperscript{107}Emissions from water and projected water use are provided in Appendix A: City of Escondido Greenhouse Gas Emissions Inventories and Projections (EPIC, 2018).

\textsuperscript{108}Estimated water produced at MFRO was provided by the City (July 2019).
Assuming the local water supply reduces imported water supply, the emissions avoided is calculated based on the imported water GHG intensities in 2030 and 2035. On the other hand, there will be additional local electricity use to treat water at the MFRO.\textsuperscript{109} Table 64 summarizes the key assumptions and results. The GHG emissions reductions projected are the amounts in the years 2030 and 2035 only, not the sum of the annual reductions from the 2012 baseline year to 2030 or 2035.

### Table 64 Key Assumptions and Results for Measure W-7.1 Develop Local Water Supply for Agriculture Water Use

<table>
<thead>
<tr>
<th>Year</th>
<th>New Local Water Provided to Agricultural Customers (Acre-Feet)</th>
<th>Water-GHG Intensity (MT CO2e/Acre-Foot)*</th>
<th>Emissions Avoided due to avoided Upstream Water (MT CO2e)</th>
<th>Local Electricity Use Added from Water Treatment** (kWh)</th>
<th>Electricity Emission Factor (lbs CO2e/MWh)</th>
<th>Emissions Generated from Electricity Consumed to Treat Water (MT CO2e)</th>
<th>Net Emission Reduction (MT CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>6,721</td>
<td>0.54</td>
<td>3,635</td>
<td>3,951,868</td>
<td>53</td>
<td>94</td>
<td>3,541</td>
</tr>
<tr>
<td>2035</td>
<td>6,721</td>
<td>0.54</td>
<td>3,635</td>
<td>3,951,868</td>
<td>36</td>
<td>64</td>
<td>3,571</td>
</tr>
</tbody>
</table>

*Water-GHG intensity of imported water. **Based on the energy intensity (599 kWh/acre-foot) of recycled water treatment (membrane filtration/reverse osmosis)

\textsuperscript{109} Energy Policy Initiatives Center 2019.

#### 6.8 Strategy 8: Reduce and Recycle Solid Waste (S)

The goal of this strategy is to reduce emissions from landfill waste through the following measure.

##### 6.8.1 Measure S-8.1: Increase Citywide Waste Diversion

Through Measure S-8.1, the City will work with its waste hauler to achieve an 80 percent waste diversion rate by 2030, and an 85 percent waste diversion rate by 2035. The 80 percent waste diversion rate would result in 2.4 pounds per person per day (PPD) waste disposed in landfills in 2030, and the 85 percent waste diversion rate would result in 1.8 PPD waste disposed in 2035.

The citywide waste disposal amount was 5.4 PPD in the 2012 baseline year and 5.9 PPD in 2016, corresponding to approximately 54 percent and 50 percent diversion rates, respectively. From 2012 to 2016, the diversion rates fluctuated between 50 percent and 54 percent.\textsuperscript{110} The City has not conducted a waste characterization study recently; therefore, the baseline 2012 waste composition is used and held constant through the CAP horizon.\textsuperscript{111} Landfills in the San Diego region are in the process of upgrading gas collection systems. It is assumed the landfill gas capture rate in 2030 will be 85 percent, an increase from the default 75 percent used in the BAU emissions projection. The emissions avoided from increasing the waste diversion rate is the difference between the waste category BAU emissions and the solid waste emissions using the target diversion rates and corresponding PPD waste amounts. Table 65 summarizes the key assumptions and results.

\textsuperscript{109} The energy intensity of treating water to recycled water levels (membrane filtration/reverse osmosis process) is used as a proxy for the treatment energy use at MFRO. *Appendix A: City of Escondido Greenhouse Gas Emissions Inventories and Projections* (EPIC, 2018). The MFRO Environmental Impact Report included estimates on the operational energy use. There, it is assumed the energy use would be like a “refrigerated warehouse”, which may not be as representative as the recycled water energy intensity.

\textsuperscript{110} Method to convert PPD to estimated diversion rate is based on CalRecycle. *Per Capita Disposal and Goal Measurement, Jurisdiction PPD from 2012–2016 were downloaded from CalRecycle Jurisdiction Diversion Summary.*

\textsuperscript{111} Recent State actions include organic waste recycling, which may reduce the mixed waste emission factor in future years.

Energy Policy Initiatives Center (EPIC)
Table 65 Key Assumptions and Results for Measure S-8.1: Increase Citywide Waste Diversion

<table>
<thead>
<tr>
<th>Year</th>
<th>Waste Disposed at Landfills from Escondido</th>
<th>Landfill Gas Capture Rate</th>
<th>Emissions with Targeted Diversion Rate (MT CO$_2$e)</th>
<th>Business as Usual Emissions (MT CO$_2$e)</th>
<th>GHG Emissions Reduction (MT CO$_2$e)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lbs./person/day</td>
<td>short tons/year</td>
<td>MT/year</td>
<td>85%</td>
<td>7,457</td>
</tr>
<tr>
<td>2030</td>
<td>2.4</td>
<td>74,223</td>
<td>67,334</td>
<td>85%</td>
<td>5,611</td>
</tr>
<tr>
<td>2035</td>
<td>1.8</td>
<td>55,848</td>
<td>50,665</td>
<td>85%</td>
<td>5,611</td>
</tr>
</tbody>
</table>

Emissions from waste are calculated based on the mixed waste emission factor (0.74 MT CO$_2$e/short ton), oxidation rate (10%), and the waste capture rates. The projected emissions reductions are based on the CAP assumptions.


6.9 Strategy 9: Carbon Sequestration and Land Conservation (C)

The most recent urban tree canopy assessment in the San Diego region, conducted in 2014 using high-resolution Light Detection and Ranging (LiDAR), showed an urban tree canopy covering approximately 18 percent of Escondido.112 The goal of this strategy is to increase the urban tree cover within Escondido through the following two measures (Measure C-9.1 and Measure C-9.2). In addition, Measure C-9.3 includes development of an Agricultural Land and Open Space Conservation Program.

6.9.1 Measure C-9.1: Enforce Landscape Tree Requirement at New Developments

The City’s current water efficient landscape regulation includes the following requirements for tree planting: 1) a minimum of one tree for every four opposing parking spaces at new non-residential developments; and 2) a minimum of one tree per unit at new residential developments, including single-family and multi-family developments. A minimum of 15 gallons in size and proper irrigation and maintenance are required.113

Based on recent permitting data, an average of approximately 134,750 sq. ft. of new commercial office and retail development and 91,750 sq. ft. of new industrial developments were added per year.114 The Escondido Municipal Code off-street parking regulations require on average of one parking space per 250 sq. ft. gross floor area; therefore, approximately 1,019 new parking spaces will be added every year at these new non-residential developments.115 The new parking spaces will yield 255 new trees annually. The projected total number of new trees added by 2030 and 2035 are shown in Table 66.

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112 The assessment was done in 2014 for all urban areas in the San Diego County using methods developed by University of Vermont and USDA Forest Service.

113 Escondido Municipal Code: Sec. 33-1339. Standards for Landscaping, accessed on August 1, 2019. These requirements are in addition to street tree requirements.

114 The average annual new non-residential development sq. ft. is calculated based on new office spaces (86,000 sq. ft. in the last two years), new retail commercial spaces (183,500 in last two years), and new industrial (240,000 sq. ft.) square footage, as provided by the City (June 2019). The sq. ft. is new gross floor area.

115 Escondido Municipal Code: Off-street Parking Requirement (Section 33-765), accessed on August 1, 2019. The minimum parking requirements for commercial, office, restaurant/food, retail, etc., are different. The average is used here.
Table 66 Number of New Trees Added at Non-Residential Parking Spaces due to Measure C-9.1: Enforce Landscape Tree Requirement at New Developments

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual New Non-Residential Developments Added (sq. ft. per year)</th>
<th>Parking Spaces at New Non-Residential Developments (Spaces per year)</th>
<th>Parking Space Tree Requirement (Spaces per tree)</th>
<th>Annual Number of New Trees Added</th>
<th>Number of New Trees Added by Target Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>254,750</td>
<td>1,019</td>
<td>4</td>
<td>255</td>
<td>2,802</td>
</tr>
<tr>
<td>2035</td>
<td>254,750</td>
<td>1,019</td>
<td>4</td>
<td>255</td>
<td>4,076</td>
</tr>
</tbody>
</table>

*Average annual commercial and industrial development areas added

For new residential developments, SANDAG Series 13 projects that 150 new single-family units and 2,224 multi-family units will be added from 2020 to 2030, and an additional 104 single-family units and 207 multi-family units will be added from 2030 to 2035. Based on the tree planting requirements, the number of trees that will be added at new residential developments will be 2,375 by 2030 and 2,686 by 2035.

The proposed strategy is to encourage thoughtful site design practices to optimize tree planting and open space. Should this unduly constrain development at high densities, the City will allow in-lieu plantings through the payment of a fee per tree unit. This ensures that new development projects achieve their planting requirements. The carbon sequestration potential from the new trees is based on the projected total number of trees planted and the CO₂ absorption rate per tree. Table 67 summarizes the key assumptions and results. The GHG emissions reductions are the projected reduction amounts in the years 2030 and 2035 only, not the sum of the annual reductions from the 2012 baseline year to 2030 or 2035.

Table 67 Key Assumptions and Results for Measure C-9.1: Enforce Landscape Tree Requirement at New Developments

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of New Trees Added by Target Year</th>
<th>CO₂ Sequestered* (MT CO₂/tree/year)</th>
<th>Carbon Sequestration (MT CO₂)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>5,177</td>
<td>0.0354</td>
<td>183</td>
</tr>
<tr>
<td>2035</td>
<td>6,762</td>
<td>0.0354</td>
<td>239</td>
</tr>
</tbody>
</table>

*Average number of trees. An improved estimate of the carbon sequestration rate can be evaluated once the implementation parameters are decided. The projected carbon sequestration rates are based on the CAP assumptions.

6.9.2 Measure C-9.2: Develop a Citywide Urban Forestry Program

Through Measure C-9.2, the City will develop and implement an Urban Forestry Program to track tree planting and maintenance at City facilities, public parks, and public rights-of-way. The number of trees

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117 On average, the CO₂ sequestration rate is 0.035 MT CO₂ per tree per year. The carbon sequestration rate depends on the tree species, climate zone, planting location, and tree age. A more accurate carbon sequestration rate will be evaluated once the parameters are decided in implementation of the measure. California Emissions Estimator Model (CALEEMOD). Appendix D Default Data Tables (October 2017).
planted by the City varies by year. From 2016 to 2018, the City planted a total of 202 new trees. Assuming the trend continues, the goal is to plant an average of 67 new trees annually.\(^{118}\)

Similar to Measure C-9.1, the carbon sequestration potential is based on the projected total number of trees planted and the CO\(_2\) absorption rate per tree.\(^{119}\) Table 68 summarizes the key assumptions and results. The GHG emissions reductions are the projected reduction amounts in the years 2030 and 2035 only, not the sum of the annual reductions from the 2012 baseline year to 2030 or 2035.

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Number of New Trees Added</th>
<th>Number of New Trees Added by Target Year*</th>
<th>CO(_2) Sequestered** (MT CO(_2)/tree/year)</th>
<th>Carbon Sequestration (MT CO(_2))</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>67</td>
<td>1,010</td>
<td>0.0354</td>
<td>36</td>
</tr>
<tr>
<td>2035</td>
<td>67</td>
<td>1,347</td>
<td>0.0354</td>
<td>48</td>
</tr>
</tbody>
</table>

*Includes 202 trees planted by the City from 2016 to 2018.
**Average of trees. An improved estimate of the carbon sequestration rate can be evaluated once the implementation parameters are decided.
The projected carbon sequestration rates are based on the CAP assumptions.

