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Introduction

Since the City’s incorporation in 1960, Los Alamitos remains a community that values its citizens, its way of life, and its future as one of the preeminent communities in Southern California. This General Plan builds on the strengths of previous planning efforts, staying true to the community’s values and vision, and addressing future needs in a changing world.

This plan focuses on the preservation and enhancement of the existing Los Alamitos community while strengthening the employment base and promoting the creation of a town center to ensure long-term viability.

Another important focus of this General Plan is to provide a document that is approachable and easy to use. This plan focuses on providing clear, consistent, and substantive goals and policy direction to guide community members, staff, and elected officials when making decisions about Los Alamitos’ future.

Purpose

**Comprehensive Framework**

The General Plan establishes a comprehensive framework through which the City manages its growth and development to ensure it efficiently and effectively provides public facilities and services. With great public facilities and services, Los Alamitos delivers and continually enhances a high quality of life and a desirable business climate, maintaining its position among the most attractive places to live and work in Southern California.

Great communities develop over time, and Los Alamitos is no exception. In addition, great communities are the product of countless individual decisions by residents, businesses, investors, visitors, and organizations, as well as numerous collective decisions through elected and appointed officials and public sector staff. The purpose of the General Plan is to provide a common vision for the future of Los Alamitos and to provide coordination for the many individual and collective decisions that, over time, will lead to the envisioned future.

**Planning Area, Timeframe, and Contents**

The General Plan guides land use and development for the entire Los Alamitos planning area, which includes the City and JFTB and the community of Rossmoor. The General Plan identifies the Los Alamitos JFTB as Community & Institutional/JFTB. The civilian reuse of the JFTB is not considered likely in the near future, and the City fully supports the base maintaining its current role for the federal and state government and the City of Los Alamitos. Although the Los Alamitos JFTB is within the City’s municipal boundary, the City has no jurisdiction or land use authority on this US military installation.
Introduction

March 2015

The planning area also includes the community of Rossmoor as part of the City’s sphere of influence. Rossmoor is included to understand future demands for services and implications for growth in Rossmoor and the City. However, Rossmoor remains an unincorporated community governed by the land use and planning authorities of the County of Orange.

The previous General Plan was adopted in 1990 and maintained a planning horizon year of 2010. In 2011, the City began a comprehensive update of the General Plan to better reflect current conditions, refine goals and policies, and position the City for success over the next 20 years through the year 2035. The City will review and evaluate this General Plan periodically, but anticipates that a comprehensive update may be needed around the year 2025.

The General Plan is comprised of an overall Vision and seven topical elements. Whereas the elements address a group of topical issues, the Vision provides the common framework tying all of the General Plan together into a unified whole. The General Plan will also help guide and be implemented by other planning documents such as the City’s Annual Budget, Strategic Plan, Capital Improvement Plan, and of course the General Plan Implementation Plan.

Citywide Vision

Los Alamitos is an attractive, dynamic, and modern city renowned for its world-class schools, parks, and recreation facilities, as well as a nationally-recognized medical center.

The City is comprised of well-maintained neighborhoods that enjoy strong identities, generate civic pride, and collectively offer wide range of places to live.

Los Alamitos hosts a town center that defines the popular image of the City and offers multiple places for the residents, workers, and students of Los Alamitos to meet friends, stroll, enjoy great food, and shop.

The City is home to successful businesses that provide the City with a diversity of tax revenue and fiscal support, helping ensure Los Alamitos is economically sustainable.

Los Alamitos maintains a system of streets and trails that are safe for everyone and every form of transportation—be they children, families, workers, or customers who walk, bike, ride transit, or drive.

General Plan Elements

The elements establish the goals and policies relevant to land use, growth, and development of the City for a variety of topics and provide a framework for municipal decision-making. Equally as important though, the City intends the goals and policies to guide and help inform decisions of those investing in Los Alamitos—residents, businesses, and organizations. The specific elements are listed below, followed by a list of goals by element.

1. Land Use
2. Economic Development
3. Housing
4. Open Space, Recreation, and Conservation
5. Mobility and Circulation
6. Public Facilities and Safety
7. Growth Management
General Plan Goals by Element

Land Use Element
Goal 1: An attractive and pedestrian-friendly town center that serves as the heart of the community.

Goal 2: Fiscally sustainable growth and economic development through a balanced mix of land uses and development types.

Goal 3: Commercial, office, and industrial opportunities that maintain compatibility with surrounding neighborhoods, businesses, and public facilities.

Goal 4: Neighborhoods and buildings that are well maintained and demonstrate a sense of pride and identity.

Goal 5: Lands owned by public agencies that are used, planned, and developed in a manner that reinforces the goals of the General Plan.

Economic Development Element
Goal 1: Development patterns and a mix of uses that provide a fiscal balance sufficient to continue and increase public investment in the community’s quality of life.

Goal 2: A local economy that provides jobs for Los Alamitos residents and improves the region’s balance of jobs and housing.

Goal 3: Distinctive shopping and entertainment corridors and districts that attract consumer spending by residents, workers, and regional visitors.

Goal 4: An economic development mindset integrated throughout City Hall.

Housing Element
This Element is updated on state-mandated timeframes and includes strategies in place of goals.

Housing Strategy Area 1: Maintenance and Rehabilitation of Housing Stock
Housing Strategy Area 2: Preserve Housing Costs Affordability
Housing Strategy Area 3: Equal Housing Opportunity
Housing Strategy Area 4: Adequate Housing Supply
Housing Strategy Area 5: Coordinated Housing Efforts

Open Space, Recreation, and Conservation Element
Goal 1: A diverse range of parks, facilities, and programs that meet the recreational needs and interests of the community.

Goal 2: Open space and landscaping that is attractive and functional.

Goal 3: Natural, historic, and cultural resources that are preserved and promoted as key features for civic pride and identity.

Goal 4: Air, water, and energy resources that are protected from pollution and overuse.
**Mobility and Circulation Element**

Goal 1: A context-sensitive network of streets, bikeways, and pedestrian areas that promote the safe and efficient movement of people and goods.

Goal 2: Neighborhoods that are protected from through traffic.

Goal 3: Safe and convenient access to schools and parks that promote healthy and active living.

Goal 4: Bicycle, pedestrian, and transit systems that are desirable alternatives to the car.

Goal 5: The right amount of convenient parking at commercial, employment, and civic facilities.

**Public Facilities and Safety Element**

Goal 1: Reliable and cost-effective infrastructure systems and services that adequately serve residents and businesses.

Goal 2: High quality emergency services that establish a real and perceived sense of safety and security for residents, businesses, and visitors.

Goal 3: Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by natural hazards.

Goal 4: An environment in which minimized noise contributes to the public's health, safety, and welfare.

Goal 5: Great schools and high quality medical facilities that define Los Alamitos and Rossmoor as preeminent communities for families and a skilled workforce.

**Growth Management Element**

Goal 1: Infrastructure and services that are provided to areas within City limits in a timely manner and, if determined appropriate, to areas outside City limits and within its sphere of influence.

Goal 2: Reduced traffic congestion throughout Los Alamitos and its neighboring communities.

Goal 3: Development that is consistent with the Airport Environs Land Use Plans for the Joint Forces Training Base and Orange County Heliports.
General Plan Outreach Summary

Outreach Objectives
In August 2011, the City of Los Alamitos initiated the General Plan Update and embarked on a multi-pronged outreach effort guided by seven broad objectives established for outreach were:

- Inform and educate
- Obtain public input / comments / more ideas
- Generate excitement for opportunities
- Elevate civic pride
- Engage Rossmoor residents
- Build / enhance partnerships for future change
- Raise the profile of the General Plan

Outreach Activities and Opportunities
The City conducted over three years of outreach to engage the public and obtain input on the general plan priorities, land use and circulation plans, policies, and environmental analysis. Hundreds of people participated in the various meetings, surveys, and interviews held throughout the update effort.

- **Project Website**
  24-hour access to news, notices, and project information

- **Project Fact Sheet**
  Distributed through mailings and outreach events

- **Public Survey**
  Over 100 short and long surveys completed by the public

- **Newsletters**
  3 newsletters distributed at key milestones

- **Stakeholder Interviews**
  28 interviews of Los Alamitos and Rossmoor residents, businesses, and service providers

- **Focus Group and Technical Advisory Committee Meetings**
  4 Roundtable discussions with the public and technical advisory committee about key topics

- **Community Open Houses and Town Hall**
  One Town Hall and 4 open houses (3 in Los Alamitos and 1 in Rossmoor)

- **Commission and Council Study Sessions**
  28 study sessions held throughout the update process:
  - 4 with City Council
  - 23 with City Commissions (Planning; Traffic, and Parks; Recreation and Cultural Arts), including 5 held as Joint Commission meetings
  - 1 with Orange County Airport Land Use Commission
A Brief History of Los Alamitos and Rossmoor

1800s: Bixby and Sugar Beets
In 1878, John Bixby acquired Rancho Los Alamitos and established great farming and ranching enterprises. Bixby’s dream of developing a city one day was brought to fruition by the passage of the McKinley Act in 1890, which spurred on the growth of a sugar industry in the United States.

In 1896, the Los Alamitos Sugar Company was formed and constructed the first sugar beet factory in Orange County. The Bixby Land Company laid out the town of Los Alamitos as support for the factory, and paid for a rail line from west Anaheim and a railroad station, where Ganahl Lumber now stands. The first church in Los Alamitos was built in 1897 and stood for over 60 years at the corner of Pine Avenue and Church Street (Church Street was later renamed Katella Avenue). In later years, the sugar factory built worker housing and clubhouse for social and recreational activities on Myrtle Street, which was renamed Los Alamitos Boulevard. Additionally, the first school opened around the turn of the century to educate the factory workers’ children.

1900s: A Quake and the Navy
In 1933, the 6.4 magnitude Long Beach Earthquake shook the town, damaging many structures including the St. Isidore Catholic Church (originally built in 1922). The church was originally built on the City’s Main Street, and still stands in the same location now known as Reagan Street. The sugar beet factory operated until 1926, when an area-wide nematode infestation depleted the soils of their nutrients. The factory complex changed many hands until 1960, when all but two of the buildings were torn down. The sugar warehouse is the only remaining building and is located next to the post office.

In 1942, the Naval Air Station moved from Terminal Island in Long Beach to Los Alamitos. By the 1950s, Los Alamitos became the largest Naval Air Reserve in the nation. In 1973, the station was designated as an Armed Forces Reserve Center and was renamed the Joint Forces Training Base in 2000. The base provides support and training for military units and other federal, state, and local organizations.

1950s: The Construction of Rossmoor
In the 1950s, a developer named Ross W. Cortese came to the area with a vision to construct a large, exclusive master planned community—at the time the largest such community in Orange County.
County with 3,500 homes. Between 1951 and 1956, Cortese formed the Rossmoor Corporation, purchased the land from the Fred Bixby Ranch Company, and began construction. Rossmoor was marketed first as a subdivision of Los Alamitos and subsequently as Long Beach's smartest new suburb. The first homeowners moved in by June 1957 and enjoyed the benefits of a master planned community, with homes organized into neighborhoods centered on school sites, tree-lined streets, spacious yards, and easy access to two shopping centers and a medical complex.

The community of Rossmoor remains unincorporated today despite several incorporation and annexation attempts, including the first incorporation effort proposed by Cortese himself in 1957. In the mid-1960s, Judge Alfred Gittelson, as the land owner of what is known today as The Shops at Rossmoor, annexed his land into the City of Seal Beach, despite opposition by the Rossmoor Homeowners Association and the City of Los Alamitos. The latest incorporation effort, submitted by the Rossmoor Community Services District, was rejected by Rossmoor residents in the November 2008 election. In 2009, the Local Agency Formation Commission placed Rossmoor in Los Alamitos' sphere of influence.

1960s: Cityhood, New Schools, and a Medical Center
During the 1940s and 1950s, the Chamber of Commerce acted as the quasi town government until its members decided to seek incorporation. The City of Los Alamitos incorporated in 1960 with a population of 4,312. The current (est. 2013) population is just over 11,000 residents. Around the time of cityhood, several roads were fully constructed and improved, providing Los Alamitos with access to neighboring communities. Katella Avenue was finally connected to Willow Street in Long Beach, making it a major east-west thoroughfare.

The City and Rossmoor are perhaps best known for their excellent schools and medical center. The first school in Rossmoor opened in 1958, followed quickly by several other elementary schools. The City's two middle schools and high school opened in the 1960s. Today, all of the City's nine comprehensive schools have been honored as National Blue Ribbon Schools and/or California Distinguished Schools. Additionally, many of the schools host athletic fields and boast a history of successful community and high school sports teams.

In 1968, the Los Alamitos Medical Center was founded to meet the health care needs of a growing community. The medical center has grown from a community hospital to a comprehensive medical campus, providing medical care to over 100,000 patients per year. Despite its growth, the medical center predominantly serves the local community as almost 90 percent of patients live within an eight-mile radius.

The facility is the largest local employer and contributes significant utility and property taxes. In 2011, the City approved a 25-year specific plan that includes a three-phase master planned expansion of the medical center. The specific plan permits the addition of over 160 new hospital beds, a new medical office building, and two parking structures.
Today: A Modern Small Town
The City remains is a peaceful, tree lined community that has preserved much of its original small town image and maintained a culture of great schools, community sports and activities, and healthy living. Strategically situated at the junction of the I-605, I-405, and 22 freeways, Los Alamitos boasts a diversified economic base consisting of light industry, manufacturing, commercial businesses, and many restaurants.
Land Use Element

Existing Land Uses

Los Alamitos
Los Alamitos is a small but balanced community bordered by the cities of Cypress, Garden Grove, and Seal Beach in Orange County and the City of Long Beach in Los Angeles County. The Joint Forces Training Base (JFTB) represents roughly half of the land area within the City boundaries and nearly 60 percent of all its parcelized land uses.

The City offers housing options that include small and large detached homes, townhomes, and medium- and high-density apartments, with the residential areas grouped into 16 different neighborhoods. Unlike the majority of Orange County jurisdictions, Los Alamitos actually has more multiple family housing units than single family homes.

The City enjoys a healthy retail and office market, along with an emphasis on medical service and the Los Alamitos Medical Center. Other businesses and employment opportunities span from aerospace to commercial printing to specialty produce. Public uses include numerous school campuses, parks and recreational facilities, religious institutions, civic facilities, and the Joint Forces Training Base.

As of 2013, over 11,000 people called Los Alamitos home, over 14,000 people were employed by businesses in Los Alamitos, and roughly 6,600 students attended schools in the City.

Rossmoor
Rossmoor is within the City’s sphere of influence and was originally developed as a master planned community nestled between Los Alamitos, Long Beach, and Seal Beach. Its land use patterns remain largely the same today, and a little over 10,000 people reside within its boundaries. Approximately 2,600 students attend one of the four elementary schools in Rossmoor.

The dominant land use is single family residential, complemented by a small amount of multiple family units, elementary schools, a church, parks, and shops and restaurants.

Charts 1 to 3, Table 1, and Figures 1 and 2 provide a more precise breakdown of existing land uses and neighborhoods in Los Alamitos and Rossmoor. In total, the City estimates that nearly 22,000 people and 15,000 employees lived and worked in the entire sphere of influence for Los Alamitos in 2013. Approximately 10,000 students attend schools in Los Alamitos and Rossmoor.
Chart 1. Los Alamitos, Detailed Existing Land Use Breakdown by Acreage (without JFTB)

Note: These figures consider only parcelized land and exclude right-of-way.  Source: PlaceWorks, 2013.

Chart 2. Rossmoor, Detailed Existing Land Use Breakdown by Acreage

Note: These figures consider only parcelized land and exclude right-of-way.  Source: PlaceWorks, 2013.
**Chart 3. Los Alamitos and Rossmoor, Generalized Existing Land Use by Acreage**

Note: These figures consider only parcelized land and exclude right-of-way. Source: PlaceWorks, 2013.

**Notes on Table 1**

1. Existing land use categories and GP designations do not match. This is not an error or an indication of land use change or nonconformity. The existing land use figures and maps are provided as a snapshot in time to provide context and better understanding for implementation of the goals and policies.

2. Employment totals for the JFTB are estimates of day-to-day employees and include those who work at the golf course. It does not include personnel that train periodically at the facility, which can total up to 3,000 Army reservists and National Guard units.
## Table 1. Existing Conditions (2013)

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<td>Residential</td>
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<td>Public/Other</td>
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<td><strong>All Land within City Boundaries</strong></td>
<td>2,619</td>
<td>4,424</td>
<td>11,384</td>
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<td><strong>ROSSMOOR / SPHERE OF INFLUENCE</strong></td>
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<td>Single Family Residential</td>
<td>642</td>
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<td>Multiple Family Residential</td>
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<td>Public/Quasi Public Facility</td>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>All Land within Rossmoor Boundaries</strong></td>
<td>982</td>
<td>3,779</td>
<td>10,234</td>
<td>395</td>
</tr>
<tr>
<td><strong>TOTAL SPHERE OF INFLUENCE</strong></td>
<td>3,601</td>
<td>8,203</td>
<td>21,618</td>
<td>14,660</td>
</tr>
</tbody>
</table>

Source: PlaceWorks, 2013.
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Figure 2 Residential Neighborhoods

Los Alamitos

1. Carrier Row
2. Country Square
3. College Park North
4. El Dorado Park Estates East
5. Greenbrook
6. Highlands
7. New Dutch Haven
8. Old Dutch Haven
9. Suburbia
10. Woodcrest
11. Limited Multi-Family Residential (R2)
12. Parkwood
13. Multi Family Residential (R3)
14. Apartment Row
15. Bungalows
16. Royal Oak Park

Rossmoor

1. Joint Forces Training Base

Suburban Residential (1B)

City Boundary

Sphere of Influence

Source: City of Los Alamitos, 2013
Issues and Opportunities

Los Alamitos is small, builtout community, and any new development could substantially impact the look, feel, and performance of the City. Care must be taken to encourage and approve the optimal land use mix for any new development within Los Alamitos. The following discusses some of the most significant land use issues and opportunities. As other issues and opportunities arise in the future, the General Plan’s goals and policies can provide guidance.

Downtown and Retail Spending

Downtown / Town Center

The General Plan uses the terms “downtown” and “town center” interchangeably to refer to a walkable, human-scaled area where people shop, work, eat, have fun, and spend quality time with friends and family. People can also live adjacent to or in a downtown area. It can also be thought of a central business, shopping, and social district. Such an area may also serve the primary place where the people of Los Alamitos gather to celebrate as a community.

Retail Spending

The City’s 2012 economic analysis pointed out that Los Alamitos has done relatively well capturing its share of retail spending in the past. With relatively new shopping centers developed in Seal Beach and Cypress, however, Los Alamitos may not soon recover to its pre-recession levels of retail sales. The vast majority of popular big-box retailers are already located in adjacent cities and Cypress already has land capacity to accommodate additional big box tenants.

However, Los Alamitos has the potential to create a unique retail shopping environment with the downtown plan from the Commercial Corridors Plan. A walking, human-scale, experiential shopping district is something that one must travel far from Los Alamitos to find. Furthermore, the Internet has not finished changing the nature of retail, and the future of big box stores as a staple of American consumerism is not a sure thing. What is more certain is that regardless of how we satisfy our material needs, we will still desire places where we can socialize, hang out, dine with friends and family, and, perhaps, do a little shopping.

Additionally, Los Alamitos hosts a large daytime population due to its balance of employment-generating land uses. Workers can generate a great deal of retail sales tax revenue through their purchases before, during, and after work. A downtown Los Alamitos would capture more of the daytime population’s taxable retail spending.

Based on the goals and policies from the preceding General Plan and over four years of public input through surveys, interviews, and over two dozen public meetings and workshops, it is clear that the creation of a downtown or town center is one of the community’s top three priorities. The downtown plan provides a way for Los Alamitos to create a central place for its residents and successfully compete for taxable retail sales in a way that complements and enhances the community’s quality of life.
**Industrial**

Industrial businesses are an important component of the local economy. The City's 2012 economic analysis suggests that these businesses will likely remain viable and continue contributing more to municipal revenues than they require in public services.

Industrial areas tend to have lower purchase/lease costs than retail and office areas. As a result, non-industrial uses often seek to locate in industrial areas. Many industrial parks in Southern California are dealing with encroachment from churches, day-care facilities, gymnastics and karate schools, and so forth. In Los Alamitos, several industrial properties have commercial recreation businesses (e.g., archery, gymnastics, indoor health and fitness, and batting cages). The nature of commercial recreation businesses attracts families with children and can conflict with adjacent industrial uses and degrade their economic viability.

Accordingly, the City created a Limited Industrial land use designation for a specific area of the City that explicitly permits forms of industrial, commercial recreation, and public/quasi-public uses that do not involve heavy equipment or large trucks. The Planned Industrial land use designation clearly delineates the area intended to accommodate industrial businesses over the long term without encroachment by family-oriented, non-industrial uses.

**Medical Office**

The medical services industry will continue growing for many years. This growth provides an opportunity for Los Alamitos to capture more economic activity and, consequently, more municipal revenues. The Los Alamitos Medical Center is approved for and is currently implementing a planned expansion that could accommodate a great deal of new medical service uses. If additional medical office demand is created, the City prefers to locate it alongside the Medical Center campus on the north side of Katella Avenue. The Medical Overlay land use designation communicates this preference without limiting opportunities for medical uses elsewhere in the City.

**Short-term Development Opportunities**

**SuperMedia/Civic Center**

The land fronting Katella Avenue just east of the 605 freeway is seen as the largest viable site in the City for future retail. Collectively, this is 13 acres and consists of City properties (City Hall, Police Department, City Yard, and the Community Center); other quasi-public buildings; and SuperMedia (western 10 acres), which has expressed a possible desire to sell its property.

Private development interest, along with the City’s willingness to relocate its own facilities, indicates that this area could support a variety of retail and hospitality uses. The area is also near Los Alamitos Boulevard and could serve as a southern anchor—though it should not be developed to potentially compete with downtown uses along Los Alamitos Boulevard.
**Vacant Parcel Next to Center Plaza**
The 2.25-acre parcel along Los Alamitos Boulevard is one of the few pieces of vacant land in the City. Over the years the land has served temporary uses such as Christmas tree sales or a short-term carnival. It will be crucial for the City to ensure that the design of any new development complements the objectives of the downtown effort and the goals and policies of the General Plan. If Serpentine Street is vacated and given to the private land owner, the City should work with the developer to maximize public plaza space into the design.

**New Residential South of Cerritos Avenue**
There are three parcels along the south side of Cerritos Avenue just east of the Coyote Creek Channel that could potentially be repurposed for residential land uses. These parcels contain two industrial uses and a church, and are surrounded by homes in the Old Town West and Royal Oak Park neighborhoods. The site is also surrounding by new homes just built in 2013, the northern edge of the downtown area, access to the Coyote Creek bike trail, and the high school. The existing church use would be explicitly permitted in a residential designation and be complementary to existing and future residential uses. The surrounding residential uses, the school district, proximity to the high school and downtown area, and poor access for retail uses indicated that a residential designation was considered the highest and best use of the properties.

**Joint Forces Training Base**
The JFTB provides support and training for military units and other federal, state, and local organizations. The base occupies roughly half of the land area within the City boundaries, but is relatively quiet during the weekdays. On weekends and other select training periods, activities can increase substantially. Nevertheless, the current activities of the base generally do not disturb the surrounding civilian areas, with the exception of some aircraft noise and dust on the areas immediately next to the base and flight path, as well as dust and noise related to new construction activities. Existing land use patterns do not inhibit military readiness activities.

The City maintains a strong partnership with the base, which hosts community events such as the annual Race on the Base and the Wings, Wheels and Rotors Expo. The base also houses the Sunburst Youth Challenge Academy, Youth Baseball Fields, and Aquatic Center, all of which are used by civilian members of the public.

The civilian reuse of the JFTB is not considered likely in the near future, and the City fully supports the base maintaining its current role for the federal and state government and the City of Los Alamitos. The City will continue to coordinate with JFTB leadership on current and potential base activities, the renovation or expansion of recreational facilities, and opportunities to reuse the land between Little Cottonwood Park and the baseball fields that currently contains long-abandoned multifamily units. Ideas include an expansion of the existing park and recreation; a civic center complex; and a joint-use facility that could be used by active, former, and disabled military, the general public, school district, and medical center.
Periodically, traffic congestion is increased along Farquhar and Katella Avenue due to military and civilian activity on the base. The base previously maintained two guarded points of access: Lexington and Orangewood. A third point of access is provided for the golf course, but it is not used to access other parts of the base except in special circumstances. The base closed the Orangewood access point a number of years ago, leaving Lexington as the only entrance to the base. For special events, the base and the City coordinate and open the Orangewood entry, but it otherwise remains closed. The City may wish to investigate with the base on the options and merits of reopening the Orangewood entry on a permanent basis.

Future potential growth in the City and Rossmoor is not within the airport’s clear zone and would be restricted to building heights far below the federally-defined limitation of 88 to 200 feet based on proximity to the runway. Additionally, potential growth would be limited to a few areas of the City, would only represent incremental increases in building space, and would not introduce sensitive land uses that are not already present. Accordingly, current and future military readiness activities would not be affected by future growth. The base is categorized as its own special Community and Institutional land use designation and policies are provided to guide the City in the event that the base begins to transition to civilian use.

**Long-term Development Opportunities**

**Mixed Use Designation**
The four corners of Los Alamitos Boulevard and Katella Avenue contain the only remaining commercial property in the unincorporated community of Rossmoor and the most intense commercial areas in Los Alamitos. The southwest corner remains designated Suburban Residential and under the jurisdiction of the County of Orange until such time as the properties are annexed into the City. The City created a Mixed Use land use designation to complement its Town Center Overlay Zone and encourage the future improvement and intensification of the land around the primary downtown intersection.

The northeast corner (extending to Reagan Street) contains Los Alamitos Plaza, other assorted shops, office, quasi-public uses (including St. Isidore), and some residences. The City currently applies a Town Center Overlay Zone to the northeast corner (through to the alleyway before Reagan Street). The overlay district permits commercial uses on the first or second floor and multiple family residential uses on the second floor and higher. Buildings within the Town Center overlay district can be constructed up to five stories or 60 feet in height (reduced down to one, two, or three stories when within 75 feet of residentially zoned property).

The northwest corner contains a commercial center (with some improvements), gas station, some homes, an older retail business, and a new CVS. The alley functions as an internal drive aisle, and the property is oriented to the automobile, though internal circulation is provided. Recent new development/improvements make it unlikely that this corner would undergo a major transformation; however, it could reposition itself when the downtown plan’s street improvements take place.
The southeast corner (extended south to Farquhar) consists of numerous small shops, restaurants, services, and the Los Alamitos museum. Shared parking is in this area, along with a small underground parking garage. This corner is served by alleys—the north-south alleyway has been partially improved with the undergrounding of utilities and inclusion of pedestrian-scale street lights. Previous plans identified this area for a walkable atmosphere that would have many of the businesses front onto the alleyway. Accordingly, future development and improvement options would likely revolve around internal streetscape design, a centralized parking feature, and the possible introduction of mixed uses.

Positive implications primarily revolve around an increase in revenue and exposure for the commercial businesses and jurisdiction, and the introduction of uses that are complementary to the medical center and downtown area. Ideas include a mix of residential, retail, restaurants, and a business hotel that could serve the medical center and other visitors. A hotel use would bring in a good deal of transient occupancy tax revenue without a significant traffic impact. Upper floor uses could take advantage of the views and temperate Southern California weather. Finally, Katella Avenue and its intersection with Los Alamitos Boulevard will likely be exposed to high volumes of external traffic regardless of intensification. The City may be wise to maximize the value of the exposure to the passing traffic by facilitating more intense development in this area.

**Arrowhead Products**

Arrowhead Products is a dynamic aerospace company whose facilities are situated on 28 acres; its two plants total over 250,000 square feet of working area. The company manufactures metals products such as flexible and ridged bleed ducting, flex joints, and exhaust ducts; and non-metal products such as insulation to support metals product and end item composites made from plastic, rubber, fiberglass, resins, Kevlar, etc. The facility permits the manufacture of intricate, detailed parts from raw material (sheet, rod, forge, blank, mixtures, etc.) through complex final assembly and cleaning processes. Arrowhead Products has been operating at this location for decades and generates a large number of highly skilled, highly paid jobs as the company continues to build upon its global status. The City supports its continued operation and success.

If the company ever decides to move locations or change its business, the property could also be an ideal site for new retail development. Collectively, the four parcels offer 28 acres of land—larger than any other privately used site in the City. Additionally, the site sits along Katella Avenue, a regional thoroughfare that carries upward of 60,000 vehicles per day, and is in proximity to substantial commercial development in Cypress.

To ensure that the City could understand and plan for a potential retail uses on the site, the City created and applied a Retail Overlay to the site to allow both the underlying Planned Industrial district and, at the time that the property owner determines that industrial uses are no longer desired, the introduction of new retail businesses as primary uses. Retail uses generate greater traffic impacts than manufacturing uses, and the environmental analysis evaluated the site as retail to analyze the greatest potential traffic impact.
Land Use Plan

The development, use, and distribution of land are critical to achieving the City's vision and objectives. Land, especially in Los Alamitos, is a finite and valuable resource, and its use dictates the City's economic future. As stewards of the land, the City must plan for uses and development that adds value to the community, in terms of function, design, and fiscal return. The following land use plan and designations reflect the City's desire to remain a balanced and fiscally sustainable community. Figure 3 displays the General Plan Land Use Plan.
Figure 3 Land Use Plan

Residential
- Single Family Res. 1-6 DU/Ac
- Limited Multi Family Res. 6-20 DU/Ac
- Multi Family Res. 20-30 DU/Ac

Commercial and Employment
- Retail Business
- Professional Office
- Planned Industrial
- Limited Industrial
- Medical Overlay
- Retail Overlay

Special Use
- Mixed Use
- Specific Plan
- Community & Institutional
- Community & Institutional/JFTB
- Open Area
- Easement Overlay

Rossmoor
- Suburban Residential
- City Boundary
- Sphere of Influence
- Other City Boundaries

Note:
Rossmoor is within the City’s SOI but it also remains within & under the jurisdiction of the County of Orange. Accordingly, the Land Use Plan shows the County land use designation of Suburban Residential.
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<table>
<thead>
<tr>
<th>Land Use Designation and Density / Intensity Range</th>
<th>Description of Typical Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CITY OF LOS ALAMITOS</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Residential</strong></td>
<td></td>
</tr>
<tr>
<td>Single Family Residential 1–6 du/ac</td>
<td>Single family detached homes on individual lots.</td>
</tr>
<tr>
<td>Limited Multiple Family Residential 6–20 du/ac Max office space 500 square feet per unit</td>
<td>Single family detached and attached residences, including small lot subdivisions, townhouses, courtyard homes, duplexes, and triplexes. Live/work uses are also permitted, subject to the uses permitted by the Professional Office designation.</td>
</tr>
<tr>
<td>Multiple Family Residential 20–30 du/ac</td>
<td>Single family detached and attached residences, including all development permitted in other residential categories as well as stacked flats and other building types with 4 or more units. Other uses such as convalescent hospitals, churches, and mobile home parks are also permitted subject to special procedures.</td>
</tr>
<tr>
<td><strong>Commercial and Employment</strong></td>
<td></td>
</tr>
<tr>
<td>Retail Business Max FAR 1.00</td>
<td>Commercial retail uses that include supermarkets, drugstores, personal services, restaurants, and facilities that offer a variety of retail products. General services such as auto-related sales and repair, nurseries, plumbing outlets, and home appliance stores are permitted subject to special review procedures.</td>
</tr>
<tr>
<td>Professional Office Max FAR 1.50</td>
<td>Professional and general office uses such as law, insurance, medical, dental, engineering, and financial services.</td>
</tr>
<tr>
<td>Planned Industrial Max FAR 1.50</td>
<td>Light industrial, manufacturing, and office park uses such as research and development, manufacturing, boat building, appliance repair and service, plastic fabrication, and printing plants. Commercial recreation uses are not permitted.</td>
</tr>
<tr>
<td>Limited Industrial Max FAR 1.50</td>
<td>All uses permitted in Planned Industrial as well as commercial recreation uses within industrial buildings such as soccer, gymnastics, archery, indoor health/fitness, and batting cages.</td>
</tr>
<tr>
<td>Medical Overlay Max FAR 3.0</td>
<td>While the underlying land use remains Planned Industrial, this Overlay encourages and permits medical businesses as primary uses on the north side of the Los Alamitos Medical Center campus.</td>
</tr>
<tr>
<td>Retail Overlay Max FAR 1.0 for Retail Max FAR 1.5 for Planned Industrial</td>
<td>While the underlying land use remains Planned Industrial, this Overlay encourages and permits retail businesses as primary uses on the Arrowhead Products site at the time that the property owner determines that industrial uses are no longer desired.</td>
</tr>
</tbody>
</table>
### Table 2. Land Use Designations

<table>
<thead>
<tr>
<th>Land Use Designation and Density / Intensity Range</th>
<th>Description of Typical Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Special Use</strong></td>
<td></td>
</tr>
<tr>
<td>Community &amp; Institutional</td>
<td>Public and quasi-public uses such as the civic center, schools, hospitals, fire stations, parks, churches, utilities, public yards, and other similar uses.</td>
</tr>
<tr>
<td>Max FAR 3.0</td>
<td></td>
</tr>
<tr>
<td>Community &amp; Institutional/JFTB</td>
<td>The Joint Forces Training Base is an active military installation and airfield that provides support and training facilities for military units and other national, state, and local organizations to include emergency operations. Development and activities on the base are governed by the federal government.</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>Vertical or horizontal mix of commercial, office, public/quasi-public, and/or residential uses on the same parcel. Stand-alone (not mixed-use) commercial, office, and public/quasi-public uses are also permitted. For parcels that front Los Alamitos Boulevard or Katella Avenue, the ground floor is required to consist of those uses permitted or conditionally permitted in the General Commercial Zoning District.</td>
</tr>
<tr>
<td>Max FAR 2.0 30 du/ac</td>
<td></td>
</tr>
<tr>
<td>Specific Plan</td>
<td>The City may require a specific plan for development with more than 50,000 proposed gross square feet of building, including residential space if a part of a mixed use project. This requirement does not apply to development within the Joint Forces Training Base or development approved under and consistent with an existing specific plan. No specific plan shall deviate from the General Plan without a general plan amendment.</td>
</tr>
<tr>
<td>Max FAR 4.0 30 du/ac</td>
<td></td>
</tr>
<tr>
<td>Easement Overlay</td>
<td>Applied to right-of-way areas for trails and open space.</td>
</tr>
<tr>
<td>Open Area</td>
<td>Land used for flood control purposes along Coyote Creek and the San Gabriel River. Trails and recreational uses are permitted in coordination with the Orange County Flood Control District.</td>
</tr>
<tr>
<td><strong>ROSSMOOR / SPHERE OF INFLUENCE</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Suburban Residential 0.5 –18 du/ac               | Governed by the latest (2011) Orange County General Plan, which provides the following guidance:  
- Wide range of housing types, from estates on large lots to attached dwelling units (townhomes, condominiums, and clustered arrangements)  
- Neighborhood/convenience commercial sites are assumed to be consistent, subject to additional guidelines |
Calculating Density and Intensity of Development

Residential Density | dwelling units per acre (du/ac)
Residential density refers to the number of dwelling units that can be constructed per acre of land.

Residential project. For a project containing only residential uses, divide the total number of dwelling units by the acreage of land, excluding the area designated for public right-of-way.

Mixed-use project, horizontal mix. For residential and nonresidential uses within the same project area, but on different parcels, divide the total number of dwelling units by the acreage of land used as residential, excluding area designated for public right-of-way.

