

4. *Environmental Setting*

4.1 INTRODUCTION

The purpose of this section is to provide, pursuant to provisions of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, a “description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, from both a local and a regional perspective.” The environmental setting will provide a set of baseline physical conditions from which the lead agency will determine the significance of environmental impacts resulting from the proposed project.

4.2 REGIONAL ENVIRONMENTAL SETTING

4.2.1 *Regional Location*

The 2,800-acre Irvine Business Complex (IBC) is in the south/central part of Orange County in the City of Irvine (see Figure 3-1, *Regional Location*). Orange County is bordered by the Pacific Ocean to the west, Los Angeles County to the north and northwest, San Bernardino County to the northeast, Riverside County to the east, and San Diego County to the south. Orange County comprises 798 square miles, with approximately 40 miles of coastline and extending inland approximately 20 miles.



The natural topography of Orange County is a combination of mountains, hills, flatlands, and shoreline. Orange County lies predominantly on an alluvial plain, which is generally less than 300 feet in elevation in the west and central section. The western portion of the county is made up of a series of broad sloping plains (Downey and Tustin Plains) formed of alluvium transported from the mountains by the Santa Ana River, Santiago Creek, and other local streams. Several low-lying mesas interrupt the plain along the northern coast. Orange County is partly enclosed by the Puente and Chino Hills to the east. The Puente and Chino Hills, which identify the northern limit of the plain, extend for 22 miles and reach a peak height of 1,780 feet. To the east and southeast of the plain are the Santa Ana Mountains, which have a peak height of 5,691 feet.

4.2.2 *Regional Climate*

The climate of Orange County is generally temperate. The average monthly high temperatures range from about 52°F in the coastal areas in January to 86°F in the inland areas of the coastal plain in August. The average annual rainfall across the county is 14 inches, typically occurring in the winter. Rainfall also exhibits characteristically wide variations annually, from a low of 3.6 inches in 1961 to a high of 32.1 inches in 1940. The Orange County region experienced heavier than normal rainfall during the 2004/2005 season, with measurements from the Santiago Peak station reaching 51.94 inches (WRCC 2009).

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4.2.3 Regional Planning Considerations

Air Quality Management Plan

An air basin generally has similar meteorological and geographic conditions throughout. California is geographically divided into 15 air basins, and the City of Irvine is in the South Coast Air Basin (SoCAB). This air basin contains the largest urban area in the western US. It is a 6,600-square-mile coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SoCAB includes all of the nondesert portions of San Bernardino, Los Angeles (non–Antelope Valley portion), and Riverside Counties and all of Orange County.

The South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the SoCAB, a comprehensive plan that includes control strategies for stationary and area sources, as well as for on-road and off-road mobile sources. Every three years since 1979, SCAQMD has prepared a new AQMP, with updates to the previous plan and a 20-year horizon. The most recent adopted comprehensive plan was adopted on June 1, 2007, and builds upon the approaches for attainment in the 2003 AQMP. The 2007 AQMP incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. It proposes attainment demonstration of the federal PM_{2.5} standards through a more focused control of SO_x, directly emitted PM_{2.5}, NO_x, and volatile organic compounds (VOC) by 2015. The eight-hour ozone control strategy builds upon the PM_{2.5} strategy, augmented with additional NO_x and VOC reductions to meet the standard by 2024, assuming a bump-up (extended attainment date) is obtained.

The AQMP provides local guidance for the State Implementation Plan, which provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards. Areas that meet ambient air quality standards are classified as attainment areas; areas that do not meet these standards are in nonattainment. Severity classifications for ozone nonattainment are marginal, moderate, serious, severe, and extreme. The proposed project's consistency with the applicable policies and standards of the AQMP is analyzed in detail in Section 5.2, *Air Quality*.

Southern California Association of Governments

Orange County and the City of Irvine are at the western edge of a six-county metropolitan region composed of Orange, Los Angeles, Ventura, Riverside, San Bernardino and Imperial Counties. SCAG is the federally recognized Metropolitan Planning Organization (MPO) for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the southern California region's MPO, SCAG cooperates with the SCAQMD, the California Department of Transportation (Caltrans), and other agencies in preparing regional planning documents. Orange County and its jurisdictions constitute the Orange

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County Subregion of the SCAG region. This subregion is governed by the Orange County Council of Governments (OCCOG). SCAG has developed plans to achieve specific regional objectives. The plans most applicable to the proposed project are discussed below.

Regional Comprehensive Plan

The 2008 Regional Comprehensive Plan (RCP) is a major advisory plan prepared by SCAG that addresses important regional issues like housing, traffic/transportation, water, and air quality. The RCP serves as an advisory document to local agencies in southern California for their information and voluntary use for preparing local plans and handling local issues of regional significance.



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The RCP presents a vision of how southern California can balance resource conservation, economic vitality, and quality of life. The RCP identifies voluntary best practices to approach growth and infrastructure challenges in an integrated and comprehensive way. It also includes goals and outcomes to measure our progress toward a more sustainable region. The proposed project's consistency with the advisory policies of the 2008 RCP is analyzed in detail in Section 5.8, *Land Use and Planning*.