6.9.3 Measure C-9.3: Develop an Agricultural Land and Open Space Conservation Program

Through Measure C-9.3, the City plans to develop an Agricultural Land and Open Space Conservation Program that will both protect agricultural land and open space from conversion to residential developments and promote smart growth infill developments elsewhere. This will include proactive Williamson Act contracting, annexation preservation goals of 75 percent, community gardening ordinance and/or incentives, and actual land purchasing. The goal is to conserve 400 acres of agricultural land and/or open space from being developed into residential units. As a result of the land conservation, it is assumed at least 400 residential units would be built as infill multi-family developments elsewhere in the city.\(^{120}\)

Preserving land from development into low-density single-family units would reduce the activity (e.g., energy use, VMT) and associated GHG emissions. Most GHG emissions from households are from transportation- and energy-related activities, and only those impacts are discussed here.\(^{121}\)

First, building the expected housing units in smart growth infill areas would increase density and destination accessibility around the units. This leads to household VMT reduction. Assuming the units would be built in urban areas with densities ranging from 5.5 to 45 units per acre, the new density would be an increase of at least 450 percent compared to the one unit per acre density as previously zoned at

\(^{118}\) The City planted 46 trees in 2016, 114 trees in 2017, and 42 new trees in 2018. Data provided by the City (June 2019).

\(^{119}\) On average, the CO\(_2\) sequestration rate is 0.035 MT CO\(_2\) per tree per year. The carbon sequestration rate depends on the tree species, climate zone, planting location, and tree age. A more accurate carbon sequestration rate will be evaluated once the parameters are decided in implementation of the measure. California Emissions Estimator Model (CALEEMOD), Appendix D Default Data Tables (October 2017).

\(^{120}\) Annexations are not considered under BAU projections. Therefore, the impacts of annexations are not estimated here.

\(^{121}\) Based on the GHG inventory results, over 90 percent of the GHG emissions are from energy and transportation related activities.
the now preserved land. Based on various studies, the ratio of VMT reduction to percent increase in density is 7 percent (i.e., the elasticity of VMT with respect to density is 7 percent). For example, a 20 percent increase in density would lead to 1.4 percent VMT reduction. However, these studies also cap the VMT reduction at 30 percent to eliminate the influence of any single factor, as community design relies on multiple land use strategies. The more than 450 percent increase in density of these 400 units would yield a VMT reduction beyond the capped VMT increase indicated by the studies. Therefore, the VMT reduction from the units is set at 30 percent.

Assuming the average household VMT in Escondido is similar to that throughout the San Diego region, the VMT avoided in 2030 and 2035 due to the land conservation are shown in Table 69.

Table 69 Household VMT Avoided due to Measure C-9.3: Develop an Agricultural Land and Open Space Conservation Program

<table>
<thead>
<tr>
<th>Year</th>
<th>VMT Reduction from Increased Density*</th>
<th>Average Household VMT** (Miles/weekday)</th>
<th>VMT Reduction per Household (Miles/year)</th>
<th>% of VMT that are Escondido VMT</th>
<th>Escondido VMT Reduction per Household (Miles/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>30%</td>
<td>76</td>
<td>7,950</td>
<td>56%</td>
<td>4,420</td>
</tr>
<tr>
<td>2035</td>
<td>30%</td>
<td>75</td>
<td>7,828</td>
<td>56%</td>
<td>4,353</td>
</tr>
</tbody>
</table>

*CAPCOA Quantifying GHG Mitigation Measures LUT-1 Maximum VMT reduction.
**Assumes 3.2 persons per household in Escondido and 23.5-mile average weekday VMT per capita (SANDAG Series 13 projection for San Diego region).
347 average weekdays per year. 56% of all household VMT is allocated to Escondido based on Origin-Destination VMT allocation methods, assuming trips will have at least one trip-end within Escondido.

The VMT avoided per household is then converted to GHG emissions reductions using the total number of households and the average vehicle emission factors discussed in Section 4.4.1 (GHG Emission Factor for On-Road Transportation). The GHG emissions reductions in 2030 and 2035 are shown in Table 70.

---

122 The density assumption of the preserved land was provided by the City (October 2019). The densities at urban residential zones are based on Escondido General Plan Land Use/Community Form Element, accessed January 4, 2020.

Energy Policy Initiatives Center (EPIC)
### Table 70 Emissions Reduction from VMT Avoided for Measure C-9.3: Develop an Agricultural Land and Open Space Conservation Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Residential Units*</th>
<th>VMT Reduction per Household (Miles/year) **</th>
<th>VMT Reduction from all Units (Miles/year)</th>
<th>Average Vehicle Emission Rate (g CO₂e/mile)</th>
<th>GHG Emissions Reduction (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>257</td>
<td>4,420</td>
<td>1,136,682</td>
<td>297</td>
<td>337</td>
</tr>
<tr>
<td>2035</td>
<td>400</td>
<td>4,353</td>
<td>1,741,008</td>
<td>279</td>
<td>486</td>
</tr>
</tbody>
</table>

* Number of single-family units not being built at the preserved land. It is assumed that they are instead built at infill land as multi-family units

** This is the VMT reduction for the units projected to be built in target years, which may differ from the VMT reduction from the homes built prior to target years.

The emissions reduction is the projection under the CAP assumptions, including future impact of State policies and programs used in the CARB EMFAC2014 model.


In addition, a typical multi-family home uses less energy (electricity and natural gas) than a typical single-family home. With the 2019 Building Standard PV mandates, all new single-family and low-rise multi-family homes would offset the homes’ electricity use with electricity generation from PV. Therefore, only the natural gas savings from a multi-family home compared with a single-family home are accounted for here. The difference in natural gas use is shown in Table 71.

### Table 71 Estimated Natural Gas Use of New Homes after 2020

<table>
<thead>
<tr>
<th>Residential Type</th>
<th>Natural Gas Use per Home (Therms per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Family 1</td>
<td>223</td>
</tr>
<tr>
<td>Single-Family 2</td>
<td>253</td>
</tr>
<tr>
<td>Single-Family (Average of 1&amp;2)</td>
<td>238</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>112</td>
</tr>
<tr>
<td>Natural Gas Saving*</td>
<td>126</td>
</tr>
</tbody>
</table>

*Average single-family minus multi-family unit natural gas use

Residential types are based on mixed-fuel prototype types developed by CEC for 2019 Building Energy Efficiency Standard. The two single-family prototypes have different floor areas (square footage) and number of stories, therefore different energy use.

Energy use are modeled with CEC CBECC-Res 22019.1.0 tool, May 2019 version, for Climate Zone 10 where Escondido is located.


Emissions reductions from natural gas savings were calculated using the natural gas savings per home, total number of households, and the natural gas emission factor discussed in Section 4.3. The emissions reductions from natural gas savings are summarized in Table 72.
Table 72 Emissions Reduction from Natural Gas Savings for Measure C-9.3: Develop an Agricultural Land and Open Space Conservation Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Residential Units*</th>
<th>Natural Gas Savings Per Household (Therms per year)</th>
<th>Total Natural Gas Savings (Therms per year)</th>
<th>Natural Gas Emission Factor (MT CO₂e/Therm)</th>
<th>Emissions Reductions from Natural Gas Savings (MT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>257</td>
<td>126</td>
<td>32,464</td>
<td>0.0054</td>
<td>178</td>
</tr>
<tr>
<td>2035</td>
<td>400</td>
<td>126</td>
<td>50,500</td>
<td>0.0054</td>
<td>276</td>
</tr>
</tbody>
</table>

*Number of single-family homes not being built at preserved land, and instead being built at infill land as multi-family homes. The emissions reduction is the projection under the CAP, including future impact of State policies and programs used in the CARB EMFAC2014 model and CAP assumptions.


The total emissions reductions from Measure C-9.3 are 515 MT CO₂e in 2030 and 762 MT CO₂e in 2035, or the sum of the target year emissions reductions from Table 70 and Table 72.
<table>
<thead>
<tr>
<th>PROJECT NUMBER / NAME:</th>
<th>MISC 20-0007 / Annual General Plan Progress Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUEST:</td>
<td>Receive and file report.</td>
</tr>
<tr>
<td>LOCATION:</td>
<td>Citywide</td>
</tr>
<tr>
<td>APN / APNS:</td>
<td>N/A</td>
</tr>
<tr>
<td>GENERAL PLAN / ZONING:</td>
<td>N/A</td>
</tr>
<tr>
<td>APPLICANT:</td>
<td>City of Escondido</td>
</tr>
<tr>
<td>PRIMARY REPRESENTATIVE:</td>
<td>Planning Division</td>
</tr>
<tr>
<td>DISCRETIONARY ACTIONS REQUESTED:</td>
<td>N/A</td>
</tr>
<tr>
<td>PREVIOUS ACTIONS:</td>
<td>Planning Case No. MISC 19-0004 (2018 report) on March 12, 2019</td>
</tr>
<tr>
<td>PROJECT PLANNER:</td>
<td>Mike Strong, Assistant Planning Director</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:mstrong@escondido.org">mstrong@escondido.org</a></td>
</tr>
<tr>
<td>CEQA RECOMMENDATION:</td>
<td>Exempt (CEQA Guidelines Section 15378(b)(5)).</td>
</tr>
<tr>
<td>STAFF RECOMMENDATION:</td>
<td>Receive and file report.</td>
</tr>
<tr>
<td>REQUESTED ACTION:</td>
<td>None.</td>
</tr>
<tr>
<td>CITY COUNCIL HEARING REQUIRED:</td>
<td>☑️ NO</td>
</tr>
<tr>
<td>REPORT APPROVALS:</td>
<td>□ Bill Martin, Community Development Director</td>
</tr>
<tr>
<td></td>
<td>☑️ Mike Strong, Assistant Planning Director</td>
</tr>
</tbody>
</table>
A. BACKGROUND:

The City Council adopted a comprehensive update to the General Plan on December 12, 2012. The General Plan states the community's vision, goals, objectives, policies, and implementation measures (i.e., ways to achieve the goals and objectives) for the future build-out of the city. As an information-based document, the General Plan describes existing conditions, makes projections, and establishes a vision for the community's future. As a policy document, the General Plan establishes a policy framework for decision-makers. Using this framework, the City Council and Planning Commission take incremental steps toward achieving the larger goals of the City by approving projects that are consistent with the General Plan.

Government Code Section 65400 mandates that cities and counties submit an annual report on the status of their General Plan and progress in its implementation. This staff report documents the fourth annual review of the 2012 General Plan, and the seventh annual review of the current Housing Element.

B. ENVIRONMENTAL STATUS:

The General Plan Annual Progress Report is a reporting document, and does not create or alter policy. The content is provided for informational purposes only, and is exempt from the requirements of the California Environmental Quality Act (CEQA) per Guidelines Section 15378(b)(5), which exempts organizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment. This informational item provides a means to monitor the success of implementing the General Plan and review what was implemented during the 12-month reporting period.

ATTACHMENT:

1. 2019 General Plan Annual Progress Report
I. Introduction

This report has been prepared pursuant to the requirements of Government Code Section 65400 (Appendix A). Guidance for preparation of the report is provided by the Governor’s Office of Planning and Research (OPR). The report discusses what was implemented during the 12-month reporting period and provides a means to determine if changes are needed in the plan or its implementation programs. The General Plan Annual Progress Report was received by the Planning Commission at their meeting on February 25, 2020 and the City Council at their meeting on March 25, 2020.

Table of Contents:

1. Introduction p.1
2. Purpose of the General Plan p.2
3. Status of the Adopted Elements p.2
4. Progress in the General Plan’s Implementation p.4
5. Degree to which the General Plan complies with the Adopted Office of Planning and Research (OPR) Guidelines p.24
6. Plans, Projects, and Accomplishments p.25
7. Conclusion p.25
II. Purpose of the General Plan

The General Plan is mandated by California Government Code Section 65300, which requires each city and county to adopt a comprehensive plan for the physical development of the jurisdiction. It addresses land use, transportation routes, population growth, open space, resource preservation and utilization, air and water quality, noise, safety issues and other related physical, social and economic development factors. Through the identification of goals, objectives, and policies, a General Plan creates a strategy framework for implementation. In addition to serving as a basis for local decision making, the General Plan establishes a clear set of development rules for citizens, developers, decision-makers, neighboring cities and counties, and provides the community with an opportunity to participate in the planning and decision-making process.