Mixed-use project, vertical mix. For a project containing residential and nonresidential uses that are within the same building, divide the total number of dwelling units by the acreage of land used for that building(s), excluding area designated for public right-of-way.

If a project contains both horizontal and vertical mixes of residential and nonresidential uses on a single parcel, the Community Development Director shall determine the appropriate proportion of land to allocate for the purposes of calculating residential density. Land used for structured parking and public rights-of-way shall be excluded from such calculations.

Building Intensity | floor area ratio (FAR)
The intensity of building on a site reflects a combination of a building’s height, lot coverage, and overall massing distribution. To ensure that the building intensity of a project is appropriate for the land use designation and community, a maximum intensity standard is provided in the form of a floor area ratio (FAR). The FAR calculation excludes floor area used for structured parking to encourage its use and reflect its much higher construction costs.

Nonresidential project. For a project containing one or more nonresidential uses, divide the total net floor area of a building(s) by the total area (in square feet) of the parcel, excluding area designated for structured parking and public right-of-way.

Mixed-use project. For a project containing residential and nonresidential (on the same or different parcels), divide the total net floor area of the residential and nonresidential portions of a building(s) by the total area (in square feet) of the parcel, excluding area designated for structured parking and public right-of-way.
**Projected Buildout Conditions**

Estimating the future buildout of the Land Use Plan allows the City, Rossmoor, and others to plan for necessary levels of community services and infrastructure capacities. It does not, however, reflect a certain future or a mandate to approve development.

The theoretical buildout was based largely on the assumption that the majority of the City and Rossmoor would not change. Some incremental intensification was assumed through small projects (e.g., adding a second dwelling unit or expanding a storefront). A handful of parcels were identified as areas where more substantial change could occur. For those parcels, the City created a set of projections and estimated the amount of development that could occur between now and 2035 (the horizon planning year for the General Plan). Tables 3 and 4 break down the potential buildout by land use designation and jurisdiction.

**Table 3. Projected Buildout (2035) by Land Use Designation**

<table>
<thead>
<tr>
<th>General Plan Land Use Designation</th>
<th>Acres</th>
<th>Units</th>
<th>Population</th>
<th>Employment</th>
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<tr>
<td><strong>CITY OF LOS ALAMITOS</strong></td>
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<tr>
<td>Residential</td>
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<tr>
<td>Single Family Residential</td>
<td>258</td>
<td>1,549</td>
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<td>Limited Multiple Family Residential</td>
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<td>189</td>
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<tr>
<td>Multiple Family Residential</td>
<td>145</td>
<td>2,934</td>
<td>7,660</td>
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<tr>
<td><strong>Commercial and Employment</strong></td>
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<tr>
<td>Retail Business</td>
<td>51</td>
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<td>2,641</td>
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<tr>
<td>Professional Office</td>
<td>29</td>
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<td>3,098</td>
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<tr>
<td>Planned Industrial</td>
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<tr>
<td>Limited Industrial</td>
<td>8</td>
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<td>185</td>
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<td>Medical Overlay</td>
<td>13</td>
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<td>-</td>
<td>1,429</td>
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<tr>
<td>Retail Overlay</td>
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<td>-</td>
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<td>1,020</td>
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<tr>
<td><strong>Special Use</strong></td>
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<tr>
<td>Mixed Use</td>
<td>19</td>
<td>100</td>
<td>263</td>
<td>2,279</td>
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<td>Specific Plan</td>
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<td>Community &amp; Institutional</td>
<td>147</td>
<td>-</td>
<td>-</td>
<td>607</td>
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<tr>
<td>Community &amp; Institutional/JFTB</td>
<td>1,318</td>
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<td>-</td>
<td>775</td>
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<tr>
<td>Open Area</td>
<td>82</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Right of Way/Easement Overlay</td>
<td>340</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>2,619</td>
<td>4,772</td>
<td>12,463</td>
<td>18,198</td>
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<tr>
<td><strong>ROSSMOOR / SPHERE OF INFLUENCE</strong></td>
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<td></td>
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<tr>
<td>Suburban Residential</td>
<td>749</td>
<td>3,963</td>
<td>10,540</td>
<td>408</td>
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<tr>
<td>Right of Way</td>
<td>233</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>982</td>
<td>3,963</td>
<td>10,540</td>
<td>408</td>
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<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>3,601</td>
<td>8,735</td>
<td>23,003</td>
<td>18,606</td>
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</tbody>
</table>

Source: PlaceWorks, 2014.
### Table 4. Existing Conditions Compared to Projected Buildout

<table>
<thead>
<tr>
<th>Planning Timeframe</th>
<th>Units</th>
<th>Population</th>
<th>Employment</th>
</tr>
</thead>
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<tr>
<td><strong>CITY OF LOS ALAMITOS</strong></td>
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<td></td>
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<tr>
<td>Existing Conditions (2013)</td>
<td>4,421</td>
<td>11,384</td>
<td>14,265</td>
</tr>
<tr>
<td>Projected Buildout (2035)</td>
<td>4,772</td>
<td>12,463</td>
<td>18,198</td>
</tr>
<tr>
<td>Potential Growth</td>
<td>348</td>
<td>1,079</td>
<td>3,933</td>
</tr>
<tr>
<td><strong>ROSSMOOR / SPHERE OF INFLUENCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Conditions (2013)</td>
<td>3,779</td>
<td>10,234</td>
<td>395</td>
</tr>
<tr>
<td>Projected Buildout (2035)</td>
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<td>Existing Conditions (2013)</td>
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Source: PlaceWorks, 2014.
Goals and Policies

Goal 1: An attractive and pedestrian-friendly town center that serves as the heart of the community.

Policy 1.1 Town center. Promote the development of a unique town center around Los Alamitos Boulevard, with spaces designed for community celebrations and events.

Policy 1.2 Public investments. Invest in public improvements to transform Los Alamitos Boulevard into an attractive and pedestrian-friendly street.

Policy 1.3 Diverse businesses and activities. Attract and retain a variety of shopping, dining, and entertainment options for residents and visitors in the town center. Encourage the creation of daytime, nighttime, and weekend activity in the town center.

Policy 1.4 Vertical mixed-use. Encourage development that provides retail on the ground floor and office, hotel, or residential uses on upper floors in the town center along Los Alamitos Boulevard.

Policy 1.5 Outdoor dining. Encourage existing and new restaurants to incorporate outdoor dining along Los Alamitos Boulevard.

Policy 1.6 Public art. Encourage the incorporation of art in public and private spaces that celebrates the community’s history and imagines a greater future.
Goal 2: Fiscally sustainable growth and economic development through a balanced mix of land uses and development types.

Policy 2.1 Fiscal impacts. Require that new development be fiscally neutral or positive and can be adequately served by public facilities without negatively impacting service to existing businesses and neighborhoods.

Policy 2.2 Mix of land uses. Maintain a balanced mix of residential, retail, employment, industrial, open space, and public facility land uses.

Policy 2.3 Maximize retail along Katella. Maximize community- and regional-scale retail opportunities along Katella Avenue. For parcels 10 acres or larger along Katella Avenue, support the conversion to community- and regional-scale retail.

Policy 2.4 Town center uses. Maximize shopping, dining, arts, and entertainment uses in the town center.

Policy 2.5 Skilled jobs. Attract and retain businesses that provide highly skilled and well-paid jobs.

Policy 2.6 Medical uses. Leverage the medical center as a key anchor, concentrating medical uses around the campus and encouraging complementary uses.

Policy 2.7 Quality of life uses. Maintain, improve, and expand uses that define and enhance the City’s quality of life, including parks, trails, open spaces, and public facilities.

Policy 2.8 Annexation. Support annexations that will have a positive fiscal impact on the City.
Goal 3: Commercial, office, and industrial opportunities that maintain compatibility with surrounding neighborhoods, businesses, and public facilities.

Policy 3.1 Compatibility. Require that new nonresidential development is located, scaled, and designed to be compatible with existing adjacent neighborhoods and uses.

Policy 3.2 Economic viability. Preserve the economic viability and continuity of existing commercial and industrial businesses.

Policy 3.3 Pedestrian improvements. Upgrade rights-of-way in areas designated as Limited Industrial and Medical Overlay to create safe and attractive pedestrian environments.
Goal 4: Neighborhoods and buildings that are well maintained and demonstrate a sense of pride and identity.

Policy 4.1 Pride and identity. Enhance the sense of identity and increase the feeling of pride among Los Alamitos residents, business owners, employees, and visitors through excellent physical design and continual property maintenance and improvements.

Policy 4.2 Corridor design. Buildings and related improvements along the City’s arterial streets should exhibit authentic and enduring design. Although no specific architectural style is required, the City prefers that designs for individual buildings stay true to a single architectural style and discourage franchise architecture.

Policy 4.3 Multifamily neighborhoods. Promote coordinated property maintenance and improvement in the Old Town West, Old Town East, and Apartment Row neighborhoods.

Policy 4.4 Scale and Character. Ensure that all new development in residential neighborhoods is compatible with the scale and character of the surrounding neighborhood.

Policy 4.5 Substandard parcels. Encourage improvement of existing buildings and property to comply with current standards and present an attractive and well-maintained appearance. When improvements are not feasible, support the consolidation of substandard parcels for reuse.
Goal 5: Lands owned by public agencies that are used, planned, and developed in a manner that reinforces the goals of the General Plan.

Policy 5.1 Community use of the Joint Forces Training Base. Cooperate with Joint Forces Training Base (JFTB) leadership to maximize the community use of base facilities.

Policy 5.2 Joint Forces Training Base reuse. The JFTB shall remain a functioning military training facility within the jurisdictional boundary of the City of Los Alamitos. If the federal government decides to close the base and transition it to private, non-military use, the City of Los Alamitos shall maintain a leadership role in establishing and implementing a base reuse plan.

Policy 5.3 Reuse of public land. The City shall prioritize the reuse of land not along Katella Avenue that is owned by non-city public agencies for public uses such as civic buildings, parks, or recreation facilities.

Policy 5.4 Flood control facilities. The City strongly supports the use of flood control facilities as public trails throughout Los Alamitos.

Policy 5.5 Dual use of school property. Coordinate with LAUSD to enable public use of school facilities outside of school hours.

Policy 5.6 School expansion and improvements. Coordinate with LAUSD and its consultants on technical studies for school expansion and improvement projects.
Summary of Key Economic Findings

The economic development element is based, in part, on a comprehensive economic analysis conducted in support of the planning process. The analysis identified five key findings.

Los Alamitos Is a Jobs Engine
Los Alamitos is a jobs-rich economic engine. Businesses, nonprofit organizations, and public agencies provide nearly 14,000 jobs in Los Alamitos. Even when Rossmoor is included, the General Plan area provides more jobs, 14,600, than it has employed residents (roughly 10,000). Few cities achieve this balance, and most constantly strive to expand the number of jobs.

Health Care Is the Engine of the Local Economy
The medical services industry provides 24 percent of all jobs in Los Alamitos, almost one of every four jobs. This sector provides 5.6 more jobs per household in Los Alamitos than it provides in Orange County and California. In addition to the sheer number of workers, it brings untold numbers of visitors to the City each day who spend money at local stores and businesses.

Manufacturing Is Still Important
Manufacturing is also an important component of the local economy. Manufacturers provide 11 percent of local jobs, about the same as in Orange County as a whole, but more than across the state. Contrary to popular perception, manufacturing continues to grow in the United States, and the value of manufactured goods, even in inflation-adjusted terms, has steadily increased over many decades, albeit with fewer and fewer workers. The community should expect manufacturing to remain an important part of the local economy.

Los Alamitos Captures Retail Sales
Los Alamitos captures a fair amount of taxable retail sales. The City captures slightly more retail sales per household than Orange County as a whole and even more than the local average (among four neighboring cities: Cypress, Garden Grove, Seal Beach, and Westminster). Prior to the recession, the amount of inflation-adjusted retail sales per household had leveled off, and during the recession, sales declined 30 percent. Since 2009, the amount of retail sales has grown.

Los Alamitos Needs to Supplement Its Strengths
As a built-out city, Los Alamitos has few prospects for substantial changes that do not involve large-scale redevelopment. Nevertheless, changes will come to Los Alamitos, driven by demographic transitions over the next 10 to 20 years. The City and Rossmoor have a very large population bulge in older children, concentrated in the 15 to 19 age cohort (2010 Census), and as these children move out, their parents may spend less on retail sales and services in Los Alamitos.
The City and Rossmoor also have a very large population bulge in the baby boom generation, concentrated among those in the 45 to 54 age cohort (2010 Census). As these residents transition into retirement, a portion of them will likely desire to move elsewhere.

In fact, trends indicate that there will be fewer families with children on a regional and national level. A question is whether the family-based market demand for housing in Los Alamitos and Rossmoor will be sufficient to sustain growing property values. The excellence of the school district and park resources may not be enough for the City to compete with other jurisdictions that are evolving into more complete communities.

**Economic Overview**
To better understand how the economy functions in Los Alamitos, it is important to appreciate the structure of the local economy, local sales tax revenues, and demographic trends.

**Structure of the Local Economy**
To describe the structure of a local economy, economists often use employment data across 20 sectors of the economy. This type of analysis identifies the types of economic activity in which the local economy specializes and the types in which the local economy is underserved.

Relative to the more complete economies of Orange County and California, five sectors employ a substantially larger share of workers in the local economy: construction; manufacturing; wholesale trade; real estate and rental and leasing; and health care and social assistance. Together, these sectors account for more than half the jobs in Los Alamitos and in the General Plan area, compared to about a third of the total jobs in the county and in the state. These are sectors in which the local economy specializes and which bring new dollars into the local economy.

At the same time, six sectors employ substantially fewer workers locally compared to the regional and state economies. These sectors are: agriculture, farming, forestry, and fishing; utilities; information; management of companies and enterprises; arts, entertainment, and recreation; and public administration (excluding education, which is its own sector). These underrepresented sectors provide only 3 percent of jobs in the City and in the General Plan area, while they account for 10 percent of Orange County jobs and 14 percent of jobs statewide.

**Goods-Producing Sectors**
Economic development efforts typically focus on base sectors, which are the sectors that usually produce goods and services that are exported out of the region and thus bring new dollars into the local economy. One group of base industries is the goods-producing sectors: agriculture, forestry, fishing, and hunting; mining, quarrying, and oil and gas extraction; construction; and manufacturing.

The goods-producing sectors provide about 22 percent of the jobs in Los Alamitos and in the General Plan area, somewhat more than the 17 percent of county jobs, and 16 percent of state
jobs. Of these four sectors, construction is the most highly concentrated, providing about 10 percent of local jobs while only accounting for about 5 percent of jobs in the county and state. One should note that construction jobs are counted in the place where the construction business is, not in the location of a particular construction project.

Manufacturing is also an important local component of the goods-producing sectors. Its share of local jobs, 12 percent, is nearly the same as the share of county jobs, but higher than the share of statewide jobs, 9 percent. As previously discussed, the local area has a relatively high portion of population with some college education, often a qualification for manufacturing. Thus, there may be labor force advantages in operating a manufacturing business in Los Alamitos. Chart 1 shows the employment distribution in the goods-producing sector.

Chart 1. Goods-Producing Sectors Employment as Percent of Total Employment, Los Alamitos, General Plan Area, Orange County, California, 2009 to 2011

Source: Placeworks 2014, using data from the US Census Bureau’s Local Employment Dynamics Program

**Base Service Sectors**
The other set of sectors that typically bring new dollars into a region and a local economy are the base service sectors. This group includes: utilities; wholesale trade; transportation and warehousing; information; professional, scientific, and technical services; management of companies; and administration & support, waste management, and remediation.

The base service sectors only provide 22 percent of local jobs, while providing 27 percent of jobs in the county and the state. Two of these sectors—information and management of companies and enterprises—account for most of that difference. On average, from 2009 to
2011, Los Alamitos had 62 jobs in information and 18 jobs in management of companies and enterprises. If, however, the City's economic structure had been more like that of the county and the state, it would have had 248 jobs in information and 230 jobs in management of companies and enterprises. Chart 2 shows the comparison of the base service sector jobs.

**Chart 2. Base Service Sector Employment as percent of Total Employment, Los Alamitos, General Plan Area, Orange County, California, 2009 to 2011**

Local-serving sectors are those that provide services primarily to the residents, workers, and visitors to an area. Whereas the base sectors of the economy tend bring new dollars into the area, local-serving sectors tend to recirculate the dollars that are already in the local economy. This group includes: retail trade; finance and insurance; real estate and rental and leasing; arts, entertainment, and recreation; accommodation and food service; other services (excluding public administration); and public administration.

The local-serving sectors account for only about 26 percent of local jobs but 36 percent of county and state jobs. By this measure, it would appear that the community is underserved in local services. However, local-serving sectors serve residents and businesses in the local area, and comparing two areas based on the percentage of total jobs can be misleading because some areas have relatively few out of a lot of total jobs.

An alternative is to compare the number of local-serving jobs per 1,000 households. Chart 3 shows this measure of employment. By this measure, Los Alamitos has 756 jobs per 1,000...
households, compared to 449 for the General Plan area, 480 for the county, and 377 for the state. Based on the number of households, Los Alamitos’s local economy is specialized in local-serving sectors. In addition, Los Alamitos has roughly the same or more jobs per household than the county and the state in all of the local-serving sectors.

**Chart 3. Local-Serving Employment per 1,000 Households, Los Alamitos, General Plan Area, Orange County, and California, 2009 to 2011**

Source: Placeworks 2014, using employment data from the US Census Bureau’s Local Employment Dynamics Program and household data from the California Department of Finance

**Education and Health Care**
The education services and the health care and social assistance sectors are also local-serving sectors. Economic analyses, however, often consider these sectors separately because state and federal regulations and funding have a greater influence over the level of employment than do the market forces that drive the other local-serving sectors.

These sectors provide 30 percent of jobs in the local economy, substantially more than in the county, 18 percent, and the state, 21 percent. Similarly, on a jobs-per-household basis, these sectors provide 879 jobs per 1,000 households in Los Alamitos, 509 in the General Plan area, and 237 in the county and state. This comparison is shown in Chart 3.
Clearly, the local economy is highly specialized in education and health care—the specialization is mostly in health care, which accounts for 5.3 times more local jobs than it does jobs in the county and state. The health care sector has the potential to be the major driver of local economic development and to attract continued private sector investment in Los Alamitos.

Sale Tax Revenues
Many cities in California closely monitor taxable retail sales because sales tax is a major source of revenues. In 2013, sales taxes provided about 21 percent of Los Alamitos’s total revenues, even more than property taxes, which provided a little over 20 percent.

Total taxable retail sales in Los Alamitos increased from $96 million (M) in 1997, to a high of $185M in 2007. With the onset of recession, taxable sales decreased for several years, to a low of $135M in 2009. In 2012, the last year for which the California Board of Equalization has published taxable retail sales data, sales in Los Alamitos rebounded slightly to $158M, a little over what sales were in 2003. After adjusting for inflation and population growth, retail sales in 2012 were about the same as they were in 1999.

Los Alamitos, like most cities, has a long way to go to return to pre-recession retail sales levels, especially when adjusted for inflation and the number of households. Even then, real taxable sales per household generally reached a plateau in 2004 and started to decline from 2006 to 2007, a year before the recession officially began. This suggests the City faces structural issues unrelated to the recession. Even with recovery from the recession’s effects, the trend suggests that the City would face constraints on its ability to fund expansion or improvements in public facilities and services, at least from sales tax revenues.

Did other cities share Los Alamitos’s experience of taxable retail sales leveling off prior to the recession? Chart 4 compares the retail taxable retail sales per household for Los Alamitos, neighboring cities (combined average of Cypress, Garden Grove, Seal Beach, and Westminster), and Orange County.

The county’s retail sales reached a peak in 2005, a year after Los Alamitos. In 2010, per household retail sales in the county were at the same level as in 2008. Similarly, across the four neighboring cities, retail sales reached their highest level in 2004. However, these cities did not have quite as steep a growth rate, and so by 2010, per household retail sales were at about the same level as in 2000. This comparison suggests that the Los Alamitos plateau in per household retail sales was not an anomaly, but appears to be part of a larger story about retail spending in Orange County and other cities.
Demographic Trends
After World War II, the number of births in the US increased substantially above its long-term norm, peaked around 1957, and showed a sharp decline from 1964 to 1965. This bulge in fertility rates is known as the baby boom; this population is aging and now nearing retirement. The number of births again increased in 1976 in an “Echo Boom” as the baby boomers began having children, though fertility rates remained low. Chart 5 shows the age distribution of these groups now in Los Alamitos, Southern California, and nationally.

The country is distressingly unprepared to deal with the cost of medical care as baby boomers age. There are not enough doctors, nurses, and facilities to accommodate these people. As the cost of and demand for healthcare increases, cities are thinking about not only their need for adequate medical services but also about building on health care growth as an economic development strategy.
In 2011, the first baby boomers became eligible for retirement. Already, there has been a decrease in family size as children of the baby boomers move out of their parents’ homes, and families are becoming a smaller portion of total households. Chart 6 illustrates the changing characteristics of households in the United States.

Between retirement and this decrease in household size, baby boomers may become more likely to sell their single family homes in order to live in more manageable accommodations. This would cause the supply of single family homes to increase; survey research suggests that a smaller portion of members of the echo boom are interested in this type of housing than were members of the baby boom. This suggests there might not be enough buyers to purchase the houses of the baby boomers, and housing prices could fall. This could be a large problem for Los Alamitos, which has a very large retiring population and young population, but little population in the age group able to buy homes.

Although Los Alamitos, a built-out city, is not able to change its housing characteristics without major redevelopment, it can work to make itself an attractive and enjoyable place to live for those looking to buy homes.
Another potential issue caused by this age distribution is a possible labor shortage. As the baby boomers retire, most of them will take the valuable skills and years of experience with them and will be replaced by a fresh-faced generation of echo boomers who have yet to receive the on-the-job training required for an effective and efficient workforce. Whether this will affect the development and profitability of businesses will depend on the ability of companies to import trained foreign workers or to train their new hires more quickly and effectively. Los Alamitos tends to attract highly educated citizens, so it is better positioned to maintain a high level of employment and income than much of California and the nation.

**Economic Vision**

Economic development is the growth and structuring of a local economy toward community-defined goals for economic well-being. Four common categories of economic development goals are listed below.

1. Increased employment opportunities
2. Real increases in incomes and household wealth
3. Enhancements to the quality of life
4. Diversification and expansion of the tax base

In Los Alamitos, enhancing the quality of life is the highest priority goal, and diversification and expansion of the tax base is a secondary goal, a tool for achieving the primary goal. The first two categories, although important, do not rise to the level of goals that drive the City’s economic vision.
The economic vision for Los Alamitos is:

We envision our local economy as a valued resource that provides a stable and resilient tax base to support the public facilities and services that contribute positively to its quality of life. We recognize and capitalize on our city’s role as a jobs engine in the regional economy. We implement public policies and invest public resources to maintain Los Alamitos’s appeal as a business location and to attract continued private investment, but we do not sacrifice our quality of life for the sake of economic growth.

Economic Strategies
To realize the economic vision, the City may pursue a variety of strategies, and, over time, these strategies may change to reflect changing conditions. This section identifies the strategies that the City has followed in formulating the General Plan. Through future economic development strategic plans, the City may identify and implement different strategies.

1. Maintain Industrial Uses
Industrial businesses are an important component of the local economy. The economic analysis conducted for the General Plan suggested that these businesses will likely remain viable and continue contributing more to municipal revenues than they require in public services.

To maintain the integrity of industrial areas and the attractiveness of Los Alamitos as a place for industrial businesses to operate, the General Plan incorporates several approaches.

Most of the existing industrial uses are in two quarter-sections north of Katella Avenue and east of Los Alamitos Boulevard, but two other industrial areas are west of Los Alamitos Boulevard. The General Plan clearly delineates the area that is intended to accommodate industrial businesses over the long term.

Industrial areas tend to have lower purchase/lease costs than retail and office areas, are not often adjacent to noise-sensitive neighbors, and contain simple building forms that can be adapted to a number of uses. As a result, many industrial parks in Southern California are dealing with encroachment from uses such as churches, day-care facilities, and sports or fitness schools. Such uses do not necessarily induce existing industrial businesses to leave, but they do limit the ability of industrial property owners to bring in new tenants. Industrial businesses can be quite sensitive to liability issues from parents with children navigating the same streets that lack sidewalks and carry large trucks.

The General Plan seeks to limit non-industrial businesses in the primary industrial areas. Accordingly, the General Plan provides a new land use designation (Limited Industrial) to allow some flexibility for these non-industrial uses outside of the primary industrial area, while prohibiting certain non-industrial businesses in the Planned Industrial land use designation.
Additionally, most relocating industrial businesses are seeking a new location to expand their production to accommodate a new contract or a new product line. For these businesses, time is of the essence. A three-month or longer process to obtain a conditional use permit or other discretionary review can be a deal killer. Although the General Plan update does not affect the existing zoning requirements, future efforts may explore the role of discretionary permit reviews for industrial uses. The intent would be to streamline the process to the degree feasible while maintaining protections for the community’s quality of life.

2. Capitalize on Medical Services
The medical services industry will continue to grow for many years, providing opportunities for Los Alamitos to capture more economic activity and, consequently, more municipal revenues. The Medical Center is already implementing a planned expansion, and this expansion might accommodate all of the medical service industry that the community is willing to accept. The General Plan has identified those areas where additional medical offices may be encouraged.

However, for areas that the City would like to see redeveloped in the future, additional expansion of medical offices might be the most likely driver of such changes. Medical office development might be able to afford the added costs to improve the look and feel of such areas. Intensification of medical offices would allow the City to capitalize on the growth potential of the medical services industry, but it would have to be compatible with the community’s overall vision for Los Alamitos.

3. Create a Competitive Retail Environment
The economic analysis pointed out that Los Alamitos has done relatively well capturing its share of retail spending in the past. With the Shops at Rossmoor and the new commercial development in Cypress around the racetrack, however, Los Alamitos may not recover to its pre-recession levels of retail sales. Many popular big-box retailers are already located around Los Alamitos and in these two areas, and the racetrack area can accommodate additional big box tenants. In contrast, there are few areas in Los Alamitos where redevelopment to create a competitive big-box center would be financially feasible.

Los Alamitos has the potential to create a unique retail shopping environment. A walking, human-scaled, experience-oriented shopping district is something that one must travel far from Los Alamitos to find. Furthermore, the internet has not finished changing the nature of retail, and the future of big box stores is uncertain. What is more certain is that Americans are social creatures; regardless of how people satisfy their material needs, they still desire places where they can socialize, hang out, dine with friends and family, and, perhaps, do a little shopping.

A downtown or town center provides a way for Los Alamitos to compete for taxable retail sales in a way that complements the community’s quality of life. In addition to creating a competitive retail environment in Los Alamitos, the General Plan recognizes the retail value of a larger daytime population. More workers in the City means more retail spending. And with the implementation of a downtown or town center, the City may capture more of the daytime population’s taxable retail spending.
4. Sustain and Improve the City’s Fiscal Balance

In general, cities spend more providing public facilities and services to residential properties than those properties generate in revenues. Retail, office, and industry, in contrast, tend to generate more in revenues than they require in facilities and services. Sustaining a municipality’s fiscal balance requires managing the balance between residential and non-residential land uses.

The data suggests that Los Alamitos has a land use balance that most cities would envy. It is jobs-rich and captures a better than average share of taxable retail sales. This does not mean that the City is without financial pressures, but it does mean that as the region’s economy recovers and continues to grow, Los Alamitos is well positioned to recover.

The General Plan focuses on maintaining a healthy land use balance in the future. To the degree that the community desires to expand public facilities and services, the City will need to focus on expanding economic activity in the City. Taxable retail sales is just one part of economic activity. By focusing solely on the retail sales tax dollar, the community risks missing much larger opportunities, ones that might be easier to capitalize on than chasing retail.

Among those opportunities are growth in the medical industry and increasing the vitality of the manufacturing sector. Because Los Alamitos is essentially built-out, increasing economic activity most likely means changing land uses and/or redevelopment of existing buildings. It is in the land use and economic development policies that the General Plan will ultimately lay the foundation for the City’s fiscal sustainability.

5. Attract Private Investment

A community that maintains and grows property values is one in which households want to invest in housing and firms want to invest in operating their business.

Changes in local, regional, and national demographics will influence the housing market over the next 20 years. How many households will move out of Los Alamitos, and how much demand will there be from younger generations to buy that housing (and will they be able to afford it)?

It would certainly seem that the quality of the Los Alamitos Unified School District is and will continue to be a key amenity that attracts households to live in the City. But there are other cities in this school district and there are cities in other good school districts. Furthermore, fewer households in the future will have children, which may make the school system less important in many purchasing decisions. The General Plan emphasizes some of the other factors that make the City an attractive place to live, especially in relation to other comparable communities.

Similarly, the General Plan emphasizes what makes Los Alamitos a good place to operate a business, now and in the future. A metric for this was to explore why a business would pay a premium to locate in Los Alamitos. The point is not to make it more expensive, but to understand what businesses would value and to deliver that in the General Plan.
Goals and Policies

Goal 1: Development patterns and a mix of uses that provide a fiscal balance sufficient to continue and increase public investment in the community’s quality of life.

Policy 1.1 Fiscal decision making. Incorporate short-term and long-term economic and fiscal implications of proposed actions into decision-making.

Policy 1.2 Fiscal disclosures. Identify and disclose potential fiscal impacts, including direct and indirect costs, as part of land use or development applications requiring City Council action.

Policy 1.3 Ongoing funding. Identify and disclose if and how a program or project will be continued upon cessation of city funding or support when the City establishes, renews, or funds a program or project lasting more than one fiscal year.

Policy 1.4 Retail and lodging amendments. General plan amendments changing from a land use designation that permits retail uses or lodging uses to a land use designation that does not allow retail or lodging uses should consider a development agreement or other legally enforceable obligation on the property owner(s) that requires the subject property generate the same or better fiscal balance for the city as it would have generated with a retail or lodging use.

Policy 1.5 Office and industrial amendments. General plan amendments changing from a land use designation that permits office or industrial uses to a designation that does not permit office or industrial land uses should consider a development agreement or other legally enforceable obligation on the property owner(s) that requires the subject property generate the same or better fiscal balance for the city as it would have generated with an office or industrial use.

Policy 1.6 Fiscal mitigation. Require a fiscal impact analysis and mitigation of any negative fiscal impacts for any requested general plan amendment.

Policy 1.7 Budgeting. Require City departments to submit an annual budget request free from reliance on one-time revenues (except for specific grant-funded projects) and unsustainable revenue and deficit spending.
Goal 2: A local economy that provides jobs for Los Alamitos residents and improves the region’s balance of jobs and housing.

Policy 2.1 Employment-generating uses. Maintain the integrity of office, industrial, and medical overlay areas and protect these areas from encroachment by other uses.

Policy 2.2 Effective land use regulation. Ensure that development standards, use regulations, and the permitting process (especially discretionary permitting), are streamlined and effective, yet maintain protections for the community’s quality of life.

Policy 2.3 Promote well-paying jobs. Prioritize municipal decisions, initiatives, investments, and development approvals that support the retention and expansion of well-paying jobs in Los Alamitos.

Policy 2.4 Workforce development. Help existing businesses communicate their workforce needs to the Orange County Workforce Investment Board, the North Orange County Community College District, the Los Alamitos Unified School District, and other educational and workforce development organizations.

Policy 2.5 Economic development marketing. Collaborate with regional economic development partners, such as the Los Alamitos Chamber of Commerce and the Orange County Business Council, to market Los Alamitos to potential new businesses.

Policy 2.6 Medical services. Capitalize on the City’s role as a regional medical services hub by promoting and encouraging the intensification of medical offices in areas assigned with the Medical Overlay designation.
Goal 3: Distinctive shopping and entertainment corridors and districts that attract consumer spending by residents, workers, and regional visitors.

Policy 3.1 Town center. Prioritize municipal decisions, initiatives, investments, and development approvals that contribute to the vision of a town center as an amenity-rich, multi-modal, and mixed-use district that is a unique regional destination and that emphasizes experience-oriented shopping.

Policy 3.2 Business development. Collaborate with the Chamber of Commerce, the Orange County Small Business Development Center, and other economic development partners to improve access by Los Alamitos small businesses and independent retailers to business development services.

Policy 3.3 Quality retail environments. Require new, redeveloped, and revitalized retail centers to provide street furniture, shading, pedestrian circulation, and gathering spaces that enhance the experience of shopping.

Policy 3.4 Parking districts. Support voluntary efforts by commercial property owners to establish parking management districts (or other tools) to facilitate shared parking solutions and encourage pedestrian-oriented mixed-use buildings.

Policy 3.5 Public-private partnerships. Prioritize municipal initiatives and investments in areas in which private sector businesses and property owners are voluntarily providing private funding through special financing districts (such as assessment districts and business improvement districts).

Policy 3.6 Diversification. Prioritize municipal initiatives, investments, and development approvals that bring businesses in economic sectors not currently represented in Los Alamitos.
Goal 4: An economic development mindset integrated throughout City Hall.

Policy 4.1 Economic development responsibility. Promote an ethos in which economic development is the responsibility of each elected official, appointed official, and City employee.

Policy 4.2 Economic development training. As financial resources are available, invest in economic development training for staff, elected and appointed officials, and key community stakeholders.

Policy 4.3 Business visitation. Establish and maintain an annual business visitation program that engages the owners and managers of businesses operating in Los Alamitos.

Policy 4.4 Economic development strategy. Adopt and regularly update a comprehensive economic development strategy, either as a stand-alone plan or as part of a broader City-wide strategic plan.

Policy 4.5 Economic development partners. Collaborate effectively with regional economic development partners to achieve specific measurable goals for Los Alamitos.
Housing Element

The Housing Element is provided under separate cover.

The Housing Element is updated on a separate State-mandated timeframe. The current Housing Element was adopted on February 3, 2014 and addresses the 2014–2021 planning period.
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Open Space, Recreation, and Conservation Element

Parks, Recreation, and Open Space

Existing Conditions
Los Alamitos and Rossmoor are active communities with families, individuals, and schools that emphasize the value of parks, recreation, and open space amenities. The City of Los Alamitos provides parks, school fields, and recreation facilities and programming that directly serve the residents of Los Alamitos, Rossmoor, Seal Beach, and Long Beach. Parks and school fields in Rossmoor serve as a direct resource for Rossmoor residents and offer additional open space resources for Los Alamitos residents.

Parks and Recreation Facilities, Events, and Programs
The City of Los Alamitos contains a wide range of parks and facilities that offer programmed and unprogrammed space for casual and organized sports, general recreation, and quiet rest and relaxation. Tables 1 and 2 offer a comprehensive inventory of parks and recreation facilities in the City of Los Alamitos and Rossmoor. Figure 1 provides a map of each facility.

Los Alamitos
Public Parks. The City has 18 acres of public park space in its four neighborhood parks and five pocket parks. The newest park facility, Coyote Creek Park, opened in 2013 and converted a barren utility corridor into a passive, 3.7-acre greenway along the Coyote Creek Channel. Little Cottonwood Park, at nearly seven acres, is the largest public park available to residents in the City of Los Alamitos and offers large open spaces, fields, and playground areas.

Laurel Park softens the experience of traveling along Katella Avenue and buffers Los Alamitos Elementary and McAuliffe Middle Schools from the heavy vehicle traffic. Laurel Park also hosts games for the Los Alamitos Girls Softball League (LAGSL), which has provided a place for girls of all levels to learn about and have fun playing softball since 1974. Orville Lewis Park sits at the southwestern edge of the City to provide open space for residents of the Highlands Neighborhood.

Five pocket parks bring small open space areas to a number of residential neighborhoods and generally include grass and play areas for small children.