Regional Transportation Plan

SCAG has also adopted the Regional Transportation Plan (RTP) to help coordinate development of the region's transportation improvements. On May 8, 2008, SCAG adopted the 2008 Regional Transportation Plan (RTP): Making the Connections. The 2008 RTP is a \$531.5 billion plan that emphasizes the importance of system management, goods movement, and innovative transportation financing. It provides a regional investment framework to address the region's transportation and related challenges, and looks to strategies that preserve and enhance the existing transportation system and integrate land use into transportation planning. The 2008 RTP is based on Compass Blueprint 2% Strategy land use projections, which are not consistent with Orange County and city General Plan Land Use Elements. The proposed project's consistency with the applicable RTP policies is analyzed in detail in Section 5.8, *Land Use and Planning*.

Compass Blueprint 2% Strategy

In 2004, SCAG adopted the 2% Strategy, which is the part of the 2004 regional growth forecast policy that attempts to reduce emissions and increase mobility through strategic land use changes. Through extensive public participation and land use and transportation modeling and analysis, the program has resulted in a plan that identifies strategic growth opportunity areas (2% Strategy Opportunity Areas). These areas are roughly 2 percent of the land area in our region. These are the areas where the 2% Strategy will help cities and counties reap the maximum benefits from regional planning implemented in cooperation and partnership with the local community. The 2% Strategy is a guideline for how and where the vision for southern California's future can be implemented toward improving measures of mobility, livability, prosperity, and sustainability for local neighborhoods and their residents. Goals for the 2% Strategy Opportunity Areas include locating new housing near existing jobs and new jobs near existing housing, encouraging in-fill development, promoting development with a mix of uses, creating walkable communities, providing a mix of housing types, and focusing development in urban areas. A portion of the IBC project area along Michelson Drive is within a designated Compass 2% Strategy Opportunity Area (SCAG 2007). The 2% Strategy designates the majority of this area Industrial/Airport/Harbor, with a small portion designated High Density Residential. The proposed project's consistency with the 2% Strategy guidelines is addressed in detail in Section 5.8, *Land Use and Planning*.

John Wayne Airport Environs Land Use Plan

The southwest boundary of the IBC is adjacent to the John Wayne Airport and is within the Orange County Airport Environs Land Use Plan (AELUP). The majority of the IBC site is outside of the accident potential zones, as shown on Figure J-4, Clear and Accident Potential Zones, of the City of

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Irvine General Plan; however, as shown on Figure J-4, a small portion is within the clear zone. Figure J-4 is shown on Figure 4-1, *Clear and Accident Potential Zones*.

In 1975, the Airport Land Use Commission (ALUC) of Orange County adopted an AELUP that included John Wayne Airport (formerly Orange County Airport). ALUC is an agency authorized under state law to assist local agencies in ensuring compatible land uses in the vicinity of airports. Primary areas of concern for ALUCs are noise, safety hazards, and airport operational integrity. ALUCs are not implementing agencies in the manner of local governments, nor do they issue permits for a project such as those required by local governments. However, pursuant to California Public Utilities Code Section 21676, local governments are required to submit all general plan amendments and zone changes that occur within the ALUC planning areas for consistency review by ALUC. If such an amendment or change is deemed inconsistent with the ALUC plan, a local government may override the ALUC decision by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes stated in Section 21670(a)(2) of the Public Utilities Code: “to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public’s exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.” The proposed project’s consistency with the established AELUP is discussed in Section 5.8, *Land Use and Planning*, of this DEIR.

Local Coastal Plan

The California Coastal Act of 1976 delineates an area along the California coastline for protection of its scenic and environmental resources. A 40-acre parcel at the southern edge of the Irvine Business Complex, adjacent the Newport Back Bay, lies within the Coastal Zone as defined by the Coastal Act. Pursuant to the Coastal Act, the City of Irvine is required to have a Local Coastal Plan (LCP) for the Coastal Zone in its jurisdiction, which also includes the approximately 200 acres of the San Joaquin Marsh at the southern edge of the City, outside the IBC adjacent to the back bay. The City exercised its option to have the State Coastal Commission prepare this plan, which was prepared and certified by the Coastal Commission in 1982. The LCP delegates land use authority to the City through zoning code regulations outlined in Chapter 2-7 of the Zoning Code. The land use plan in the LCP, as amended, allows for a mix of business and industrial uses, along with the potential for high density mixed-use development.

University of California Irvine Long Range Development Plan

Within the University of California Irvine (UCI), a Long Range Development Plan (LRDP) is a comprehensive policy and land use plan that guides the growth of a campus. The LRDP identifies the physical development needed to achieve the academic needs and goals of the campus while demonstrating responsible conservation of limited resources. UCI’s LRDP was last updated in 2007. It is the fourth LRDP for UCI, as previous plans were adopted in 1963, 1970, and 1989. The 2007 LRDP for the Irvine campus provides a framework of policies and guidelines to shape land use and physical development at UCI through 2025–26. The plan, designed to support key academic and student life goals, identifies development objectives, delineates campus land uses, and estimates the new building space needed to support projected program expansion through the planning horizon year (UCI 2007).