III. Status of the Adopted Elements

State law requires that general plans include seven (7) basic elements which must cover the following topics: Land Use, Circulation, Housing, Safety, Noise, Conservation, and Open Space. In addition to the seven (7) required elements, Senate Bill (SB) 1000, Statutes of 2016, added to the required elements of the general plan an environmental justice element, or related goals, policies, and objectives integrated in other elements, if the city, county, or city and county has a disadvantaged community or meets certain criteria as designated by the law. As of this writing, the City of Escondido has not triggered the requirements to prepare an environmental justice element.

Mandatory or voluntary elements may be combined or renamed, but basic requirements must be included. The City of Escondido General Plan has ten (10) chapters. The relationship between the seven (7) elements and the chapters provided in the City of Escondido General Plan is described in more detail in Appendix B.

State law does not provide a mandatory minimum timeframe for revisions of elements, except for a Housing Element. State requirements for Housing Elements are more detailed and specific than for the other portions of a General Plan, and Housing Elements are updated every eight (8) years according to a schedule set by the State. Other elements may be updated less frequently and typically have a 15 to 20-year horizon. None of the General Plan elements were amended during the 2019 calendar year, except for the Land Use portion of the General Plan to accommodate a three (3) story care facility on Centre City Parkway.

City Council Action Plan

The City Council puts together an Action Plan that helps advance the goals, policies, and/or implementation measures contained in the General Plan. The Action Plan represents the City Council’s collective vision for Escondido’s future and the key activities that will be used to achieve that vision. It is developed biannually following a workshop in which key policy interests are identified and discussed by the City Council, city staff, and the public. This keeps relevant General Plan policy-related issues, such as financial stability, economic development, image and appearance on the forefront and relevant for systematic implementation through Action
Plan direction on Capital Improvement Plan, economic development planning, municipal administrative services, maintenance and operations, etc.

**General Plan Update Work Program**

Escondido’s General Plan was comprehensively updated in 2012. The adopted General Plan continues to serve as a relevant and useful document to guide the use of public and private lands within the community.

The CA Supreme Court has stated that local governments have an implied duty to keep their plans current (*DeVita v. County of Napa, 9 cal. 4th 763 (1995)*), so there is a need to systematically look ahead and plan on how the City will keep the General Plan document up to date. It will need to adequately address and respond to emerging land use activities, use of space, multi-modal trends, regulations, and other matters that affect the City’s desirability to live, work, and play. Most of the general plan elements typically have a 15 to 20-year horizon, excepting the Housing Element. Absent any direction to prepare a comprehensive update, the following schedule proposes when the next suggested update would occur, ensuring continuous improvement to the City’s land use and regulatory framework. Current efforts are underway to update the roadway classifications of the City’s Mobility and Infrastructure portion of the General Plan.

<table>
<thead>
<tr>
<th>General Plan Element</th>
<th>Last Update</th>
<th>Next Suggested Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility and Infrastructure</td>
<td>2012</td>
<td>Underway</td>
</tr>
<tr>
<td>Housing*</td>
<td>2012</td>
<td>Underway</td>
</tr>
<tr>
<td>Land Use and Community Form*</td>
<td>2012</td>
<td>2021</td>
</tr>
<tr>
<td>Community Protection*</td>
<td>2012</td>
<td>2022</td>
</tr>
<tr>
<td>Resource and Conservation*</td>
<td>2012</td>
<td>2022</td>
</tr>
<tr>
<td>Economic Prosperity</td>
<td>2012</td>
<td>2023-2025</td>
</tr>
<tr>
<td>Growth Management</td>
<td>2012</td>
<td>2026-2027</td>
</tr>
<tr>
<td>Community Health and Services</td>
<td>2012</td>
<td>2029-2030</td>
</tr>
<tr>
<td>Vision and Purpose</td>
<td>2012</td>
<td>---as needed---</td>
</tr>
<tr>
<td>Implementation Program</td>
<td>2012</td>
<td>---as needed---</td>
</tr>
</tbody>
</table>

* State law requires certain information be included in General Plan elements at the time a jurisdiction next revises a Housing Element. This invariably involves land use-related policies. Furthermore, Government Code Section 65302 requires all cities and counties to amend the
safety and conservation elements of their General Plan to include analysis and policies regarding hazard information upon the next revision of the Housing Element, which is scheduled to cover the 2021-2029 planning period. For this reason, these elements have been grouped together or sequenced in a logical manner to ensure that the City’s policy framework is updated in a timely manner to continue to guide growth and development in a beneficial direction, while satisfying all state mandates.

IV. Progress in the General Plan’s Implementation

Generally, all of the existing parcels of land that have been developed have been purposed with land uses consistent with the General Plan. Residential land use currently accounts for 70.8 percent of all land area in the City, more than any other land use. Commercial, office, and industrial uses account for approximately 5.7 percent of total land area in the City. Public lands and open spaces accounts for 15.1 percent of the total land area in the City, which are generally dispersed throughout the City. Most of the streets and highways described in the General Plan are developed to their planned capacity, or have capacity to be fully implemented in time. Some of the roadways could be downgraded and repurposed to achieve other General Plan objectives. The entire infrastructure needed to serve the planned land uses is in place with sufficient capacity to accommodate the planned land uses and population, except for localized drainage and/or outfall-related issues.

A. Land Use and Community Form

The Land Use Element is one (1) of seven (7) elements required by state law to be included in California General Plans. The Element guides the desired pattern of growth, development, and change in the community. The purpose is to ensure that a balance of residential, employment, commercial, recreational, civic/cultural and open space land uses are provided at appropriate intensities, locations and combinations to enhance community sustainability. Goals identified in the Land Use / Community Form Element foster Escondido's role as an urban center. The Plan emphasizes the revitalization of the downtown area and established neighborhoods, promotes economic development in the form of attractive, sustainable, economically viable industrial and commercial areas, and concentrates high intensity activities in the urban core. Topics or policy issue areas covered in the Land Use and Community Form Element include the following:

- Community Character
- Land Use Zoning
- Residential Development
- Residential Clustering
- Planned Development
- Mixed Use Overlay Zones
- Commercial Land Uses
- Office Land Use
- Industrial Land Use
- Specific Plan Area Land Use
- Open Space/Park Land Use
- Public Facility Overlay
- Tribal Area Land Use
- Development Agreements
- Annexation
- General Plan Review and Amendments
- Environmental Review
Indicators and General Plan Implementation (2019)

- 53,516 total housing units
  - 51,439 total housing units occupied
  - 2,077 vacant (or 3.8 percent prevailing vacancy rate. The amount was 4.8 percent prevailing vacancy rate in 2018, a year-over decrease of 1.0 percent from 2018)
- Major pipeline projects (initiated, in progress, or completed during the reporting period)
  - # of units issued zoning permits: 533
  - # of units denied zoning permits: 131 (Touchstone, Aspire in October 2019)
  - # of building permits issued: 37
  - # of units issued certificates of occupancy: 352
  - Over the past year, the City of Escondido and the development community added more than 352 housing units to our City, and we have about 2,800 more in the pipeline. This includes 970 units planned, permitted, or under construction in the downtown area, which will be help bring much more foot traffic and activity to our downtown businesses.
  - Additional pipeline projects include: 183,500 square feet of new retail commercial space, 86,000 square feet of new medical office space, and 697 new hotel units (keys).
- Approved and/or processed planning projects or administrative activities:
  - 3 Admin Adjustment
  - 1 Adjustment Plat
  - 36 Accessory Dwelling Units
  - 64 Banner Signs
  - 85 CofA
  - 2 CoC
  - 31 Conditional Use Permits
  - 27 Design Review Permits
  - 2 Grading Exemption
  - 1 General Plan Amendment
  - 15 Plot Plan
  - 2 Tentative Subdivision Map
  - 2 Tentative Parcel Map
  - 85 Sign
  - 24 Zoning Letter
  - 1 Zone Change
  - 1 Nonconforming Use Determination
  - 1 Extension of Time
  - 7 Planned Development
  - 3 Specific Plan Amendments
  - 2 Daley Ranch Credit Purchase
  - 1 RV Parking
  - 1 EIR
  - 5 MND
- 3,763 total building permits issued in 2019:
  - This is a year-over increase of 4.8 percent from 3,589 in 2018.
  - Building permits issued:
- 11 new single-family homes (22 homes were issued in 2018 and 236 homes were issued in 2017).
- 25 Accessory Dwelling Units (15 in 2018 and 1 in 2017)
- 6 new commercial structures (16 new commercial structures in 2017).
- 0 new industrial buildings (5 new industrial buildings in 2018 and 2 new industrial buildings in 2017).

- 2,701 code enforcement cases received in 2019:
  - 34 average number of days that code enforcement cases were open. This is a significant decrease from 48 average days in 2018.
  - 3,055 code enforcement cases received in 2018. This is a year-over decrease of 11.6 percent.
  - 3,242 code enforcement cases were received in 2017. This is a two year-over decrease of 16.6 percent.
  - 3,406 code enforcement cases were received in 2016. This is a three year-over decrease of 20.7 percent.
  - 2,709 code enforcement cases were received in 2015.

- 4,867 total code enforcement inspections performed in 2019. There were 5,675 total code enforcement inspections performed in 2018.
  - 36,425 total tags and graffiti reported removed. (26,932 in 2017). All of our graffiti eradication team staff are now using Cityworks technology and handheld devices to create a very efficient graffiti eradication program. Cityworks applications has paved the way to capture substantial graffiti information used for restitution and create patterns for enforcement. Graffiti Eradication staff created 6,529 graffiti reports in 2019 and the Escondido Report-It app contributed to an additional 2,979 graffiti reports which creates proficiencies in the City’s response to graffiti.
  - 93 code enforcement parking citations, a year-over increase of 102.2 percent from 46 in 2018. And a two year-over increase of 29.1 percent from 72 in 2017.

- South Center City Specific Plan was adopted in 2018. The Plan won a San Diego Section APA award of excellence in 2018 for the Public Outreach award category in 2018. In 2019, the Plan also won an APA award of excellence for the “Advancing Social Diversity and Change” category.

- Certified the FEIR for Nutmeg Condos.
- Initiated the Climate Action Plan update in 2018 and concluded Phase 1 outreach in 2019, with direction received from Council regarding measures and strategies. City staff initiated the development of an adaptation, social equity, and environmental justice chapter(s) based on Council direction and public feedback.
- Completed the Zoning Code Land Use Study and adopted amendments to the Escondido Zoning Code to strengthen the effectiveness of our zoning code regulations on certain non-residential land uses.
- Adopted a transfer development rights (TDR) and unit-banking (UB) program in the downtown area to ensure the full, future build-out of the downtown at the densities envisioned as part of the 2012 General Plan. This will be critical component of the Housing Element update to optimize residential land inventory calculations and yield
assumptions to meet RHNA objectives. The project known as the “Ivy” utilized a transfer of 24 units to make the project more viable and, after completion, would add additional density to the downtown area.

- The City Business Licensing Division and Code Enforcement Division went live with the new online permit and activity tracking tool, “Cityworks.” The Building Division, Planning Division, and Engineering Services Department expect to launch in 2020.
- Grants:
  - SB2 planning grant to prepare an updated Housing Element, feasibility study, and specific plan for the east valley area and HP zone ($310,000).
- Code Enforcement completed abatement of three large hoarder properties through the receivership process.
- Code Enforcement vacated 22 people from a sober living facility due to unpermitted alterations which resulted in substandard living conditions. The property was rehabilitated and reopened.
- Code Enforcement vacated a single family residence that had been illegally converted to multifamily housing. 29 residents were displaced due to the hazardous substandard living conditions.
- Code Enforcement in cooperation with Public Works and the Police Department have cleaned out numerous homeless encampments on both public and private property throughout the city.

**Anticipated Implementation Activities (0-3 Years):**

1. Amend Article 47 to include appropriate features, thresholds, and objectives that reduce environmental impacts when considering pedestrian or transit-oriented development.
3. Amend Zoning Ordinance to include the implementation of smart growth principles.
4. Prepare a mobilehome park study.
5. Complete the Climate Action Plan update and begin implementation.
6. Establish opportunities to implement the Mixed Use Overlay of the East Valley Parkway Target Area (underway).
8. Update the Sign Ordinance.