Other Spaces and Facilities under City Control or Contract. Four facilities comprise 27 acres of park and recreation space through City ownership or joint-use agreements. The Aquatic Center is home to the USA Water Polo National Training Center and an outdoor 50-meter pool. The City leases and operates the facility and offers swimming, exercise, and other youth programs throughout the year in the heated pool.
The Los Alamitos Community Center is the focal point for recreational activities and community services in Los Alamitos and Rossmoor. The Community Center includes rooms for arts, crafts, exercise and dance classes, and special programs. The activity rooms and kitchen facilities can accommodate banquets, receptions, meetings, seniors, and fund-raising activities. The Community Center is also the home of the Los Alamitos Senior Club and Senior Lunch and Bread Program.

Adjacent to the Community Center is the Youth Center, which dates back to 1952 as an organization serving the communities of Los Alamitos, Rossmoor, and Seal Beach. The Youth Center is a nonprofit organization that maintains strong partnerships with the City of Los Alamitos, the Los Alamitos Unified School District (LAUSD), and the Rossmoor Community Services District. Its current building and gymnasium was completed in 1979 and is a community landmark that has assisted countless groups, including other non-profit organizations requiring use of the facility for valuable events on evenings and weekends. The center provides children an opportunity to relax, learn, recreate, and be with friends through after school drop-in, volunteer, and music programs, as well as summer and teen camps. The building is also used in the morning hours by the City for the senior meals program.

Through long-term, facilities/joint-use agreements with LAUSD, the City is able to use and program field space on McAuliffe and Oak Middle Schools. This includes hosting “Friday Night Lights,” youth flag football for boys and girls of all skill levels in grades K–8 in Los Alamitos, Rossmoor, and Seal Beach.

**Other Spaces and Facilities Controlled by Other Agencies.** Eight other private or public facilities offer residents recreation space on a limited basis (by fee, athletic organization affiliation, or membership). These facilities are not covered by a current agreement with the City but, with the exception of St. Hedwig, are open to the public.

The Joint Forces Training Base (JFTB) has two parks and two special use facilities. The baseball fields are leased by Los Alamitos Youth Baseball (LAYB), an all-volunteer organization that offers baseball programs to boys and girls ages 4 to 14. LAYB celebrated its 50th anniversary as a youth baseball league in 2012. The Arbor Dog Park and Fields are currently leased by the City of Seal Beach from the JFTB for its residents, although the two parks are within Los Alamitos. The Arbor Park Fields are prioritized for use by American Youth Soccer Organization (AYSO) Region 159, serving children in Los Alamitos, Rossmoor, and Seal Beach. AYSO is celebrating its 50th year anniversary in 2014. The Navy Golf Course (222 acres) is open to the public on a fee/membership basis.

Three public schools maintain playing fields that are available for use on a fee basis, and St. Hedwig’s, a private K–8 school, maintains grass ball fields. Private indoor recreation facilities (not shown in the tables or on the map) include gymnasiums at the Church of Jesus Christ of Latter-day Saints and Good Shepherd Presbyterian Church, and commercial recreation facilities that include indoor soccer, archery, gymnastics, and batting cages.
**Events and Programs.** Special community events offered by the City include the Race on the Base, Spring Carnival, Fourth of July Fireworks Spectacular, Music & Movies Events, Halloween Trunk or Treat, and Winter Wonderland at the Plaza. These events are extremely popular and attract people from Los Alamitos, Rossmoor, and surrounding communities. The City’s largest event is the Race on the Base, an annual running and triathlon race for children and adults that draws thousands from the entire southern California region.

The Los Alamitos Recreation and Community Services Department also conducts recreation programs and classes for people of all ages and interests. Indoor and outdoor activities and excursions are held all year long. The City also offers classes covering a range of topics such as arts and crafts, exercise and fitness, sports, health and travel, animals, and volunteering.

**Rossmoor**

**Public Parks.** Rossmoor has 18.5 acres of public park space in its two neighborhood parks and two pocket parks. Both Rossmoor and Rush Park were originally slated for use as schools. Rossmoor Park never developed as a school and was developed into a park as Rossmoor built out. In 1990, with a dwindling population of elementary school-age children, Rossmoor residents approved a ballot measure to acquire Rush School and convert it into a public park.

Today, both of these neighborhood parks offer numerous athletic fields/courts, playground areas, community rooms, and general open space. For example, both parks host games for the LAGSL. The parks have become so popular that some residents complain about the lack of parking and the athletic events that draw sizable crowds. The two pocket parks provide small open space areas for people walking and exercising in Rossmoor.

**Other Spaces and Facilities.** The Montecito Center and four elementary schools provide 16.6 acres of park and recreation space in Rossmoor. Montecito Center offers nearly 1,500 square feet of space for community events and activities, along with a large courtyard and patio. During the school year, this facility is home to the Li’l Cottonwood Preschool. The fields and open space areas of the four elementary schools are available for public use outside of school hours. Individuals, families, and small groups use the school fields for general recreation, informal games and practices, and passive open space.
Facility Agreements

The following parks and recreational facilities have been secured for public use through facilities/joint-use agreements. Use of school facilities is limited, and none are available during school hours when school is in session.

- USA Water Polo National Training Center: November 19, 1998, to February 29, 2016 (agreement with JFTB)
- LAUSD Master Agreement: November 19, 2014 for 5 years with a possible 5-year renewal;
- The following facilities follow the terms of the LAUSD Master Agreement: McAuliffe Field; Oak Field; and Oak Middle School Basketball Courts, Restrooms, and Bike Path
- Oak Gymnasium: Started February 28, 1974, and the agreement is held in perpetuity

Table 1. Summary of Existing Parks and Recreation Facilities

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>City of Los Alamitos</th>
<th>Rossmoor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Parks</td>
<td>18.0 acres</td>
<td>18.5 acres</td>
</tr>
<tr>
<td>Other Spaces and Facilities</td>
<td>299.5 acres</td>
<td>16.6 acres</td>
</tr>
<tr>
<td>TOTAL</td>
<td>317.5 acres</td>
<td>35.1 acres</td>
</tr>
</tbody>
</table>

Sources: City of Los Alamitos and Rossmoor Community Service District 2014.

Table 2. Comprehensive List of Existing Parks and Recreation Facilities

<table>
<thead>
<tr>
<th>Park/Facility Name</th>
<th>Type</th>
<th>Acres</th>
<th>Amenities/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CITY OF LOS ALAMITOS</td>
<td>317.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Parks</td>
<td>18.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coyote Creek Park</td>
<td>Neighborhood Park</td>
<td>3.69</td>
<td>trail and grass area</td>
</tr>
<tr>
<td>Little Cottonwood Park</td>
<td>Neighborhood Park</td>
<td>6.75</td>
<td>basketball court, sand volleyball court, softball field, multipurpose field space, play area, cement jogging sidewalk, barbecues, picnic tables/shelters, drinking fountain, restrooms</td>
</tr>
<tr>
<td>Laurel Park</td>
<td>Neighborhood Park</td>
<td>4.33</td>
<td>lighted multipurpose field, lighted softball field, lighted tennis courts, picnic tables, drinking fountain, restrooms</td>
</tr>
<tr>
<td>Orville Lewis Park</td>
<td>Neighborhood Park</td>
<td>1.65</td>
<td>grass area, baseball backstop, basketball court, play area, barbecue, picnic shelter and tables, drinking fountain</td>
</tr>
<tr>
<td>Labourdette Park</td>
<td>Pocket Park</td>
<td>0.44</td>
<td>play area, barbecue, picnic shelter</td>
</tr>
</tbody>
</table>
### Table 2. Comprehensive List of Existing Parks and Recreation Facilities

<table>
<thead>
<tr>
<th>Park/Facility Name</th>
<th>Type</th>
<th>Acres</th>
<th>Amenities/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roberts Park</td>
<td>Pocket Park</td>
<td>0.09</td>
<td>• play area</td>
</tr>
<tr>
<td>Stansbury Park</td>
<td>Pocket Park</td>
<td>0.62</td>
<td>• grass area and play area</td>
</tr>
<tr>
<td>Soroptimist Park</td>
<td>Pocket Park</td>
<td>0.17</td>
<td>• play area</td>
</tr>
<tr>
<td>Sterns Park</td>
<td>Pocket Park</td>
<td>0.29</td>
<td>• play area and barbecue</td>
</tr>
<tr>
<td><strong>Other Spaces and Facilities</strong></td>
<td><strong>299.5</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Center</td>
<td>Special Use Facility</td>
<td>2.46</td>
<td>• subject to long-term facilities use agreement between the City and JFTB</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Olympic-sized pool and facility</td>
</tr>
<tr>
<td>Los Alamitos</td>
<td>Special Use Facility</td>
<td>1.69</td>
<td>• 11,000+ sq ft of meeting and activity rooms, as well as kitchen facilities</td>
</tr>
<tr>
<td>Community Center</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McAuliffe</td>
<td>Track/Fields</td>
<td>10.88</td>
<td>• subject to long-term facilities/joint-use agreement between the City and LAUSD</td>
</tr>
<tr>
<td>Middle School</td>
<td></td>
<td></td>
<td>• grass area, lighted playing fields, track</td>
</tr>
<tr>
<td>Oak Middle School</td>
<td>Track/Fields</td>
<td>11.90</td>
<td>• subject to long-term facilities/joint-use agreement between the City and LAUSD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• grass area, lighted playing fields, lighted outdoor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>basket ball courts, gymnasium, bike path, lighted track, restrooms</td>
</tr>
<tr>
<td>Arbor Dog Park</td>
<td>Special Use Facility</td>
<td>2.74</td>
<td>located on the JFTB; leased/operated by Seal Beach</td>
</tr>
<tr>
<td>Arbor Park Fields</td>
<td>Fields</td>
<td>8.92</td>
<td>located on the JFTB; leased/operated by Seal Beach with preference for AYSO</td>
</tr>
<tr>
<td>Los Alamitos Youth</td>
<td>Special Use Facility</td>
<td>9.57</td>
<td>located on the JFTB; leased and operated by Los Alamitos Youth Baseball</td>
</tr>
<tr>
<td>Baseball Fields</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navy Golf Course</td>
<td>Public Golf Course</td>
<td>221.60</td>
<td>located on the JFTB; open to general public for a fee;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>27-hole golf course, driving range, and pitch/putt</td>
</tr>
<tr>
<td>Laurel High School</td>
<td>Turf/Fields</td>
<td>3.93</td>
<td>available for rental, but not part of a facilities/joint-use agreement with the City</td>
</tr>
<tr>
<td>(Continuation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Los Alamitos High</td>
<td>Turf/Fields/Pool</td>
<td>21.01</td>
<td>available for rental, but not part of a facilities/joint-use agreement with the City</td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Los Alamitos</td>
<td>Turf/Fields</td>
<td>1.78</td>
<td>available for rental, but not part of a facilities/joint-use agreement with the City</td>
</tr>
<tr>
<td>Elementary School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Hedwig School</td>
<td>Turf/Fields</td>
<td>2.98</td>
<td>private use only</td>
</tr>
<tr>
<td>(Private)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Comprehensive List of Existing Parks and Recreation Facilities

<table>
<thead>
<tr>
<th>Park/Facility Name</th>
<th>Type</th>
<th>Acres</th>
<th>Amenities/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROSSMOOR / SPHERE OF INFLUENCE</strong></td>
<td></td>
<td>35.1</td>
<td></td>
</tr>
<tr>
<td><strong>Public Parks</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Rossmoor Park                    | Neighborhood Park   | 9.43  | • basketball, tennis, and volleyball courts; softball and soccer fields, play area  
|                                  |                     |       | • barbecues, picnic table, 750+ sq ft community room and kitchen |
| Rush Park                        | Neighborhood Park   | 8.61  | • grass area, ball fields, play area, fitness trail  
|                                  |                     |       | • picnic tables, 6,300 sq ft community room/kitchen |
| Foster Mini-Park                 | Pocket Park         | 0.17  | • grass area, play area, benches                     |
| Kempton Mini-Park                | Pocket Park         | 0.24  | • grass area, play area, benches                     |
| **Other Spaces and Facilities**  |                     | 16.6  |                                                     |
| Montecito Center                 | Special Use Facility| 0.54  | • 1,500 sq ft community room, courtyard, and patio   |
| Hopkinson Elementary School      | Turf/Fields         | 4.89  | • grass area and fields open to the public outside of school hours and available for rental |
| Lee Elementary School            | Turf/Fields         | 3.64  | • grass area and fields open to the public outside of school hours and available for rental |
| Rossmoor Elementary School       | Turf/Fields         | 4.44  | • grass area and fields open to the public outside of school hours and available for rental |
| Weaver Elementary School         | Turf/Fields         | 3.09  | • grass area and fields open to the public outside of school hours and available for rental |

Sources: City of Los Alamitos and Rossmoor Community Service District 2014.
Notes: The title to Little Cottonwood Park was transferred to the City by the United States Department of the Interior through a Quit Claim Deed in 1989. If the property is needed for national defense, title would revert back to the federal government. Laurel Park was purchased by the City from the Los Alamitos Unified School District in 2005.
Figure 1 Parks and Recreation Facilities

1. Stansbury Park (0.62 ac)
2. Roberts Park (0.09 ac)
3. Sorrento Park (0.17 ac)
4. Braywood Park (0.44 ac)
5. Stevens Park (0.29 ac)
6. Kempten Wein Park (0.24 ac)
7. Foster Wein Park (0.17 ac)
8. Coyote Creek Park (3.69 ac)
9. Sunset Park (4.31 ac)
10. Little Cottonwood Park (0.75 ac)
11. 40th Avenue Park (1.65 ac)
12. Arbor Park (0.92 ac)
13. Arbor Dog Park (2.74 ac)
14. Reservoir Park (9.43 ac)
15. Rush Park (6.47 ac)
16. Los Alamitos Community Centre/Youth Center (1.09 ac)
17. Los Alamitos Youth Baseball Fields (9.57 ac)
18. Aquatic Center (2.46 ac)
19. Navy Golf Course (221.60 ac)
20. Montecito Center (0.54 ac)
21. School District Headquarters (3.93 ac)
22. Los Alamitos High School (21.01 ac)
23. Oak Middle School (1.90 ac)
24. McMillen Middle School (10.29 ac)
25. Los Alamitos Elementary School (1.70 ac)
26. St. Hedwig School (Private) (3.19 ac)
27. Lee Elementary School (3.64 ac)
28. Rossmoor Elementary School (4.44 ac)
29. Weaver Elementary School (3.09 ac)
30. Hopkins Elementary School (4.89 ac)

Source: City of Los Alamitos, 2013  CLA-01 :  OSRC Figure 1 Parks_and_Recreation_Facilities.mxd      7/23/2014
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**Future Park and Recreation Space**

Overall, there are nearly 318 acres of park and recreation facilities in Los Alamitos. Of this, 18.0 acres of parkland and 26.9 acres of recreation space in special use and school facilities that are owned, operated, or under contract by the City for public use. An additional 269.6 acres of recreation space (48.0 acres outside of the golf course) is on land outside of City control or contract, but available for public use. Roughly 3.0 acres or recreation space are provided through a private school (St. Hedwig) typically reserved for its students and families.

There is no state or federal statute on how to calculate the City’s level of park service. Additionally, there is no state or federal minimum level of park or recreation space. It is up to each jurisdiction to determine the appropriate amount of park and recreation space and what does and does not count toward the target amount. Some guidance is provided by Section 66477 of the California Government Code (commonly referred to as the Quimby Act), but this part of the Government Code does not apply to all development.

The City calculates the acreage of park and recreation facilities that serve the public as follows:

- 18.0 acres | public parks
- 26.9 acres | spaces and facilities owned or under contract by the City for public use
- 13.5 acres | 5% of all other spaces and fields generally available to the public, but outside of the City’s direct control or agreement

In total, this represents 58.4 acres of park and recreation space currently available to the public. This figure completely excludes the three acres on St. Hedwig’s property and includes only five percent of the land outside of the City’s direct control or agreement. While the City can assume that well over 500 residents use these facilities at various times of the year (roughly five percent of the City’s 2013 estimated population), there are no specific data sources to confirm a precise number. However, given the level of participation of residents’ children in local sports and recreation activities (school-sponsored and club), the number of residents could easily equal 10 percent or more.

Using the conservative figure of 58.4 acres total and assuming the City’s estimated existing 2013 population of 11,384, the City currently provides 5.1 acres of neighborhood and community park and recreation space for every 1,000 residents.

Accordingly, the types of activities, users, and families in Los Alamitos indicate that the City will be best served by setting the following goal for park and recreation facilities:

**Park and Recreation Goal.** A minimum of 5 acres of park and recreation space per 1,000 residents.

Based on the City’s estimated buildout of 12,463 people, the City may need to provide up to 62.3 acres of park and recreation space to maintain a ratio of 5 acres per 1,000 residents, or 3.9 acres more than what is currently provided.
Underserved Neighborhoods. The location of park space is just as important as the amount of space provided. It is not enough to provide a large amount of park land in one area of the City. Individuals and families should be able to walk to a local park.

Though many of the City’s neighborhoods are close to park and recreation facilities, residents in the Carrier Row, New Dutch Haven, Greenbrook, and Highlands neighborhoods cannot easily access park space within Los Alamitos.

Future Park and Recreation Space. The City has many options to add new park and recreation space and address underserved neighborhoods. Small pocket parks should be within walking distance (1/4-mile) of the neighborhood being served. Neighborhood parks and other larger park and recreation facilities, however, are citywide assets and can be address the needs of underserved neighborhoods from any location in Los Alamitos.

- **Acquire new park space.** Explore options to purchase and convert a portion of the Navy Cruiser Course or former base housing into public parkland and recreation space. Consider options to purchase vacant and underutilized land in neighborhoods, as available.

- **Extend and expand facility use agreements.** Renew and renegotiate existing long-term facility use agreements with the LAUSD and JFTB. Enter into new agreements to open fields and facilities on additional areas of the base and other schools to the general public for recreation activity outside of school hours. Specifically, negotiate with JFTB leadership to enter into a lease agreement for the public use of Arbor Park (fields and dog park) in advance of the termination date of the current lease agreement between the JFTB, City of Seal Beach, and AYSO.

- **Work with religious and other nonprofit institutions.** Coordinate with religious and other nonprofit institutions in the City and identify opportunities for community events and for public use of open space on private property. This could include coordination with the preservation efforts for St. Isidore Historical Plaza and its possible role as a community center or a 21st century digital library.

- **Identify options for new types of park facilities.** Evaluate the potential for community gardens in the Apartment Row neighborhood and on school sites as joint-use facilities. Explore site and programming options for farmers markets, including Reagan Street, Pine Street, Laurel Park, and the JFTB. Identify opportunities to create an additional off-leash dog park in the City or on the JFTB.

Rossmoor. Those who live in Rossmoor indicate that they are adequately served by park and recreation facilities, largely due to the fact that the elementary schools serve as de facto parklands. Rossmoor has an estimated existing population of 10,234 and is served by 18.5 acres of public parkland and another 16.6 acres of recreational space on the four elementary schools. Due to the distribution of parks and schools, none of the residents are outside of walking distance.
distance to at least one of the facilities. This equates to 3.4 acres of park and recreation space per 1,000 residents.

If Rossmoor is ever annexed into the City, the estimated buildout of both communities would be approximately 23,000 people. The combined park and recreation space of both communities, as calculated above, is 93.5 acres. With a City park and recreation goal of 5 acres for every 1,000 residents, the total facility need would be 115 acres. Accordingly, if Rossmoor is ever annexed, the City may need to add 21.5 acres of park and recreation space compared to what is provided today to maintain the City’s park and recreation goal.

There is little vacant and underutilized land in Rossmoor, and the school district is unlikely to close any elementary schools. However, the options stated above to add park and recreation space in the City could also be used to address the potential gap in a scenario where Rossmoor is annexed into the City.

Natural, Cultural, and Historic Resources

Natural Resources

History

Agricultural Roots. Los Alamitos and Rossmoor contain biological resources typical of the urban areas in southern California. Los Alamitos and Rossmoor were part of a larger rural area during the early 1900s primarily known for its agricultural production. Much of the natural grasslands, other flora, and wildlife were destroyed or displaced by farming. Urban development of the rural landscape necessitated additional plants and wildlife to be removed to accommodate new housing sites, streets, and other public improvements. As a result, the original vegetation (native chaparral and grassland) and associated wildlife have long since been replaced by ornamental planting.

Flooding and Flood Control. Following the devastating floods of 1914, impacted communities supported the damming and eventual paving of the Los Angeles and San Gabriel rivers to protect life and property. By the 1950s, the San Gabriel River was converted from its natural state into a concrete flood control channel. With the channelization of nearly all downstream areas, the natural riparian habitat was largely destroyed.

In the 1960s, a growing environmental movement began to challenge this approach to river management. By the 1980s and 1990s, local governments began to introduce goals of enhancing habitat, recreation, and open space into plans that were previously focused solely on flood protection, water supply, and water quality. The latest plans view the river systems as integral parts of the southern California environment and promote their ecological restoration and natural renewal.

Joint Forces Training Base. The JFTB was originally used in the 1920s and 1930s for agricultural purposes. In May 1942, the property was commissioned as the Los Alamitos Naval Air Station,
after which it changed roles and operational control several times but maintained its military function. The JFTB is currently licensed to the State of California by the Department of the Army and is operated by the California Army National Guard.

**Existing Conditions**
Within Los Alamitos and Rossmoor, the current natural landscape consists primarily of trees and managed park space. The trees and park spaces visually soften the hard urban landscape, help to purify the air, and provide shade, recreation space, and shelter for humans, birds, and animals. The JFTB is largely developed with buildings, roads, and an airfield. Some agricultural fields, a 27-hole golf course, and two park facilities form the southern and eastern borders of the base.

Coyote Creek Park is the newest park facility in the City and improved an area along the Coyote Creek Channel that was devoid of trees and vegetation. The area now contains a passive recreation space with landscaping composed of native plants of significant ecological value to the region. The City funded this project through a grant from the Rivers and Mountains Conservancy (RMC) and the Clean Drinking Water, Coastal and Beach Protection State Bond Act of 2002.

**Cultural and Historic Resources**
Cultural resources can be regarded as symbols of a people and their civilization. These symbols can represent human activity in pre-history as well as the present. Cultural resources can also provide a sense of place, history, and pride for residents of a region.

No archaeological or paleontological sites have been discovered in the City or Rossmoor. Additionally, no sites or structures are currently identified by the City as local landmarks (per Chapter 17.22 of the City’s Municipal Code) and none are listed on the state or federal registers of historic places. However, there are a number of sites and structures that may have local historical significance. The City may seek state and federal registration for one or more of the following sites and structures.

**Los Alamitos Sugar Company Sugar Beet Processing Plant.** In 1896, the Los Alamitos Sugar Company was formed and constructed the first sugar beet factory in Orange County a year later. The company brought jobs and development that led to the formation of the town of Los Alamitos. The sugar beet factory operated until 1926, when an area-wide nematode infestation depleted the soils of their nutrients. The factory complex changed hands many times until 1960, when all but two of the buildings were torn down. Unfortunately, no structures remain, and a plaque commemorates the original site of the plant. Located on a wall next to the post office, the site is designated as Historical Site #46 by the Orange County Historical Commission.

**Los Alamitos Fire Station/Museum.** The Los Alamitos Museum is housed in a building previously used as the Los Alamitos volunteer fire station (11062 Los Alamitos Boulevard). In the late 1940s, the volunteer firemen began earning money to purchase the land for the station. The County of Orange built the firehouse of adobe bricks, and the Los Alamitos
volunteers finished the inside. The station operated on a completely volunteer basis until the Los Alamitos fire station was moved to its current address on Green Street in the 1970s. The museum was dedicated in 1975 and opened with exhibits in 1976.

**St. Isidore Chapel.** The St. Isidore Chapel is the oldest public building in Los Alamitos. The St. Isidore Parish was established in 1921—the sixth parish to be established in Orange County. Its parishioners were field hands, employees of the sugar beet factory, farmers, ranchers, dairymen and members of the community. In 1926, the church was built and named St. Isidore after the patron saint of laborers and farm workers.

The original church, a simple chapel with brick facade and large windows, suffered substantial damage in the 1933 Long Beach earthquake. The chapel was rebuilt in a Spanish Revival style that it maintains today. Iconic elements of the structure include beautiful plastered walls, exposed wood beams, wrought-iron accents, and ceramic tiles. In the 1930s and early 1940s, 10 striking stained glass windows were installed. This landmark played a central role throughout the history of the community—the Great Depression, earthquakes and floods, and multiple wars. With the opening of St. Hedwig in 1960, St. Isidore was closed and stripped of its contents, including its bell, hand carved pews, and Belgium-marble statues and altar. The church was refurbished and reopened in the 1970s, after which it again became a focal point in the community.

The Orange Diocese closed St. Isidore in 1999 due in part to the cost to earthquake retrofit the chapel. Concerned that the chapel may be demolished, a group of citizens coordinated with the Orange Diocese to purchase and restore the site and its grounds. The group, currently known as the St. Isidore Historical Plaza, plans to gift the property to the City of Los Alamitos with stipulations that it indefinitely serve as a park and community center.

**Private Homes.** A number of private homes remain that were built well before the City’s incorporation. The oldest house and structure in the City still standing is at 10802 Chestnut and is thought to have been constructed in 1898. Other homes or locations of former homes that may be of local historic significance are listed below.

- 10901 Chestnut
- 10772 Pine
- 10927 Chestnut
- 10852 Pine
- 10931 Chestnut

**Rossmoor.** Rossmoor was marketed first as a subdivision of Los Alamitos and subsequently as Long Beach’s smartest new suburb. The first homeowners moved in by 1957, and Rossmoor is now home to over 10,000 residents. Though many of the original houses remain, the majority of homes are continually remodeled, and none of the original homes are considered to be of historical value at this time. Within the commercial portion of Rossmoor, none of the buildings were built before the 1950s and are not considered to be of historical value at this time.
Air, Energy, and Water Resources

Air Quality

**Environmental Context.** The City of Los Alamitos and community of Rossmoor are in the South Coast Air Basin, which includes all of Orange County as well as the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The basin is in a coastal plain with connecting broad valleys and low hills; it is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of its perimeter. Due to its coastal location and prevailing wind patterns, Los Alamitos and Rossmoor enjoy good to excellent air quality. Local air pollutants are blown by prevailing winds from much of the basin toward inland areas.

**Rules and Regulations.** Air pollution generated by mobile and stationary sources in the City of Los Alamitos is subject to the rules and regulations imposed by the South Coast Air Quality Management District (SCAQMD), the California Air Resources Board, and the U.S. Environmental Protection Agency (EPA). State law also requires cities to address future impacts on climate change. The California Global Warming Solutions Act of 2006 was the first legislation recognizing the link between global warming and air pollution. This legislation requires cities to reduce cumulative greenhouse gases (GHG) emissions due to public and private development projects.

**Criteria Air Pollutants.** The Clean Air Act requires the EPA to set national ambient air quality standards for six common air pollutants (also known as "criteria pollutants") found all over the United States. The state also sets ambient air quality standards for these pollutants. These pollutants are referred to as "criteria air pollutants” because the state and federal government regulate them by developing human health-based or environmentally based criteria for setting permissible levels. These standards are designed to protect “sensitive receptors,” or those most susceptible to respiratory distress, such as persons with asthma, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise.

They six pollutants are ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. These pollutants can harm your health and the environment and cause property damage. Of the six pollutants, particle pollution and ground-level ozone are the most widespread health threats. The limits based on human health are called primary standards. Another set of limits intended to prevent environmental and property damage is called secondary standards.

- **Ozone.** Ozone is a pungent, colorless gas that is typical in southern California smog. The major effects of "oxidants" are visibility reduction, vegetation damage, and aggravation of respiratory diseases and eye irritation. Peak ozone concentrations result in reduced lung function, particularly during physical activity. This effect is acute in the sick, elderly, and young children. Ozone levels peak during the summer and early fall months.
Particulate Matter. Particulate matter (PM\textsuperscript{10}) is a complex mixture of extremely small particles and liquid droplets, consisting of components such as acids (nitrates and sulfates), organic chemicals, metals, and soil or dust particles. Particles that are 10 micrometers in diameter or smaller are particularly concerning because they generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects.

Carbon Monoxide. Carbon monoxide (CO) is a colorless, odorless gas emitted from combustion processes. The majority of CO emissions come from mobile sources in urban areas like Los Alamitos and Rossmoor. CO can cause harmful health effects by reducing oxygen delivery to the body's organs (like the heart and brain) and tissues. At extremely high levels, CO can cause death.

Nitrogen Dioxide. Nitrogen dioxide (NO\textsubscript{2}) is a group of highly reactive and irritating gases that form quickly from emissions from cars, trucks and buses, power plants, and off-road equipment. In addition to contributing to the formation of ground-level ozone and fine particle pollution, NO\textsubscript{2} is linked with a number of adverse effects on the respiratory system.

Sulfur Dioxide. Sulfur dioxide (SO\textsubscript{2}) is one of a group of highly reactive gasses that derive primarily from fossil fuel combustion at power plants and other industrial facilities. Smaller sources of SO\textsubscript{2} emissions include industrial processes such as extracting metal from ore, and the burning of high-sulfur-containing fuels by locomotives, large ships, and non-road equipment. SO\textsubscript{2} is linked with a number of adverse effects on the respiratory system.

Lead. Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions were historically from fuels in motor vehicles and industrial sources; although these emissions have been reduced dramatically as a result of EPA’s regulatory efforts. The major sources of lead emissions to the air today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline.

State standards. The SCAQMD also measures for compliance with two other state standards: sulfate and visibility.

Sulfates. Sulfates are the fully oxidized ionic form of sulfur, which emit primarily from the combustion of petroleum-derived fuels that contain sulfur. This sulfur is oxidized to sulfur dioxide (SO\textsubscript{2}) during the combustion process and converted to sulfate compounds in the atmosphere. The conversion of SO\textsubscript{2} to sulfates takes place rapidly in urban areas and can decrease respiratory functions and increase risk of cardiopulmonary disease. Sulfates are particularly effective in degrading visibility and can harm ecosystems and damage property. The statewide standard is designed to prevent aggravation of respiratory symptoms.

Visibility-Reducing Particles. Visibility-reducing particles consist of suspended particulate matter that vary greatly in shape, size and chemical composition, and can be made up of many different materials, such as metals, soot, soil, dust, and salt. The statewide standard is intended to limit the frequency and severity of visibility impairment due to regional haze.
Energy Resources
Energy issues impact a wide range of daily activities. This includes the more obvious uses of energy for transporting, heating, cooling, and lighting. The use of energy is also affected by local conditions such as land use patterns, transportation options, and individual consumer consumption decisions. Finally, how we build and operate the buildings within our community can reduce per capita energy demand, increase conservation opportunities, and incorporate alternative energy sources.

Finding ways to reduce the energy demands (including transportation of water) and encourage the development of renewable energy resources within the City can not only reduce our reliance upon non-renewable energy resources, but can also make the City more ecologically and economically sustainable.

Water Resources
This section addresses the sources, quantity, and quality of water resources for the Los Alamitos and Rossmoor area. Additional information pertaining to water purveyors and supply infrastructure is provided in the Public Facilities and Services Element.

*Water Sources and Quantity.* Groundwater for the City of Los Alamitos is provided by Golden State Water Company (GSWC), which owns and operates the water lines serving the majority of the City. A portion of the City and the community of Rossmoor are within the jurisdiction of the City of Seal Beach water utility.

GSWC’s water supply comes from the Orange County Groundwater Basin (OCGB) and imported water from the Municipal Water District of Orange County (MWDOC). Groundwater is pumped from several wells in the OCGB. According to the 2010 Urban Water Management Plan (UWMP)—West Orange County, prepared by GSWC, water supply for Los Alamitos is considered 100 percent reliable and stable through 2035 for normal water years, single-dry years, and multiple-dry years provided that water supply from the MWDOC and best management practices of water extraction from the OCGB remain reliable and stable.

As stated above, the City of Seal Beach also provides water supply to portions of Los Alamitos and the Rossmoor community. Seal Beach’s main sources of water supply are groundwater from the OCGB and imported water from MWDOC. According to Seal Beach’s UWMP and MWDOC’s 2010 Regional UWMP, imported waters from MWDOC would be 100 percent reliable and stable through 2035 for normal water years, single-dry years, and multiple-dry years.

In addition, pursuant to Section 16.08.060 of the City’s Municipal Code, new developments are required to submit project details and appropriate environmental documents in accordance with state guidelines to ensure adequate water supply and infrastructure. Chapter 13.04 of the municipal code identifies water conservation measures that the City may enforce during times of drought or other conditions that would tax the water system and supplies. Section 13.05.040 of the municipal code sets standards for water use in landscaping to ensure water efficient irrigation.
**Water Quality.** The state maintains a Drinking Water Program (DWP) that is responsible for enforcing the federal and state Safe Drinking Water Acts. The DWP seeks to protect public health and promote comprehensive water quality protection for drinking water, irrigation, industrial, and other uses.

The Orange County Water District maintains a thorough groundwater protection policy that includes water quality monitoring, cleanup of contaminants, regulatory agency support, toxic residuals removal, and hazardous waste management. Additionally, the District provides water quality information to regulators, other water agencies, and the general public.

Pursuant to Section 402 of the Clean Water Act, the EPA established regulations under the National Pollution Discharge Elimination System (NPDES) program to control direct stormwater discharges. In Los Alamitos, the Santa Ana Regional Water Quality Control Board (RWQCB) administers NPDES permitting programs and is responsible for developing wastewater discharge requirements.

As required by the City of Los Alamitos's local implementation plan and municipal ordinances on stormwater quality management (e.g., Chapter 8.44 of the Municipal Code, Stormwater and Urban Runoff Pollution Controls), projects that result in 5,000 square feet or more of impervious surfaces must submit a priority project-specific water quality management plan to the City for approval prior to the City issuing any building or grading permits.
Goals and Policies

Goal 1: A diverse range of parks, facilities, and programs that meet the recreational needs and interests of the community.

Policy 1.1 Park and recreation space. Establish a goal of providing 5 acres of park and recreation space for every 1,000 residents in Los Alamitos.

Policy 1.2 Diverse needs and interests. Design and program parks and recreational facilities for people of all ages and abilities. Promote park uses such as community gardens, farmers markets, dog parks, and skate/bike parks.

Policy 1.3 Underserved neighborhoods. Prioritize the development of new parks and recreational facilities in neighborhoods not already within walking distance (¼-mile) of an existing facility.

Policy 1.4 Joint-use facilities. Encourage the joint use of facilities owned by public agencies and religious institutions for public parks and recreation.

Policy 1.5 Underutilized or surplus land. Utilize publicly-owned surplus land, easements, and rights-of-way for open space and recreational facilities.

Policy 1.6 School closure. If a school site is ever closed and made available for lease or purchase, the City shall require future use or development of the site to include public recreational space equal to the recreational land area previously provided while a functional school.

Policy 1.7 City-owned facilities. When evaluating the future use of city-owned facilities consider the needs of the city first and then consider use by non-municipal entities.
Goal 2: Open space and landscaping that is attractive and functional.

Policy 2.1 Multipurpose open space. Maximize the use of public utility easements, flood control channels, school grounds, and other quasi-public areas for recreational uses and playfields.

Policy 2.2 Connectivity and image. Improve existing and establish new trails along flood control facilities to link neighborhoods and public uses, augment local and regional bicycle systems, enhance the City’s image, and attract recreational cyclists and other visitors to the town center.

Policy 2.3 Large development. Encourage development with large buildings and/or parking structures to incorporate open space and onsite recreational amenities on rooftop areas.
Goal 3: Natural, historic, and cultural resources that are preserved and promoted as key features for civic pride and identity.