**B. Mobility and Infrastructure**

The Circulation Element is one (1) of seven (7) mandated elements that each local government must maintain in its General Plan. The Circulation Element must include the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities. Circulation and utility improvements must also correlate with the land use-related policies. The purpose is to identify the types, locations and extent of existing and proposed transportation and utility facilities, and to establish goals and guiding policies for implementing improvements necessary to serve existing and future residents.
element introduces planning tools essential for achieving the community’s transportation and utility goals and policies with the intent of providing a sustainable system to serve residents and businesses. Topics or policy issue areas covered in the Mobility and Infrastructure Element include the following:

- Regional Transportation Planning
- Complete Streets
- Pedestrian Network
- Bicycle Network
- Transit System
- Transportation Demand Management
- Street Network
- Parking
- Traffic Calming
- Goods and Services Transport
- Aviation
- Water System
- Wastewater System
- Storm Drainage
- Solid Waste and Recycling
- Energy
- Telecommunications

**Indicators and General Plan Implementation (2019)**

- **Commute Travel:**
  - 78.8 percent of commuters drove alone
  - 10.3 percent of commuters carpooled
  - 2.5 percent of commuters walked or used a bicycle
  - 2.3 percent used public transportation
- Mean travel time to work – 27.5 minutes. A year-over increase of 0.4 from 2018, two year-over increase of 1.2 minutes from 2017, and a three year-over increase of 2.2 minutes from 2016.
- 2.7 percent of workers had no vehicle available. 43.0 percent of workers had three or more vehicles available.
- 98.3 lane miles of streets resurfaced. (98 lane miles resurfaced in 2018, 94 lane miles in 2017, and 67 lane miles in 2016.)
- 75 street trees placed. Only 42 street trees replaced in 2018.
- 763 total lights have been converted to LED.
- 0.74 miles of sidewalks replaced.
- 16 miles of bike lanes added or improved. 6.5 miles of bike lanes in 2018.
- 60 pedestrian lamps installed. 36 pedestrian lamps installed in 2018.
- Completed design of El Norte Parkway Bridge, Medians and Pedestrian Signal
- Began construction of Spruce Street Channel Improvements and Pedestrian Bridge.
- Completed rehabilitation of 2,122 lineal feet of corrugated metal storm drain pipe.
- Completed construction of traffic signals at Valley/Date and El Note/Fig.
- The Spruce Street Channel Improvement Project progressed significantly in 2019.
- **Grants:**
  - Cycle 4 Active Transportation Grant: Escondido Creek Trail Transit Center Bicycle Path Improvement Project ($747,000)
  - Local Road Safety Plan Grant ($72,000)
- **Water-related:**
- 32,691 acre feet produced (28 percent local and 72 imported)
- 19,831 acre feet to Escondido Water District and 12,860 acre feet to VID

- Recycle water-related:
  - 2,225.85 acre feet produced and 1,972.04 acre feet sold to Escondido, Rincon, and Palomar Energy Plant

- Wastewater-related: For CY 2019
  - Influent – 5,105.6 MG
  - Effluent – 4,110.8 MG
  - Outfall capacity – 20.15
  - Plant capacity – 18 MGD
  - We are at 55.9 percent of our outfall capacity. This is an increase from 48.2 percent in 2018.

- No money was received from Prop 1E Grant for our Lake Wohlford Dam project during 2019.

- Water-related infrastructure:
  - Modifications to A-3 and A-11 Reservoirs currently in design.
  - Emergency Treated Water Connection. Adding a treated water connection from the San Diego County Water Authority treated water pipeline for use in the event that there is an emergency that limits or eliminates the ability of the Water Treatment Plant to produce treated water. Currently in design.
  - Lindley Reservoir Replacement. Replace the existing 2 MG steel reservoir constructed in 1950 with two 1.5 MG pre-stressed concrete reservoirs. Currently in design.
  - Water mains replacement. Replaced the water mains in West 7th Avenue between Quince and South Broadway, and in South Broadway between West 7th Avenue and Valley Parkway. RFP out for design.
  - Obtained easements across private parcels for the San Pasqual Undergrounding Project (Escondido Canal through the San Pasqual Reservation as per the Settlement Agreement with the Indian Bands). The project is currently in design.

- Wastewater-related infrastructure:
  - Hale Avenue Resource Recovery Facility (HARRF). Work includes modifying the primary sedimentation tanks, replacing the sludge and scum collection system, replacing the odor control facility, and replacing the grit storage facility. This work was completed in August 2018.
  - The Brine Line Project extends the existing brine pipeline from the Broadway crossing of Escondido Creek (near Grape Day Park) to the existing brine line in Harmony Grove Road. This project will construct approximately 12,200 lineal feet (2.3-miles) of 16-inch high-density polyethylene (HDPE) and 15-inch polyvinyl chloride (PVC) brine gravity pipeline using a combination of open trench and jack and bore methods. This project will also include the construction of manholes and small diameter fiber optic conduits. Construction started in April 2018. The project was completed in August 2019.
- Sewer gravity main trunk lines replaced – project completed. Approximately 1007 feet of 24” RCP replaced with 30” C-905, 836 feet of 27” RCP replaced with 36” C-905 for a total of 1843’ of sewer gravity main trunk line replaced.
- Recycled water. Currently in construction is the recycled water pipeline from Citrus Avenue and Escondido Creek to the agricultural area of Cloverdale and Mountain View; converting the existing Hogback Reservoir to recycled water and constructing a new potable water reservoir. Currently in design is a 10 MG emergency storage pond and pipelines to distribute the recycled water to agricultural users.
- Membrane Filtration Reverse Osmosis Facility (MFRO). A two-step Design-Build procurement process was initiated for the design and construction of a MFRO facility and pump station to improve recycled water quality for agricultural uses. The MFRO design is nearing completion and public review of the CEQA document is expected to commence by spring 2020.

**Anticipated Implementation Activities (0-3 Years):**

1. Update and integrate our existing Bikeway Master Plan and Trails Master Plan with a Pedestrian Master Plan, prepared as a Complete Active Transportation Strategy for the city.
2. Prepare a streetscape plan and design for Grand Avenue (underway).
3. Update the Circulation Element portion of the General Plan, with a focus on roadway classifications (underway).
4. Develop and implement a Transportation Demand Management Program.
5. Define Urban Code Area for establishing traffic Levels of Service or VMT areas to streamline CEQA review on future development projects.

**C. Housing**

The Housing Element assesses the housing needs of all economic segments of the City of Escondido. In addition, the Housing Element defines the goals and policies that will guide the City’s approach to resolving those needs and recommends a set of programs that would implement policies over the next few years. Topics or issue areas covered in the Housing Element include the following:

- Plan for quality, managed, and sustainable growth
- Provide a range of housing opportunities
- Enhance the quality of housing and preserve character

**Indicators and General Plan Implementation (2019)**

- The primary existing housing type in the City was single-family homes detached homes (25,068 total housing units).
- There are 3,507 attached single-family homes.
- Two-family and multi-family condominiums, townhomes, and apartments comprised 19,547 total housing units.
• 3,305 total mobilehomes.
• 5.1 median rooms per housing unit, citywide.
• 51.7 percent of all housing is owner-occupied. This is an increase of 1.9 percent from 49.8 percent in 2018.
• The average size of an owner-occupied unit – 2.91 persons per household.
• The average size of a renter occupied unit – 2.92 persons.
• Vacancy rates: The homeowner and rental vacancy rate is 2.1 percent
• Major pipeline projects (initiated, in progress, or completed during the reporting period)
  - # of units issued zoning permits: 533
  - # of units denied zoning permits: 131 (Touchstone, Aspire in October 2019)
  - # of building permits issued: 37
  - # of units issued certificates of occupancy: 355
• Construction of an affordable residential development was completed: Veterans Villas, a 54-unit permanent supportive rental housing development serving homeless veterans (48 new construction and 6 rehab)
• An RFP was released for federal HOME and Successor Housing Agency (SHA) funds for the construction or rehabilitation of affordable housing. $1,000,000 in HOME funds were committed to San Diego Habitat for Humanity to construct up to 10 homeownership units and $1,000,000 in SHA funds were committed to Veterans Village of San Diego as permanent financing for newly constructed homeless veteran permanent supportive housing.
• A Homelessness & Housing Community Advisory Group was initiated to harness public energies around homeless solutions.
• Escondido participated in the North County Homeless Action Committee with elected representative and staff to come to regional consensus regarding goals and solutions. The Committee will continue to strategize in 2020.
• 6-units of transitional housing for homeless households were rehabilitated with federal HOME funds.
• Federal HUD funds ($132,052 in ESG and $45,000 in CDBG) were committed to address homelessness through shelter operations, case management, and homelessness prevention.
• Grants:
  - The City’s 2018 HEAP grant was approved and Escondido contracted with Interfaith Community Services to hire a full time social worker to assist unsheltered chronically homeless individuals to access available services and shelter (and ultimately, homes). Escondido Homeless Case Management ($192,995)
  - 2020 Census Outreach ($77,000)
  - SB2 Planning Funds ($310,000)
• 30 very-low income seniors and disabled households were assisted in mobile homes and apartments with a monthly rental subsidy while waiting for HUD Housing Choice Vouchers (Section 8)
• During 2019, 1,040 Escondido residents received Housing Choice Vouchers from the Housing Authority of San Diego County
- There are 2,032 households on the wait list, which is a year-over decrease of 85.40 percent decrease from 13,924 households in 2018.

- The City conducted five mobile home rent control hearings (all short form)

- In 2019, 17 neighborhood groups were supported, including neighborhood clean-ups, neighborhood leadership forum meetings, and participation of multiple departments at neighborhood group meetings

- In FY 2019-2020, the City received $1,824,482 in CDBG funds (a year-over increase of 1.8 percent from $17,791,466 in FY 2018-2019). For this cycle, $307,715 supported public service and fair housing activities supporting the six local CDBG priorities: Youth, Economic Development, Seniors, Neighborhood Revitalization, Homelessness, and ADA Improvements. This amount is a year-over increase of 1.6 percent from the previous cycle’s $302,750

- In 2019, work began on a new 5-Year Consolidated Plan to identify and address the community development needs, affordable housing and homeless needs effecting Escondido’s low-mod neighborhoods and households.

**Anticipated Implementation Activities (0-3 Years):**

1. Prepare and implement 5-Year Consolidated Action Plans and/or Annual Action Plans.

2. Complete the Comprehensive Strategy to Address Homelessness and begin implementation.

3. Initiate and adopt a 2021-2029 Housing Element and pursue early implementation of some anticipated Housing Element action items:
   - Remove constraints to housing development, such as ground floor retail requirements in the downtown area. Although key corridors and nodes should continue to feature ground level retail activity, applying the restriction throughout the Downtown Specific Plan unduly constrains development opportunities.
   - Assign minimum density standards for the downtown and other key residential zones to ensure that new development accommodates future housing needs, stabilizes neighborhood development, and promotes smart growth objectives to focus growth near infrastructure. This will be critical component of the Housing Element update to demonstrate SB 166 compliance ("No Net Loss" law), as well as objectives and to promote environmental sustainability.