Policy 3.1 Native plants. Require the use of native and climate-appropriate plant species, and prohibit the use of plant species known to be invasive.

Policy 3.2 Urban forest. Maintain and enhance a diverse and healthy urban forest on public and private lands. Incorporate and preserve mature and specimen trees at key gateways, landmarks, and public facilities.

Policy 3.3 Landscaping. Establish and maintain attractive landscaping on public and private property visible to the public, including rights-of-way, freeways access points, building frontages, and trails.

Policy 3.4 National and state historic resources. Preserve historical sites and buildings of state or national significance in accordance with the Secretary of Interior Standards for Historic Rehabilitation.

Policy 3.5 Local historic resources. Encourage property owners to maintain the historic integrity of the site by (listed in order of preference): preservation, adaptive reuse, or memorialization.

Policy 3.6 St. Isidore. Support the preservation and repurposing of St. Isidore Historical Plaza as a business or community facility, preserving the chapel as the key historical element.

Policy 3.7 Public education. Support public education efforts for residents and visitors about the unique historic, natural, and cultural resources in Los Alamitos.
Goal 4: Air, water, and energy resources that are protected from pollution and overuse.

Policy 4.1 Land use and transportation. Reduce greenhouse gas and other local pollutant emissions through mixed-use and transit-oriented development and well-designed transit, pedestrian, and bicycle systems.

Policy 4.2 Sensitive Land Uses. Discourage the future siting of sensitive land uses within the distances defined by the California Air Resources Board without sufficient mitigation.

Policy 4.3 Regional air quality. Support regional efforts to reduce particulate matter and collaborate with other agencies to improve air quality at the emission source.

Policy 4.4 Low and zero emission vehicles. Support development of private and public parking infrastructure facilitating the use of alternative fuel vehicles.

Policy 4.5 Energy and water conservation. Encourage new development and substantial rehabilitation projects to exceed energy and water conservation and reduction standards set in the City’s zoning ordinance and the California Building Code.

Policy 4.6 Irrigation. Encourage the use of water-efficient irrigation systems and reclaimed water for irrigation.

Policy 4.7 Stormwater pollution. Minimize non-point source pollutants and stormwater runoff.

Policy 4.8 Stormwater management. Encourage the use of low impact development techniques that retain or mimic natural features for stormwater management.

Policy 4.9 Renewable Energy. Promote the use of renewable energy sources to serve public and private sector development.
Mobility and Circulation Element

Existing Conditions

Regional Setting
The City of Los Alamitos is in northern Orange County and is bordered to the east by the cities of Cypress and Garden Grove. The City of Seal Beach abuts the southern border; to the north, across the county line, is the City of Long Beach in Los Angeles County. Rossmoor is in the City’s sphere of influence, and the roadways and intersections within Rossmoor are therefore considered part of the City’s transportation network in the general plan.

Primary regional access to Los Alamitos is provided by Interstates 405 and 605 (I-405 and I-605) and State Route 22 (SR-22). Access throughout the City is provided by the arterial roadways: Katella Avenue, Cerritos Avenue, Ball Road, Los Alamitos Boulevard, and Bloomfield Street.

The City’s roadways generally travel north uninterrupted into Los Angeles County jurisdictions. Southbound travel, however, is limited to I-605 and Los Alamitos Boulevard due to the position of the Joint Forces Training Base (JFTB) and its airfield. The JFTB and its restricted access precluded the formation of north–south paths south of Katella Avenue between Los Alamitos Boulevard and Valley View Street, creating more vehicular pressure for Los Alamitos Boulevard as a southern route to I-405 and SR-22. The JFTB also restricts east–west travel south of Farquhar Avenue, and the majority of vehicles using Katella Avenue to travel through the City.

Roadway Facilities

Freeways

**Interstate 405.** I-405 runs north–south immediately south of the City, extending from Irvine in the south to the San Fernando Valley in the north. Near the study area, it generally provides five travel lanes in each direction and an additional high-occupancy vehicle (HOV) lane in each direction. The posted speed limit on I-405 is 65 miles per hour (mph), with local access provided by Seal Beach Boulevard and Valley View Street.

**Interstate 605.** I-605 runs north–south west of the City, extending from I-405 in the south to Duarte in the north. Near Los Alamitos it generally provides 4 travel lanes in each direction with an additional HOV lane in each direction. The posted speed limit on I-605 is 65 mph, with local access provided by Katella Avenue and Cerritos Avenue.

**State Route 22.** SR-22 runs east–west south of the City of Los Alamitos. It extends from Long Beach in the west to Tustin in the east. Near the study area, SR-22 joins I-405 and generally provides 5 travel lanes in each direction, with an additional HOV lane in each direction. Local access is provided off Seal Beach Boulevard and Valley View Street.
Major Roadways

Los Alamitos Boulevard
Los Alamitos Boulevard is a north–south roadway that extends into Los Angeles County as Norwalk Boulevard and to the Pacific Ocean as Seal Beach Boulevard, where it is a direct connector to I-405. Street parking is permitted along most of Los Alamitos Boulevard north of Farquhar Avenue, but is not permitted south of Farquhar Avenue. The posted speed limit on Los Alamitos Boulevard is 40 mph. Los Alamitos Boulevard is a designated truck route.

Bloomfield Street
Bloomfield Street is a north–south roadway that extends from Whittier Boulevard to the north and Farquhar Avenue to the south. Bloomfield Street is a direct connecter to I-5 and SR-91 to the north. Street parking is permitted along portions of Bloomfield Street, and the posted speed limit varies between 25 and 40 mph. Bloomfield Street is a designated truck route between Katella Avenue and Cerritos Avenue.

Denni Street/Lexington Drive
Denni Street stretches from Forest Lawn Memorial Park in Cypress to Cerritos Avenue in Los Alamitos. At that point, the road is renamed Lexington Drive, stretching from Cerritos Avenue to the JFTB. Street parking is permitted on Lexington Drive north of Farquhar Avenue and south of Katella Avenue. The posted speed limit on Denni Street/Lexington Drive in the City is 25 mph.

Ball Road
Ball Road is an east–west roadway that extends into Long Beach as Wardlow Road to the west and through Cypress to the east until it terminates in Orange as Taft Avenue. Street parking is not permitted on Ball Road, and the posted speed limit is 40 mph. Ball Road is a designated truck route through the City of Los Alamitos.

Cerritos Avenue
Cerritos Avenue is an east–west roadway that extends from I-605 to the west as Spring Street and terminates in Anaheim at Walnut Street on the western boundary of Disneyland. Street parking is not permitted along most of Cerritos Avenue, and the posted speed limit is 35 mph. Cerritos Avenue is a designated truck route through the City of Los Alamitos.

Katella Avenue
Katella Avenue is an east–west roadway that extends into the City of Long Beach as Willow Street to the west and into Cypress to the east, finally terminating in Irvine. Katella Avenue is a direct connector to the I-110, I-710, I-405, I-605, I-5, SR-57, and SR-55 freeways. The posted speed limit in the city is 40 mph. Katella Avenue is a designated truck route through the City of Los Alamitos.

Figure 1 provides a map of the existing roadway network in Los Alamitos and Rossmoor.
Figure 1 Existing Roadway Network

Major Road
Local Road
Local Road-JFTB
Alley
City Boundary
Sphere of Influence
Other City Boundaries
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Traffic Control Devices
There are a total of 26 signalized intersections within the City of Los Alamitos, some of which are not maintained by the City, but by regional and adjacent jurisdictions. The majority of traffic signals in the City are installed along Los Alamitos Boulevard and Katella Avenue. The signalized intersections are:

Katella Avenue at:
- Interstate 605
- Civic Center
- Wallingford/Walnut
- Los Alamitos Boulevard
- Cherry Street
- Kaylor Street
- Bloomfield Street
- Noel Avenue
- Lexington Street
- Siboney Street
- Walker Street
- Winners Circle

Los Alamitos Boulevard at:
- Cerritos Avenue
- Sausalito Avenue
- Florista Avenue
- Farquhar Street
- Orangewood Avenue
- Rossmoor Avenue
- Bradbury Road
- Los Alamitos High School
- Humbolt Street
- Bloomfield Street

Other intersections:
- Cerritos Avenue at Denni Street/Lexington
- Ball Road at Kaylor Street
- Ball Road at Bloomfield Street
- Carbon Creek Channel at Bloomfield Street

These signalized intersections and all-way and side-street stop-controlled intersections are shown in Figure 2. There are no signalized intersections within Rossmoor except at some of the perimeter intersections.

Bicycle and Pedestrian Facilities

Bicycle Facilities
Class I: Bike Path. Provides a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with minimal interruption by motor vehicles. Within the City of Los Alamitos, there is currently a bike path along the Coyote Creek Bikeway that runs adjacent to the San Gabriel River through the City of Los Alamitos. There is also a quarter-mile bike path north of Oak Middle School, connecting Oak Street with the Coyote Creek Bikeway. Within Rossmoor, a Class I Bike Path is found within Rossmoor Park and along Wallingsford Road connecting Katella Avenue to Hedwig/Foster Road.

Class II: Bike Lane. Provides a preferential right-of-way designated and striped for the exclusive or semi-exclusive use of bicycles, with some allowances for vehicle parking. Existing bike lanes exist along Bloomfield Street from the northern City limit to Katella Avenue in both directions of travel and on Ball Road from Kaylor Avenue to the western City limit.

A Class II Bike Lane continues from Rossmoor Park along the entire length of Foster Road to the southern end of Rossmoor.
Class III: Bike Route. Provides a route designated by signs or permanent pavement markings that is shared with either pedestrians or motorists. Bike routes exist along Bloomfield Street north of Ball Road past the northern City limit and along Ball Road through the City limits.

Class IV: Bikeway. Legislation passed in 2014 (AB 1193) introduced a new class of bicycle facilities. Referred to as cycle tracks or separated bikeways, a Class IV bikeway provides a right-of-way designated exclusively for bicycle travel adjacent to a roadway and which are protected from vehicular traffic. Types of separation include, but are not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking. There are no existing Class IV bikeways in Los Alamitos or Rossmoor.

Pedestrian Facilities
Pedestrian facilities in Los Alamitos consist of sidewalks and crosswalks. Sidewalks are generally provided throughout the City. Some locations provide a wide sidewalk with a comfortable amount of space between the sidewalk and roadway edge. Other locations provide a sidewalk immediately adjacent to the edge of the roadway, with some narrowed due to past roadway widening.

Having crosswalks on all approaches to the signalized intersections allows pedestrians the choice of where to cross and provides for good pedestrian access. All the signalized intersections in the City of Los Alamitos have crosswalks on all approaches with the exception of: Katella Avenue at I-605, and Carbon Creek Channel at Bloomfield Street.

Figure 3 identifies existing bicycle and pedestrian facilities in the study area. The all-way and side-street stop-controlled intersections in the City of Los Alamitos have a mix of crosswalks on all, some, and no approaches. At many of the side-street stop-controlled intersections, crosswalks are only provided parallel to the major roadway (not across it).
Figure 2 Traffic Control Devices

- Traffic Signal
- All-Way Stop
- Side-Street Stop
- City Boundary
- Sphere of Influence
- Other City Boundaries

Source: Fehr & Peers, 2013
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Figure 3
Existing Bicycle and Pedestrian Facilities

- Bikeway Access Point
- Existing Crosswalks
  - Both N/S and E/W
  - Either N/S or E/W
- Existing Bicycle Facilities
  - Class I
  - Class II
  - Class III
- City Boundary
- Sphere of Influence
- Other City Boundaries
- School
- Park/Recreation

Source: Fehr & Peers, 2013
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Transit Facilities
Transit service is provided by the Orange County Transportation Authority (OCTA). Local bus routes provide service along Los Alamitos Boulevard, Bloomfield Street, Katella Avenue, and Cerritos Avenue. In 2010, OCTA also planned to operate a bus rapid transit route (BRT) along Katella Avenue. Subsequent budget cuts postponed such plans indefinitely, and the study area will continue to be served only by local bus service. The five lines are described below, and Figure 4 shows existing bus routes and stops serving the City of Los Alamitos and Rossmoor.

Route 42/42A. Generally runs east–west, providing service from Seal Beach to Orange. The major streets of service are Los Alamitos Boulevard, Lincoln Avenue, and Tustin Street. Typical headways (the waiting time between buses at a stop) are 20 minutes.

Route 46. Generally runs east–west, providing service from Los Alamitos to Orange. The major streets of service are Ball Road and Tustin Street. Within Los Alamitos, Route 46 only provides service in the eastbound direction. Typical headways are 30 minutes.

Route 50. Generally runs east–west, providing service from Long Beach to Orange. The major streets of service are Studebaker Road, Katella Avenue, and Tustin Street. In the study area, Route 50 provides regular service in both directions of travel. Typical headways are 30 minutes.

Route 211. An express route that generally runs north–south via I-405, providing service between Seal Beach and Irvine. Route 211 travels along Lampson Avenue through the study area. Typical headways are 30 minutes.

Route 701. An express route that generally runs north–south via I-405 and I-605, providing service between Huntington Beach and Downtown Los Angeles. Route 701 travels along Lampson Avenue through the City. Typical headways are between 20 and 50 minutes.

Other Transportation Facilities
Railroad Facilities
There are no passenger rail lines through the City of Los Alamitos. The nearest passenger rail lines are west of the City near Long Beach (Metro Blue Line) and north of the city near Norwalk and Santa Fe Springs (Metro Green Line). Buena Park offers the closest Metrolink station (Orange County Line) and Amtrak service (Pacific Surfliner). Right-of-way previously used by the Southern Pacific Railroad is found in various parts of the City.

In the Planned Industrial area south of Cerritos Avenue between Los Alamitos Boulevard and Bloomfield Street, the ROW has been reused for operations and access by the industrial businesses. The ROW north of Katella Avenue between Lexington Drive and Bloomfield Street has and will continue to be slated for a multipurpose Class I bike path.
Harbor/Port Facilities
The City of Los Alamitos is near two major ports—the Port of Long Beach and the Port of Los Angeles. The Port of Long Beach is about 9 miles southwest, and the Port of Los Angeles is about 13 miles northwest of the City.

Airport Facilities
The City of Los Alamitos contains the Los Alamitos Army Airfield, a military airport within the Joint Forces Training Base not open to the public. The Army Airfield has two runways that require permission prior to landing. Approaches and departures have specific flight routes to assist in noise abatement. Typically, flights are only allowed to arrive/depart from the north, south, and east along specifically defined routes that avoid flying over homes. No public airport facilities exist in the City.

Freight System
The goods or freight movement system in Los Alamitos consists of designated truck routes. The Los Alamitos Municipal Code (Chapter 10, Section 20) defines weight restrictions, specifies the ability of trucks to enter areas not designated as truck routes, and defines the truck routes within the City. Roads in the study area that contain truck routes include Katella Avenue, Los Alamitos Boulevard, Bloomfield Street, Cerritos Avenue, and Ball Road.

Vehicles over four tons in gross vehicle weight are prohibited on Catalina Street between Los Alamitos Boulevard and Cherry Street, Pine Street between Florista Street and Catalina Street, Reagan Street between Katella Avenue and Catalina Street, and Cherry Street between Florista Street and Catalina Street. Figure 5 illustrates the City’s existing truck routes.
Figure 4 Transit Facilities

- Bus Stops
- LBT Bus Line 102
- LBT Bus Line 104
- OCTA Bus Line 42
- OCTA Bus Line 46
- OCTA Bus Line 50
- OCTA Bus Line 211
- OCTA Bus Line 701
- School
- Park/Recreation
- City Boundary
- Sphere of Influence
- Other City Boundaries

Source: Fehr & Peers, 2013
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Figure 5 Truck Routes

- **Weight Restricted Roadways**
- **Designated Truck Routes**
- **City Boundary**
- **Sphere of Influence**
- **Other City Boundaries**

Source: PlaceWorks, 2014
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Regulatory Framework
The regulatory framework informs the public and decision makers about the regulatory agencies and policies that affect transportation in the City, and facilitates effective decisions about planning improvements to transportation systems.

Federal Regulations
In 1982, the federal government passed the Surface Transportation Assistance Act (STAA). This act requires states to allow larger trucks on the “National Network,” which consists of the interstate system plus the non-interstate federal-aid primary system. “Larger trucks” are (1) doubles with 28.5-foot trailers, (2) singles with 48-foot semi-trailers and unlimited kingpin-to-rear axle distance, (3) unlimited length for both vehicle combinations, and (4) widths up to 102 inches. Interstate 605 in the City of Los Alamitos is an STAA route.

State Regulations
Assembly Bill 1358, Complete Streets Act. The California Complete Streets Act of 2008 requires circulation elements to address the transportation system from a multi-modal perspective. The bill states that streets, roads, and highways must “meet the needs of all users...in a manner suitable to the rural, suburban, or urban context of the general plan.” Essentially, this bill requires a circulation element to plan for all modes of transportation where appropriate—including walking, biking, car travel, and transit. The Complete Streets Act also requires circulation elements to consider the multiple users of the transportation system, including children, adults, seniors, and the disabled.

Assembly Bill 32, Global Warming Solutions Act. With the passage of the Global Warming Solutions Act of 2006, the State of California committed itself to reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. The California Air Resource Board (ARB), which is coordinating the response to comply with AB 32, is currently on schedule to meet this deadline.

In 2007, ARB adopted a list of early action programs that could be put in place by January 1, 2010. In 2008, ARB defined its 1990 baseline level of emissions, and by 2011 it completed rules for reducing GHG emissions. Rules on emissions, as well as market-based mechanisms like the proposed cap and trade program, came into effect January 1, 2012. The cap and trade program controls pollution by a governing agency selling permits on the amount of pollutants a firm can emit. A firm’s pollutants cannot exceed the limit. Firms requiring the need to increase their emissions must purchase permits from other firms requiring fewer permits.

Senate Bill 375. In 2008, the ARB adopted its Proposed Scoping Plan for AB 32. This scoping plan included the approval of SB 375 as the means for achieving regional transportation-related GHG targets. SB 375 provides guidance on how curbing emissions from cars and light trucks can help the state comply with AB 32. SB 375 also provides CEQA streamlining incentives for preferred development types. Residential or mixed-use projects qualify if they conform to the Sustainable Communities Strategy. Transit-oriented developments also qualify if they 1) are at least 50 percent residential, 2) meet density requirements, and 3) are within one-half mile of a
transit stop. The degree of CEQA streamlining is based on the degree of compliance with these development preferences.

**Senate Bill 743.** SB 743 passed in 2013 and amends the California Environmental Quality Act (CEQA) to give individual agencies the ability to opt out of a congestion management program. Additionally, this bill requires the State Office of Planning and Research (OPR) to develop alternative impact criteria for transportation impacts in transit priority areas. The biggest impact of this senate bill may be the requirement for OPR to look at changing CEQA significance thresholds for traffic throughout the state. This could remove level of service (LOS) as a topic for environmental analysis under CEQA. Official guidelines are expected to be approved in 2015.

**Regional Plans and Programs**

**Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy (SCAG RTP/SCS).** The SCAG RTP/SCS provides a regional transportation plan for six counties in Southern California: Orange, San Bernardino, Riverside, Los Angeles, Ventura, and Imperial. The primary goal of the RTP is to increase mobility for the region. With recent legislation, this plan also encompasses sustainability as a key principle in future development.

**Orange County Congestion Management Program (CMP).** The Orange County CMP defines a network of state highways and arterials, level of service standards, and related procedures and provides technical justification for the approach. The CMP for Orange County was originally adopted in 1991 and updated most recently in 2013. For consistency with the CMP, CMP-designated intersections in the City (I-605 northbound ramps at Katella Avenue) should operate at LOS E or better. Additionally, during the CMP monitoring process, if any CMP facility is identified as operating at a deficient level, a deficiency plan is required to restore operations to an acceptable level.

**OCTA Commuter Bikeways Strategic Plan (CBSP).** The CBSP is a regional planning document that identifies existing and proposed bikeways in Orange County. OCTA last updated the CBSP in 2009. Through the cooperation of the cities and the county, an inventory was taken of existing bikeways, and priorities for new bikeways were identified. Prioritization of the proposed bikeways was based on several factors, including input from local jurisdictions and the public, as well as connectivity to transit and regional destinations.

**Local Plans**

**Katella and Los Alamitos Commercial Corridors Plan.** Through SCAG Compass Blue Print funding, the City prepared a commercial corridor plan for Katella Avenue and Los Alamitos Boulevard. This demonstration project analyzes and outlines actions the City can take to capitalize on the future bus rapid transit routes/stations, stimulate new private investment and redevelopment, and ultimately create great places in Los Alamitos. In addition to the Compass Blueprint Principles, the demonstration project is driven by six specific project goals:
Enhance the City’s sense of identity along the corridors and at key gateways.
Create a central, pedestrian- and bicycle-friendly place for those who live, work, learn, and shop in Los Alamitos.
Create a reason for people to turn left or right from Katella Avenue onto Los Alamitos Boulevard.
Consolidate scattered office, medical, retail, and service uses into logical districts and nodes.
Develop strategies for the reuse of key commercial centers and other underutilized parcels and incentivize lot consolidation.
Maximize the multimodal nature of the corridors and capitalize on future BRT investments.

Roadway Performance

Traffic Analysis Methodology

Level of Service
The City analyzed the operation of the roadway system in Los Alamitos and Rossmoor in terms of level of service. Level of service is a general measure of traffic operating conditions whereby a letter grade, from LOS A (no congestion) to F (high levels of congestion), is assigned. LOS E applies to “at capacity” operations.

The flow of vehicles without significant impediments is considered “stable,” but when traffic encounters interference that limits the capacity acutely, the flow becomes “unstable.” These grades represent the perspective of drivers only and are an indication of the comfort and convenience associated with driving such as speed, travel time, traffic interruptions, and freedom to maneuver.

The Orange County CMP designates LOS standards at CMP intersections and requires that all intersections operate at LOS E or better. One study intersection, Katella Avenue at the I-605 northbound ramps, is in Los Alamitos and is designated a CMP location. Katella Avenue is also identified on the CMP highway system, although there are no specific CMP requirements for roadway segment assessment. Since Los Alamitos maintains a stricter LOS requirement (LOS D) than the CMP, the LOS standard for the City was used to evaluate all study locations.

Intersection Traffic Operations
Intersection operations were evaluated with the Traffix 8.0 level of service software, which is consistent with the Intersection Capacity Utilization methodology as provided by the Orange County Transportation Authority. Table 1 summarizes how the level of service corresponds to intersection delay at the signalized study intersections. There are no unsignalized study intersections.
The following assumptions were made in Traffix to conduct the analysis:

- Saturation flow rate of 1,700 vehicles per hour per lane (vphpl) for all left turn lanes, through lanes and right turn lanes, except for exclusive right turn lanes that allow right turn on red, in which the rate is 1,955 vphpl. These assumptions are consistent with the Orange County CMP.
- Lost time factor of 0.05.
- De facto right turn lanes were not assumed.

**Roadway Segment Traffic Operations**
The City performed a roadway segment traffic operations analysis on selected roadway segments to evaluate how the roadway network will perform under the general plan, understand the amount of traffic that may use each roadway, and determine if the existing or proposed lane configurations can adequately handle the volumes. The level of service for roadway segments were calculated for key roadway segments in Los Alamitos’ regional roadway system to evaluate existing traffic conditions. Daily capacity thresholds are shown in Table 2.

**Table 1. Intersection Level of Service Criteria for Signalized Intersections**

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Description</th>
<th>V/C Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Operations with very low delay, favorable progression, and/or short cycle length.</td>
<td>0.000–0.600</td>
</tr>
<tr>
<td>B</td>
<td>Operations with low delay, good progression, and/or short cycle lengths.</td>
<td>0.601–0.700</td>
</tr>
<tr>
<td>C</td>
<td>Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.</td>
<td>0.701–0.800</td>
</tr>
<tr>
<td>D</td>
<td>Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop, and individual cycle failures are noticeable.</td>
<td>0.801–0.900</td>
</tr>
<tr>
<td>E</td>
<td>Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.</td>
<td>0.901–1.000</td>
</tr>
<tr>
<td>F</td>
<td>Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.</td>
<td>Greater than 1.000</td>
</tr>
</tbody>
</table>

Note: V/C = volume-to-capacity.
Table 2. Maximum Daily Roadway Capacities

<table>
<thead>
<tr>
<th>Classification</th>
<th>Typical Lane Configuration</th>
<th>LOS A</th>
<th>LOS B</th>
<th>LOS C</th>
<th>LOS D</th>
<th>LOS E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Street</td>
<td>6 Lanes Divided</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>60,000</td>
</tr>
<tr>
<td></td>
<td>8 Lanes Divided</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>72,000</td>
</tr>
<tr>
<td>Major</td>
<td>6 Lanes Divided</td>
<td>36,000</td>
<td>40,400</td>
<td>45,000</td>
<td>49,500</td>
<td>54,000</td>
</tr>
<tr>
<td>Primary</td>
<td>4 Lanes Divided</td>
<td>24,000</td>
<td>27,000</td>
<td>30,000</td>
<td>33,000</td>
<td>36,000</td>
</tr>
<tr>
<td>Secondary</td>
<td>4 Lanes Undivided</td>
<td>16,000</td>
<td>18,000</td>
<td>20,000</td>
<td>22,000</td>
<td>24,000</td>
</tr>
</tbody>
</table>

Intersections and Roadway Segments Analyzed

In Los Alamitos and Rossmoor, 14 intersections and 19 roadway segments were selected for analysis based on a review of the roadway network, circulation patterns, and public input. Intersection and segment counts were collected between 2011 and 2012.

Intersections

Los Alamitos Boulevard at:
- Cerritos Avenue
- Katella Avenue
- Farquhar Avenue
- Orangewood Avenue
- Bradbury Road
- Rossmoor Center Way
- St. Cloud Drive

Katella Avenue at:
- Bloomfield Avenue
- Lexington Avenue
- Walker Street
- Wallingsford Road/Walnut Street

Bloomfield Street at:
- Ball Road
- Cerritos Avenue

Roadway Segments

Los Alamitos Boulevard between:
- North City Limits and Cerritos Avenue
- Cerritos Avenue and Katella Avenue
- Katella Avenue and Farquhar Avenue
- Farquhar Avenue and Orangewood Avenue
- Orangewood Avenue and Bradbury Road
- Bradbury Road and St. Cloud Drive

Katella Avenue between:
- I-605 and Los Alamitos Boulevard
- Los Alamitos Boulevard and Bloomfield Street
- Bloomfield Street and Lexington Drive
- Lexington Drive and Walker Street
- Farquhar Avenue between:
  - Los Alamitos Boulevard and Bloomfield Street
  - Bloomfield Street and Lexington Drive

Lexington Drive between Farquhar Avenue and Katella Avenue
**Traffic Model**
The City employed a travel demand forecasting model for Orange County (OCTAM) to evaluate growth in the City of Los Alamitos, Rossmoor, and the region, incorporating land use to assign traffic to the local roadway system. The model inputs land use, travel behavior, and roadway characteristics (number of lanes, speed, etc.) to estimate traffic demand on roadways.

OCTAM was developed and maintained by OCTA for use in preparing regional transportation studies. The City used version 3.4, which incorporates the latest available land use forecasts for Orange County (Orange County Projections 2012). Consistent with state-of-the-practice travel demand forecasting, model error was corrected using the methodologies in the National Cooperative Highway Research Program Report 255 (Transportation Research Board 1982), using the “difference method” for roadway segments and intersections (e.g., add model-predicted growth to existing volumes).

OCTAM data is available for forecast years 2010 and 2035. As part of the forecasting process, the socioeconomic data for the City of Los Alamitos and Rossmoor were updated with more accurate information collected in 2012. Additionally, the City updated the roadway network consistent with the future roadway network.

The OCTAM future roadway network assumptions incorporated into the travel demand model are consistent with the SCAG RTP funded roadway projects list, the needs identified by comparing the model results to the capacity tables referenced above. Specific roadway improvements that were assumed include:

- Los Alamitos Boulevard modeled as a four-lane facility north of Katella Avenue, consistent with the Corridors Plan (retaining the current four active lanes and all turning movements, but avoiding an increase to six active lanes).
- I-605 and I-405 freeways assume new HOV lanes in each direction.

**Existing Roadway Performance**
Tables 3 and 4 present the existing traffic volumes and lane configurations at the study intersections and segments. All intersections studied are currently operating at an acceptable LOS, with many intersections operating at LOS A or B during one or both peak hours. All roadway segments are currently operating at an acceptable level of service of D or better.
Table 3. Existing (2013) Intersection Level of Service

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Traffic Control</th>
<th>AM Peak</th>
<th>PM Peak</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>V/C (Delay)</td>
<td>LOS</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and Cerritos Avenue</td>
<td>Signal</td>
<td>0.770</td>
<td>C</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and Katella Avenue</td>
<td>Signal</td>
<td>0.787</td>
<td>C</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and Farquhar Avenue</td>
<td>Signal</td>
<td>0.548</td>
<td>A</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and Orangewood Avenue</td>
<td>Signal</td>
<td>0.641</td>
<td>B</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and Bradbury Road</td>
<td>Signal</td>
<td>0.623</td>
<td>B</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and St. Cloud Drive</td>
<td>Signal</td>
<td>0.534</td>
<td>A</td>
</tr>
<tr>
<td>Bloomfield Street and Ball Road</td>
<td>Signal</td>
<td>0.690</td>
<td>B</td>
</tr>
<tr>
<td>Bloomfield Street and Cerritos Avenue</td>
<td>Signal</td>
<td>0.815</td>
<td>D</td>
</tr>
<tr>
<td>Bloomfield Street and Katella Avenue</td>
<td>Signal</td>
<td>0.671</td>
<td>B</td>
</tr>
<tr>
<td>Lexington Avenue and Katella Avenue</td>
<td>Signal</td>
<td>0.528</td>
<td>A</td>
</tr>
<tr>
<td>Walker Street and Katella Avenue</td>
<td>Signal</td>
<td>0.672</td>
<td>B</td>
</tr>
<tr>
<td>Wallingsford Road/ Walnut Street and Katella Avenue</td>
<td>Signal</td>
<td>0.857</td>
<td>D</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and Rossmoor Center Way</td>
<td>Signal</td>
<td>0.443</td>
<td>A</td>
</tr>
<tr>
<td>I-605 NB and Katella Avenue</td>
<td>Signal</td>
<td>0.355 (1.8)</td>
<td>A</td>
</tr>
</tbody>
</table>

Sources: Los Alamitos Medical Center Specific Plan TIA 2008; Los Alamitos Boulevard Corridor Traffic Study 2010; Fehr & Peers 2012; OCTA CMP 2013.
Note: V/C (XX) = volume-to-capacity ratio with seconds of delay shown for the Caltrans facility at I-605 NB and Katella Avenue.
Table 4. Existing (2013) Roadway Segment Volume and Level of Service

<table>
<thead>
<tr>
<th>Street Name and Segment</th>
<th>Classification</th>
<th>Traffic Volume</th>
<th>V/C</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Los Alamitos Boulevard</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between North City Limits and Cerritos Ave</td>
<td>Major</td>
<td>24,008</td>
<td>0.67</td>
<td>C or Better</td>
</tr>
<tr>
<td>Between Cerritos Ave and Katella Ave</td>
<td>Major</td>
<td>30,437</td>
<td>0.85</td>
<td>D</td>
</tr>
<tr>
<td>Between Katella Ave and Farquhar Ave</td>
<td>Major</td>
<td>44,340</td>
<td>0.82</td>
<td>D</td>
</tr>
<tr>
<td>Between Farquhar Ave and Orangewood Ave</td>
<td>Major</td>
<td>45,473</td>
<td>0.84</td>
<td>D</td>
</tr>
<tr>
<td>Between Orangewood Ave and Bradbury Rd</td>
<td>Major</td>
<td>41,619</td>
<td>0.77</td>
<td>C or Better</td>
</tr>
<tr>
<td>Between Bradbury Road and St. Cloud Dr</td>
<td>Major</td>
<td>40,805</td>
<td>0.76</td>
<td>C or Better</td>
</tr>
<tr>
<td><strong>Katella Avenue (OCTA CMP Highway System)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between I-605 and Los Alamitos Blvd</td>
<td>Smart Street</td>
<td>64,007</td>
<td>0.89</td>
<td>D</td>
</tr>
<tr>
<td>Between Los Alamitos Blvd and Bloomfield St</td>
<td>Smart Street</td>
<td>51,583</td>
<td>0.86</td>
<td>D</td>
</tr>
<tr>
<td>Between Bloomfield St and Lexington Dr</td>
<td>Smart Street</td>
<td>46,100</td>
<td>0.77</td>
<td>C or Better</td>
</tr>
<tr>
<td>Between Lexington Dr and Walker St</td>
<td>Smart Street</td>
<td>45,890</td>
<td>0.76</td>
<td>C or Better</td>
</tr>
<tr>
<td><strong>Bloomfield Street</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Katella Ave and Cerritos Ave</td>
<td>Secondary</td>
<td>14,163</td>
<td>0.59</td>
<td>C or Better</td>
</tr>
<tr>
<td>Between Cerritos Ave and Ball Rd</td>
<td>Secondary</td>
<td>12,471</td>
<td>0.52</td>
<td>C or Better</td>
</tr>
<tr>
<td>Between Farquhar Ave and Katella Ave</td>
<td>Local</td>
<td>2,925</td>
<td>0.21</td>
<td>C or better</td>
</tr>
<tr>
<td><strong>Cerritos Avenue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between I-605 and Los Alamitos Blvd</td>
<td>Primary</td>
<td>29,391</td>
<td>0.82</td>
<td>D</td>
</tr>
<tr>
<td>Between Los Alamitos Blvd and Bloomfield St</td>
<td>Primary</td>
<td>29,932</td>
<td>0.83</td>
<td>D</td>
</tr>
<tr>
<td>Between Bloomfield St and Lexington Dr</td>
<td>Primary</td>
<td>24,059</td>
<td>0.67</td>
<td>C or Better</td>
</tr>
<tr>
<td><strong>Farquhar Avenue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Los Alamitos Blvd and Bloomfield St</td>
<td>Local</td>
<td>5,525</td>
<td>0.39</td>
<td>C or Better</td>
</tr>
<tr>
<td>Between Bloomfield St and Lexington Dr</td>
<td>Local</td>
<td>3,762</td>
<td>0.27</td>
<td>C or Better</td>
</tr>
<tr>
<td><strong>Lexington Drive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Farquhar Ave and Katella Ave</td>
<td>Local</td>
<td>5,671</td>
<td>0.41</td>
<td>C or Better</td>
</tr>
</tbody>
</table>

Sources: Los Alamitos Boulevard Corridor Traffic Study 2010; I-605 Cerritos Interchange Study 2011; Fehr & Peers 2012.
Note: V/C = volume-to-capacity ratio.
Forecast Roadway Performance
The analysis identified performance and potential impacts to the roadway system assuming buildout of the general plan land use plan and regional growth by 2035. With some exceptions (discussed below), the vast majority of intersections and roadways segments are forecast to perform at acceptable levels of service. Tables 5 and 6 identify forecast performance levels.

Three intersections and five roadway segments along Katella and Cerritos Avenues are forecast to degrade to LOS E or F in 2035.

- Los Alamitos Boulevard and Katella Avenue – LOS E during AM peak hour
- Bloomfield Street and Cerritos Avenue – LOS F in AM peak hour and LOS E in PM peak hour
- Wallingsford Road/Walnut Street and Katella Avenue – LOS F in AM peak hour
- Katella Avenue (segments)
  - Between I-605 and Los Alamitos Blvd – LOS F
  - Between Los Alamitos Blvd and Bloomfield St – LOS F
  - Between Bloomfield St and Lexington Dr – LOS E
  - Between Lexington Dr and Walker St – LOS E
- Cerritos Avenue (segment)
  - Between I-605 and Los Alamitos Blvd – LOS E

To increase performance to an acceptable level of service at and along these intersections and roadway segments, the City would need to obtain additional right-of-way.

- Los Alamitos Boulevard and Katella Avenue: an additional eastbound through lane along Katella Avenue would be needed.
- Bloomfield Street and Cerritos Avenue: an additional westbound left-turn lane and westbound right-turn lane would be required along Cerritos Avenue.
- Wallingsford Road/ Walnut Street and Katella Avenue: the northbound approach of Wallingsford Road would need to be widened, and an additional eastbound through lane would be required along Katella Avenue.
- Katella and Cerritos Avenues (segments): increase the number of through lanes throughout the segments.

Given existing right-of-way constraints, however, such actions are not considered feasible. Instead, Policy 1.4 in this element exempts these intersections and roadways from the level of service performance thresholds.
The degradation of performance is due primarily to growth in regional traffic. The localized growth of the City and Rossmoor associated with the general plan buildout does not significantly contribute to the performance failure of the intersections and roadways.

Modeling Los Alamitos Boulevard as a four-lane facility north of Katella Avenue improved the performance of the Los Alamitos Boulevard and Katella Avenue intersection—as a four-lane facility, it would not attract as much regional traffic as a six-lane facility. Performance along the Los Alamitos Boulevard roadway segment north of Katella Avenue would remain at an acceptable level of service.

Table 5. Forecasted (2035) Intersection Level of Service

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Traffic Control</th>
<th>AM Peak</th>
<th>PM Peak</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>V/C (Delay)</td>
<td>LOS</td>
<td>V/C (Delay)</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and Cerritos Avenue</td>
<td>Signal</td>
<td>0.821</td>
<td>D</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and Katella Avenue</td>
<td>Signal</td>
<td>0.938</td>
<td>E</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and Farquhar Avenue</td>
<td>Signal</td>
<td>0.544</td>
<td>A</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and Orangewood Avenue</td>
<td>Signal</td>
<td>0.662</td>
<td>B</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and Bradbury Road</td>
<td>Signal</td>
<td>0.675</td>
<td>B</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and St. Cloud Drive</td>
<td>Signal</td>
<td>0.570</td>
<td>A</td>
</tr>
<tr>
<td>Bloomfield Street and Ball Road</td>
<td>Signal</td>
<td>0.809</td>
<td>D</td>
</tr>
<tr>
<td>Bloomfield Street and Cerritos Avenue</td>
<td>Signal</td>
<td>1.003</td>
<td>F</td>
</tr>
<tr>
<td>Bloomfield Street and Katella Avenue</td>
<td>Signal</td>
<td>0.885</td>
<td>D</td>
</tr>
<tr>
<td>Lexington Avenue and Katella Avenue</td>
<td>Signal</td>
<td>0.681</td>
<td>B</td>
</tr>
<tr>
<td>Walker Street and Katella Avenue</td>
<td>Signal</td>
<td>0.780</td>
<td>C</td>
</tr>
<tr>
<td>Wallingsford Road/Walnut Street and Katella Avenue</td>
<td>Signal</td>
<td>1.012</td>
<td>F</td>
</tr>
<tr>
<td>Los Alamitos Boulevard and Rossmoor Center Way</td>
<td>Signal</td>
<td>0.483</td>
<td>A</td>
</tr>
<tr>
<td>I-605 NB and Katella Avenue</td>
<td>Signal</td>
<td>0.315 (2.1)</td>
<td>A (A)</td>
</tr>
</tbody>
</table>

Notes: V/C (XX) = volume-to-capacity ratio, with seconds of delay shown for the Caltrans facility at I-605 NB and Katella Avenue. Intersections operating below acceptable LOS standards are shown in bold.
<table>
<thead>
<tr>
<th>Street Name and Segment</th>
<th>Classification</th>
<th>Traffic Volume</th>
<th>V/C</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Los Alamitos Boulevard</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between North City Limits and Cerritos Ave</td>
<td>Primary</td>
<td>26,130</td>
<td>0.73</td>
<td>C or Better</td>
</tr>
<tr>
<td>Between Cerritos Ave and Katella Ave</td>
<td>Primary</td>
<td>30,440</td>
<td>0.85</td>
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Note: V/C = volume-to-capacity ratio. Roadway segments operating below acceptable LOS standards are shown in bold.
Mobility and Circulation Plan

Roadways
Figures 6 and 7 illustrate the City’s general plan roadway classifications. Each classification and arterial highway is described in more detail below. All other roadways are local roads. Divided roadways incorporate a physical median, two double-yellow lines, and/or continuous left-turn lane between opposing travel lanes.

Roadway Classifications

Smart Street
A Smart Street is designated a six- to eight-lane divided roadway with a maximum right-of-way width of 122 to 146 feet. The Smart Street classification is estimated to have a design capacity of 72,000 vehicles per day in the eight-lane configuration and 60,000 vehicles per day in the six-lane configuration.

Major Arterial
A major arterial is designated a six-lane divided roadway, with a typical right-of-way width of 120 feet. A major arterial is designed to accommodate a maximum of 54,000 daily vehicle trips.

Primary Arterial
A primary arterial is designated a four-lane divided roadway with a typical right-of-way width of 100 to 120 feet. A primary arterial is designed to accommodate a maximum of 36,000 daily vehicle trips.

Secondary Arterial
A secondary arterial is designated a four-lane undivided roadway with a typical right-of-way width of 80 feet. A secondary arterial is designed to accommodate a maximum of 24,000 daily vehicle trips.

Arterial Highways

Los Alamitos Boulevard
- Classification: Primary Arterial (north of Katella Avenue), with two travel lanes in each direction. Major Arterial (south of Katella Avenue), with three lanes in each direction.
- Typical ROW: 120 feet
- On-street Parking: permitted along most of Los Alamitos Boulevard north of Farquhar Avenue, excluding the bridge; not permitted south of Farquhar Avenue
- Posted speed limit: 35 to 40 mph
- Truck Route: Yes
Bloomfield Street
- Classification: Secondary Arterial, divided with two travel lanes in each direction north of Katella Avenue, and undivided with one lane in each direction south of Katella Avenue.
- Typical ROW: 80 feet
- On-street Parking: permitted along portions of the street
- Posted speed limit: 25 to 40 mph
- Truck Route: Yes, between Katella Avenue and Cerritos Avenue

Denni Street/Lexington Drive
- Classification: Secondary Arterial, undivided with two travel lanes in each direction from Cerritos Avenue to the northern City limits. Local street, undivided with one lane in each direction south of Cerritos Avenue.
- Typical ROW: 80 feet
- On-street Parking: only permitted along Lexington Drive north of Farquhar Avenue and south of Katella Avenue
- Posted speed limit: 25 mph
- Truck Route: No

Ball Road
- Classification: Primary Arterial, divided with two travel lanes in each direction.
- Typical ROW: 100 feet
- On-street Parking: not permitted
- Posted speed limit: 40 mph
- Truck Route: Yes

Cerritos Avenue
- Classification: Primary Arterial, divided with two travel lanes in each direction.
- Typical ROW: 100 feet
- On-street Parking: not permitted
- Posted speed limit: 35 mph
- Truck Route: Yes

Katella Avenue
- Classification: Smart Street with four lanes in each direction west of Los Alamitos Boulevard and three lanes in each direction to the east.
- Typical ROW: 122 to 146 feet
- On-street Parking: generally permitted
- Posted speed limit: 40 mph
- Truck Route: Yes
**Los Alamitos Boulevard Redesign**

Los Alamitos Boulevard is a six-lane street south of Katella Avenue, carrying over 45,000 cars and trucks into and through the City on an average day. North of Katella Avenue, the traffic volumes decrease significantly to 24–30,000 trips per day, and traffic backs up primarily during the morning hours when students are driving to or being dropped off at Los Alamitos High School. Moreover, the projected volume in 2035 is not expected to exceed 26–30,000 trips per day, and the roadway will operate at a similar level of service as today.

Though the number of striped lanes decrease from six to four (two in each direction), Los Alamitos Boulevard retains the same right-of-way width. As a result, the roadway itself is not reduced, and the distance from curb-to-curb is roughly 95 feet. This is the distance that pedestrians have to travel to cross from one side of Los Alamitos Boulevard to the other.

In addition to a daunting crossing distance, the extra-wide roadway encourages cars and trucks to travel faster. The combination of speeding vehicles and large crossing distances ensure that the only safe places pedestrians can cross Los Alamitos Boulevard are at signalized intersections with a formal crosswalk.

Furthermore, businesses suffer when potential customers are passing by at high speed and few pedestrians walk along the corridor. It is not sufficient for commercial businesses to be exposed to a large number of vehicles. Those vehicles must be able to see the businesses and slow down to visit them. Additionally, the businesses on either side of the street are too far apart to relate to one another, and opportunities for synergy between businesses are compromised.

Accordingly, concepts were explored through the Commercial Corridors Plan that narrow the roadway and enlarge the parkway and sidewalk areas along Los Alamitos Boulevard. These concepts were strongly supported by the general public and business community in furtherance of a walkable downtown environment.

Accordingly, the City’s policies and implementation program seek to redesign Los Alamitos Boulevard north of Katella Avenue to maintain four through lanes and turning movements at intersections while converting the remaining surplus space into an expanded parkway. Curb extensions should be installed at intersections to reduce crossing distance. On-street parking should be restricted north of Sausalito Street until after 9 AM to provide sufficient queuing space for vehicles turning right onto Cerritos to access the high school in the morning. After the redesign is complete, the City could conduct a speed study to determine if a speed limit reduction from 35 to 30 miles per hour is justified.
Figure 6 Roadway Classifications

Classification

- Smart Street, 8 Lane (146 ft. ROW)
- Smart Street, 6 Lane (122 ft. ROW)
- Major Arterial (120 ft. ROW)
- Primary Arterial (100 - 120 ft. ROW)
- Secondary Arterial (80 ft. ROW)
- City Boundary
- Sphere of Influence
- Other City Boundaries

Source: Fehr & Peers, 2013
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Figure 7. Arterial Highway Classifications: Typical Midblock Street Sections

SMART STREET
(8 lanes west of Los Alamitos Blvd | 6 lanes east of Los Alamitos Blvd)

MAJOR
(dimensions may vary for Los Alamitos Blvd north of Katella Ave)

LOCAL

ALLEY
Bicycle and Pedestrian Facilities
Overall, the City and Rossmoor provide adequate infrastructure for bicycles and pedestrians. In many places, however, biking and walking environments are not pleasant and do not encourage walking or biking—especially along larger roadways. Given the family-oriented nature of both communities, the large number of children and schools, and the desire for a walkable downtown, a number of improvements are identified to increase the communities’ safety and quality of life.

Future Bicycle Facilities
The residents and employees of Los Alamitos and Rossmoor expressed a strong desire for a greater ability to ride their bikes in and around the community. The addition of new bicycle facilities and amenities will create an integrated, well-signed, and comprehensive bicycle system. OCTA maintains a Bikeways Strategic Plan and makes recommendations for new bike facilities within Orange County jurisdictions. Based on an analysis of the City’s roadways and uses, a modified system of bicycle facilities is recommended on Figure 8 to enhance bicycle travel within Los Alamitos.

Proposed Class I Bike Paths
Drainage Channels
The community currently uses bike paths along a number of drainage facilities within and around Los Alamitos and Rossmoor. New multipurpose Class I bike paths could be added along the Carbon Creek Channel north of the high school (connecting to the Coyote Creek Bikeway) and the drainage channel that travels between Los Alamitos Boulevard and Farquhar Avenue, passing Little Cottonwood Park and the Youth Baseball Fields.

These facilities already have pathways wide enough for maintenance vehicles and could easily accommodate a bike path. Improvements through additional landscaping would turn what are currently unimproved, functional open channels blocked by a chain-link fence or concrete block wall into visual amenities that enhance connectivity. Concerns about privacy and access will need to be addressed but should not be considered absolute barriers to the introduction of new bicycle facilities on land owned by public agencies.

Railroad Right-of-Way
The City maintains its desire to convert the abandoned railroad right-of-way between Bloomfield Avenue and Lexington Avenue to a multipurpose Class I bike path. Opportunities may also include additional recreational features or the conversion of the land into a linear park.

Proposed Class II Bike Lanes
Chestnut Street
A new Class II bike lane could be created along Chestnut Street from Katella Avenue to Catalina Avenue. This could serve as another route for those looking to travel by bike along Los Alamitos Boulevard, particularly if the adjacent alleyway is not improved.
**Rossmoor**

An existing Class I bike path travels from Katella Avenue down a wide 10 to 12-foot sidewalk along Wallingsford Road until it reaches Hedwig Road. A Class II bike lane then follows Hedwig Road, which turns into Foster Road past Rossmoor Park, until it reaches Druid Lane. At that point, Foster Road turns into Yellowtail Drive, which runs approximately three-quarters of a mile until it intersects with Saint Cloud Drive, just 150 feet to the west of Seal Beach Boulevard and an existing Class I bike path.

Yellowtail Drive is not striped for a Class II bike lane, but could be, completing a bikeway for those seeking a slower, safer alternative to traveling along Seal Beach Boulevard/Los Alamitos Boulevard. The City could coordinate with the County of Orange to consider extending the Class II bike lane along Yellowtail Drive.

**Proposed Class III Bike Routes**

**Walnut Street**

The Class III bike route along Walnut Street could be upgraded to a Class II bike lane and provide greater awareness, signage, and striping for bicycles around Oak Middle School and the streets that connect to the downtown area.

**Los Alamitos Boulevard**

Although OCTA shows a Class II bike Lane for Los Alamitos Boulevard, the downtown plan and number of existing driveways may make a Class II lane unsuitable north of Katella Avenue. South of Katella Avenue, the right-of-way configuration and lane geometries provide less opportunity for an on-street facility without widening the roadway or right-of-way. If the right-of-way were widened, a Class I bike path could be placed down at least one side of Los Alamitos Boulevard.

Given the proximity of homes and newly developed shopping areas in Seal Beach, however, it is unlikely that the roadway and/or right-of-way will be widened along any significant portion of Los Alamitos Boulevard south of Katella Avenue. Nevertheless, Los Alamitos Boulevard is the City’s only direct north–south route, and assigning a Class III bike route is appropriate to facilitate access through the City.

**Old Town West and Apartment Row Neighborhoods**

Class III bike routes should be introduced along the streets that would connect the existing and proposed bicycle facilities and facilitate bicycle access between schools, neighborhoods, and the downtown area. Streets identified for new Class III bike routes are: Florista Street, Catalina Street, Oak Street, Sausalito Street, Reagan Street, and Bloomfield Street.

**Proposed Class IV Bikeways**

There are no Class IV bikeways (aka separated bikeways or cycle tracks) planned in Los Alamitos or Rossmoor.


**Other Bicycle Improvements**

**Improved Connections to the San Gabriel River Trail**

The San Gabriel River Trail is an off-road multipurpose trail, part of a 61-mile loop that travels from the Pacific Ocean in Seal Beach to cities such as Long Beach, El Monte, and Asuza. Thousands of bicyclists, runners, and walkers use the SGR Trail every day for commuting, exercise, or general recreation. The Coyote Creek Trail connects to the SGR Trail just one mile south of the access point at Oak Middle School. The Coyote Creek Trail is a heavily traveled bike path with a significant number of serious riders (those with expensive gear traveling long distances).

Some of these users may be eager to find a nice place to stop, rest, and grab something to eat or drink. Los Alamitos enjoys direct access to the Coyote Creek Trail at three points in the City: 1) just north of Oak Middle School, 2) Cerritos Avenue, and 3) the northwest corner of Los Alamitos High School.

Whether they stop for coffee, breakfast, a quick snack, or to peruse shops and services, people using the Coyote Creek and SGR Trails represent potential customers for the businesses of Los Alamitos. By improving the connection points to the Coyote Creek Trail, the City could encourage some of those using the trail to visit the businesses and places in Los Alamitos, particularly within the downtown area. Some might visit while using the trail and others might return later after seeing a great place to eat or shop in the City.

Each connection point should become a visual landmark along the trail. Enhanced landscaping should be combined with attractive signage, seating areas, lighting, and water fountains to provide users with a nice place to rest during their time on the trail. The signage should include direction markers to the downtown area. The landscaping should be low water consuming and native, and the lighting should be powered by alternative energy if possible.

The path leading from the Coyote Creek Trail to City streets should be treated in the same manner, with a special focus given to the connection along the northern edge of Oak Middle School leading to Catalina Street, which ultimately leads to Los Alamitos Boulevard and the downtown area.

**Enhanced Bike Signage and Racks**

**Signage.** Enhanced bikeway signage should be introduced along all three types of bikeways to promote bicycle usage and provide directions on how to connect to other bikeways or key points in the City. A local example of enhanced bikeway signage can be found in the neighboring city of Long Beach, which has created “Long Beach Bikeway” signs and route markers. These signs elevate the bicycle to a mode of transportation that is supported in the City’s official infrastructure. The signs also allow easier use of the bikeways and directions for those traveling within the City or to other cities and destinations.

The City may want to collaborate with the City of Long Beach to create bikeway signage that is unique to Los Alamitos, but complementary to the signs in Long Beach. The neighboring cities
can work together to strengthen the local and regional system of bikeways in Southern California.

**Bike Racks.** Enhanced bike racks are another feature that should be introduced along the corridors. Going beyond conventional metal tubing, enhanced bike racks can be artwork that shapes metal tubes into words or objects to provide the bike rack structure. These types of racks enhance the right-of-way and serve as functional public art. They also present an opportunity to connect to the adjacent businesses; e.g., a coffee cup-shaped bike rack in front of Starbucks.

Bike racks can help draw in customers and complete the bikeway system. With more bikeways and enhanced signage, more people know that they can bike safely around the community corridor and how to get to key features and amenities. Enhanced bike racks are an attractive way of telling people that they are welcome to stop in the downtown and other shopping areas.

**Bike Parking.** The installation of on-street or curb-adjacent bicycle parking may be considered at key points in the downtown. Approximately 12 bikes can park in the space normally reserved for a single car. Therefore, by replacing one parking space, corridor businesses could accommodate space for up to 12 customers. On-street parking should be done primarily on side streets where traffic is slower and limited to two lanes, but the spaces should still be highly visible as one travels within the downtown area.

**Future Pedestrian Facilities**
The pedestrian facilities in Los Alamitos are generally well developed, although there is a lack of connectivity in and around the downtown area and the adjacent medical center. The redesign of Los Alamitos Boulevard north of Katella Avenue will contribute significantly toward the improvement of connectivity and safety for pedestrians in the downtown area. The community is also concerned with the safety of children and the amount of congestion created at intersections of large roadways near schools.

**Pedestrian Bridges**
The City of Los Alamitos supports a world-class school district that provides educational and recreational instruction to approximately 10,000 students. Though the majority of the elementary schools are off the quiet, residential roadways in Rossmoor, Los Alamitos Elementary and all of the District’s middle and high schools are along or near busy arterial roadways. Students walking or biking to school must cross these roadways via crosswalks at signalized intersections.

Although crosswalks are relatively safe and effective, they can create traffic congestion, because cars must wait for the crosswalk to be entirely clear of pedestrians before turning right. During school drop-off and pick-up hours, hundreds of students may need to cross the corridors while a similar number of cars are trying to travel through the intersections (though few make the light, creating a line of cars stretching down the block).
The introduction of pedestrian bridges would separate the vehicular traffic from the pedestrian and bicycle traffic. This separation would allow cars to travel through the intersection without having to wait for the crosswalk to be clear, and pedestrians and bicyclists to cross the corridors without risk of being struck by a moving vehicle. The City’s general plan transportation consultant, Fehr & Peers, estimates that intersection capacities could increase by up to 10 percent if pedestrians are separated from and do not conflict with vehicles. Potential locations are shown on Figure 8.

These bridges could also enhance the City’s identity at key entrance and exit points. The City currently maintains four small monument signs at the ends of both corridors that welcome people into Los Alamitos. Pedestrian bridges would offer larger, elevated signage opportunities that mark a clear transition into and out of Los Alamitos. The bridges and accompanying signage would be architecturally designed to emphasize the City’s high quality character.

Supplementary funding can be found in federal and state grant programs such as the Safe Routes to School Programs, which provide funding for infrastructure projects that increase the opportunity for children to walk and bike to school by making it safer to do so. Other funding sources may include federal and state programs focused on improving walkability and reducing greenhouse gas emissions.

**Intersection Improvements**
Other types of improvements should be considered at key intersections in the City. This is especially important for the intersection of Katella Avenue and Los Alamitos Boulevard, where the need for safe pedestrian and bicycle crossing is critical. The heavy traffic volumes at this intersection are the single biggest deterrent to people walking or riding their bike from south of Katella Avenue to the northern half of Los Alamitos. Some examples of low cost pedestrian intersection crossings include:

**Countdown Signals**
Countdown signals are used in conjunction with conventional pedestrian signals to indicate the amount of time remaining to safely cross the street. These can enable pedestrians and bicyclists to make better decisions about when it is safe to cross the street. Countdown signals are becoming more common throughout California as Caltrans directs their installation along the state highway system, and local jurisdictions install them during routine maintenance operations.

**Bicycle Traffic Signals**
Bicycle-specific traffic signals alongside the traditional round red, yellow and green signals. Bicycle-specific signals help alert cars and bicyclists when it is safe and appropriate for bicycles to enter and cross the intersection.

**In-pavement Lights**
In-pavement lights at crosswalks alert motorists to the presence of a pedestrian crossing or preparing to cross the street. The amber LED (light-emitting diode) lights are embedded in the
pavement on both sides of the crosswalk and oriented to face oncoming traffic. When the pedestrian activates the system, either by using a push button or through detection from an automated device, the lights begin to flash at a constant rate, warning the motorist that a pedestrian is in the vicinity of the crosswalk ahead. The amber LED lights flash in unison at a rate designed for maximum motorist recognition and are visible during the daylight as well as at night.

**Pedestrian Scramble**
A pedestrian scramble or exclusive pedestrian phase is a pedestrian crossing system that stops all vehicular traffic and allows pedestrians to cross an intersection in every direction, including diagonally, at the same time. This short, all-red light clearance interval provides a better separation between cars and pedestrians and allows people to cross from one corner to another in one movement.

Scramble timing also eliminates conflicts with turning vehicles if pedestrians and motorists obey their signals. This crossing system does create longer wait cycles for cars, but the timing can be designed to be on-demand so that wait cycles when pedestrians are not present are reduced significantly. Scramble timing may eliminate the ability to synchronize timing at adjacent traffic signals, and its benefits may not extend to vision-impaired pedestrians. Highly visible signage is an essential companion to this option.

**Raised, Colored, and Textured Intersections**
Raised intersections are flat areas elevated three to six inches above the surrounding street grade. The intersection and all adjoining crosswalks are accessed by gently sloping ramps. The intersections are often constructed of a different type and/or color of materials than the surrounding road. Vehicles automatically slow due to the change in grade and materials. Raised intersections can lengthen the time it takes for vehicles to travel through the intersection and can be slightly more expensive to build and maintain than a traditional intersection. This treatment (raised elevation, coloring, and/or texturing) can be applied to the entire intersection or just to the crosswalks for pedestrians and bicyclists.
Figure 8 Existing and Planned Bicycle and Pedestrian Facilities

- Bikeway Access Point
- Proposed Pedestrian Bridges

Existing Crosswalks:
- Both N/S and E/W
- Either N/S or E/W

Existing Bicycle Facilities:
- Class I
- Class II
- Class III

Proposed Bicycle Facilities:
- Class I
- Class II
- Class III

City Boundary
Sphere of Influence
Other City Boundaries
School
Park/Recreation

Source: Fehr & Peers, 2013
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Goals and Policies

Goal 1: A context-sensitive network of streets, bikeways, and pedestrian areas that promote the safe and efficient movement of people and goods.

Policy 1.1 Multimodal network. The City shall plan, design, operate, and maintain the transportation network to promote safe and convenient travel for all users: pedestrians, bicyclists, transit riders, freight, and motorists.

Policy 1.2 Transportation decisions. Decisions should balance the comfort, convenience, and safety of pedestrians, bicyclists, and motorists of all ages and abilities.

Policy 1.3 Downtown connectivity. Downtown Los Alamitos shall be safely and comfortably accessible by car, by bike, or on foot while maintaining Los Alamitos Boulevard as a four-lane facility with sufficient space for turning movements and queuing space for school access.

Policy 1.4 Level of Service. Maintain a Level of Service (LOS) “D” or better along all City arterials and at intersections during peak hours, with the following exceptions:

A. There is a desire to prioritize pedestrians and/or bicyclists over vehicles
B. Insufficient ROW exists
C. The intersection or roadway is considered built out

The following intersections and roadways are exempt from the LOS D standard:
- Katella Avenue and Los Alamitos Boulevard intersection
- Katella Avenue and Walnut Street/Wallingsford Road intersection
- Bloomfield Street and Cerritos Avenue intersection
- Katella Avenue (between Interstate 605 and Walker Street)
- Cerritos Avenue (between Interstate 605 and Los Alamitos Boulevard)

Policy 1.5 Multimodal LOS. Monitor the evolution of multimodal level of service (MMLOS) standards. The City may adopt MMLOS standards when appropriate.

Policy 1.6 Access management. Minimize access points and curb cuts along arterials and within 200 feet of an intersection to improve traffic flow and safety. Eliminate and/or consolidate driveways when new development occurs or when traffic operation or safety warrants.

Policy 1.7 Fair share of improvements. Require new development to pay a fair share of needed transportation improvements based on a project’s impacts to the multimodal transportation network.
Goal 2: Neighborhoods that are protected from through traffic.

Policy 2.1 Traffic calming. Discourage cut-through traffic in residential neighborhoods through the application of traffic-calming measures.

Policy 2.2 Joint Forces Training Base. Coordinate with JFTB administration to provide additional vehicular access points from major arterials to minimize travel through residential areas.

Policy 2.3 Truck routes. Plan and designate truck routes that minimize truck traffic through or near residential areas.
Goal 3: Safe and convenient access to schools and parks that promote healthy and active living.

Policy 3.1 Commuting to school. Maximize the number of students walking, biking, and riding the bus to and from school.

Policy 3.2 Active trips. Establish, maintain, and improve bicycle and pedestrian systems to promote active trips to schools and parks.

Policy 3.3 Pedestrian bridges. Invest in the construction of pedestrian bridges at key intersections near schools to enhance safety and reduce congestion.
Goal 4: Bicycle, pedestrian, and transit systems that are desirable alternatives to the car.

Policy 4.1 Walkable business districts. Create pedestrian-friendly business districts by expanding and improving spaces for walking along and crossing business corridors.

Policy 4.2 Site design. Require physical designs for new development that provide convenience and security to pedestrians, bicyclists, and transit users.

Policy 4.3 Intersections. Improve the safety and comfort of pedestrian and bicycle crossings at intersections.

Policy 4.4 Bicycle and pedestrian trails. Convert railroad rights-of-way, former rights-of-way, alleyways, and areas along storm drain channels into pedestrian and bicycle trails.

Policy 4.5 Regional connections. Connect bicycle and pedestrian trails to local and regional trails in adjacent jurisdictions.

Policy 4.6 Bicycle and pedestrian wayfinding. Provide bicycle and pedestrian network wayfinding and information through signs, street markings, or other technologies.

Policy 4.7 Transit stops. Improve and maintain safe, clean, comfortable, well-lit, and rider-friendly transit stops that are well marked and visible to motorists.

Policy 4.8 Bus rapid transit. Plan for bus rapid transit along Katella Avenue, with an emphasis for service to the Los Alamitos Medical Center and Downtown Los Alamitos.
Goal 5: The right amount of convenient parking at commercial, employment, and civic facilities.

Policy 5.1 Parking tools. Support innovative parking techniques to maximize parking efficiency throughout the City, especially in the downtown, including:
- Shared parking
- Unbundled parking
- In-lieu parking fees
- Parking management plans
- Parking districts

Policy 5.2 Additions to existing uses. As a component of remodeling where square footage is added, require commercial, business, and industrial centers to provide adequate on-site parking.

Policy 5.3 Public facilities. Provide adequate on-site parking at public facilities for daily and event-based activities, especially in the downtown and medical center areas.

Policy 5.4 Centralized parking. Design and establish large parking facilities and parking management districts to connect to and serve multiple activity centers.

Policy 5.5 Automobile parking demand. Reduce automobile parking demand by improving public transit, bicycle, and pedestrian mobility.

Policy 5.6 Bicycle parking. Encourage safe, secure, attractive, and convenient bicycle parking, especially in the downtown, at schools, and for employees of local businesses.

Policy 5.7 Motorcycle and scooter parking. Encourage businesses to provide parking spaces specifically designed for motorcycles and motorized scooters.
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Public Facilities and Safety Element

Infrastructure

Water
The City of Los Alamitos and the community of Rossmoor both receive water service from the Golden State Water Company (GSWC). GSWC owns and operates the extensive network of water lines that serve the two communities and is part of the West Orange System of GSWC’s Orange County District. The West Orange System serves most of the cities of Cypress, Stanton, and Los Alamitos, small portions of the Cities of Seal Beach, Garden Grove and La Palma, and adjacent unincorporated areas of Orange County including the community of Rossmoor.

Figure 1 displays the water service area of GSWC as it applies to the City of Los Alamitos and Rossmoor.

As required by state law, an Urban Runoff Management Plan (UWMP) must be prepared every five years for urban water suppliers like GSWC. According to the latest 2010 UWMP, GSWC’s water system supply sources include a mixture of groundwater from the Santa Ana River Basin and treated surface water purchased from the Metropolitan Water District Water District of Southern California (MWDSC). The system has historically met between 42 and 83 percent of its total water demand of pumping water from groundwater sources. In the future, groundwater is expected to be approximately 62 percent of the West Orange System’s total supply.

GSWC operates several groundwater wells within the Orange County Groundwater Basin (Basin), which is managed by the Orange County Water District (OCWD). OCWD regulates the amount of groundwater pumped from the Basin and sets the Basin Production Percentage (BPP) for all pumpers. GSWC pumps groundwater from the Basin for four of its systems including the West Orange System which serves the City of Los Alamitos and Rossmoor.

There are approximately 20 active wells within the West Orange System with a total current active well capacity of 11,750 gallons per minute (26 cubic feet per second) and a total capacity of 18,954 acre-feet per year. The distribution system consists of water lines ranging in size from 2 inches to 6 inches in diameter which form a grid pattern throughout the City.

GSWC’s water supply is projected to increase by approximately 14 percent from 2010 to 2035 to meet associated project water demands, with this demand being met by imported water from MWDOC and increased groundwater extractions.

There are currently no sources for recycled water for the West Orange System and is not anticipated in the near future for this service area.
The Water Conservation Act requires a water supply reliability assessment and a water shortage contingency plan. The West Orange System obtains its water supply from two sources: imported Metropolitan water from MWDOC and groundwater from the Orange County Groundwater Basin. In general, GSWC’s supply of water is expected to be 100% reliable through 2035 based on the analysis provided in the 2010 UWMP for both single year analyses and multi-year analyses.

In addition, GSWC has a very detailed water shortage contingency plan that is broken up into several stages dependent upon the severity of the shortage. Stages I–IV represent minimum to critical water shortage supply conditions and a variety of voluntary and mandatory measures that will be implemented for each stage of the shortage.

Consistent with state requirements enacted through Senate Bill No. 7 (SBX7-7) in 2009, the West Orange System is required to reduce its urban per capita water use by 20 percent by December 31, 2020. The water use baseline for the West Orange System is 151 gallons per capita per day (gpcd) and the 2020 compliance goal is 140 gpcd.

Over the past few years, per capita water use has declined due to several reasons including mild climatic conditions, economic recession, and residential-tiered conservation pricing structure. Per capital water use has gone down 15 percent from 2008 (144 gpcd) to an estimated 122 gpcd in 2010. The 2015 UWMP will assess the most recent water use trends. As estimated, the West Orange System currently satisfies its SBX7-7 goals and will focus on maintaining these savings up to and beyond 2020.
Figure 1 Water Service

City Boundary
Sphere of Influence
Other City Boundaries
Golden State Water Company (GSWC)
Sanitary Sewers

The Rossmoor/Los Alamitos Area Sewer District (RLAASD) has provided sewage collection service for the City of Los Alamitos and the unincorporated area of Rossmoor and a small portion of Cypress and Seal Beach since 1952. Wastewater is carried through pipes owned and maintained by the RLAASD to larger sewer trunk lines owned and maintained by the Orange County Sanitation District (OCSD). Figure 2 displays the sanitary sewer distribution network.

OCSD’s trunk sewers are typically grouped into 11 “trunksheds” which discharge to the headworks of either Plant No. 1 (Fountain Valley) or Plant No. 2 (Huntington Beach). The City of Los Alamitos falls within the Knott Trunkshed which generally discharges to Plant No. 2. However, OCSD has the ability to divert flows to Plant No. 1 when necessary. These plants provide primary and secondary treatment for an average dry weather flow of 250 million gallons of wastewater per day (mgd). Plant 1 has a design capacity of 174 mgd and Plant 2 has a design capacity of 276 mgd.

The majority of the sewer lines in the RLAASD boundaries are 8 inches in diameter. In general, these sewer lines are located in the public right-of-way. Larger trunk lines are located along Foster Road in Rossmoor, along Los Alamitos Boulevard north of Katella Avenue, and along Katella Avenue. Table 1 lists the approximate line lengths relative to pipe diameters.

Table 1. Rossmoor/Los Alamitos Area Sewer District Sanitation Sewer Facilities Inventory

<table>
<thead>
<tr>
<th>Pipe Diameter (inches)</th>
<th>Approximate Length (feet)</th>
<th>Approximate Length (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>264,497</td>
<td>50.1</td>
</tr>
<tr>
<td>10</td>
<td>9,844</td>
<td>1.9</td>
</tr>
<tr>
<td>12</td>
<td>14,587</td>
<td>2.8</td>
</tr>
<tr>
<td>15</td>
<td>3,053</td>
<td>0.6</td>
</tr>
<tr>
<td>18</td>
<td>5,758</td>
<td>1.1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>297,739</td>
<td>56.4</td>
</tr>
</tbody>
</table>


The City’s sanitary sewer system drains via gravity and the general drainage pattern is from east to west and then north to south towards Seal Beach. Two OCSD trunk sewers and one lift station (Westside Lift Station) serve RLAASD facilities: (1) the Los Alamitos Subtrunk sewer following Bloomfield Avenue, Cerritos Avenue, Oak Street, Katella Avenue, and Los Alamitos Boulevard and, (2) the Westside Relief Interceptor following Lexington Drive, Katella Avenue, and Los Alamitos Boulevard.

The Los Alamitos Subtrunk flows to the OCSD Westside Lift Station where it is pumped to the Seal Beach Boulevard Interceptor. The flow is transported to OCSD facilities where sewage is treated and ultimately disposed of via ocean outfall facilities. There are three major sanitary sewer drainage areas within Los Alamitos.
1. **North Los Alamitos Sanitary Sewer Area.** This area is bounded by Katella Avenue to the south and Los Alamitos Boulevard to the east. Eight-inch diameter collectors drain in a southerly direction to a twelve-inch trunk along Los Alamitos Boulevard. Flow in this trunk is subsequently discharged to the Los Alamitos sub-trunk.

2. **Katella Avenue Drainage Area.** This area follows Katella Avenue from Los Alamitos Boulevard east. Sewage flows is in a westerly direction as 8-inch diameter collector discharge into an existing 12-inch trunk line in Katella Avenue. Flow in this trunk line is diverted at several locations into the OCSD Westside Relief Interceptor.