**D. Community Health and Services**

The Community Health and Services Element establishes policies that influence good land use planning in order to enhance community health and welfare. Policies supporting access to healthy foods, availability of parks, recreational opportunities, libraries and cultural services, as well as promoting educational advancement and civic engagement all aim to improve economic, physical, and social conditions. The Community Health and Services Element promotes a community-based and private sector approach for establishing a sustainable and healthy
community. Topics or issue areas covered in the Community Health and Services Element include the following:

- Health and Wellness
- Parks and Recreation
- Library Services
- Cultural Enrichment
- Schools and Education
- Civic Engagement
- Childcare
- Older Adult, Disabled, and Disadvantaged

**Indicators and General Plan Implementation (2019)**

- Median age – 33.8 years
  - The population that is 65 years and older – 11.8 percent
  - Children ≤ 18 years old in households – 24.8 percent
- The City’s first four-year university, John Paul the Great Catholic University, completed its sixth full year of operation.
- The City began using $1,207,600 in grant funds to the City to improve parks and community centers in low-income, park deficient neighborhoods (projects to be completed in 2020).
- 6,556.3 acres of parkland. The Escondido Country Club project, approved in 2017, would add public parkland to the City inventory (anticipated to be completed in 2020-2022).
- 11 new upgraded parks or facilities in 2019:
  - Don Anderson Building: Exterior lighting improvements, and a new dumpster enclosure.
  - East Valley Community Center (EVCC): Improved lighting in the parking lot, and water efficient landscaping improvements.
  - Grape Day Park: Rehabilitation of two art pieces (Monuments to Time in the Corridor of Life, Art and Culture; and Blue Granite Shift); installation of new skirting on the historic Santa Fe Train Depot; converted irrigation surrounding historic museum buildings to drip irrigation; removed old landscaping and replacing it with drought resistant, appropriately-sized landscaping; and rehabilitation of the fountain feature.
  - Grove Park: Complete restroom rehabilitation, improve landscaping, trash facilities, and improved park lighting.
  - Jim Stone Pool: Rehabilitation of the bathhouse, including reroofing, improvements to the locker rooms and mechanical building, and structural repairs.
  - Mathes Center: Rehabilitation of current facilities including enhancements to public areas (flooring, fixtures, and painting), as well as water efficient landscape improvements.
  - Felicita Mini Park: Water efficient landscaping improvements.
- Oak Hill Activity Center: Water efficient landscaping improvements.
- Park Avenue Community Center (PACC): Installation of a new (20-ton) air conditioning unit and improved landscaping surrounding the building and private courtyard.
- Washington Park: Complete restroom rehabilitation (including conversion to single occupancy units); pool house rehabilitation (rehabilitation of shade structures, reroofing and painting); recreation building rehabilitation (brand new air conditioning, reroofing, window replacement, flooring replacement, electrical upgrades, restroom upgrades, new appliances, improvements to cabinets and countertops, upgraded lighting, interior & exterior paint, replacement of damaged exterior doors, and installation of brand new 30'x40' concrete pad); baseball field upgrades (turf, grading, lighting, backstop, and fencing); resurfaced tennis courts; resurfaced basketball courts; and improved landscaping and park lighting.
- Westside Park: Complete restroom rehabilitation, installation of new bike racks, a new fence feature along the western boundary, and improved lighting.

- 609 recreational programs in 2019, which is a year-over decrease of 2.6 percent from 625 in 2018, but a two year-over increase of 41.9 percent from 429 recreational programs. There were 844 programs in 2016, or a three year-over decrease of 21.3 percent:
  - 4,418 total students participating.
  - 1,203 participants in the youth soccer program.
  - 6 youth soccer, pop Warner, and baseball leagues with 3,809 participants.
  - 190 adult softball teams with 2,280 participants.
  - 11 soccer tournaments (youth and adult) with 20,000 participants.
  - 12 softball tournaments with 22,000 participants.
  - 9,038 participants/visits at the skate park.
  - 58 adult hockey teams with 638 participants.

- No. of new miles of public trails in 2019 – none

- In partnership with Lakes & Open Spaces staff, Community Services expanded outdoor recreational offerings and revamped the Escondido Recreation Guide to include more free and low-cost events and programs, as well as more relevant City-related news.

- New improvements to libraries in 2019:
  - Staffing on-site Park Rangers has improved the safety, security, and environment of the library campus.
  - City Council voted to approve the removal of DVD and media rental fees which has reduced barriers and increased access for patrons and created efficiencies in the back-end workflows for staff.
  - Polaris ILS- easier to use, more accessible (web based) for staff, patron notification more streamlined and works better, more options. Better catalog.
  - Flipster for eMagazines- offers both in-browser and app options for reading, have People magazine, which is very popular among patrons, less expensive and better product.
  - Improved wireless network technology resulting in less dropped connections, faster speeds, and better metrics for staff.
- Hosted Career Fair and Wellness Expo for adults.
- Added BeYoutiful Nail Art and Animanga Kurabu monthly programs for teens
- Added board game collection to Adult Services for checkout in the library.

• Library technology:
  - 123,369 wireless internet sessions in the library. This is a decrease from 145,973 sessions in the library in 2018 and 141,325 in 2017.
  - 349,638 website hits in 2019. This is an increase from 288,036 website hits in 2018 and 184,069 website hits in 2017.

• Library circulation:
  - 493,546 items circulated, and increase of 16.7 percent from 2018 when 422,939 items were circulated.
  - 45,613 check outs of digital media (eBooks, eAudiobooks, etc.), an increase of 26.3 percent from 31,159 check outs of digital media in 2018

• Library programs:
  - 294 children's programs and 10,706 in attendance. In 2018, there was 118 children’s programs, with 4,818 attending. In 2017, there were 125 children’s programs and 4,740 attending.
  - 116 adult programs in 2019. 96 adult programs in 2018 (includes Pioneer Room and Literacy)
  - 56 teen programs and 541 attending in 2019. 20 teen programs and 220 attending in 2018.
  - 34 family programs and 3,045 in attendance in 2019. In 2018, 12 family programs and 1,315 attending.

• The Library received the 2019 California Library Association PRExcellence Award for best print marketing (under $5 million category) for their Boos and Booze program materials. The goal of this event was to provide a fun, spooky, informative experience to adult patrons, ages 21+. By fostering an interest in the history of Escondido (especially the site of the current Library building), showcasing the local beer culture that is so prevalent in San Diego County, and appealing to the 25-35-year-old age group (which is the lowest demographic of Library users at Escondido Public Library), Escondido caught the attention of CLA and ultimately the PRExcellence Award for their creativity to organize a community even that brought this hard to reach population to our library.

• Childcare programs:
  - Number of Day Camp programs conducted – 21
  - Pre-school programs – 75
  - After School programs (City) – 2
  - After School Education and Safety (ASES), EUSD programs – 10

• Elderly/disabled/disadvantaged programs:
  - 51 programs for seniors, down from 66 programs in 2018.
  - 24,102 meals served to seniors, down from 26,643 meals in 2018.
  - 13,129 rides provided to seniors from home to the Park Avenue Community Center (PACC) to eat and enjoy the programs. This is down from 13,562 rides in 2018.
Anticipated Implementation Activities (0-3 Years):

1. Update the master plan of trails to include Pedestrian Master Plan and elements, as an intrinsic component of a citywide Complete Active Transportation Strategy, which would include a new bikeway master planning and art programming.
2. Various neighborhood improvement initiatives, as established by the City Council Work Plan from time to time.
3. Complete new Washington Park Skate Spot and expanded parking lot improvements (planning and design underway).

E. Community Protection

Escondido’s Community Protection Element addresses such issues as flood and fire hazards, geologic and seismic activity, and hazardous materials. Sections regarding Emergency Preparedness, Police and Fire service are also included. The Element also includes a section addressing Noise, which is a required component for General Plans. The purpose of the Community Protection Element is to identify and address the most relevant public safety issues affecting the community. In addition, the Element offers possible solutions and establishes standards and policies for proactively addressing threats to life and property. Topics or issue areas covered in the Community Protection Element include the following:

- Disaster Preparedness and Emergency Response
- Fire Protection
- Police Services
- Code Enforcement Policies
- Noise
- Flood Protection
- Solis and Seismicity
- Hazardous Materials

Indicators and General Plan Implementation (2019)

- No. of calls for service in 2019:
  - 50,798, a year-over decrease of 2.9 percent from 52,313 in 2018, and a two year-over decrease of 5.4 percent from 53,696 service calls in 2017.
  - 58,802 9-1-1 calls, a year-over decrease 3.2 percent from 60,759 9-1-1 calls in 2018. There were 45,064 9-1-1 calls in 2017.
  - 103,654 total police calls for service (which includes all calls for service, traffic stops, extra patrols, and other police related activities. There were 99,193 total calls in 2018, 115,699 total calls in 2017, and 104,579 calls in 2016.
- No. or parking citations in 2019 – 6,744, a 8.1 percent decrease from 7,341 in 2018. There were 6,256 in 2017.
- No. of reported accidents (by type):
  - 1,503 collisions, an increase of 42.6 percent from 1,054 in 2018.
  - 7 fatal collisions, an increase of 75 percent from 4 in 2018.
No. of noise complaints received/closed in 2019 – 1,630. A decrease from 2,222 in 2018. There were 1,660 complaints in 2017 and 1,565 in 2016.

No. of arrests (felony, misdemeanor) in 2019: 5,092, a year-over decrease of 0.5 percent from 5,108 in 2018. There were 5,866 in 2017 and 5,342 in 2016.
  - 1,591 felony arrests
  - 3,491 misdemeanor arrests
  - 344 other detentions

No. of police officers – 160 (includes one OTS grant funded position)

In 2019, the Police Department maintained 28 grants for a total of approximately $1,922,545.

The Escondido Police Department focused on community based crime reduction by partnering with citizens to find collaborative solutions through community engagement. Police officers and Department members work closely with Resident Leadership Academies, COMPACT, and multi-family housing management groups to increase safety in the community.

The Escondido Police Department assigned a School Resource Officer (SRO) to address underage tobacco and vaping usage. The EPD partnered with local schools and businesses to educate and enforce laws intended to keep youth from purchasing and using tobacco and vaping products.

Escondido Police officers received special training to recognize and address school violence. This proactive approach focuses on student wellness and assistance to keep schools safe.

The Crimes of Property Division worked and solved a major case involving retail thefts at local and regional hardware stores. The suspect was stealing goods and selling them on the Offer Up platform, which connects local buyers and sellers. Detectives worked with local loss prevention officers to identify the suspect. This collaboration resulted in an investigation and arrest for multiple felonies. Regional loss prevention administrators appreciated the EPD for its teamwork and professionalism.

No. of fire stations – 7

No. of Fire Department personnel:
  - 87 Firefighters (24 Fire Captains, 24 Fire Engineers, and 39 Paramedics)
  - 18 Non-Safety Paramedics
  - 6 Chief Officers
  - 1 Fire Marshal
  - 4 Prevention Officers (full time) and 1 part time Prevention Officer
  - 1 Emergency Preparedness Manager
  - 3 Administrative Staff (full time) and 2 part time Administrative Staff

No. of Fire Apparatus:
  - 7 Type 1 Frontline Fire Engines
  - 3 Type 1 Reserve Engines
  - 4 Type 3 Brush Engines
  - 1 Type 6 Brush Engine
  - 1 Frontline Truck
  - 1 Reserve Truck
  - 5 Frontline Ambulances
- 4 Reserve Ambulances
  - Average response time of Fire Department: 5 minutes and 11 second in 2019. The response time was 5 minutes and 14 seconds in 2018.
  - Met Quality of Life Standard Goal 91 percent of the time.
  - The average response time was 5 minutes and 15 seconds in 2017.
  - The average response time was 6 minutes and 29 seconds in 2016.
- Mechanical CPR devices: Purchased, training for all personnel, deployed on all ambulances.
- Automotive Vehicle Location (AVL) Dispatching: Closest units dispatched to incidents based on GPS location.
- Insurance Services Office (ISO) 5-year survey completed with a score increase and maintaining 2/2X rating.
- Fire Stations 1 and 2 water wise landscape completed: Water and cost savings with huge athletic improvement.
- Automated medication and controlled substances inventory control implemented
- Six wildfire preparedness community meetings.
- Fire Explorer program expansion.
- Emergency Operations Center Table-Top Exercise in conjunction other North County jurisdictions.

**Anticipated Implementation Activities (0-3 Years):**

1. Various public safety initiatives, as established by the City Council Work Plan from time to time.

**F. Resource Conservation**

Escondido’s Resource Conservation Element satisfies state requirements for the Open Space and Conservation Elements as stated in the Government Code. Community Goals and Objectives call for creating an aesthetically pleasing environment, as well as conserving Escondido’s natural and scenic resources. The Element's purpose is to identify areas for conserving open space as well as other important resources including air and water quality, cultural, agricultural, mineral and energy resources, as well as protecting hillside and ridgeline view corridors with particular emphasis on ridgelines, unique landforms and visual gateways. Topics or issue areas covered in the Resource Conservation Element include the following:

- Biological and Open Space
- Trails
- Visual Resources
- Agricultural Resources
- Historical Resources
- Water Resources and Quality
- Air Quality and Climate Protection

**Indicators and General Plan Implementation (2019)**
• 1,504 new solar PV units installed in 2019. 1,342 new solar PV units installed in 2018 and 989 new solar PV units were installed in 2017. This is a two year-over increase of 52.1 percent.