3. **Joint Forces Training Base.** This area includes the entire Joint Forces Training Base plus residential development east of Los Alamitos Boulevard. Sewage flow is in a westerly direction. Eight-inch and ten-inch collectors discharge into the OCSD Westside Relief Interceptor in Los Alamitos Boulevard.

In 2001, the RLAASD completed a comprehensive Sewer System Management Plan. The Plan, prepared by Boyle Engineering, projected a peak flow of approximately 8.6 mgd for the entire District, and found the sewer system to be generally capable of handling normal and peak sewer flows. As part of the required Sewer System Management Plan, a Sewer System Evaluation and Capacity Assurance Plan prepared by Psomas in 2005 also found the District's existing collection system is capable of handling this flow without generating any significant problems. This finding is reinforced by the fact that the RLAASD has not experienced any historical sanitary sewer overflows.

Furthermore, OCSD upgraded the Westside Pump Station in 2009 to address capacity issues with the pump station and to minimize future surcharge conditions. Additional OCSD improvements are also proposed for the trunklines serving the Los Alamitos area, including 34,350 linear feet of replacement pipe for the Los Alamitos Sub-trunk and 32,100 linear feet of replacement for the Westside Relief Interceptor Pipeline along the eastern border of the City. There is no evidence of hydraulic deficiencies within the RLAASD system that discharges into the OCSD trunklines.

**Adjacent Sewer Systems**

There are three areas within the City of Los Alamitos that are served by neighboring local sewage agencies or discharge into adjacent systems:

1. **El Dorado Park Estates East and Bungalows.** The City of Long Beach Water Department provides sewer service for the El Dorado Park Estates East and Bungalows neighborhoods.

2. **Country Square.** The Country Square neighborhood discharges northerly into Long Beach but connects to the OCSD trunk line in Bloomfield Street.

3. **Parkwood.** The Parkwood neighborhood discharges southerly to the Seal Beach local collection system.
Figure 2 Sewer Plan

Sewer Lines:
- OCSD Trunk
- RLAASD Sewer
- Parcels served by Long Beach Water District
- City Boundary
- Sphere of Influence
- Other City Boundaries

Source: City of Los Alamitos, 2013


**Stormwater Drainage**

**Facilities**

Stormwater drainage and flood control facilities in the City of Los Alamitos and Rossmoor are maintained by the City, the Orange County Flood Control District (OCFCD), and the Los Angeles Public Works Department. These agencies maintain flood control facilities to prevent or minimize loss of life and property caused by flooding. Figure 3 displays the local and regional drainage facilities for Los Alamitos and Rossmoor.

**City of Los Alamitos**

Local drainage patterns and facilities consist primarily of surface runoff intercepted by open channels and underground pipe systems. The City maintains the following facilities:

**Streets.** Streets serve as the primary facility for conveying stormwater on City-owned land. The majority of streets were constructed in the 1950s and 1960s, when a slope from 0.15 to 0.25 percent was considered adequate. Most city streets are inadequately sloped to convey runoff in compliance with current drainage standards (minimum slope of 0.50 percent).

**City Storm Drain and Open Channel Facilities.** City streets also route stormwater runoff to catch basins that lead to storm drains or open channels. There are approximately 80 catch basins throughout the City’s two square mile watershed, which intercept most of the local runoff for storm drain and open channel facilities. Since most of the catch basins and storm drain systems were constructed in the 1950s and 1960s, they do not meet current design standards for conveyance of the 10-, 25-, and 100-year event storms. Additionally, the number of catch basins is inadequate based on current standards, which require storm drain interception for every 1,000 feet of cumulative roadway length. Significant local storm drain facilities owned and maintained by the City include:

- Rossmoor Highlands open channel (with east to west drainage).
- Katella Avenue drain (a regional drain with east to west drainage).
- Cerritos Avenue drain (east to west drainage).

**Pump Station.** The City owns and maintains a pump station at the cul-de-sac of Fenley Drive in the College Park North area. The facilities are for the purpose of pumping local stormwater in areas that are geographically depressed that prohibit gravity flow designed systems.

**Orange County Flood Control District/Orange County Public Works**

Flood control facilities in Rossmoor are the responsibility of the OCFCD, which are maintained by the Orange County Public Works Department.

**Streets.** The majority of streets in Rossmoor were also constructed based on standards from the 1950s and 1960s and are inadequately sloped to convey runoff in an efficient manner to comply with current drainage standards.
County Storm Drain and Open Channel Facilities. There are several regional flood control facilities located in the City of Los Alamitos and Rossmoor, including the following:

- Carbon Creek Channel (OCFCD Facility B01): Located in the northern-most portion of Los Alamitos, Carbon Creek Channel exists as a concrete trapezoidal channel that outlets to Coyote Creek. The channel also receives drainage from the Cities of Cypress, Anaheim, Fullerton, and Placentia.

- Los Alamitos Channel (OCFCD Facility C01): The Los Alamitos Channel exists as an earthen trapezoidal channel and generally parallels the Coyote Creek channel and San Gabriel River. The facility originates at Cerritos Avenue along the western portion of the City, and flows southwest to the Rossmoor Retarding Basin.

- Rossmoor Storm Channel (OCFCD Facilities C01S01–04): Originates in the eastern portion of the City of Los Alamitos and flows west, generally parallel to Howard Avenue and Farquhar Avenue as an earthen trapezoidal channel. After crossing Los Alamitos Boulevard, the channel traverses through the community of Rossmoor before draining to the Rossmoor Retarding Basin. This also includes the Kempton, Montecito, and Bixby Storm Channels.

- Katella Storm Channel (OCFCD Facility C01S05): The Katella Storm Drain exists as an underground, 10 feet by 8 feet reinforced concrete box along Katella Avenue (originating at Los Alamitos Boulevard), and terminates at the Los Alamitos Channel and Rossmoor Retarding Basin.

- Bloomfield Storm Channel (OCFCD Facility C01P02): The Bloomfield Storm Drain is a 72-inch reinforced concrete pipe that ties directly into the City storm drain system in Katella Ave and ultimately ties into the OCFCD Katella facility.

Multi-Jurisdictional
The City and Rossmoor are also served by a larger, multi-jurisdictional regional flood control network that discharges the majority of its stormwater runoff into the San Gabriel River. The Los Angeles County Flood Control District, through the Los Angeles County Department of Public Works, maintains the San Gabriel River and Coyote Creek flood control facilities adjacent to the City and Rossmoor.

Throughout the early 19th century, the San Gabriel River functioned as a tributary to the Los Angeles River and also flowed directly to the ocean. Following a series of flood, the river assumed a course similar to its current alignment. The floods of 1914 instigated a series of flood control facilities and mechanized paving technology in the 1950s gave birth to the concrete-lined channels seen today. These improvements did not yet reach the City and Rossmoor when heavy storms caused deaths and substantial flooding damage in 1952. The final concrete channelization of the San Gabriel River and Coyote Creek was completed soon after and has protected both communities ever since.
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Hazards

Flood Hazards
To identify a community's flood risk, the Federal Insurance Administration delineates flood risk areas that form the basis of flood insurance rate maps (FIRM). Depending on their flood risk, property owners may be required to purchase flood insurance (standard homeowner insurance policies do not cover losses due to floods). Flood insurance is legally required for property owners with land in an area deemed at risk of flooding during a 100-year flood event.

A 100-year flood event is fairly large but historically infrequent flood. To be precise, it is a flood of a size that is projected to have only a one-percent chance of being equaled or exceeded each year. However, this does not mean that this size of flood will only occur once every 100 years. The likelihood of a 100-year flood occurring within a 100-year stretch of time is actually high, but there is no way to predict when the next flood will occur—or the one after that.

As shown in Figure 4, only the drainage channels are in a 100-year flood zone risk area. With the exception of the flood control facilities, entire City of Los Alamitos and Rossmoor are in a Zone X (shaded)—defined as area that have a 0.2 percent chance of flooding every year (also known as a 500-year flood zone). More detailed flood risk information can be found on the following flood insurance rate maps: 06059C0104J, 06059C0112J, and 06059C0116J.

Localized Flooding Problems
Localized flooding has occurred at several locations throughout the city, including areas along Portal Drive, Cherry Street, and Serpentine Drive; at low points along Katella Avenue; and along Kempton Drive in the southern portion of the City. This flooding is due primarily to streets with limited slope and an insufficient number of catch basins and inlets. These flooding issues will be evaluated further under a future Master Plan of Drainage by the City.

A significant portion of the existing storm drain system was designed and implemented under older flood control design standards that do not comply with current design standards. Recent storms have resulted in minimal damage to property and no loss of life, indicating that the existing system provides a minimal level of protection.

While the costs to upgrade the entire system to the current design standards is cost prohibitive, improvements made after 1996 have incorporated the updated design standards and will continue to be implemented with the following County of Orange design standards:

1. Building pads constructed one foot or more above the designated 100-year flood plain
2. Roadways and drainage facilities designated for the 10- and 25-year storm events

Design standards for determining local runoff include the following manuals:

1. Orange County Hydrology Manual, October 1986
2. Orange County Local Drainage Manual, January 1996
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Figure 4 Flood Hazards

Source: FEMA, 2014
Seismic and Geologic Hazards
While there are no known active or potentially active earthquake faults located in the City of Los Alamitos or Rossmoor, the entire Southern California region is considered to be seismically active. Earthquakes create primary seismic hazards such as ground shaking, ground displacement, subsidence, and uplift. These actions can, in turn, induce secondary hazards such as ground failure, liquefaction, landslides, seismically induced water waves (tsunamis and seiches), and dam failure.

Earthquake Faults
The closest earthquake faults in the Orange County-Los Angeles County region that are capable of generating destructive earthquakes and surface rupture in Los Alamitos include: El Modena, Elysian Park, Newport-Ingleswood, Norwalk, and Whittier-Elsinore. The closest fault is the Newport-Ingleswood fault zone (see Figure 5), which produced the catastrophic 1933 Long Beach earthquake that caused the devastation in the Los Alamitos/Rossmoor area. This earthquake was estimated to be a magnitude 6.3 on the Richter scale. There are numerous other faults within 50 miles that could cause minor to moderate damage depending on magnitude of the seismic event.

Surface Rupture and Ground Shaking
Surface rupture resulting directly from earthquakes is unlikely to occur in Los Alamitos or Rossmoor because no faults have been identified within the boundaries of either community.

In addition, the underlying soil and geologic structure influences the amount of ground shaking and damage. The soils underlying Los Alamitos include alluvium deposits (a collection of a variety of materials, including fine particles of silt and clay and larger particles of sand and gravel). Alluvium deposits can become unstable during intense groundshaking and may create ground movement during a seismic event.

High levels of groundshaking and soil movement may cause substantial damage to structures, walls, and paved areas. Tilt-up structures, unreinforced masonry buildings, older buildings, buildings over four stories in height, and mobile homes can be particularly susceptible to earthquake related damage.

Landslides
Due to its flat topography, Los Alamitos and Rossmoor are generally considered at low risk for earthquake-induced landslides. There may be some potential for landslides along drainage channels and similar settings where steep banks or slopes occur. Also, landslide hazards can be created during excavation and grading unless appropriate techniques are used.

Liquefaction
Liquefaction causes ground subsidence. It is the process by which the soils become fluid and lose shear strength during an earthquake. Three simultaneous conditions are necessary for liquefaction: 1) generally cohesionless soils, predominantly sand; 2) high ground water (where the groundwater is less than 30 feet from the surface); and 3) ground shaking. Due to the proximity of active and potentially active faults in and around Los Alamitos, the
characteristically high water table, and the cohesionless subsoils, areas in the City with these conditions may experience liquefaction during extreme ground shaking.

**Seiches**
Another potential secondary source of damage is from the generation of seiches. A seiche is the oscillation of sloshing of water caused by seismic activity or landsliding. It may occur in a lake, bay, or other enclosed body of water. It may result in damage to peripheral shore development or to downstream development if water tops a dam. Due to dam upgrades, potential damage to Los Alamitos from a failure of Prado Dam on the Santa Ana River is not an issue.

**Infrastructure Hazards**
Other hazards related to seismic and other geologic events include damage to roadways and utilities. The City’s Emergency Operations Plan specifies municipal procedures to address hazards created by damage to infrastructure. The County’s Emergency Operations Plan also addresses these hazards.

**Roadways.** Evacuation and emergency vehicle access could be blocked if surface streets are damaged or covered with debris. Freeway overpasses at Katella Avenue, Cerritos Avenue, and Seal Beach Boulevard could collapse and block ingress and egress to the area.

**Natural Gas.** Natural gas service to the City and Rossmoor is provided by the Southern California Gas Company. The gas mains in the City range in age from those installed in the 1940s to present day installations. The distribution system primarily consists of high and medium pressure lines, ranging in size from 1/2 inch to 10 inches in diameter, which form a grid pattern. One high pressure 34-inch gas line runs along Lampson Avenue and is a part of a large transmission network system that supplies the greater Los Angeles and Orange County area. Natural gas lines can fail due to seismic activity, possibly resulting in an explosion.

**Electricity.** The City of Los Alamitos and Rossmoor receives electrical service from the Southern California Edison Company. Electrical infrastructure is located both above and below ground level from Southern California Edison generating facilities to local receiving stations and substations. In the case of a seismic event, electrical lines could fall to the ground and create risks of electrocution or fire.

**Underground Pipelines.** Several pipelines underlie the City to transport oil, gasoline, and crude oil. These pipelines run along Bloomfield Avenue and Los Alamitos Boulevard north of Cerritos Avenue, and along Cerritos Avenue. The major threats posed by underground pipelines include explosions, fire, and contamination of groundwater used as a drinking water source.
Figure 5 Seismic Hazards

Source: California Department of Conservation, Alquist-Priolo Potentially Active Faults 2007
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**Airport Hazards**
The Los Alamitos Joint Forces Training Base (JFTB) is in the southeastern portion of the City. The airfield, operated by the National Guard Bureau, contains two runways with approximately 1,600 flights that arrive or depart every month.

The Airport Environs Land Use Plan (AELUP) provides a comprehensive plan for the area surrounding each public airport in Orange County, as well as federal military airports. Crash hazard areas and building height restrictions are identified for each airport, including operations at the JFTB.

**Crash Hazards**
Aircraft failure and crashes are most likely to occur during takeoff and landing activities. Areas around runways need to be clear from potential hazards to enhance the safety of the aircraft and its passengers as well as the protection of people and property on the ground. These areas are called clear zones and, as shown on Figure 6, are entirely within the boundaries of the JFTB.

**Height Restrictions**
To ensure the safe operation of aircraft activity at the JFTB, structures anywhere in Los Alamitos or Rossmoor should not exceed the applicable elevations defined in the Federal Aviation Regulations (FAR), Part 77 (Objects Affecting Navigable Air Space). This height restriction is 88 to 200 feet above ground level based on proximity to the runway.

Current zoning standards do not permit development higher than 70 feet in Los Alamitos or Rossmoor. Nevertheless, all developments are subject to FAR Part 77 noticing requirements and must file the necessary form(s) with the City’s Community Development department, the County’s Planning division, and the Orange County Airport Land Use Commission.
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Figure 6 JFTB Impact Zones

Source: Orange County Airport Land Use Commission, 2002
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Noise Hazards
Excessive noise can adversely affect human health and well-being, economic productivity, and property values. Mobile and stationary noise sources contribute to overall noise levels, and the impacts of both must be analyzed when planning the City’s future growth and management.

Noise Sources and Sensitive Receptors

Mobile
Surrounded by freeways, the primary noise source in Los Alamitos and Rossmoor is from automobile, truck and motorcycle traffic. Noise from motor vehicles is generated by engine vibrations, the interaction between tires and the road, and the exhaust system. Activities on the Joint Forces Training Base also contribute periodic noise sources through aircraft activity, although approaches and departures have specific flight routes to assist in noise abatement.

Stationary
Residential uses generate noise from landscaping, maintenance activities, and air conditioning systems. Commercial and industrial uses generate noise from heating, ventilation, air conditioning systems, loading docks, and machinery. Noise generated by residential or commercial uses are generally short and intermittent. Industrial uses may generate noise on a more continuous basis due to the nature of its activities.

Within the City of Los Alamitos, land uses are primarily residential, with retail along major roadways and industrial uses in the northeastern and northwestern portions of the City. Rossmoor is almost exclusively residential, with some commercial uses in the northeastern corner of the community.

Construction activities are another regular and ongoing source of noise typically isolated to the immediate vicinity of the construction site and occur during daytime hours in accordance with municipal regulations. Construction activities also occur for relatively short-term periods—a few weeks to a few months.

Sensitive Receptors
Sensitive land uses are those uses with human activities that may be subject to stress or significant interference from noise. These include residences, schools, childcare facilities, religious institutions, hospitals, libraries, parks and recreational facilities, health care facilities, convalescent centers, and retirement homes. Such uses should be protected from unnecessary noise to the maximum degree feasible.

Understanding the Measurement of Noise
Noise refers to sound pressure variations audible to the ear. The audibility of a sound depends on how loud it is (amplitude), its pitch (frequency), and the person’s ability to hear. Whether the sound is judged as noise depends largely on the listener’s current activity and attitude toward the sound source, as well as the amplitude and frequency of the sound.
To obtain convenient measurements, sound is measured in units of the decibel (dB). However, the human ear is not equally sensitive to all frequencies. At low frequencies (a rumble or roar), the ear is not very sensitive, while at higher frequencies (a screech or a whine), the ear is most sensitive. To reflect this varying sensitivity, an A-weighted decibel scale (dBA) is typically used to approximate the sensitivity of the human ear. The scale ranges from zero for the least perceptible sound to about 130 to 140 dBA, at which point most people begin to feel pain. A sound level of 190 dBA will rupture the eardrum and permanently damage the inner ear.

The most common sounds vary between 40 dBA (very quiet) and 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud engine noises equate to 110 dBA, which can cause serious discomfort. A listener often judges an increase in sound levels of 10 dBA as a doubling of sound. Examples of various noise sources and their decibel level are shown in Table 2.

**Table 2. Representative Noise Levels**

<table>
<thead>
<tr>
<th>Common Outdoor Activities</th>
<th>Noise Level (dBA)</th>
<th>Common Indoor Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jet fly-over at 100 feet</td>
<td>110</td>
<td>Rock band</td>
</tr>
<tr>
<td>Gas lawnmower at 3 feet</td>
<td>105</td>
<td></td>
</tr>
<tr>
<td>Gas lawnmower at 100 feet</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Diesel truck going 50 mph at 50 feet</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>Noisy urban area during daytime</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Gas lawnmower at 100 feet</td>
<td>85</td>
<td>Food blender at 3 feet</td>
</tr>
<tr>
<td>Commercial area</td>
<td>80</td>
<td>Garbage disposal at 3 feet</td>
</tr>
<tr>
<td>Heavy traffic at 300 feet</td>
<td>75</td>
<td>Vacuum cleaner at 10 feet</td>
</tr>
<tr>
<td>Quiet urban area during daytime</td>
<td>70</td>
<td>Normal speech at 3 feet</td>
</tr>
<tr>
<td>Quiet urban area during nighttime</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Quiet suburban area during nighttime</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Quiet rural area during nighttime</td>
<td>55</td>
<td>Large business office</td>
</tr>
<tr>
<td>Quiet urban area during daytime</td>
<td>50</td>
<td>Dishwasher in next room</td>
</tr>
<tr>
<td>Quiet urban area during nighttime</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Quiet urban area during nighttime</td>
<td>40</td>
<td>Theater, large conference room (background)</td>
</tr>
<tr>
<td>Quiet suburb area during nighttime</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Quiet rural area during nighttime</td>
<td>30</td>
<td>Library</td>
</tr>
<tr>
<td>Quiet area during nighttime</td>
<td>25</td>
<td>Bedroom at night, concert hall (background)</td>
</tr>
<tr>
<td>Quiet rural area during nighttime</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Quiet area during nighttime</td>
<td>15</td>
<td>Broadcast or recording studio</td>
</tr>
<tr>
<td>Quiet area during nighttime</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Quiet area during nighttime</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Lowest threshold of human hearing</td>
<td>0</td>
<td>Lowest threshold of human hearing</td>
</tr>
</tbody>
</table>

Source: Caltrans 2009.
Noise Standards

City of Los Alamitos
The General Plan is a tool for managing noise by planning for and maintaining compatibility between sensitive land uses and noise sources. Noise from stationary sources is regulated through specific standards in Chapter 17.24 of the Los Alamitos Municipal Code and Division 6 of the Orange County Municipal Code (Rossmoor). The City’s noise standards are shown below in Table 3 and are similar to the standards found in the County’s municipal code.

Table 4 provides additional guidance when considering the compatibility of proposed land uses with existing noise levels in the proposed project area.

State of California
The State of California provides noise standards through Title 24 of the California Building Code. Title 24 establishes standards for residential construction practices and building materials to ensure that interior noise levels do not exceed 45 dBA. The state leaves it up to each jurisdiction to determine acceptable interior and exterior noise levels by land use. The state does provide some guidance through information presented in the table below.

Table 3. City of Los Alamitos Noise Standards

<table>
<thead>
<tr>
<th>Noise Zone</th>
<th>Exterior Noise Standards</th>
<th>Interior Noise Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Noise Level</td>
<td>Time Period</td>
</tr>
<tr>
<td>1 (Residential) day</td>
<td>55 dBA</td>
<td>7 a.m.–10 p.m.</td>
</tr>
<tr>
<td>1 (Residential) night</td>
<td>50 dBA</td>
<td>10 p.m.–7 a.m.</td>
</tr>
<tr>
<td>2 (Professional and Institutional)</td>
<td>55 dBA</td>
<td>Anytime</td>
</tr>
<tr>
<td>3 (Commercial)</td>
<td>60 dBA</td>
<td>Anytime</td>
</tr>
</tbody>
</table>

Source: LAMC Chapter 17.24, Noise.
Notes: The noise levels at the affected property shall not exceed:
- The noise standard for a cumulative period of more than 30 minutes in any hour; or
- The noise standard plus 5 dBA for a cumulative period of more than 15 minutes in any hour; or
- The noise standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour; or
- The noise standard plus 15 dBA for a cumulative period of more than one minute in any hour; or
- The noise standard plus 20 dBA for any period of time.
Table 4. Land Use and Noise Compatibility Matrix

<table>
<thead>
<tr>
<th>LAND USES</th>
<th>EXISTING NOISE LEVEL (dBA CNEL)</th>
<th>&lt;</th>
<th>55</th>
<th>60</th>
<th>65</th>
<th>70</th>
<th>75</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example Land Uses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amphitheater, concert hall, auditorium, meeting hall</td>
<td>B</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>C</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Mobile home</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>C</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Hospital, library, school, faith/religious uses</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>C</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Hotel, motel, transient lodging</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Single family, multifamily, faith/religious uses</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Parks</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Office building, research &amp; development, professional office, city office building, and hotel</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Amusement park, miniature golf, go-cart track, health club, equestrian center</td>
<td>A</td>
<td>A</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Golf courses, nature centers, cemeteries, wildlife reserves, wildlife habitat</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Commercial retail, bank, restaurant, movie theater</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>B</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Automobile service station, auto dealer, manufacturing, warehousing, wholesale, utilities</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Agriculture</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

Notes:
- **Community Noise Equivalent Level (CNEL)**. The energy-average of the A-weighted sound levels during a 24-hour period, with 5 dB added to the levels from 7:00 PM to 10:00 PM and 10 dB added from 10:00 PM to 7:00 AM.
- **Compatibility Zones**. The following zones indicate the degree to which listed land uses are compatible with noise levels shown in the table.
  - **Zone A**. Clearly Compatible. Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
  - **Zone B**. Normally Compatible. New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.
  - **Zone C**. Normally Incompatible. New construction or development should normally be discouraged. If new construction or development does proceed, a detailed analysis or noise reduction requirements must be made and needed noise insulation features must be included in the design.
  - **Zone D**. Clearly Incompatible. New construction or development should generally not be undertaken.

**Noise Analysis**

**Traffic Noise**

A noise analysis was conducted to model noise of the existing roadway network using the Federal Highway Administration’s Highway Noise Prediction Model. In a general plan noise analysis, a 3 dBA increase is considered barely perceptible, and increases over 5 dBA are generally considered readily perceptible. As shown in Table 4, noise-sensitive residential uses are considered normally compatible under ambient noise conditions of 65 dBA CNEL. Because the expected ambient noise increase would occur over a long period of time—over 20 years—
as opposed to an immediate change in noise, the noise analysis considers a noise increase of 3 dB or more to be a threshold of significance that requires mitigation.

Table 5 displays the existing (2014) and projected (2035) traffic noise levels for selected roadway segments under buildout conditions. The table also shows the net change in the ambient noise levels from existing conditions. The noise analysis indicated that the ambient noise environment would be higher than 60 dBA CNEL along most of the studied roadway segments.

While buildout conditions would be expected to result in increased noise levels, the maximum increased would be 1.1 dBA. These incremental increases would be below levels considered “barely perceptible” and would be below thresholds that require mitigation. This does not render the City’s enforcement of its noise ordinance or the requirements that it can impose to plan for and maintain compatibility between sensitive land uses and noise sources.

<table>
<thead>
<tr>
<th>ROADWAY</th>
<th>SEGMENT</th>
<th>dBA CNEL</th>
<th>Existing (2014)</th>
<th>Projected (2035)</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Alamitos Boulevard</td>
<td>North City Limits to Cerritos Avenue</td>
<td>73.3</td>
<td>73.7</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Los Alamitos Boulevard</td>
<td>Cerritos Avenue to Katella Avenue</td>
<td>74.3</td>
<td>74.3</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Los Alamitos Boulevard</td>
<td>Katella Avenue to Farquhar Avenue</td>
<td>76.0</td>
<td>76.1</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Los Alamitos Boulevard</td>
<td>Farquhar Avenue to Orangewood Avenue</td>
<td>76.1</td>
<td>76.1</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Los Alamitos Boulevard</td>
<td>Orangewood Avenue to Bradbury Road</td>
<td>75.7</td>
<td>75.8</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Los Alamitos Boulevard</td>
<td>Bradbury Road to St. Cloud Drive</td>
<td>75.6</td>
<td>75.7</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Katella Avenue</td>
<td>I-605 to Los Alamitos Boulevard</td>
<td>78.3</td>
<td>78.9</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Katella Avenue</td>
<td>Los Alamitos Boulevard to Bloomfield Street</td>
<td>77.3</td>
<td>78.3</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Katella Avenue</td>
<td>Bloomfield Street to Lexington</td>
<td>76.8</td>
<td>78.0</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Katella Avenue</td>
<td>Lexington to Walker Street</td>
<td>76.8</td>
<td>77.8</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Bloomfield Street</td>
<td>Katella Avenue to Cerritos Avenue</td>
<td>69.1</td>
<td>69.8</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Bloomfield Street</td>
<td>Cerritos Avenue to Ball Road</td>
<td>68.6</td>
<td>69.0</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Bloomfield Street</td>
<td>Farquhar Avenue to Katella Avenue</td>
<td>58.7</td>
<td>58.7</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Cerritos Avenue</td>
<td>I-605 to Los Alamitos Boulevard</td>
<td>71.1</td>
<td>71.6</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Cerritos Avenue</td>
<td>Los Alamitos Boulevard to Bloomfield Street</td>
<td>71.1</td>
<td>71.1</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Cerritos Avenue</td>
<td>Bloomfield Street to Lexington</td>
<td>70.2</td>
<td>70.5</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Farquhar Avenue</td>
<td>Los Alamitos Boulevard to Bloomfield Street</td>
<td>61.5</td>
<td>61.5</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Farquhar Avenue</td>
<td>Bloomfield Street to Lexington</td>
<td>59.8</td>
<td>59.8</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Lexington Drive</td>
<td>Farquhar Avenue to Katella Avenue</td>
<td>61.6</td>
<td>61.6</td>
<td>0.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: PlaceWorks 2014.
Traffic noise contours were estimated for conditions in the year 2035. Figure 7 shows the projected future noise contours from roadway traffic along nearby freeways and major roadways in Los Alamitos and Rossmoor. As shown, several areas will be exposed to noise levels above 60 dBA CNEL. It should be noted, however, that these contours do not account for noise attenuation provided by intervening structures or topographical barriers, which may substantially reduce noise impacts for areas farther from the roadway areas.

**Joint Forces Training Base**

**Aircraft Noise.** The JFTB is a military aviation facility and operations involve aircraft and ground vehicle activity. The base does not utilize live ordnance. The major sources of noise are vehicular traffic on roadways, large events, and aircraft operations.

The Airport Environs Land Use Plan (AELUP) is a land-use compatibility plan that describes the effects of aircraft noise on surrounding areas. Land uses within the airport planning area boundaries are required to conform to noise restrictions established in the AELUP. Figure 6 shows the 60 and 65 dBA CNEL noise contours from the AELUP.

Approximately 50 existing homes are exposed to noise levels above 65 dBA CNEL in the Highlands and New Dutch Haven neighborhoods. These homes have been or should be sufficiently sound attenuated so that noise levels do not exceed an interior standard of 45 dBA CNEL. Homes within the moderate noise impact zone (between 60 and 65 dBA CNEL) could be seriously disturbed by single noise events, but are still considered compatible by the AELUP. Other small areas within the 65 dBA CNEL noise contour consist of planned industrial and professional office uses. However, these are not considered noise sensitive land uses and are therefore considered compatible by the AELUP.

**Vehicular Traffic and Events.** The JFTB hosts community events and houses educational and recreational facilities used by civilians. On weekends and other select training periods, activities can increase substantially. The base maintains its major point of access off Lexington Drive. An additional point of access is provided for the golf course, but it is not used to access other parts of the Los Alamitos JFTB except in special circumstances. For special events, the base and the City coordinate and open the Orangewood Avenue entry, but it otherwise remains closed.

The projected 2035 noise level contours for the segment of Lexington Drive between Katella Avenue and the JFTB were calculated for a typical traffic condition, without events or military exercises. The nearest homes are outside the 65 dBA CNEL noise contour, which falls within the road’s right-of-way. The other access route to the Lexington Drive entrance is provided via Farquar Avenue, but it is exposed to less noise than Lexington Drive. Therefore, during normal traffic conditions, the residential areas along the roadways are compatible.

According to the JFTB staff, the base hosts major military training exercises approximately once a month, when there is an increase in vehicular activity due to military truck conveys accessing the base. These events would continue to be sporadic, causing noise increases due to truck passbys that occur for short periods of time.
Figure 7
Traffic Noise Level Contours - 2035 Conditions

Source: Fehr & Peers, 2014; PlaceWorks, 2014
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Public Services

Police Service

Los Alamitos
The Los Alamitos Police Department is committed to providing the highest degree of professional police service in partnership with the community to ensure Los Alamitos is a safe place to live, visit, and conduct business. The Department is based out of the civic center (see Figure 8) along Katella Avenue and consists of two divisions: Operations and Support Services.

The Operations Division is comprised of those activities that are directly related to enforcement. The primary responsibility of the Patrol Bureau is to ensure the safety and security of the community. With an average response time to emergency calls of less than three minutes, the Department is among the quickest, if not the quickest in Orange County.

In addition to the patrol function, the Operations Division encompasses the Detective Bureau, Traffic Bureau, personnel and training, the reserve officer program, public information, and professional standards.

The Support Services Division is overseen by a civilian manager and encompasses special programs and those police functions that are not directly related to operations. This includes the Records Bureau, court liaison, property & evidence, facilities, emergency preparedness, information technology, administration of the Police Department's grants and budget, animal control, and the Community Outreach Program.

Rossmoor
Rossmoor is served by the Orange County Sheriff’s Department (OCSD) and the California Highway Patrol (CHP). The OCSD North Operations Division, which is responsible for patrol services in the north Orange County unincorporated areas and contract police services for the cities of Yorba Linda, Stanton, and Villa Park. The Sheriff provides patrol services in the Rossmoor community, while also offering a wide range of emergency, judicial, and law enforcement services at the Sheriff’s headquarters in Santa Ana. The California Highway Patrol provides traffic enforcement and accident investigation services. Personnel operate out of the Westminster area office of CHP’s Border Division.
Fire Service

Los Alamitos and Rossmoor
The City of Los Alamitos contracts with the Orange County Fire Authority (OCFA) for fire protection and emergency medical services. Rossmoor, as an unincorporated community, is also served by the OCFA. The OCFA is divided into three departments: Operations, Fire Prevention, and Human Resources.

The Operations Department provides emergency response to fires, medical aids, rescues, and hazardous materials incidents in both communities. The majority of service calls are for emergency medical service. Due to the urban nature of Los Alamitos, Rossmoor, and the surrounding communities, there is very little risk of wildland fire hazards (fires that burn in woodland, brushland and grassland areas). The primary fire hazard is urban fires—those that burn in developed areas and include commercial, industrial and residential structures.

The Fire Prevention Department consists of four sections. The Planning and Development Services section works with the development community and municipal staff to ensure that building and developments meet state and local fire and life safety requirements. The Safety and Environmental Services section enforces codes and ordinances relative to fire and life safety issues associated with commercial, industrial, and residential development, as well as hazardous materials. The Pre-Fire Management section takes a proactive approach to fire prevention through the systematic mitigation of risk in the OCFA communities. Finally, the Investigation Services section is responsible for investigating or reviewing fires and determining appropriate intervention strategies.

The Human Resources Department coordinates OCFA employment, the volunteer programs, public education programs, and administration activities.

The local fire station for Los Alamitos and Rossmoor OCFA Fire Station #2, located at 3642 Green Avenue (see Figure 8). Additional resources are quickly available from the additional OCFA stations and from the City of Long Beach and County of Los Angeles through a mutual aid agreement. The closest OCFA stations are Station #17 in Cypress and Station #48 in Seal Beach.

Joint Forces Training Base
The California Military Department operates a fire station at the Joint Forces Training Base (JFTB) and is specially trained for aircraft rescue while also providing basic fire protection services. The JFTB and OCFA provide support for one another through a mutual aid agreement.
Figure 8 Public Facilities

**Police Stations**
- 1. Los Alamitos Police Dept.
- 2. OC Sheriff Substation (Stanton)

**Fire Stations**
- 1. OCFD Station #2
- 2. Los Alamitos JFTB Fire Department Station
- 3. OCFD Station #17
- 4. OCFD Station #48
- 5. Garden Grove Fire Station No. 4

**Schools**
- 1. School District Headquarters
- 2. Los Alamitos High School
- 3. McAuliffe Middle School
- 4. Los Alamitos Elementary
- 5. Oak Middle School
- 6. Richard Henry Lee Elementary
- 7. Rossmoor Elementary
- 8. Jack L. Weaver Elementary
- 9. Francis Hopkinson Elementary
- 10. St. Hedwig Catholic School (Private)

**Other**
- 1. City Hall
- 2. Los Alamitos Medical Center
- 3. OCLP Los Alamitos-Rossmoor Library

Source: City of Los Alamitos, 2013
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Hazardous Materials

Hazardous materials are used in all segments of society. Hazardous material users include manufacturing and service industries, agriculture, military bases, hospitals, schools and households. The major transportation routes in Los Alamitos include the freeway system and surface streets. These routes are used daily to transport hazardous materials from suppliers to users. On these routes, transportation accidents involving hazardous materials can occur. The threats posed by a transportation accident involving hazardous materials include explosions, physical contact by emergency response personnel, and exposure to the public via airborne exposure.

The Federal Department of Transportation (DOT) is the primary regulatory authority for the interstate transport of hazardous materials. The DOT regulations establish criteria for safe handling procedures, personnel qualifications and training, inspection requirements, and equipment specifications. The California Highway Patrol enforces the intrastate transport of hazardous materials and hazardous wastes.