• The Spruce Street Channel Improvement Project progressed significantly in 2019. The City’s Utilities/Environmental Programs and Engineering Services Departments worked together to complete 100 percent design, secure permits from environmental agencies and North County Transit District (NCTD), complete bidding, and start construction. The final design includes a pedestrian bridge over West Valley Parkway, removal of an unused channel crossing, installation of two maintenance access ramps and new manholes, and flood walls. Construction began with invasive plant and accumulated sediment removal in July 2019.

• Environmental Programs worked with other Departments to track the implementation of pollution prevention programs including the following activities:
  o Investigated 409 non-storm water discharges, public complaints, or spills.
  o Reviewed, approved, and inspected projects with structural Best Management Practices (BMPs) to treat runoff from development or redevelopment permits.
  o Completed storm water program inspections and follow up actions, sometimes issuing escalated enforcement to achieve compliance. In FY 2018-19, the City performed 364 construction inspections, 44 municipal facility inspections, 1522 commercial inspections, 66 industrial inspections, and 15 residential area patrols.

• City staff recorded visual water quality observations at 109 major storm drain outfalls and analyzed water quality at 6 sites, twice in 2019.

• Swept 9,954 miles of streets, removing 4,551 tons of material before it reached storm drains. The Public Works Department continued a process to update this program with a GIS-based routing system in future fiscal years.

• Inspected 2,230 storm drain catch basins for accumulated debris and trash. Performed 872 cleanouts of storm drains, removing 178 tons of debris from the MS4.

• Cleaned 0.56 miles of open channel, removing 2,262 tons of invasive plants, trash and debris, and mobilized sediment prior to discharge to natural areas.

• The Wastewater Division implemented the sewer system maintenance program and achieved the following improvements in FY 2017-18, resulting in reduced risk of exfiltration or sewer spills: 18.3 miles of pipeline televised, 2,960 feet of gravity mainline replaced or repaired, and 282 miles of sewer lines cleaned.

• Environmental Programs led a multi-departmental effort to update the trash enclosure guidelines. The Escondido Municipal Code allows for requiring non-compliant facilities to install a roofed trash enclosure; this would only occur with thorough documentation of repeated violations. All Environmental Compliance inspectors are now noting the trash enclosure status, including a photograph, for all facility inspection reports.

• The City undertook significant effort to improve habitat and reduce unauthorized encampments in a section of the Reidy Creek channel adjacent to the Police and Fire Headquarters on Centre City Parkway, north of State Route 78. The City Fire Department led a contract with CAL FIRE to have crews manually perform removal of non-native plants and trim vegetation to improve visibility for law enforcement. Environmental Programs supported biological monitoring of the effort to ensure
Streambed Alteration Agreements and Best Management Practices were followed. The effort yielded 158 tons of vegetative debris, plus an additional 10.5 cubic yards of transient encampment material. Furthermore, the City continued to support the Escondido Creek Conservancy in preparations for their California Department of Fish and Wildlife grant to remove over 250 non-native trees, including Mexican Fan Palms. The project is slated for completion in FY 2019-2020, including development of a long-term management plan to be implemented as part of the Landscape Maintenance District program dedicated to that area.

- The City purchased and installed two new trash booms for implementation in Escondido and Reidy Creek flood control channels. These booms capture trash prior to discharge to the Harmony Grove habitat area, and are maintained on a regular basis (typically, after every major storm in the winter season) to ensure proper function.
- The Country Club golf course in the City of Escondido is being redeveloped into a residential community, Country Club Redevelopment Project - “The Villages”. The Villages project site encompasses an area of 97.5 acres and will have structural biofiltration BMPs to treat runoff. The City’s development agreement requires the developer to treat storm water from over 100 acres of neighborhoods outside of the Villages project site. During FY 2018-19, the first phase of construction (Village 1) was approved and construction was initiated in September 2019.
- The City installed 7 trash capture devices at “strategic” locations, where devices can function to capture runoff from multiple required inlets. The Utilities Department also funded a significant mapping effort to support compliance with Statewide Trash regulations. City staff also began an effort for inter-departmental compliance information management needed to manage the design, bid, installation, maintenance, inventory, and reporting for this program once requirements are incorporated into the MS4 Permit.
- In FY 2018-19, the Utilities Department completed 153 classroom and camp presentations to 3,696 elementary school students throughout Escondido, to educate them about water conservation and pollution prevention.
- In FY 2018-19, the Utilities Recycling Division led 43 events reaching approximately 1,200 residents. Notably, the City sponsors electronic and household hazardous waste events twice a month, reaching approximately 200 people a month. The City also hosted and promoted 4 used oil events, 3 compost workshops (with 36 total attendees), and two volunteer cleanups at Lake Dixon with 96 volunteers last year. Finally, the We Clean Escondido program supports approximately 10 neighborhood cleanup groups with an average of 3-5 volunteers per group, gathering approximately 2 bags of trash for monthly cleanups removing litter before it reaches the storm drain system.
- The City of Escondido remains committed to establishing an Alternative Compliance program. Environmental Programs staff participate in Regional Technical Advisory Committees for Alternative Compliance Program development, as well as the Water Quality Equivalency component. A Capital Improvement Program (CIP) fund was established to build funds for a future project to be constructed by the City, if feasible.
- Initiated the Climate Action Plan update in 2018 and concluded Phase 1 outreach in 2019, with direction received from Council regarding measures and strategies. City staff initiated the development of an adaptation, social equity, and environmental justice chapter(s) based on Council direction and public feedback.
Anticipated Implementation Activities (0-3 Years):

1. Prepare a Master Plan or design standards that identifies gateways and visual quality guidelines.
2. Conduct a study to determine the feasibility of expanding the city’s recycling program.
3. Complete the Climate Action Plan update and begin implementation.
4. Various resource and environmental initiatives, as established by the City Council Work Plan from time to time.

G. Growth Management

The purpose of the Growth Management Element is to establish policies for balancing the timing of infrastructure improvements with current and anticipated demands for service through the adoption of specific implementation techniques. A goal of growth management is to phase capital facility improvements concurrent with population growth so that new development does not compound existing service shortfalls, or result in critical infrastructure deficiencies. Effective growth management also establishes parameters for periodically monitoring the impacts that growth has on the community and defines the methods by which impacts are addressed, allowing decision makers to efficiently prioritize capital improvements. Topics or issue areas covered in the Growth Management Element include the following:

- Quality of Life Thresholds
- Public Facility Master Plans
- Public Facility Financing
- Public Facility Phasing
- Public Facility Deficiencies
- Growth Management Monitoring

Indicators and General Plan Implementation (2019)

- Total population – 152,232
- Total fees collected through building permits in 2019:
- Monitored and reported annually on the performance of development activity.
- Working with LAFCO to complete a Sphere of Influence Update and MSR to confirm properties appropriate to re-zone.
- City Council established a target Reserve balance of 25 percent.
- City conducted an assessment of public facility needs and costs, and the City Council approved an inflationary adjustment to development impact fees related to traffic, parks, drainage and public facilities to reflect the cost of constructing infrastructure associated with serving new growth.

**Anticipated Implementation Activities (0-3 Years):**

1. Prepare an Annexation Procedures Manual
2. Monitor Growth Management Measure
3. Participate in LAFCO’s island annexation program and contribute to orderly and fiscally solvent annexations into the incorporated city.
4. Various fiscal impact initiatives, as established by the City Council Work Plan from time to time.

**H. Economic Prosperity**

The purpose of the Economic Prosperity Element is to establish policies that promote the long-term vitality of Escondido’s local economy by developing and guiding employment and business opportunities and encouraging appropriate economic and business development in the city. Policies in this element promote a sustainable local economy to benefit current and future generations without compromising resources, and are intended to favorably influence the balance between employment and housing. Topics or issue areas covered in the Economic Prosperity Element include the following:

- Employment Acreage
- Wage and Job/Housing
- Small Business
- Twenty-First Century Industries
- Tourism and Recreation
- Existing Economic Districts
- Marketing and Image
- Long-Term Economic Wellbeing
- Minimizing Infrastructure Impediments
- Strengthening Workforce Qualifications
- City Leadership
- Economic Development Monitoring

**Indicators and General Plan Implementation (2019)**

- Civilian employed population – 73,405. This is a year-over increase of 2.4 percent from 71,644 in 2018; and a two year-over increase of 6.9 percent from 68,645 in 2017; and a three year-over increase of 10.8 percent from 66,225 in 2016.
  - Service occupations – 17,718 (24.1 percent)
  - Sales and office – 16,908 (23.0 percent)
  - Management/business sector – 8,398 (11.4 percent)
  - Education – 3,015 (4.1 percent)
  - Healthcare practitioner – 2,238 (3.0 percent)
- Major pipeline projects (initiated, in progress, or completed during the reporting period)
- Over the past year, the City of Escondido and the development community added more than 352 housing units to our City, and we have about 2,800 more in the pipeline. This includes 970 units planned, permitted, or under construction in the downtown area, which will be help bring much more foot traffic and activity to our downtown businesses.
- Additional pipeline projects include: 183,500 square feet of new retail commercial space, 86,000 square feet of new medical office space, and 697 new hotel units (keys).

- 10,317 total active business licenses.
- Business licensing has fully transitioned to Cityworks.
- Continued implementing the Working Together to Get to Yes initiative.
- Conducted a voter opinion survey of a potential sales tax revenue measure for consideration on the November 2020 election ballot.
- Continued to build on the momentum of the Innovate 78 regional economic development initiative focused on business retention expansion and attraction along the 78 Corridor and strategies to expedite permit processing and improve overall customer service.
- Work underway for the design of Grand Avenue streetscape and Street Alignment Plan.
- Held the annual local wineries event.
- Hosted Meet the Buyers in partnership w/Small Business Development Center.
- Hosted Connect to Capital workshop in partnership with Small Business Development Center.
- Renegotiated the City’s Franchise Agreement with Escondido Disposal Inc. pertaining to solid waste and recycling terms, provisions, conditions, rates and fees.
- Participated in Manufacturing Day event to identify and promote companies involved in the program.

**Anticipated Implementation Activities (0-3 Years):**

1. Economic Development strategies and tactics as outlined in the City’s updated comprehensive economic development strategy.
2. Economic Development strategies and tactics as outlined in the City Council Action Plan every two (2) years.
3. Continuation of the Innovate 78 initiative with new focus on the 78 Corridor’s startup ecosystem, entrepreneurship and talent pipeline development.
4. Partnership with the San Diego Regional EDC on a regional strategy for economic inclusion.
5. Promote investment in Escondido’s Opportunity Zone.
6. Redevelopment of properties in Spruce St. area.
7. Continued to explore tools to improve historic downtown core, including assessment district options.
V. Degree to which the General Plan complies with the Adopted Office of Planning and Research (OPR) Guidelines

The Governor’s Office of Planning and Research (OPR) is responsible for updating the resources for drafting and amending a general plan. OPR also monitors general plan implementation with annual progress reports from cities and counties, and grants general plan extensions for qualified cities and counties. OPR adopted General Plan Guidelines (GPG) in 2003 for use by local jurisdictions in the preparation of their general plans. Also, a December 2010 GPG update to the guidelines provided guidance on how to address the Complete Streets Act and modify the Circulation Element to plan for a balanced, multimodal transportation network. It is important to note that the Guidelines are permissive, not mandatory.

Staff has prepared an analysis of the Escondido General Plan compared to the general criteria included in State law, along with an evaluation of the degree to which the Escondido General Plan complies with the OPR Guidelines.

The GPG contain ten chapters and three appendices of requirements and references, in the following basic areas:

1. **General Plan Basics**: The General Plan generally complies with the basic requirements in that it is comprehensive, internally consistent, and has a long-term perspective.

2. **Sustainable Development and Environmental Justice**: The General Plan complies with guidelines for sustainable development and environmental justice. General plan policies and programs generally discuss inclusive public participation, social and economic well-being, jobs/housing balance, managed and balanced growth, livable communities and quality of life, and responsible resource conservation.

3. **Preparing and Amending the General Plan**: The City complied with the Guidelines in the preparation and adoption of the General Plan (2012) and continues to comply with the Guidelines, CEQA, and the Government Code in the processing of any General Plan amendments.

4. **Required Elements**: The General Plan contains all of the required elements (Appendix B).

5. **Format and Element Integration**: The format of the General Plan complies with the Guidelines in that all of the required elements are present and no one element takes precedence over any other (equal legal status). The document is posted on the City’s website and available for public review at City Hall and the Library.

6. **Optional Elements**: The General Plan includes optional elements that are either individual sections or are consolidated with other elements.

7. **CEQA and the General Plan**: The General Plan preparation, adoption, and amendments comply with all requirements of the California Environmental Quality Act.
8. **Public Participation:** The preparation, adoption, and administration of the General Plan all include public participation, to the extent required by the General Plan Guidelines, CEQA, and the Government Code.

9. **Implementing the General Plan:** To date, the implementation of the General Plan has complied with all applicable Guideline requirements, including consistency with zoning, subdivisions, redevelopment, building code administration, financing mechanisms, and the preparation of this Annual Progress Report.

10. **Special General Plan Considerations:** The General Plan preparation and administration comply with the applicable Acts.

**VI. Plans, Projects, and Accomplishments**

The Planning and Building Divisions processed a variety of planning permits during 2019, including conditional use permits (CUPs), subdivision map requests, and associated environmental reviews. The breakdown in applications received is reported in the Land Use portion of the General Plan indicators.

Progress in meeting the City's Share of Regional Housing Needs Government Code Section 65400(a)(2)(B) provides: "The Housing Element portion of the Annual Progress Report shall be prepared through the use of forms and definitions adopted by the Department of Housing and Community Development..." The tables provided in Appendix D demonstrates the progress made in meeting the City's share of regional housing needs. HCD requires a report format that consists of six Excel spreadsheets. Therefore, Appendix D also addresses the progress in meeting housing goals and objectives specified in the Housing Element, adopted in 2012.

**VII. Conclusion**

The General Plan is the City's guiding vision. Upkeep and maintenance of the General Plan is a continuous process. As noted in this Annual Progress Report, the City implements the General Plan's vision on a day-to-day basis, in its many planning projects, and strives to include the public in the decision-making process.
APPENDIX A
GOVERNMENT CODE SECTION 65400
Government Code Section 65400

a) After the legislative body has adopted all or part of a general plan, the planning agency shall do both of the following:

1) Investigate and make recommendations to the legislative body regarding reasonable and practical means for implementing the general plan or element of the general plan, so that it will serve as an effective guide for orderly growth and development, preservation and conservation of open-space land and natural resources, and the efficient expenditure of public funds relating to the subjects addressed in the general plan.

2) Provide by April 1 of each year an annual report to the legislative body, the Office of Planning and Research, and the Department of Housing and Community Development that includes all of the following:

A) The status of the plan and progress in its implementation.

B) The progress in meeting its share of regional housing needs determined pursuant to Section 65584 and local efforts to remove governmental constraints to the maintenance, improvement, and development of housing pursuant to paragraph (3) of subdivision (c) of Section 65583. The housing element portion of the annual report, as required by this paragraph, shall be prepared through the use of forms and definitions adopted by the Department of Housing and Community Development pursuant to the rulemaking provisions of the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2). Prior to and after adoption of the forms, the housing element portion of the annual report shall include a section that describes the actions taken by the local government towards completion of the programs and status of the local government's compliance with the deadlines in its housing element. That report shall be considered at an annual public meeting before the legislative body where members of the public shall be allowed to provide oral testimony and written comments.

C) The degree to which its approved general plan complies with the guidelines developed and adopted pursuant to Section 65040.2 and the date of the last revision to the general plan.

b) If a court finds, upon a motion to that effect, that a city, county, or city and county failed to submit, within 60 days of the deadline established in this section, the housing element portion of the report required pursuant to subparagraph (B) of paragraph (2) of subdivision (a) that substantially complies with the requirements of this section, the court shall issue an order or judgment compelling compliance with this section within 60 days. If the city, county, or city and county fails to comply with the court's order within 60 days, the plaintiff or petitioner may move for sanctions, and the court may, upon that motion, grant appropriate sanctions. The court shall retain jurisdiction to ensure that its order or judgment is carried out. If the court determines that its order or judgment is not carried out within 60 days, the court may issue further orders as provided by law to ensure that the purposes and policies of this section are fulfilled. This subdivision applies to proceedings initiated on or after the first day of October following the adoption of forms and definitions by the Department of Housing and Community Development pursuant to paragraph (2) of subdivision (a), but no sooner than six months following that adoption.
APPENDIX B
GENERAL PLAN RELATIONSHIP TO STATE LAW REQUIREMENTS
State law requires that general plans include seven elements. The elements may be combined or renamed, but basic requirements must be included. Elements for other topics of local concern may also be included. The relationship between State mandated elements and the Escondido General Plan are illustrated below.

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<tr>
<th>Mandatory Element</th>
<th>Escondido General Plan</th>
<th>Element Description</th>
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<tbody>
<tr>
<td>Land Use</td>
<td>Land Use and Community Form</td>
<td>Designates the proposed distribution and location of the uses of land for housing, business, industry, open space, and other categories of public and private land use activities.</td>
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<td>Circulation</td>
<td>Mobility and Infrastructure</td>
<td>Specifies the general location of existing and proposed major thoroughfares, transportation routes, and other local public utilities and facilities.</td>
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<tr>
<td>Conservation</td>
<td>Resource and Conservation</td>
<td>Addresses the conservation, development, and utilization of natural resources including water and its hydraulic force, soils, rivers and other waters, wildlife, minerals, and other natural resources.</td>
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<tr>
<td>Open Space</td>
<td>Resource and Conservation</td>
<td>Addresses the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life.</td>
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<tr>
<td>Safety</td>
<td>Community Protection</td>
<td>Identifies variety of risks and hazards. This includes any unreasonable risks associated with the effects of seismically induced surface rupture and tsunami, slope instabilities, flooding, and fire hazards.</td>
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<tr>
<td>Noise</td>
<td>Community Protection</td>
<td>Identifies noise problems and analyzes current and projected noise levels for highways, roadways, transit systems, and</td>
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<td>Optional Element</td>
<td>Community Health and Services</td>
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<td>--------------------------------------</td>
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<tr>
<td></td>
<td>Develops a policy framework</td>
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<td></td>
<td>for recreational services,</td>
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<td></td>
<td>library services, schools and</td>
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<td></td>
<td>education, cultural enrichment,</td>
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<tr>
<td></td>
<td>and public health and</td>
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<tr>
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<td>wellbeing.</td>
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<td>public facility planning</td>
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<table>
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<th>Economic Prosperity</th>
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<td>to promote the City’s long-</td>
</tr>
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<td></td>
<td>term viability and to advance</td>
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<tr>
<td></td>
<td>the City’s position as a</td>
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<tr>
<td></td>
<td>“economic hub” with employment</td>
</tr>
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<td>and business opportunities.</td>
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</table>
APPENDIX C
PIPELINE PROJECTS

Pipeline Project Map and Pipeline Project List:

https://www.escondido.org/planning.aspx
### ANNUAL ELEMENT PROGRESS REPORT

#### Housing Element Implementation

**Reporting Year**: 2019 (Jan. 1 - Dec. 31)

**Jurisdiction**: Escondido

---

#### Table A: Housing Development Applications Submitted

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<th>Project Name</th>
<th>Local Jurisdiction Tracking ID</th>
<th>Unit Category (SFA,SFD,2 to 4,5+,ADU,MH)</th>
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<th>Very Low-Income Non Dead Restricted</th>
<th>Low-Income Dead Restricted</th>
<th>Low-Income Non Dead Restricted</th>
<th>Moderate-Income Dead Restricted</th>
<th>Moderate-Income Non Dead Restricted</th>
<th>Above Moderate Income</th>
<th>Total PROPOSED Units by Project</th>
<th>Total APPROVED Units by Project</th>
<th>Total DISAPPROVED Units by Project</th>
<th>Notes</th>
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**Notes**:

- "**" indicates an optional field.
- Cells in grey contain auto-calculation formulas.
- **(CCR Title 25 §6202)**

---

**Summary Row: Start Data Entry Below**

- **Total APPROVED Units by Project**
- **Total DISAPPROVED Units by Project**
- **Notes**

---

**Streamlining**

- **Pursuant to GC 65913.4(b)** (SB 35 Streamlining)
### Table A2

#### Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

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<th>Unit</th>
<th>PHG</th>
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Note: "+" indicates an optional field.

(CCR Title 25 §6202)

Source: Interview with property owner

Affordability was based on rental price specified by property owner.

Price of readiness of the units to be developed.

Locality determined the units were affordable to be built.

For units affordable without financial assistance or deed restrictions,

Units completed and/or demolished.

Was Project

Notes:

[(SB 35 Streamlining)]

Affordability was based on rental price specified by property owner.

Price of readiness of the units to be developed.

Locality determined the units were affordable to be built.

For units affordable without financial assistance or deed restrictions,
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<th>Property Address</th>
<th>Type</th>
<th>Unit</th>
<th>Rentable Living Area (sf)</th>
<th>Rental Price (Year)</th>
<th>Construction Date</th>
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<td>Income Level</td>
<td>RHNA Allocation by Income Level</td>
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<td>2015</td>
<td>2016</td>
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Note: units serving extremely low-income households are included in the very low-income permitted units totals.
Cells in grey contain auto-calculation formulas.
ANNUAL ELEMENT PROGRESS REPORT
Housing Element Implementation

Table D
Program Implementation Status pursuant to GC Section 6583

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>Objective</th>
<th>Timeframe in H.E</th>
<th>Status of Program Implementation</th>
</tr>
</thead>
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<td><strong>1.1 Project Development -</strong> Create increased supply of affordable housing units for lower income households, including those households with extremely low incomes. Every effort will be made to accomplish this through redevelopment and acquisition/rehabilitation.</td>
<td>Increased supply of rental units for extremely low, very low and low-income residents. 390 units.</td>
<td>Ongoing</td>
<td>Within the HE period, the City contracted with Community HousingWorks. Interfaith Community Services and Solutions for Change to develop affordable rental projects consisting of acquisition/rehabilitation of existing units (CHW and Interfaith) and new construction (Solutions). The CHW project was completed in April 2017 and consists of 11 HOME affordable units out of 200 total affordable units in the project. Interfaith rehabilitated an existing 4-unit project in 2018. Solutions completed construction of a new affordable rental project consisting of 33 units (32 affordable) in July 2017. In 2019 Veteran’s Village of San Diego opened a 54-unit (including 48 units of new construction and 53 total affordable units) development serving homeless veterans. The City provided funding to assist ten of these units. Including 3 previous projects during the HE period (11 ownership units by SDHFH in 2015, 35 new rental units by CHW in 2013 and 44 rehabilitated units by UHC in 2015), a total of 147 affordable housing units have been created via local funding since 2013.</td>
</tr>
</tbody>
</table>

| **1.2 Lot Consolidation -** Encourage consolidation of small lots to utilize land more efficiently and facilitate the development of mixed use and affordable multi-family developments. | Facilitate development as envisioned in the General Plan. | Ongoing | A ministerial process is utilized for basic lot consolidation. The City continues to encourage consolidation of lots to facilitate mixed-use and affordable developments. |

| **1.3 Infill New Construction -** Support new construction of homeownership and rental units and redevelopment/revitalization on infill sites. The city also encourages recycling and revitalizing of sites for a variety of housing types and income levels. | New housing opportunities for homeownership and rental for low- and moderate-income households. | Ongoing | The majority of the affordable residential projects completed during the period have been on infill sites. Veteran’s Village (10 funded units out of 53 affordable) was completed in 2019 on infill land on South Escondido Boulevard. Solutions for Change completed construction on a new affordable rental project of 33 units (32 affordable) on an infill site on South Escondido Boulevard in July 2017. Interfaith Community Services rehabilitated a four-unit residential project on Aster Street in the center of the city to be used for low-income households in 2018. CHW rehabilitated 11 HOME affordable units (200 total) on Midway Drive in 2017. The 11-unit project by Habitat in 2015, the 35-unit project by CHW in 2013 and the 44 units by UHC in 2015 all were on infill sites. |