The local regulatory authority for the onsite storage of hazardous materials in Los Alamitos and Rossmoor is the OCFA. The OCFA conducts an inventory program of hazardous materials stored, handled, and used within OCFA’s jurisdiction, and maintains related information on a database accessible to all emergency response agencies in the event of a major emergency. The information is also provided to the public regarding the location, type, and health risks of hazardous materials on a facility-specific basis.

As of July 2013, the Orange County Environmental Health Agency (OCEHA) manages the Hazardous Materials Disclosure, Business Emergency Plan, and California Accidental Release Prevention programs that were previously managed by the OCFA.

Joint Forces Training Base

The JFTB is considered a large quantity generator and can store hazardous waste at a central accumulation site for up to 90 days and at five satellite accumulation points that can hold hazardous waste for up to 180 days. All of the storage buildings in these areas are designed for storing hazardous materials and waste. The buildings have locks and integral secondary containment. Hazardous waste is collected by an outside contractor, OC Vacuum, who disposes of the waste according to all federal and state regulations.

The OCEHA also acts as the inspection agency for the JFTB. The California Military Department fire protection staff responds to low level hazardous material incidents while the OCFA responds to higher level incidents on the base.

Emergency Procedures and Facilities

The City of Los Alamitos Emergency Operations Plan (EOP) addresses the jurisdiction’s planned response to natural disasters and public safety emergency situations. The EOP seeks to mitigate the effects of hazards, prepare for measures to be taken which will preserve life and minimize
damage, enhance response during emergencies and provide necessary assistance, and establish a recovery system in order to return the city to its normal state of affairs.

The EOP provides overall organizational and operational concepts for responding to various types of identified hazards. Included are listings of responsible response agencies, emergency action checklists for hazard-specific responses, and operational data such as listings of resources, key personnel, and essential facilities. The EOP is updated on a periodic basis and tested annually to improve disaster response and recovery operations.

The EOP is activated immediately upon the existence or declaration of a state of emergency for the state or nation. It may also be placed into effect in case of local emergency by action of City officials in accordance with Ordinance No. 248.

The County of Orange maintains an EOP that functions in a similar manner as the plan for the City.

Hospital and Medical Facilities
Los Alamitos and Rossmoor residents are served by the Los Alamitos Medical Center. If the need arises, there are numerous hospitals located in adjacent cities which could serve Los Alamitos residents.

Facilities vital to post-earthquake disaster response efforts include fire control and law enforcement facilities, hospitals, and emergency operations control and communication centers. It is imperative such facilities be able to withstand the effects of a major earthquake and remain fully functional. In this regard, factors warranting careful consideration include seismic design and construction requirements, site location and accessibility, impacts resulting from damage to adjacent buildings, and the degree of usability of vital facilities following an earthquake.

State of California’s Office of Emergency Services at the JFTB
The State of California’s Office of Emergency Services (OES) has a facility at the JFTB. This JFTB has a 10,000-foot long runway that is capable of accommodating any type of emergency aircraft. The OES is staffed by full-time personnel and can activate its emergency services during times of civil disturbance, floods, wild fires, and other emergencies. The OES cooperates and coordinates with the Federal Emergency Management Agency and California National Guard in the event of a wide-spread emergency.

Schools
The Los Alamitos Unified School District (LAUSD) is one of the best school districts in Southern California and serves all of Los Alamitos and Rossmoor. The district also serves Seal Beach, the Surfside community in Huntington Beach, and small portions of Cypress and Long Beach.

All of the district’s comprehensive schools have been honored as National Blue Ribbon Schools and/or California Distinguished Schools. Additionally, many of the schools host athletic fields and boast a history of successful community and high school sports teams.
Los Alamitos Unified School District contains six elementary schools, two middle schools, one high school (see Figure 8). A continuation high school and adult school are operated out of the high school campus. The City also contains one private K-8 school.

**In Los Alamitos**  
Los Alamitos Elementary  
Oak Middle School  
McAuliffe Middle School  
Los Alamitos High School  
Laurel High School (Continuation/Adult)  
Saint Hedwig Catholic (Private)

**In Rossmoor**  
Francis Hopkinson Elementary  
Richard Henry Lee Elementary  
Rossmoor Elementary  
Weaver Elementary

**In Seal Beach**  
McGaugh Elementary

The total enrollment in LAUSD has grown from under 8,500 in 1996/97 to over 9,900 for the latest 2013/14 school year. Those living and working in the district’s boundaries are given first priority but the district also accepts interdistrict transfers based on remaining capacity. According to the district, 20 to 30 percent of the latest enrollment figures represent interdistrict transfers. This indicates that LAUSD has plenty of capacity to serve any increase in demand created by an increase in the number of school children generated by existing development as well as those introduced by new development.

The City enjoys a great working relationship with the district and maintains facility use agreements for the dual use of recreation facilities.

**Medical Services**

The Los Alamitos Medical Center was founded in 1968 to meet the health care needs of a growing community. The medical center has grown from a community hospital to a comprehensive medical campus and completed a specific plan in 2011 to being a phased expansion. The campus may ultimately grow to a main hospital and two patient care buildings with over 300 beds, as well as a collection of medical office buildings, the Total Care Pavilion, two parking structures, and associated administrative, storage, and mechanical buildings. The Medical Center is a full-service medical facility that offers a complete array of medical programs and patient services (see list below).

**Acute Care Areas**  
Birthing Center  
Cardiac Rehab Services  
Cardiology Services  
daVinci Robotic Surgery  
Diagnostic Services  
Emergency Department  
Geropsychiatry  
Laparoscopy  
Orthopedics  
Rehabilitation Services  
Same Day Surgery  
Senior Services  
Spine Surgery  
Stroke Program  
Total Care Cancer Center  
Total Care Imaging Center  
Total Care Infusion Center  
Women's Health Service  
Wound Healing and Hyperbarics

In addition to the Los Alamitos Medical Center, the City contains dozens of other medical-related businesses providing services such as dental care, basic and specialized medical care, diagnostics, and research and development. Overall, the medical industry is an engine of the
local economy and provides approximately one of every four jobs in Los Alamitos, as well as an untold number of visitors. Together, this creates an impressive daytime population that patronizes local businesses.

The medical industry is a growth sector. The United States lacks a sufficient number of hospital beds, nurses, doctors, and most other factors related to medical care to deal with the aging of the baby boom generation and the continued growth of the overall population. The growing demand for medical services will generate continued employment growth, regardless of how we as a society decide to pay for the increasing costs.

The City enjoys a great working relationship with the Los Alamitos Medical Center and will continue to work together to improve the medical campus and the surrounding area in a manner that best serves the Medical Center, the local community, and the city as a whole.

**Solid Waste Disposal**
The City of Los Alamitos contracts for the provision of solid waste and recycling services with Republic Services for residential, commercial, and municipal addresses as well as city-sponsored events. Service includes the curbside and roll-out collection and disposal/processing of green waste, recyclable materials, and other solid waste through individual carts (trash cans), bins, compactors, or boxes. Republic Services also provides annual holiday tree recycling and on-call collection of bulky, household hazardous, universal, and electronic waste.

Rossmoor receives similar services from CR&R Waste and Recycling Services.

As required by law, both service providers are required to recycle or divert from landfilling sufficient waste to ensure that each jurisdiction meets current state law requirements for waste diversion. In 1989, the state set a goal to reach a diversion rate at 50 percent by 2000 and the current diversion rate achieved statewide is 65 percent. In 2012, the state increased the diversion goal to 75 percent by 2020.

**Los Alamitos Television**
Los Alamitos Television (LATV) began as a small public-access channel in 1984 with the mission to provide non-commercial local programming to and by the greater Los Alamitos community (which includes Rossmoor). LATV evolved into a station that provides public, educational, and governmental (PEG) programming with coverage on topics such as local government/agency meetings, sports, travel, local issues and events, and elections.

For example, LATV serves as a resource for the dissemination of disaster preparedness and safety information, including coverage of live events and videos tailored specifically to the local residential and business communities. LATV can also assist in promoting ongoing community programs, special events, business attraction/retention, and issues of public interest such as recreation, recycling and conservation, and proposed public and private projects. Future improvements may include the ability to simulcast programming through the Internet.
The City of Los Alamitos operates LATV, is the local franchising authority, and owns all LATV assets and facilities. LATV is funded by a franchise fee from cable subscribers and from local underwriting. LATV is overseen by the City’s Cable Television Commission, which consists of five members, plus one-full time student member.

**Animal Control**
Animal control services involve the protection of people and property from the dangers and nuisance of roaming uncontrolled animals. It also includes the protections of pets and wild animals from the dangers they face in the wild and urban environment. Although Los Alamitos and Rossmoor are in highly urbanized areas, wildlife does venture into both communities. Coyotes are a particular nuisance and can pose a threat to small outdoor pets and unattended children.

The City of Los Alamitos contracts for animal control services with the City of Long Beach. The City of Long Beach provides emergency response to animal-related incidents, conducts legal investigations, offers veterinary care and training, and administers emergency management.

Rossmoor is served by the County of Orange for animal control services, which provides similar services as stated above.
Goals and Policies

Goal 1: Reliable and cost-effective infrastructure systems and services that adequately serve residents and businesses.

Policy 1.1 Water quality and supply. Work with Golden State Water Company to maintain high water quality and ensure adequate water supply for personal use, landscaping, and fire protection.

Policy 1.2 Sewer system. Work with the Rossmoor Los Alamitos Sewer District to maintain adequate and efficient sewage waste disposal services.

Policy 1.3 Stormwater drainage. Coordinate with regional flood control agencies to protect residents and businesses from flood hazards, upgrading existing facilities to current standards whenever financially feasible.

Policy 1.4 New development. New development shall pay its fair share of public facility and infrastructure improvements.

Policy 1.5 Waste management. A waste management system that meets or exceeds state recycling and waste diversion mandates while providing cost-effective disposal of waste for residents, businesses, and the City.
Goal 2: High quality emergency services that establish a real and perceived sense of safety and security for residents, businesses, and visitors.

Policy 2.1 **Police and fire service.** Maintain staffing, facilities, and training activities to effectively respond to emergency and general public service calls. Continue to contract fire protection services with the Orange County Fire Authority.

Policy 2.2 **Public safety hot spots.** Prioritize improvement and enforcement activities to minimize existing and prevent future public safety hot spots.

Policy 2.3 **Interagency support.** Participate in mutual aid system and automatic aid agreements to back up and supplement capabilities to respond to emergencies.

Policy 2.4 **Interagency communications.** Maintain an effective communication system between emergency service providers within Los Alamitos, Rossmoor, and neighboring jurisdictions.

Policy 2.5 **Emergency preparedness planning.** Maintain an emergency operations plan and an emergency operations center and develop a hazard mitigation plan to prepare for actual or threatened conditions of disaster or extreme peril.

Policy 2.6 **Hazardous materials.** The use and storage of hazardous materials shall comply with applicable federal, state, and local laws to prevent and mitigate hazardous materials releases.
Goal 3: Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by natural hazards.

Policy 3.1 Flood zone. Ensure that flood control facilities continue to be designed and maintained so that no land is in a 100-year flood zone. [Exception is provided for the JFTB, which is on federal land and in an undetermined risk area.]

Policy 3.2 Geologic and seismic risk. Prohibit development on unstable terrain, excessively steep slopes, and other areas deemed hazardous due to geologic and seismic hazards unless acceptable mitigation measures are implemented. Require that underground utilities be designed to withstand seismic forces and accommodate ground settlement.

Policy 3.3 Critical and public facilities. Locate and design critical and public facilities to minimize their exposure and susceptibility to flooding, seismic and geological effects, fire, and explosions. Ensure critical use facilities (e.g., hospital, police, and fire facilities) can remain operational during an emergency.
Goal 4: An environment in which minimized noise contributes to the public's health, safety, and welfare.

Policy 4.1 Land use compatibility. Approve development and require mitigation measures to ensure existing and future land use compatibility as shown in the City’s Noise Ordinance, the Land Use and Noise Compatibility Matrix, the State Interior and Exterior Noise Standards, and the Airport Environ Land Use Plan for the JFTB.

Policy 4.2 New residential. When new residential development is proposed adjacent to land designated for industrial or commercial uses, require the proposed development to assess potential noise impacts and fund feasible noise-related mitigation measures.

Policy 4.3 Control sound at the source. Prioritize noise mitigation measures to control sound at the source over buffers, soundwalls, and other perimeter measures.

Policy 4.4 Noise impacts. Minimize or eliminate persistent, periodic, or impulsive noise impacts of business operations.

Policy 4.5 Caltrans facilities. Coordinate with Caltrans to ensure the inclusion of noise mitigation measures in the design of new highway projects or improvements to existing facilities.

Policy 4.6 Aircraft noise. Work with the JFTB and Long Beach Airport to minimize the noise impact of small aircraft and helicopters on residential neighborhoods.
Goal 5: Great schools and high quality medical facilities that define Los Alamitos and Rossmoor as preeminent communities for families and a skilled workforce.

Policy 5.1 Academic excellence. Advocate for the continued pursuit of academic excellence in the Los Alamitos Unified School District.

Policy 5.2 Los Alamitos Medical Center. Maintain and enhance a collaborative relationship with Los Alamitos Medical Center and other medical service providers to best serve the community, create healthy communities, and maintain and attract a skilled workforce.

Policy 5.3 Workforce training. Collaborate with industrial organizations, businesses, and educational institutions to create opportunities for workforce training.
Growth Management Element

Purpose
Growth Management addresses the location, timing and type of development within the City, Rossmoor, and areas adjacent to the City. The Orange County Transit Authority (OCTA) Countywide Traffic Improvement and Congestion Management Plans and programs encourage all cities in Orange County to adopt General Plan Growth Management Elements to demonstrate eligibility for Measure M and M2 funding.

This element contains a series of goals and policies to carry out the countywide program and ensure that growth and development are based upon the City's ability to provide an adequate circulation system and public facilities.

Given the broad scope of the Growth Management Element, many related goals and policies are addressed elsewhere in the General Plan, particularly the Land Use, Mobility and Circulation, and Public Facilities and Safety elements. A policy on level of service is duplicated both in this element and the Mobility and Circulation element.

Legislative Context

Measure M
For more than 20 years, Measure M has been the major force behind traffic congestion relief in Orange County. Measure M is the half cent sales tax for transportation improvements first approved by Orange County voters in 1990, and renewed by voters for a 30-year extension in 2006. The combined measures raise the sales tax in Orange County by one-half cent through 2041 to alleviate traffic congestion.

Measure M1. Under the first Measure M program (M1), more than $4 billion worth of transportation improvements for Orange County were achieved, including the widening of State Route 22 (SR-22). As a result, M1 was responsible for adding 192 freeway lane miles, improving 170 intersections and 38 freeway interchanges, and implementing Metrolink service in Orange County, which now carries the equivalent of one lane of traffic on Interstate 5 (I-5).

Measure M2. With the sunset of M1, voters approved a continuation of transportation improvements through the Measure M Transportation Investment Plan (M2). By the year 2041, the M2 program plans to deliver approximately $15.5 billion worth of transportation improvements to Orange County. Major improvement plans target Orange County freeways, streets and roads, transit and environmental programs.
**M2020 Plan.** The M2020 Plan expedites $5 billion of M2 transportation improvements through bonding between 2012 and 2020. The plan includes detailed information on each project or program, which includes several projects relevant to the Los Alamitos area.

- Freeway widening of I-405 between I-605 and SR-55. This may include the addition of general purpose and high-occupancy lanes and in each direction.
- Interchange improvement at I-605 and Katella Avenue. This would improve freeway access, arterial connection, interchange traffic operations; and enhance safety, pedestrian, and bicycle facilities within the interchange area.

**Proposition 111**

In 1990, the California Legislature enacted the Congestion Management Program (CMP) to implement Proposition 111, a state-wide transportation funding proposal that required local governments to implement mitigation measures to offset the impacts from new development on the regional transportation system.

The goal was to link land use, transportation, and air quality decisions at the regional and local level. The program required, among other things, that every county designate a congestion management agency, which in turn would designate a regional roadway network for monitoring purposes and develop a deficiency plan to address deficiencies in levels of service on the network. The legislation also provided that jurisdictions that fail to comply with the CMP requirements would lose their state gasoline tax revenues.

The CMP requirements include traffic level of service (LOS) standards, a trip reduction program, and a seven-year capital improvement program. Many of the Proposition 111 requirements are the same or similar to the requirements of Measure M.

OCTA is the designated congestion management agency (CMA) for Orange County and is responsible for the conformance monitoring and biennial updating of Orange County’s CMP.

**Compliance Requirements**

To receive Measure M funds, the City must submit to the OCTA a statement of compliance with the Countywide Growth Management components that are summarized below. The City’s compliance with these components has been addressed in this element.

1. Adoption of a Growth Management Element that includes
   - Traffic level of service standards
   - A development mitigation program
2. Participation in inter-jurisdictional planning forums
3. Development of a seven-year capital improvement program
4. Adoption of a Transportation Demand Management Ordinance
Goals and Policies

Goal 1: Infrastructure and services that are provided to areas within City limits in a timely manner and, if determined appropriate, to areas outside City limits and within its sphere of influence.

Policy 1.1 New development. New development shall pay its share of the costs of public facilities and services needed to serve the new residents.

Policy 1.2 Development phasing. Require all new development within Los Alamitos to establish a development phasing plan commensurate with required improvements.

Policy 1.3 Governmental collaboration. Proactively collaborate with adjacent jurisdictions to ensure that infrastructure and public services are provided in a timely and high-quality manner.

Policy 1.4 Joint Forces Training Base. Maintain proactive communications with the Joint Forces Training Base (JFTB) regarding processes, operations, or projects in the City or at the JFTB that have the potential to impact the City of Los Alamitos, its residents, its businesses, or base operations.

Policy 1.5 Sphere of Influence. Embrace Rossmoor as a part of the City’s sphere of influence. Provide services to Rossmoor residents and businesses if and when they choose to contract with City services or be annexed by the City.
Goal 2: Reduced traffic congestion throughout Los Alamitos and its neighboring communities.

Policy 2.1 can also be found in the Mobility and Circulation Element as Policy 1.4.

Policy 2.1 Level of Service. Maintain a Level of Service (LOS) “D” or better along all City arterials and at intersections during peak hours, with the following exceptions:

A. There is a desire to prioritize pedestrians and/or bicyclists over vehicles
B. Insufficient ROW exists
C. The intersection or roadway is considered built out

The following intersections and roadways are exempt from the LOS D standard:
- Katella Avenue & Los Alamitos Boulevard intersection
- Katella Avenue & Walnut Street/Wallingford Road intersection
- Bloomfield Street & Cerritos Avenue intersection
- Katella Avenue (between Interstate 605 and Walker Street)
- Cerritos Avenue (between Interstate 605 and Los Alamitos Boulevard)

Policy 2.2 New development. New development shall pay its share of the costs associated with local and regional traffic mitigation.

Action 2.3 Improvement timing. Within three years of the issuance of the first building permit for a development project or within five years of the first grading permit for said development project, whichever occurs first, require the necessary improvements to transportation facilities to which the project contributes measurable traffic to be constructed and completed to attain the level of service standards established in this Element.

Policy 2.4 Orange County Congestion Management Plan. Maintain consistency with the County of Orange Congestion Management Plan and Master Plan of Arterial Highways pursuant to the requirement of state law to continue to receive its share of State gasoline sales tax revenues.
Goal 3: Development that is consistent with the Airport Environments Land Use Plans for the Joint Forces Training Base and Orange County Heliports.

Policy 3.1 can also be found in the Public Facilities and Safety Element as Policy 4.1.

Policy 3.1 Land use compatibility. Approve development and require mitigation measures to ensure existing and future land use compatibility as shown in the City’s Noise Ordinance, the Land Use and Noise Compatibility Matrix, the State Interior and Exterior Noise Standards, and the Airport Environments Land Use Plan (AELUP) for the JFTB.

Policy 3.2 Federal Aviation Regulation Part 77. Do not approve buildings and structures that would penetrate Federal Aviation Regulation (FAR) Part 77 Imaginary Obstruction Surfaces for JFTB, Los Alamitos unless found consistent by the Airport Land Use Commission (ALUC). Additionally, in accordance with FAR Part 77, required applicants proposing buildings or structures that penetrate the 100:1 Notification Surface to file a Form 7460-1 Notice of Proposed Construction or Alteration with FAA and provide a copy of the FAA determination to the City and the ALUC for Orange County.

Policy 3.3 Structures above 200 feet. For development projects that include structures higher than 200 feet above existing grade, the City shall inform the ALUC and submit materials to the ALUC for review. Proposed projects that would exceed a height of 200 feet above existing grade shall be required to file Form 7460-1 with the Federal Aviation Administration (FAA).

Policy 3.4 Heliport/helistop approval and requirements. Approve the development of a heliport or helistop only if it complies with the AELUP for Heliports. Ensure that each applicant seeking a conditional use permit or similar approval for the construction or operation of a heliport or helistop complies fully with the state permit procedure provided by law and with all conditions of approval imposed or recommended by the FAA, by Orange County ALUC, and by Caltrans/Division of Aeronautics. This requirement shall be in addition to all other City development requirements.

Policy 3.5 New residential units. Do not approve the construction of new residential units within the 65 dBA CNEL noise contour for the JFTB.

Policy 3.6 JFTB noise contours. Require the use of JFTB noise contours to ensure new development is compatible with the noise environment.

Policy 3.7 Deed disclosure notice. Provide notice of airport in the vicinity where residential development is being proposed within the 60 dBA CNEL noise contours for the
JFTB. Require that the following language be included as part of the Deed Disclosure Notice:

**NOTICE OF AIRPORT IN VICINITY**

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.
Appendix A
Glossary of Terms and Acronyms

The following glossary provides definitions for the various planning and technical terms and acronyms that can be found in the General Plan or may arise during conversations, analysis, and implementation related to the General Plan.

Terms

A

**Acoustical Engineer.** An engineer specializing in the measurement and physical properties of sound. In environmental review, the acoustical engineer measures noise impacts of proposed projects and designs measures to reduce those impacts.

**Acreage, Gross.** The land area that exists prior to any dedication of land for public use, health, and/or safety purposes.

**Acreage, Net.** The portion of a site that can actually be built upon, which is the land area remaining after dedication of ultimate rights-of-way for:

- Public streets
- Drainage facilities
- Public parks and other open space developed to meet minimum standards required by City ordinance
- Utilities

**Acre-Foot.** The volume of water that would cover 1 acre to a depth of 1 foot. An acre-foot is about the amount of water used each year in and around the home by two average California families, or about 326,000 gallons.

**Active Transportation.** Non-motorized transportation modes, such as bicycling and walking, that are integrated with public transportation.

**Adaptive Reuse.** The conversion of obsolescent or historic buildings from their original or most recent use to a new use. For example, the conversion of former hospital or school building to a residential use, or the conversion of an historic single-family home to an office use.

**Affordability, Housing.** The ratio of housing costs to household income.
**Affordability Requirements.** Provisions established by a public agency to require that a specific percentage of housing units in a project or development remain affordable to very low- and low-income households for a specified period.

**Affordable Housing.** Dwelling units for which the housing payment is generally not more than 30 percent of household gross income for a specified income group.

**Alley.** A narrow service way, either public or private, which provides a permanently reserved but secondary means of public access not intended for general traffic circulation. Alleys typically are located along rear property lines.

**Alquist-Priolo Earthquake Fault Zone.** A regulatory zone, delineated by the State Geologist, within which site-specific geologic studies are required to identify and avoid fault rupture hazards prior to subdivision of land and/or construction of most structures for human occupancy.

**Alternative Energy.** See Renewable Energy

**Ambient.** Surrounding; used to describe measurements of existing conditions with respect to traffic, noise, air and other environments.

**Annex.** To incorporate a land area into an existing district or municipality, with a resulting change in the boundaries of the annexing jurisdiction.

**Automobile Related Uses:** Uses related to retail or wholesale sales of automobiles, recreational vehicles and boats, automotive repair services, automobile-oriented retail businesses (e.g., auto parts, tires, etc.) and fueling stations.

**A-weighted Decibel.** The A-weighted decibel scale discriminates against upper and lower frequencies in a manner approximating the sensitivity of the human ear. The scale ranges from zero for the average least perceptible sound to about 130 for the average pain level.

**B**

**Below Market Rate Housing.** Below market rate housing refers to housing unit(s) that receive public or private subsidies that make it affordable for a very low, low, or moderate income households (depending on the program) to rent or purchase a housing unit. It may also be referred to as subsidized housing.

**Bicycle Friendly.** Describes policies and practices that may help people feel more comfortable about traveling by bicycle with other traffic. The level of bicycle-friendliness of an environment can be influenced by many factors resulting from transportation planning and infrastructure design decisions.
**Bike Path (Class I Facility).** Provides a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with minimal interruption by motor vehicles. A bicycle path may be located on a portion of a street or highway right-of-way or in a special right-of-way not related to a motor vehicle facility. It may be grade separated or have street crossings at designated locations. It may be identified with “Bike Route” signs and also may have pavement markings.

**Bike Lane (Class II Facility).** Provides a preferential right-of-way designated and striped for the exclusive or semi-exclusive use of bicycles, with some allowances for vehicle parking. It is usually located along the edge of the paved area or between the parking lane and the first motor vehicle travel lane. It is identified by “Bike Lane” or “Bike Route” signage, special lane lines, and other pavement markings. Bicycles have exclusive use of a bicycle lane for longitudinal travel, but must share the facility with motor vehicles and pedestrians crossing it.

**Bike Route (Class III Facility).** Provides a route designated by signs or permanent pavement markings that is shared with either pedestrians or motorists. There are generally no special lane markings and bicycle traffic shares the roadway with motor vehicles.

**Bikeway, Separated (Class IV Facility).** Provides a right-of-way designated exclusively for bicycle travel adjacent to a roadway and which are protected from vehicular traffic. Types of separation include, but are not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking. Also referred to as a cycle track or protected bike lane.

**Bikeways.** Facilities that provide primarily for and promote bicycle travel. Bikeways are categorized into four classes: Class I, bike path; Class II, bike lane; Class III, bike route; and Class IV, separated bikeway.

**Bond.** An interest-bearing promise to pay a stipulated sum of money, with the principal amount due on a specific date. Funds raised through the sale of bonds can be used for various public purposes.

**Brownfield.** An area with abandoned, idle, or under-used industrial and commercial facilities where expansion, redevelopment, or reuse is complicated by real or perceived environmental contamination.

**Buffer.** An area established between potentially conflicting land uses, such as heavy industrial and residential uses, which, depending on the potential impact, may utilize landscaping, earth berms, structural barriers, setbacks, or roads to reduce or eliminate potential impacts.

**Buildout.** Development of land to its full potential, consistent with current or proposed planning or zoning designations. Full potential may be defined as either: 1) the maximum density or intensity permitted by planning or zoning designations; or 2) a projected level that is generally greater than existing conditions but may be less than the maximum level permitted.
**Buildout, General Plan.** The projected development of land within the General Plan area (City of Los Alamitos and Rossmoor) by the year 2035, as permitted by the land use designations. The theoretical buildout was based largely on the assumption that the majority of the City and Rossmoor would not change. Some incremental intensification was assumed through small projects (e.g., adding a second dwelling unit or expanding a storefront). A handful of parcels were identified as areas where more substantial change could occur. For those parcels, the City created a set of projections and estimated the amount of development that could occur between now and 2035 (the horizon planning year for the General Plan).

**Business Incubator.** An organization designed to accelerate the growth and success of entrepreneurial companies through an array of business support resources and services that could include physical space, capital, coaching, common services, and networking connections. Business incubation programs are often sponsored by private companies or municipal entities and public institutions, such as colleges and universities. Their goal is to help create and grow young businesses by providing them with necessary support and financial and technical services.

**California Environmental Quality Act (CEQA).** Legislation and corresponding procedural components established in 1970 by the State of California to require environmental review for projects anticipated to result in adverse impacts to the environment.

**Capital Improvement Program (CIP).** A program that schedules permanent improvements, usually for a minimum of five years in the future, that fits the projected fiscal capability of the local jurisdiction. The program generally is reviewed on an annual basis for conformance to and consistency with the General Plan.

**Carbon Dioxide (CO₂).** An odorless, colorless gas formed during respiration, the combustion of fuels, and certain industrial activities, among other processes. CO₂ is the most abundant greenhouse gas, with primary sources from transportation and electrical power generation.

**Carbon Monoxide (CO).** An odorless, colorless gas formed by the incomplete combustion of fuels; majority of southern California CO emissions come from motor vehicles.

**Chlorofluorocarbon (CFC).** An ozone-depleting greenhouse gas previously used as a propellant and a refrigerant.

**City Limits.** The legal boundaries of the geographical area subject to the jurisdiction of the City of Los Alamitos government. For example, development applications for properties located within the city limits must be reviewed by the City.
**Clear Zone.** Areas around runways need to be clear from potential hazards to enhance the safety of the aircraft and its passengers as well as the protection of people and property on the ground.

**Coastal Zone.** Refers to the land and water area of the State of California from the Oregon border to the border of the Republic of Mexico, extending seaward to the state's outer limit of jurisdiction, including all offshore islands, and extending inland generally 1,000 yards from the mean high tide line of the sea. In significant coastal estuarine, habitat, and recreational areas it extends inland to the first major ridgeline paralleling the sea or five miles from the mean high tide line of the sea, whichever is less, and in developed urban areas the zone generally extends inland less than 1,000 yards. Although neither Los Alamitos nor Rossmoor are within a coastal zone, the surrounding cities of Long Beach and Seal Beach are within a coastal zone.

**Community Noise Equivalent Level (CNEL).** The energy-average of the A-weighted sound levels during a 24-hour period, with 5 dB added to the levels from 7:00 PM to 10:00 PM and 10 dB added from 10:00 PM to 7:00 AM.

**Compatible.** Capable of existing together without conflict or ill effects.

**Complete Streets.** Streets that comfortably accommodate all users, with particular emphasis on pedestrians, bicyclists, and public transportation, as well as people of all ages and physical abilities. The Complete Streets Act of 2008 requires circulation elements to incorporate multimodal transportation into the General Plan.

**Complete Streets Act.** In 2008, the Governor signed Assembly Bill 1358, the California Complete Streets Act. The Act states: “In order to fulfill the commitment to reduce greenhouse gas emissions, make the most efficient use of urban land and transportation infrastructure, and improve public health by encouraging physical activity, transportation planners must find innovative ways to reduce vehicle miles traveled and to shift from short trips in the automobile to biking, walking and use of public transit.”

The legislation impacts local general plans by adding the following language to Government Code Section 65302(b)(2)(A) and (B):

(A) Commencing January 1, 2011, upon any substantial revision of the circulation element, the legislative body shall modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of the streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan.

(B) For the purposes of this paragraph, “users of streets, roads, and highways” means bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors.
Concurrency. Installation and operation of facilities and services needed to meet the demands of new development simultaneous with the development.

Conditional Use Permit. The discretionary and conditional review of an activity or function or operation on a site or in a building or facility.

Conservation. The management of natural resources to prevent waste, destruction, or neglect.

Consistency, Consistent With. Free from significant variation or contradiction. The various diagrams, text, goals, policies, and programs in the general plan must be consistent with each other, not contradictory or preferential. The term "consistent with" is used interchangeably with "conformity with." The courts have held that the phrase "consistent with" means "agreement with; harmonious with." Webster defines "conformity with" as meaning harmony, agreement when used with "with." The term "conformity" means in harmony therewith or agreeable to (Sec 58 Ops.Cal.Atty.Gen. 21, 25 [1975]). California State law also requires that a general plan be internally consistent and also requires consistency between a general plan and implementation measures such as the zoning ordinance.

Cultural Resources. Includes historic, archaeological, and paleontological resources, as well as human remains.

Cumulative Impact. As used in CEQA, the total environmental impact resulting from the accumulated impacts of individual projects or programs over time.

Cycle Track. See Bikeway, Separated

D

Decibel (dB). The unit of measure for loudness based on a logarithmic scale.

Decibel "A-Weighted" (dBA). The “A-weighted” scale for measuring sound in decibels, which weighs or reduces the effects of low and high frequencies in order to simulate human hearing. Every increase of 10 dBA doubles the perceived loudness even though the noise is actually ten times more intense.

Dedication. The turning over by an owner or developer of private land for public use, and the acceptance of land for such use by the governmental agency having jurisdiction over the public function for which it will be used. Dedications for roads, parks, school sites, or other public uses often are made conditions for approval of a development by a city or county.

Density, Residential (dwelling units per acre or du/ac). The number of permanent residential dwelling units per acre of land. Densities specified in the General Plan are expressed in dwelling units per net acre (see Acreage, Net).
Design Guidelines. A collection of statements and standards used to evaluate building and site design of proposed development projects through the City’s site plan review process. All property owners, developers and design professionals are encouraged to carefully review applicable design guidelines before commencing planning and design studies, and to consult with City staff should questions or the need for interpretation occur.

Design Review; Development Review. The comprehensive evaluation of a development and its impact on neighboring properties and the community as a whole, from the standpoint of site and landscape design, architecture, materials, colors, lighting and signs, in accordance with a set of adopted criteria and standards. “Development Review” usually refers to a system established in the Municipal Code, whereby projects are reviewed against certain standards and criteria by a specially established design review board or other body such as the Planning Commission.

Development Fees. Direct charges or dedications collected on a one-time basis for a service provided or as a condition of approval being granted by the local government. The purpose of the fee or exaction must directly relate to the need created by the development. In addition, its amount must be proportional to the cost of the service or improvement. Fees can be broken down into two major classes: 1) service charges such as permit fees covering the cost of processing development plans, connection or standby fees for installing utilities, or application fees for reviewing and considering development proposals; and 2) "impact" fees levied on new development to cover the cost of infrastructure or facilities necessitated by development.

Development Project. A project that involves grading, demolition, construction, remodeling, subdivision, new signs, or other land improvement or division for which discretionary planning approvals or building permits are required.

Discourage. To advise or persuade to refrain from.

Downtown. A walkable, human-scaled area where people shop, work, eat, have fun, and spend quality time with friends and family. People can also live adjacent to or in a downtown area. It can also be thought of a central business, shopping, and social district. Such an area may also serve the primary place where the people of Los Alamitos gather to celebrate as a community. A downtown area may also be referred to as a town center. (See Town Center)

Drought-Tolerant Landscaping. Landscaping that uses water-conserving, drought-tolerant plant species that are environmentally and horticulturally adapted to local conditions, and that uses design strategies to minimize water use while maintaining an attractive and neat appearance. It may also be referred to as xeriscape.

Dwelling Unit (du). A building or portion of a building containing one or more rooms, designed for or used by one household for living or sleeping purposes, and having a separate bathroom and only one kitchen or kitchenette.
**E**

**Easement.** Usually the right to use property owned by another for specific purposes or to gain access to another property. For example, utility companies often have easements on the private property of individuals to be able to install and maintain utility facilities.

**Encourage.** To stimulate or foster a particular condition through direct or indirect action by the private sector or government agencies.

**Endangered Species, California.** A native species or sub-species of a bird, mammal, fish, amphibian, reptile, or plant, which is in serious danger of becoming extinct throughout all or a significant portion of its range, due to one or more factors, including loss in habitat, change in habitat, over-exploitation, predation, competition, or disease. The status is determined by the California Department of Fish and Wildlife together with the California Fish and Game Commission.

**Endangered Species, Federal.** A species that is in danger of extinction throughout all, or a significant portion, of its range. The status is determined by the US Fish and Wildlife Service and the Department of the Interior.