| **1.4 City-Owned Sites -** Facilitate the redevelopment/development of affordable housing on City-owned sites. | Use City-ownership as a potential inducement for rehabilitation of more affordable housing. | Ongoing | The Housing and Neighborhood Services Division, the Engineering Services Department, the City’s Real Property Agent, and other City staff continue to review City-owned properties when they become available as potential sites for redevelopment as affordable housing. |

| **1.5 Density Bonus -** Amend Density Bonus Ordinance to be consistent with State law. | Additional housing opportunities for low- and moderate-income households. | Ongoing | City staff completed an amendment to the Zoning Code in 2017 to modify Density Bonus provisions so they are in conformance with state law. The City will continue to maintain consistency with State density bonus law, including amending the Zoning Code as necessary. Several projects are currently in the pipeline or have been recently completed using Density Bonus provisions, providing additional affordable units. |

| **2.1 Housing Rehabilitation: Renter Occupied -** Continue to explore potential rental rehabilitation programs. | Increase opportunities for rental rehabilitation for lower income households (25 units). | Ongoing | Funding from a CalHOME grant allowed the City to re-establish an owner-occupied rehabilitation program for low-income households in single-family residences and mobile homes in 2015. The program ended after two years. Staff continues to explore funding opportunities for a new renter-occupied rehabilitation program. |

| **2.2 Acquisition/Rehabilitation -** Continue to explore ways to encourage the recycling of deteriorated and older structures for affordable housing opportunities. | Additional affordable housing opportunities for lower income households (200 units). | Ongoing | Recycling of existing, dilapidated structures continues to be a priority in Escondido. An RFP in 2014 for affordable housing developers resulted in two affordable rehabilitation developments: 11 acquisition/rehabilitation units in a 200-unit development was completed in 2017, and a 44-unit rehabilitation project was completed in 2015. An RFP in 2017 resulted in a 4-unit affordable rehabilitation project completed in 2018. |

Neighborhoods - Collaborate with departments to channel resources and efforts into improvement of neighborhood quality of life, including code enforcement, housing rehabilitation and capital improvements. The concentration of City resources to individual neighborhoods and the opportunity for significant community impact both in physical improvement and improvement in quality of life for neighborhood residents. Continue collaboration efforts through funding resources, policies and community outreach. | | | Currently there are 18 recognized neighborhood groups in the City. Project NEAT continues to utilize Community Development Block Grant (CDBG) funding to assist residents in solving their own neighborhood problems at a neighborhood (rather than a Code Enforcement) level, such as maintenance, graffiti, trash. The Neighborhood Transformation Project (NTP) is one effort to join neighborhoods with City Departments to combine resources (funding and sweat equity) in targeted areas to include neighborhood cleanups and public improvements. The City continues a focused approach in neighborhoods using additional strategies to improve neighborhoods by involving residents.
<p>| 2.4 Preservation of At-Risk Housing - Continue to explore means to continue housing affordability for lower income households that would be impacted by the conversion of subsidized projects to market rate housing. | Continued affordability of subsidized housing developments. If owner wishes to sell, contact potential buyers who would want to extend affordability, and if unsuccessful, follow up with Section 8 and relocation potential. | Ongoing | The City continues to monitor at-risk units, particularly those contained in the Housing Element. This effort is ongoing. The City worked with Community HousingWorks to preserve the affordability of 200 units in Cypress Cove (now Manzanita Apartments) while extending affordability on 11 of the units using HOME funds in 2017. In 2018-2019 the City helped preserve 6 affordable, transitional/supportive units at 1203 South Maple Street (Las Casitas) by committing CHDO funds for rehabilitation of the project. Community HousingWorks is approximately 9 years into the affordability period on an acquisition/rehab project and is preserving affordability by rehabilitating a number of structural problems not addressed originally (roof, termite, etc). No at-risk units were lost in 2017, 2018 or 2019. |
| 2.5 Portable Homebuyer/Home Entry Loan Program (HELP) - Provide low interest loans to lower income households for closing costs and down payment, of lesser of 5% of purchase price or $25,000, using federal HOME funds. | Increased homeownership opportunities for lower income households (150 households). | Ongoing | In December 2017 Housing and Neighborhood Services staff met with local real estate professionals to discuss possible impediments to issuing First-time homebuyer loans and possible solutions. The City continues to try to improve the success of the loan program. No HELP loans were funded during 2016, 2017, 2018 or 2019. 4 loans were funded during 2015, 2 during 2014 and 3 during 2013, for a total of 9 first-time homebuyer loans during the period. |
| 2.6 Portable Homebuyer/Mortgage Credit Certificates - Provide mortgage credit certificates to first-time homebuyers to reduce federal income taxes and more easily qualify for a loan. | Additional homeownership opportunities for low-and moderate-income households (20 households). | Ongoing | Although MCCs remain available to Escondido residents, a local MCC administrator no longer exists and MCCs are not reported locally after 2014. |
| 3.3 Rental Subsidy - Provide households with affordable rents through rent subsidy programs for households with incomes not exceeding 50% of the Area Median Income. | Provide rental subsidy to 110 very low-income senior/disabled households in mobilehome parks and apartments. Support Rental Assistance to 1,200 very low-income households with Housing Choice Vouchers through collaboration with Housing Authority of San Diego County. | Ongoing | During 2019, 1,040 Escondido households were assisted with a Housing Choice Voucher (Section 8 voucher), administered through the Housing Authority of San Diego County. An additional 2,932 households are on the wait list in Escondido. At the end of 2019, 23 senior/disabled households in mobilehome parks and an additional 7 in apartments, for a total of 30, were receiving a monthly rental subsidy from the City of Escondido while waiting for HUD Section 8 eligibility. Eligibility for the Rental Subsidy Program was tightened in 2012 due to the loss of redevelopment funds and the number of monthly subsidies has slowly declined. |
| 3.4 Mobilehome Park Conversion - Provide technical assistance to mobilehome resident groups in the conversion of existing parks to resident ownership. | Continued mobilehome resident ownership opportunities for lower income residents. Continue to work with City policies and procedures to assist in conversions. | Ongoing | The City continues to provide technical assistance to mobilehome parks considering conversions to resident ownership. No recent conversions have been requested. The City has been advised on the purchase of an existing mobilehome park and the potential change of use, although the owner is not currently moving forward. The City continues to manage the remaining City-owned spaces in Escondido Views (4 lots) and Mountain Shadows (22 lots) mobilehome parks. |
| 3.5 Mobilehome Rent Review - Rent review via the Rent Review Board of applications for increases in mobilehome parks. | Stabilized rents for mobilehome residents, many of whom are lower income. | Ongoing | During 2019, 5 short-form rent review hearings and no long-form rent review hearings were held. Average monthly increases approved for short form applications ranged from $9.88 to $18.41. |
| 3.6 Fair Housing - Actively engage in furthering fair housing for all residents through specific education outreach and monitoring activities. | Continued enforcement of the Fair Housing Plan which will prevent discrimination in housing and disputes between landlords and tenants. | Ongoing | In 2019 the City contracted with the Legal Aid Society of San Diego, Inc. to provide Fair Housing Services to Escondido residents, including handling reports of discrimination, and providing counseling and mediation in landlord/tenant disputes. City staff continues to disperse information at public counters, review potential impediments to fair housing, and meet with other jurisdictions to discuss and address regional issues. The City of Escondido has been working collaboratively with other jurisdictions in the San Diego County region to address Fair Housing reporting in compliance with HUD's current requirements. |
| 4.1 Emergency Shelters - Amend the Zoning Code to permit emergency shelters by right, consistent with State law. | Consistency with state law. Provision of shelter for families/individuals with special needs. | 0-3 years | The City’s Emergency Shelter Overlay, in compliance with State law, was approved by the City Council in October 2013. Staff re-evaluated the size and location of the Overlay in 2015, but left the language unchanged. The City is in compliance with State law. A year round shelter operated by Interfaith Community Services currently operates outside the Overlay area. |
| 4.2 Transitional/Supportive housing - Amend the zoning code to differentiate transitional/supportive housing operated as group quarters versus a regular housing development. Uses will be permitted where housing is otherwise allowed. | Increased housing opportunities for special needs persons. | 0-3 years | An amendment to the Zoning Code to define transitional and supportive housing as specified in State law, and to permit both where residential units are otherwise permitted, was completed in June 2017. |
| 4.3 Senior Housing Ordinance - Amend the Zoning Code to permit senior housing by right where housing is permitted. | Increased housing opportunities for seniors. | 0-3 years | An amendment to the Zoning Code to permit senior housing by right where housing is permitted, was completed in June 2017. |</p>
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**4.4 Monitoring of Growth Management Measure - Periodically monitor and evaluate Proposition S for its impacts on the cost, supply and timing of affordable housing.** Analyze the ability to accommodate the city's regional housing need, constraints on supply and affordability of housing. **Increased public awareness of the City's housing needs and obligations under state law.**

**5.1 Affordable Housing Financing - Continue to pursue a variety of funding sources to support affordable housing in the community.** Acquisition, rehabilitation, preservation or construction of affordable housing for lower and moderate income households.

**5.2 Housing Information and Referral - Update public information in many formats identifying the City's housing programs and provide opportunities to market these programs.** More effective and targeted housing programs, especially for lower income households.

**The City's Housing Element shows that the City's RHNA can be accommodated. In 2018 it does not appear that the existence of Proposition "S" discouraged or prevented construction of market or affordable units. The City will continue to monitor RHNA progress annually to determine whether growth management policies impact the City's ability to accommodate its affordable housing need.**

**Housing program and project information is updated as needed and is distributed via a variety of avenues, such as the City website, brochures, mailers and referral cards, and at the senior center and City Hall. Staff continues to seek additional ways to distribute information to the public. The City website was most recently overhauled at the beginning of 2018, resulting in an easier to read and use source of housing, fair housing and other information for the public. Updates to the website are ongoing as needed. In 2019, the City established the Communications and Community Services Department, which includes a Communications Officer who disseminates information through various media sources. This results in a broader reach of program information. In 2016 the Housing Division and Neighborhood Services Division were merged into the Housing and Neighborhood Services Division under a Housing and Neighborhood Services Manager. This allows for more streamlined assistance to the public.**

**In 2017 the City's residential zones were consolidated in one place in the Zoning Code to streamline requirements and provide for more consistency. A new category was established (R-5-30), implementing a General Plan designation allowing higher density in transit corridors and shopping/employment areas. The ADU standards are in compliance with State requirements, permitting the development of more affordable units. The City continues to evaluate residential development standards and policies that may directly impact provision of housing for all sectors of the community.**

**As documented in the Housing Element, adequate sites are available for a variety of housing types for all economic segments of the population, including high density zones. The Zoning Code has provisions for ADUs, mobilehomes, multi-family dwellings, SROs and residential care facilities. In 2013 the City approved a zoning overlay where emergency shelters are permitted by right. Similar code amendments were completed in 2017 for transitional/supportive housing and senior housing. There are no other known policies or regulations that constrain development of housing for persons with disabilities.**

**The City to periodically review fees to ensure they reflect current impacts and necessary impacts.**

**Requirements for on- and off-site improvements vary depending on the presence of existing improvements, as well as the size and nature of the proposed development.**

**The 2016 California Building Codes and Green Building Standards Code have been adopted by the City. The City has no local ability to waive provisions of State Building Codes. However, there is an appeal process to challenge interpretations of the building code requirements.**

**The City continues to explore ways to streamline processing of applications and reduce fees for affordable and mixed-use housing. During the current HE cycle, the Design Review Board was consolidated into the Planning Commission/staff review in an effort to streamline processing. In addition, the city complies with all streamlining efforts of housing applications required by the State.**