**Enhance.** To improve existing conditions by increasing the quantity or quality of beneficial uses or features.

**Environmental Impact Report (EIR).** A report required pursuant to the California Environmental Quality Act (CEQA) that assesses all the environmental characteristics of an area, determines what effects or impacts will result if the area is altered or disturbed by a proposed action, and identifies alternatives or other measures to avoid or reduce those impacts. (See California Environmental Quality Act)

**Environmental Impact Statement (EIS).** Under the National Environmental Policy Act, a statement on the effect of development proposals and other major actions that significantly affect the environment. (see National Environmental Policy Act)

**Ethos.** The distinguishing character, sentiment, moral nature, or guiding beliefs of a person, group, or institution.

**Exaction.** A contribution or payment required as an authorized precondition for receiving a development permit; usually refers to mandatory dedication (or fee in lieu of dedication) requirements found in many subdivision regulations.

**F**

**Facade.** A building “face” or exterior wall of a building, usually, but not always, the front wall, including all openings and architectural ornamentation, facing a street or public way. The
facade is often the most important part of a building from an architectural design standpoint, as it sets the tone for the rest of the building.

**Fault.** A fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side. A fault zone is a zone of related faults which commonly are braided, but which may be branching. A fault trace is the line formed by the intersection of a fault and the earth’s surface.

**Feasible.** Capable of being done, executed, or managed successfully from the standpoint of the physical and/or financial abilities of the implementer(s). It is a term used in policy and implementation action language that indicates that a decision or action is not mandatory, but should be taken unless one can demonstrate an inability or undue hardship. It should be noted that just because an action or feature is new (i.e., not typically done), or requires some additional expense does not meant that it is infeasible.

**Financial Sustainability.** The assessment that the city and/or a project will have sufficient funds to meet all its resource and financing obligations over a long period of time (e.g., 20 years), whether these funds come from user charges or budget sources.

**Fiscal Impact Analysis.** A projection of the direct public costs and revenues resulting from population, employment, or facility change in the jurisdiction. Such an analysis enables local governments to evaluate relative fiscal merits of general plans, specific plans, or projects.

**Flood, 100-year.** In any given year, a flood that has a 1 percent likelihood of occurring, and is recognized as a standard for acceptable risk. A 100-year flood event is fairly large but historically infrequent flood. To be precise, it is a flood of a size that is projected to have only a one-percent chance of being equaled or exceeded each year. However, this does not mean that this size of flood will only occur once every 100 years. The likelihood of a 100-year flood occurring within a 100-year stretch of time is actually high, but there is no way to predict when the next flood will occur—or the one after that.

**Floodplain.** The relatively level land area on either side of the banks of a stream regularly subject to flooding.

**Floor Area Ratio (FAR).** The intensity of building on a site reflects a combination of a building’s height, lot coverage, and overall massing distribution. To ensure that the building intensity of a project is appropriate for the land use designation and community, a maximum intensity standard is provided in the form of a floor area ratio (FAR). For example, a 60,000 square foot building on a 120,000 square-foot parcel would have a 0.50 FAR. In the General Plan, the FAR calculation excludes floor area used for structured parking to encourage its use and reflect its much higher construction costs.

**Form-Based Codes.** A method of regulating development to achieve specific urban form. Form-based codes use clear, graphic-based standards to address the relationship between
building facades and the public realm, the form, mass and scale of buildings in relation to one another and the aesthetic character of buildings, urban spaces, streets and blocks.

G

Gateway. Gateways are entry points into key areas, typically a point along a roadway at which a motorist gains a sense of having left the environs of one place and of having entered another place. Gateways should be distinctive and attractive.

General Plan. A compendium of City policies regarding its long-term development, in the form of maps and accompanying text. The General Plan is a legal document required of each local agency by the State of California Government Code Section 65301 and adopted by the City Council. California State law requires that a General Plan include elements dealing with seven subjects--circulation, conservation, housing, land use, noise, open space and safety.

These can be arranged in a single element for each topic or combined into elements that address multiple topics. For Los Alamitos, an element on growth management is also required to ensure consistency with countywide plans, to be eligible for Measure M and M2 funding, and to receive state gasoline tax revenues. The City’s General Plan also includes an optional element on economic development.

General Plan Amendment (GPA). A modification made to an adopted General Plan.

Geographic Information Systems (GIS). A combination of approaches, programs, methodologies, and technologies to gather, store, manipulate, analyze, present, and interpret spatial information and data.

Goal. A goal is a statement of desired future conditions, regarding a particular topic in the community, toward which effort and resources are directed. A goal may be quantifiable and time-dependent or more abstract in nature.

Green Building. Green or sustainable building is the practice of creating healthier and more resource-efficient models of construction, renovation, operation, maintenance, and demolition.

Greenhouse Effect. A term used to describe the warming of the earth’s atmosphere due to accumulated carbon dioxide and other gases in the upper atmosphere. These gases absorb energy radiated from the earth’s surface, “trapping” it in the same manner as glass in a greenhouse traps heat.

Greenhouse Gas (GHG). A balance of naturally occurring gases in the atmosphere determines the earth’s climate by trapping solar heat through a phenomenon known as the greenhouse effect. GHGs, including carbon dioxide, methane, nitrous oxide, chlorofluorocarbons, and water vapor, keep solar radiation from exiting our atmosphere. In a process very similar to the windows on a greenhouse, GHGs trap so much heat that the temperature within the earth’s atmosphere is rising. GHGs are emitted through both natural processes and human activities.
Emissions from human activities, such as electricity production, motor vehicle use, and agriculture, are contributing to the concentration of GHGs in the atmosphere and have led to a trend of unnatural warming of the earth’s climate, which is known as global warming.

**Groundwater.** Water that exists beneath the earth’s surface, typically found between saturated soils and rock, and is used to supply wells and springs.

**Growth Management.** Growth management addresses the location, timing and type of development within the City, Rossmoor, and areas adjacent to the City. Growth management comprises a series of goals and policies to carry out the countywide program and ensure that growth and development are based upon the City's ability to provide an adequate circulation system and public facilities.

**H**

**Habitat.** The physical locations or types of environments in which an organism or biological population lives or occurs.

**Hazardous Material.** Any material that because of its quantity, concentration, or physical or chemical characteristics poses a significant present or potential hazard to human health and safety or the environment if released into the workplace or environment.

**Hazardous Waste.** Waste that requires special handling to avoid illness or injury to persons or damage to property.

**Hydrochlorofluorocarbon (HCFC).** A gaseous compound that has been used as an ozone-safe replacement for CFCs, but which acts as a potent greenhouse gas.

**Hydrofluorocarbon (HFC).** A gaseous compound that has been used as an ozone-safe replacement for CFCs, but which acts as a potent greenhouse gas.

**Household.** Person or persons living in one dwelling unit; also an occupied housing unit.

**I**

**Identity.** A consistent quality that makes a city, place, area, or building unique and gives it a distinguishing character.

**Image.** The mental picture or impression of a city or place taken from memory and held in common by members of the community.

**Impervious Surface.** Surface through which water cannot penetrate, such as a roof, road, sidewalk, or paved parking lot. The amount of impervious surface increases with development and establishes the need for drainage facilities to carry the increased runoff.
Implementation Action. Activities, procedures, programs, or techniques that are used to achieve goals or carry out policies. This includes one-time initiatives by the City (e.g., zoning code update to reflect changes in a general plan), decisions on public and private development projects, municipal operational programs, capital improvements, and partnerships with jurisdictions or agencies. It can also include specific efforts or decisions that are made on an ongoing or periodic basis.

Income, Above-Moderate. A household whose income exceeds 120 percent of the County median income.

Income, Extremely-Low. “Extremely Low Income Household” shall mean persons and families whose household income does not exceed the qualifying limits for Extremely Low Income Households as established and amended from time to time in California Health & Safety Code §50106, as such limits are published annually by the California Department of Housing and Community Development.

Income, Low. “Low Income Household” shall mean persons and families whose household income does not exceed the qualifying limits for lower income families as established and amended from time to time pursuant to Section 8 of the United States Housing Act of 1937, as such limits are published annually by the California Department of Housing and Community Development, pursuant to Section 50079.5 of the California Health and Safety Code.

Income, Median. “Median Income” shall mean the median household income for the County of Orange, as published annually by the State of California Department of Housing and Community Development.

Income, Moderate. “Moderate Income Household” shall mean persons or families whose gross incomes do not exceed 120% of the Median Income adjusted for family size in accordance with adjustment factors adopted by the United States Department of Housing and Urban Development, as published annually by the California Department of Housing and Community Development, pursuant to Section 50093 of the California Health and Safety Code.

Income, Very-Low. “Very Low Income Household” shall mean persons and families whose household income does not exceed the qualifying limits for Very Low Income Households as established and amended from time to time pursuant to §10105(a) of the California Health & Safety Code, as such limits are published annually by the California Department of Housing and Community Development.

Infill Development. Development that occurs on vacant or underutilized land within areas that area already largely developed.

In-lieu Fee. Cash payments that may be required of an owner or developer as a substitute for a dedication of land for public use, usually calculated in dollars per lot, and referred to as in-lieu fees or in-lieu contributions.
**Intelligent Transportation System.** Advanced applications that aim to provide innovative services relating to different modes of transportation and traffic management and enable various users to be better informed and make safer, more coordinated, and 'smarter' use of transportation networks.

**Jobs/Housing Balance.** A ratio expressed as the jobs in an area divided by the number of dwelling units or households. It may be used to describe the adequacy of the housing supply within a defined area to meet the needs of persons working within the same area. Due to the wide geographic distribution of job opportunities in Southern California, it is generally considered by local and regional planning agencies to be informative when looking at a subregion or region. However it should not be relied upon for making decisions at a local level within a single jurisdiction.

**L**

**Landslide.** A general term for a falling, sliding, or flowing mass of soil, rocks, water, and debris. Includes mudslides, debris flows, and debris torrents.

**Landmark.** A building, site, object, structure, or significant tree, having historical, architectural, social, or cultural significance and marked for preservation by the local, state, or federal government. A landmark may also be a visually prominent or outstanding structure or natural feature that functions as a point of orientation or identification.

**Landscaping.** Planting areas including trees, shrubs, and ground covers that are suitably designed, selected, installed, and maintained as to permanently enhance a site or roadway.

**Leadership in Energy and Environmental Design (LEED).** A voluntary, consensus-based national standard for developing and rating high-performance, sustainable “green” buildings. LEED provides a complete framework for assessing building performance and meeting sustainability goals, such as water savings, energy efficiency, materials selection, and indoor environmental quality.

**Level of Service (LOS) Standard.** A standard used by government agencies to measure the quality or effectiveness of a municipal service, such as police, fire, or library, or the performance of a facility, such as a street or highway. It is primarily used in the General Plan to refer to the general measure of traffic operating conditions whereby a letter grade, from LOS A (no congestion) to F (high levels of congestion), is assigned. LOS E applies to “at capacity” operations.
**Life-cycle Costing.** A method of evaluating a capital investment that takes into account the sum total of all costs associated with the investment over the lifetime of the project.

**Light Pollution, Spillover, or Trespass.** Unwelcome light spilling off originating property. Typical causes include poorly shielded lights that are aimed partially horizontally, not down, and too much light power.

**Liquefaction.** A process by which water-saturated granular soils transform from a solid to a liquid state during strong ground shaking.

**Local Agency Formation Commission (LAFCO).** A five- or seven-member commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and merger of districts with cities. Each county’s LAFCO is empowered to approve, disapprove, or conditionally approve such proposals.

**Local Coastal Program (LCP).** Planning tool used by local governments to guide development in the coastal zone, in partnership with the Coastal Commission. LCPs contain the ground rules for future development and protection of coastal resources. LCPs specify appropriate location, type, and scale of new or changed uses of land and water. The LCP includes a land use plan and measures to implement the plan (such as zoning ordinances). Prepared by local government, these programs govern decisions that determine the short- and long-term conservation and use of coastal resources. Although neither Los Alamitos nor Rossmoor are within a coastal zone, the surrounding cities of Long Beach and Seal Beach are within a coastal zone and maintain an LCP.

**M**

**Maintain.** To keep in an existing state; do not allow to deteriorate.

**Mansionization.** New construction or additions on residentially-zoned lots that are out-of-scale with the surrounding neighborhood, but which comply with the current zoning regulations.

**May.** That which is permissible. It is not required, prohibited, encouraged, or discouraged.

**Minimize.** To reduce or lessen, but not necessarily to eliminate.

**Mitigate.** To ameliorate, alleviate, or avoid to the extent reasonably feasible.

**Mitigation.** A specific action taken to reduce environmental impacts to insignificant levels. Mitigation measures are required as a component of an environmental impact report (EIR).
**Mixed Use.** The concept of mixed use essentially stands in contrast with single use development. Whereas a single family residential zoning district generally permits only single family homes, schools, and religious buildings, a mixed use district permits a wider variety of residential and nonresidential land uses in the same area --- much as you see in walkable town centers in older suburbs and cities.

Mixed use development is intended to provide for more walkable and dynamic areas in the city, such as the proposed town center. Mixed use development can also foster more direct and convenient pedestrian, bicycle, and vehicular access between residences and businesses. Additionally, in a built out city like Los Alamitos that lack significant amounts of vacant land, mixed use can support higher intensity uses and bring new types of land uses and opportunities.

The term mixed use can refer to many different types of land use combinations, depending on the context. Examples are described below.

**On the same parcel.** Any mixture of dwellings and commercial land uses on a single parcel, such as dwellings combined with offices, retail, or other non-residential uses. A common example is a single building with retail stores on the ground floor and residential units on the upper floors.

**On multiple parcels.** Mixed use can also refer to multiple buildings with different uses on multiple parcels where the different types of land uses are in proximity and planned as a unified, complementary, and cohesive whole.

**As a land use designation.** A mixed use land use designation or zoning district permits a variety of uses in a particular area. This mix of uses may take place in a single building, on a single parcel, or in multiple buildings and multiple parcels. For example, a mixed use land use designation may allow an office building to be built next to a retail store. It could also permit a single building with both residential and nonresidential uses next to a group of townhomes.

In contrast, a single use land use designation or zone permits only one primary type of development. For example, the R-1 (Single Family) Residential zoning district permits single-family dwellings on individual parcels and planned-unit development with no mixed or incompatible uses.

**Mixed Use, Horizontal.** Mixed use, horizontal: Two or more different types of uses are placed next to each other, planned as a unit, and connected together with pedestrian and vehicular access. For instance, multiple family building that is adjacent to a neighborhood commercial development and office complex. This may take place on a single parcel or multiple parcels.

**Mixed Use, Vertical.** Where two or more different uses occupy the same building—usually on different floors. For instance, retail on the ground floor and office and/or residential uses on the second and/or third floors. Projects may also include a combination of vertically- and horizontally-mixed uses in one or more buildings and on one or more parcels.

**Modal Shift.** The percent change in the number of trips made within, or originating from, a specific geographic area during a defined period and using specific transportation methods or
“modes”, such as cycling, walking, riding public transit and driving automobiles. For example, a modal shift increase of 15 percent in bicycle use means that the number of bicycle trips in an area increased 15 percent over a previous period.

**Multimodal Network:** A transportation network that is designed and or operated in a manner that meets transportation needs for different types of users, such as bicyclists, pedestrians, public transit users, and motorists.

**Multimodal Transportation.** Refers to multiple modes of transportation, including, but not limited to pedestrian, bicycle, automobile, or transit forms of travel.

**Must.** That which is mandatory.

**N**

**National Environmental Policy Act (NEPA).** An act passed in 1974 establishing federal legislation for national environmental policy, a council on environmental quality, and the requirements for environmental impact statements.

**Necessary.** Essential or required.

**Nitric Oxide (NO).** A gaseous compound that may result from combustion or industrial processes. It is a precursor to nitric acid, which contributes to acid rain, and contributes to the depletion of stratospheric ozone.

**Nitrogen Dioxide (NO₂).** A reddish brown gas that is a byproduct of the combustion process and is a key to the ground-level ozone production process.

**Nitrous Oxide (N₂O).** A colorless gas that is byproduct of the combustion process and certain industrial process. It has certain industrial and clinical applications and is both a precursor to ground level ozone and a greenhouse gas.

**Noise Contour.** Areas around a noise source with equal levels of noise exposure. Noise contours are drawn similar to a topographic map.

**Noise-Sensitive Use or Sensitive Land Use.** A location where people reside or where the presence of unwanted sound could adversely affect land use. Sensitive land uses include schools, hospitals, senior housing and convalescent facilities, residential uses, places of worship, libraries, and passive outdoor recreation areas.

**Non-Conforming Use.** A land use, structure, or parcel that was lawful before the adoption or amendment of the Zoning Code, but that would be prohibited, regulated, or restricted differently under the terms of the current Zoning Code or future amendments. (See Chapter 17.64, Nonconforming Uses and Structures of the Los Alamitos Municipal Code)
O

**OCTA.** An abbreviation for “Orange County Transportation Authority”, a regional agency with broad responsibility for transportation program planning and operations, including public transit, Metrolink, freeways, ride sharing, funding and grants.

**Overcrowding.** When occupancy exceeds more than one person per room (excluding the kitchen and bathrooms).

**Overlay.** A land use designation or zoning designation that modifies the basic underlying designation or designations in some specific manner. Typically, the overlay provides additional or optional policies or standards, depending on the individual overlay.

**Ozone (O₃).** An oxidant, O₃, that at ground level makes up the largest single portion of smog. In the upper atmosphere, the presence of ozone acts as a protectant against harmful ultraviolet rays.

P

**Parcel.** A lot, or contiguous group of lots, in single ownership or under single control, usually considered a unit for purposes of development.

**Parking, Shared.** A public or private parking area used jointly by two or more uses that would otherwise require their own separate parking areas. Typically, shared parking implies a reduction in overall parking spaces than would be required for the two (or more) uses if considered separately.

**Parking, Stacked.** Involves trained car valets parking cars bumper-to-bumper in a parking lot or structure to maximize space. Another form of stacked parking uses involves a complex hydraulic system with individual slots for vehicles that can be moved horizontally or vertically to maximize space.

**Parkway or Parkway Strip.** A piece of land located between the rear of a curb and the front of a sidewalk, usually used for planting low ground cover and/or street trees, also known as "planter strip."

**Particulate Matter.** Minute, separate airborne solid or liquid particles including smoke, dust, aerosols, metallic oxides, and pollen.

**Paseo.** A walkway that allows pedestrians to travel between buildings, linking points of activity, and which are designed to provide a welcoming and aesthetically appealing experience through the use of architectural and landscape elements.

**Peak Hour Traffic.** The number of vehicles passing over a designated section of a street during the busiest one-hour period during a 24-hour period.
**Peak Water Supply.** The supply of water available to meet both domestic water and firefighting needs during the particular season and time of day when domestic water demand on a water system is at its peak.

**Pedestrian Experience.** The experience had by pedestrians while walking or exploring urban environments. The experience typically includes visual qualities of the streetscape, behaviors of other people, ability to access areas of interest, comfort, traffic density, and sidewalk safety.

**Pedestrian Facilities.** Facilities that enhance pedestrian experience, including but not limited to clean sidewalks, parkway plantings, street trees, plazas, bus stop signage and benches, trash receptacles (where appropriate), lighting, and other features that help improve pedestrian safety, comfort, and convenience.

**Plan or Planning Area.** The area directly addressed by the General Plan. A city's general plan planning area typically encompasses the city limits and its sphere of influence (SOI). For Los Alamitos, the SOI includes the unincorporated community of Rossmoor.

**Policy.** A specific statement that guides decision making and indicates an intended level of commitment of the local legislative body to a particular course of action. If you are faced with a decision on this subject, here is the policy you are to follow. A policy is based on and helps implement a goal and is carried out by an implementation action(s).

**Preserve.** To keep safe from destruction or decay; to maintain or keep intact.

**Program.** An action, activity, or strategy carried out in response to adopted policy to achieve a specific goal or objective. Policies and programs establish the “who,” “how” and “when” for carrying out the “what” and “where” of goals and objectives.

**Protect.** To maintain and preserve beneficial uses, structures, or areas in their present condition as nearly as possible.

**Q**

**Quimby Act.** Authorizes cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Revenues generated through the Quimby Act must be used for the acquisition and development of park facilities.

**R**

**Redevelop.** To demolish existing buildings; or to increase the overall floor area existing on a property; or both; irrespective of whether a change occurs in land use.

**Regional.** Pertaining to activities or economies at a scale greater than that of a single jurisdiction, and affecting a broad geographic area.

**Regional Housing Needs Assessment.** The Regional Housing Needs Assessment (RHNA) is an assignment of development potential by income category. Since the RHNA is based on regional
growth projections, the RHNA is considered a community’s share of the regional projected housing demand. The RHNA represents development potential during a time frame established by the state, called a planning period.

**Rehabilitation.** The repair, preservation, and/or improvement of substandard conditions for a structure and/or area.

**Renewable Energy.** Energy derived from resources that are naturally replenished on a human timescale such as sunlight, wind, rain, tides, waves, and geothermal heat.

**Restore.** To renew, rebuild, or reconstruct to a former state.

**Restrict.** To check, bound, or decrease the range, scope, or incidence of a particular condition.

**Retrofit.** To add materials and/or devices to an existing building or system to improve its operation, safety, or efficiency. For example, buildings have been retrofitted to use solar energy or to strengthen their ability to withstand earthquakes.

**Right-of-Way (ROW).** The land on which a roadway and/or utilities is located. Highway and utility right-of-ways are owned and maintained by the agency having jurisdiction over that specific roadway or utility.

**S**

**Safe Routes to Schools.** Pedestrian and bicycling routes that provide safe access to and from schools. This may involve bikeways, crosswalks, pedestrian bridges, and other design features that can affect the public right-of-way or, in some cases, private property.

**Second Unit.** Small, separate living quarters located on the same site as a single-family detached home. A second unit can be rented, but cannot be sold separately from the main house.

**Sensitive Land Uses.** See Noise-Sensitive Use

**Sensitive Receptors.** Include those segments of the population that are most susceptible to poor air quality, such as children, elderly people, and sick people, as well as sensitive land uses, such as schools, hospitals, parks, and residential communities. Air quality problems intensify when sources of air pollutants and sensitive receptors are located near one another.

**Shall.** That which is obligatory; an unequivocal direction.

**Should.** Signifies a directive to be honored if at all possible; a less rigid directive than "shall," to be honored in the absence of compelling or contravening considerations.
**Slope Failures.** Includes two types, major slide masses such as landslides and minor soil slips like mud or debris flows. Slope failures can occur on natural or man-made slopes. Failures are often the result of interrelated natural hazards, earthquake-induced rockfall, or storm induced mudflows.

**Specific Plan.** Under Article 8 of the Government Code (Section 65450 et seq), a legal tool for detailed design and implementation of a defined portion of the area covered by a General Plan. A specific plan may include all detailed regulations, conditions, programs, and/or proposed legislation which may be necessary or convenient for the systematic implementation of any General Plan element(s). The contents are similar to those of a general plan except they will be more comprehensive with respect to utilities and public facilities and their funding.

If a specific plan essentially provides more detailed policy guidance, it is a “policy” level plan and is adopted by resolution. If it establishes development regulation, it is a “regulatory” specific plan and becomes customized zoning for the affected property, and is adopted by ordinance.

**Sphere of Influence (SOI).** The probable, ultimate physical boundaries and service area of the city, as determined by the Local Agency Formation Commission (LAFCO) of the county. For Los Alamitos, this includes the unincorporated community of Rossmoor.

**Stormwater Runoff.** Storm water runoff refers to seasonal rainfall flows. It is very noticeable during a heavy rain storm when large volumes of water drain off paved areas.

**Street Furniture.** Those features associated with a street that are intended to enhance that street's physical character and use by pedestrians, such as benches, trash receptacles, kiosks, lights, newspaper racks.

**Subdivision.** The division of a lot, tract, or parcel of land into two or more lots, tracts, parcels, or other divisions of land for sale, development, or lease.

**Subsidence.** The gradual sinking of land as a result of natural or man-made causes.

**Sulfur Dioxide.** The chemical compound with the formula \( \text{SO}_2 \). It is a toxic gas with a pungent, irritating smell, that is released in various industrial processes.

**Sustainable.** Describes practices that meet the needs of the present without compromising the ability of future generations to meet their own needs.

**T**

**Threatened Species, California.** A native species or sub-species of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection
and management efforts required by Chapter 1.5 of the State Department of Fish and Game Code.

**Threatened Species, Federal.** A species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

**Town Center.** A walkable, human-scaled area where people shop, work, eat, have fun, and spend quality time with friends and family. People can also live adjacent to or in a downtown area. It can also be thought of a central business, shopping, and social district. Such an area may also serve the primary place where the people of Los Alamitos gather to celebrate as a community. A town center area may also be referred to as a downtown. (See Downtown)

Note that there are many shopping areas (from small strip centers to large shopping malls) that use the term “town center” or “town square” in their name. This should not be confused with the City’s desire to create a more traditional town center or downtown area as described above.

**Traffic Calming.** Measures designed to reduce motor vehicle speeds and to encourage pedestrian use, including but not limited to:

- Narrow streets
- Tight turning radii
- Sidewalk bulbouts
- Parking bays
- Textured paving at intersections
- Parkways between sidewalks and streets
- Chicanes
- Speed tables

**Transit Oriented Development (TOD).** Residential and commercial areas designed to maximize access by public transportation, such as trains and buses. TODs typically have a neighborhood center with a transit station (bus or rail), surrounded by higher-density development, with progressively lower density spreading outwards.

**Transitional Housing.** Rental housing operated under programs that provide assistance for stays of at least six months.

**Transportation Demand Management.** Application of strategies and policies to reduce travel demand (specifically that of single-occupancy private vehicles), or to redistribute this demand in space or in time.

**Undue.** Improper, or more than necessary.
Unincorporated Area. Encompasses properties that are located outside of cities. Development in the unincorporated area is subject to County jurisdiction, even if the unincorporated area is within a city’s sphere-of-influence.

Universal Access. Accessibility to buildings, facilities and services to people with and without disabilities.

Urban Forest. Collectively refers all of the trees growing within Los Alamitos. The urban forest can include the trees along streets, within parks and other public spaces, or in the yards of private citizens.

Urban Runoff. Urban runoff can happen anytime of the year when excessive water use from irrigation, car washing and other sources carries litter, lawn clippings and other urban pollutants into storm drains. Even an automobile leaking motor oil 20 miles inland can still pollute the ocean.

Vegetative Cover. Collective term for vegetation covering the ground.

Vehicle Trip. A trip made by a vehicle (may equal one or more person-trips).

Wastewater. Water that has already been used for washing, flushing, or in a manufacturing process, and therefore contains waste products such as sewage or chemical byproducts.

Watershed. The total area above a given point on a watercourse that contributes water to the flow of the watercourse; the entire region drained by a watercourse.

Wayfinding. Ways in which people orient themselves in physical space and navigate from place to place. Signage is an obvious wayfinding method. Other methods include continuous landscaping, visible landmarks, distinctive paving/sidewalks, etc.

Wetlands. An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wildland Fire. A fire occurring in a suburban or rural area which contains uncultivated lands, timber, range, watershed, brush or grasslands. This includes areas where there is a mingling of developed and undeveloped lands.

Will. That which is expected or may be expected. Expresses intent or purpose.
X

**Xeriscape.** See Drought-Tolerant Landscaping

Y

*No terms are provided that begin with this letter.*

Z

**Zoning Ordinance.** Title 17 of the City of Los Alamitos Municipal Code, also known as the Zoning Code.
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AADT</td>
<td>annual average daily traffic</td>
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<tr>
<td>AAQS</td>
<td>ambient air quality standards</td>
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<tr>
<td>AB</td>
<td>Assembly Bill</td>
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<tr>
<td>ACM</td>
<td>asbestos-containing materials</td>
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<tr>
<td>ACS</td>
<td>American Community Survey</td>
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<tr>
<td>ADT</td>
<td>average daily traffic</td>
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<tr>
<td>af</td>
<td>acre-feet</td>
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<td>afy</td>
<td>acre-feet per year</td>
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<td>AIA</td>
<td>airport influence area</td>
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<td>ALUC</td>
<td>airport land use commission</td>
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<tr>
<td>AELUP</td>
<td>airport environs land use plan</td>
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<tr>
<td>amsl</td>
<td>above mean sea level</td>
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<tr>
<td>AQMP</td>
<td>air quality management plan</td>
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<tr>
<td>AYSO</td>
<td>American Youth Soccer Organization</td>
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<tr>
<td>BACT</td>
<td>best available control technology</td>
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<tr>
<td>BAU</td>
<td>business as usual</td>
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<tr>
<td>BMP</td>
<td>best management practices</td>
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<tr>
<td>BPS</td>
<td>best performance standards</td>
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<tr>
<td>BRT</td>
<td>bus rapid transit</td>
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<tr>
<td>BSO</td>
<td>(historic) buildings, structures, or objects</td>
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<tr>
<td>CAA</td>
<td>Clean Air Act</td>
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<tr>
<td>CalARP</td>
<td>California Accidental Release Prevention Program</td>
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<tr>
<td>Cal/EPA</td>
<td>California Environmental Protection Agency</td>
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<tr>
<td>CAL FIRE</td>
<td>California Department of Forestry and Fire Protection</td>
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<tr>
<td>CALGreen</td>
<td>California Green Building Standards Code</td>
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<td>Cal/OSHA</td>
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<td>CNEL</td>
<td>Community Noise Equivalent Level</td>
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<td>California Native Plant Society</td>
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<tr>
<td>CO</td>
<td>carbon monoxide</td>
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<td>CO2</td>
<td>carbon dioxide</td>
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<td>carbon dioxide equivalent</td>
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<td>council of governments</td>
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<td>US Army Corps of Engineers</td>
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<td>Community Rating System</td>
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<td>dB</td>
<td>decibel</td>
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<tr>
<td>dBA</td>
<td>A-weighted decibel</td>
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<td>DBCP</td>
<td>dibromochloropropane</td>
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<td>DPM</td>
<td>diesel particulate matter</td>
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<td>EIR</td>
<td>environmental impact report</td>
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<td>EOP</td>
<td>Emergency Operations Plan</td>
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<td>Environmental Protection Agency (US)</td>
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<td>Emergency Planning and Community Right-to-Know Act</td>
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<td>GHG</td>
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<td>GSW</td>
<td>Golden State Water Company</td>
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<tr>
<td>gpcd</td>
<td>gallons per capita per day</td>
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<tr>
<td>gpm</td>
<td>gallons per minute</td>
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<tr>
<td>GWh</td>
<td>gigawatt hours</td>
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<td>GWP</td>
<td>global warming potential</td>
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<td>HCD</td>
<td>Housing and Community Development Department (CA)</td>
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<td>HCM</td>
<td>Highway Capacity Manual</td>
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<td>Abbreviation</td>
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<td>HCP</td>
<td>habitat conservation plan</td>
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<td>HOV</td>
<td>high-occupancy vehicle</td>
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<td>HRI</td>
<td>California State Historic Resources Inventory</td>
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<tr>
<td>IFC</td>
<td>International Fire Code</td>
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<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
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<tr>
<td>JFTB</td>
<td>Joint Forces Training Base</td>
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<tr>
<td>Ldn</td>
<td>day-night noise level</td>
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<tr>
<td>Leq</td>
<td>equivalent continuous noise level</td>
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<td>LAMC</td>
<td>Los Alamitos Municipal Code</td>
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<tr>
<td>LCFs</td>
<td>low-carbon fuel standard</td>
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<td>LESA</td>
<td>land evaluation and site assessment</td>
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<td>LGB</td>
<td>Long Beach Airport</td>
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<tr>
<td>LOS</td>
<td>level of service</td>
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<tr>
<td>LQG</td>
<td>large-quantity generator</td>
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<tr>
<td>LUST</td>
<td>leaking underground storage tank</td>
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<td>Los Alamitos Medical Center</td>
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<td>LAPD</td>
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<td>Los Alamitos Unified School District</td>
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<td>LATV</td>
<td>Los Alamitos Television</td>
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<td>LED</td>
<td>light-emitting diode</td>
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<td>MBTA</td>
<td>Migratory Bird Treaty Act</td>
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<tr>
<td>mcfd</td>
<td>million cubic feet per day</td>
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<td>MCL</td>
<td>Maximum Contaminant Level</td>
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<tr>
<td>mgd</td>
<td>million gallons per day</td>
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<tr>
<td>MMLOS</td>
<td>multimodal level of service</td>
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<tr>
<td>MMT</td>
<td>million metric tons</td>
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<td>MOU</td>
<td>memorandum of understanding</td>
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<td>MPO</td>
<td>metropolitan planning organization</td>
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<td>MRF</td>
<td>materials recovery facility</td>
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<td>MS4</td>
<td>municipal separate storm sewer system</td>
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<tr>
<td>MT</td>
<td>metric ton</td>
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<tr>
<td>mybp</td>
<td>million years before present</td>
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<td>MWDOC</td>
<td>Municipal Water District of Orange County</td>
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<td>NAGPRA</td>
<td>Native American Graves Protection and Repatriation Act</td>
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<td>NAHC</td>
<td>Native American Heritage Commission</td>
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<td>NCCP</td>
<td>natural communities conservation plan</td>
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<td>National Flood Insurance Program</td>
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<td>National Fire Protection Association</td>
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<td>NHPA</td>
<td>National Habitat Preservation Authority</td>
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<td>NOX</td>
<td>nitrogen oxides</td>
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<td>National Pollution Discharge Elimination System</td>
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<td>NPL</td>
<td>National Priorities List</td>
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<td>NRHP</td>
<td>National Register of Historic Places</td>
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O3    ozone
OCCOG Orange County Council of Governments
OCEHA Orange County Environmental Health Agency
OCFA Orange County Fire Authority
OCFCD Orange County Flood Control District
OCGB Orange County Groundwater Basin
OCSD Orange County Sheriff’s Department
OCPL Orange County Public Library
OCPW Orange County Public Works
OCSD Orange County Sanitation District
OCTA Orange County Transportation Authority
OCTAM Orange County Transportation Analysis Model
OCWD Orange County Water District
OES Office of Emergency Services
OHP Office of Historic Preservation
OSFM Office of the State Fire Marshal
Pb lead
P-C Production-Consumption
PCC Portland cement concrete
PCE perchloroethylene
PM particulate matter
POTW publicly owned treatment works
ppm parts per million
PPV peak particle velocity
PUD Public Utilities Department
RCSD Rossmoor Community Services District
RLAASD Rossmoor/Los Alamitos Area Sewer District
RCRA Resource Conservation and Recovery Act
RHNA regional housing needs assessment
RMC Rivers and Mountains Conservancy
RMP risk management plans
RMS root mean square
RTP regional transportation plan
ROW right-of-way
RWQCB Santa Ana Regional Water Quality Control Board
RWRF regional water reclamation facility
SARA Superfund Amendments and Reauthorization Act
SB Senate Bill
SCAG Southern California Association of Governments
SCAQMD South Coast Air Quality Management District
SCD Statewide Compliance Division (DTSC)
SCE Southern California Edison
SCGC Southern California Gas Company
SCS sustainable communities strategy
<table>
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<th>Acronym</th>
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<td>Safe Drinking Water Act</td>
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<td>Special Flood Hazard Areas</td>
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<td>(State) School Facility Program</td>
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<td>State Implementation Plan</td>
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<td>Sacred Land File</td>
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<td>Sound Level Meter</td>
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<td>Sphere-of-Influence</td>
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<td>Sulfur Oxides</td>
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<td>Standard Urban Stormwater Mitigation Plan</td>
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<td>Stormwater Pollution Prevention Plan</td>
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<td>Toxic Air Contaminants</td>
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<tr>
<td>taf</td>
<td>Thousand Acre-feet</td>
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<td>Trichloroethylene</td>
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<td>Traditional Tribal Cultural Places</td>
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<td>United States Fish and Wildlife Service</td>
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<td>Volatile Organic Compounds</td>
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<td>V/C</td>
<td>Volume-to-Capacity</td>
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