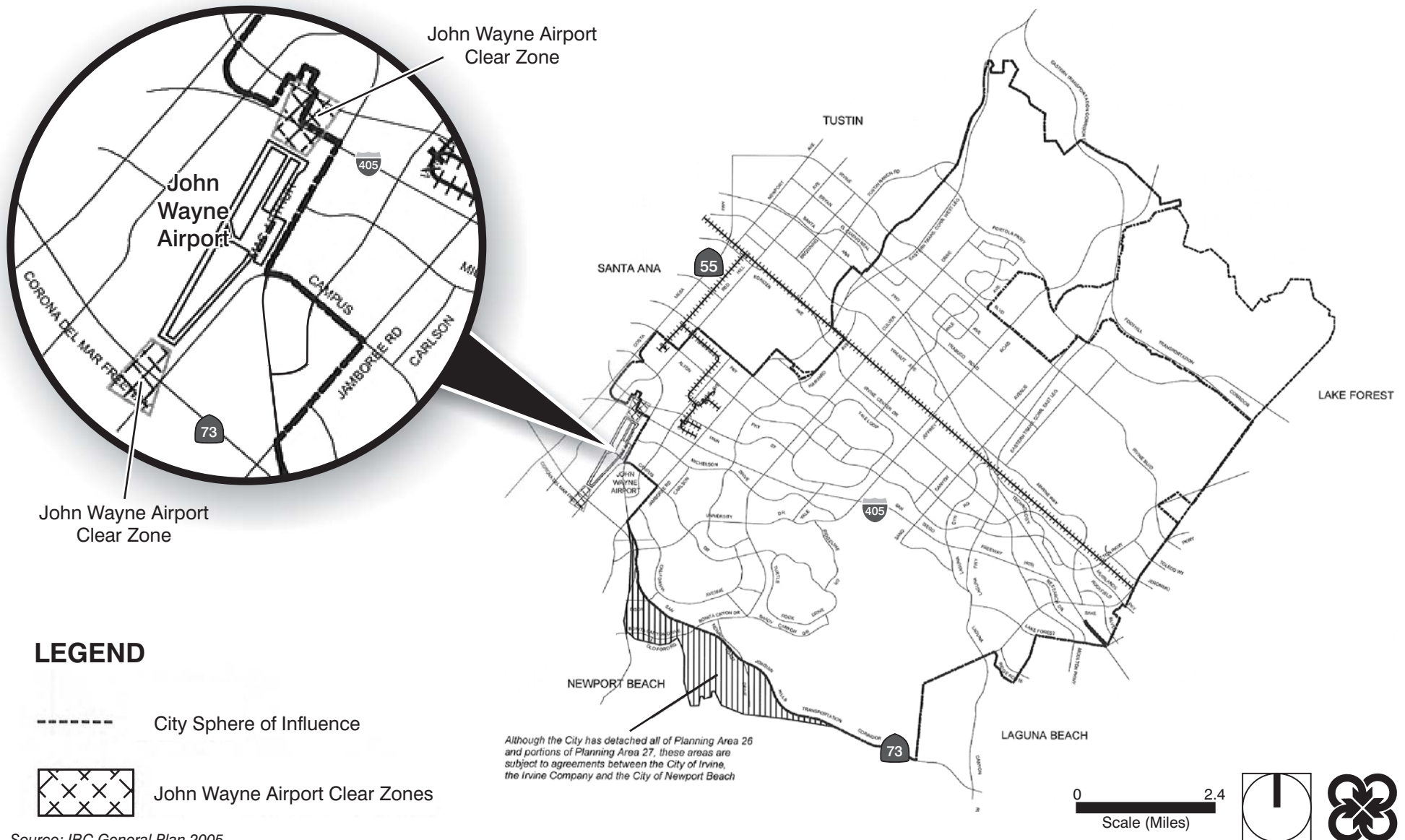
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The 2007 LRDP is similar to a city's general plan. It identifies land use and policies for designated areas rather than specific development projects, and defines the potential growth of the UCI campus through 2025–26. The LRDP is neither an enrollment plan nor an implementation plan; rather, it provides a framework of policies and guidelines to influence future decisions on land use, enrollment, housing, parking, academic facilities, and urban and landscape design. Individual capital projects would be subject to future approval by the University. The 2007 LRDP is also accompanied by an EIR, prepared in accordance with CEQA and University of California guidelines for implementation of CEQA.

The 2007 LRDP encompasses the main campus and its environs. It does not include remote campus sites such as the UCI Medical Center in Orange and the Shellmaker Island boathouse in Newport Beach.

The proposed project's consistency with the LRDP is included in the analysis of Sections 5.8, *Land Use and Planning*, and 5.13, *Transportation and Traffic*.

Clear and Accident Potential Zones



Source: IBC General Plan 2005

IBC Vision Plan and Mixed Use Overlay Zoning Code Recirculated DEIR

City of Irvine • **Figure 4-1**

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4.3 LOCAL ENVIRONMENTAL SETTING

Location and Land Use

The City of Irvine is 69.7 square miles in south/central Orange County. There are six cities bordering Irvine: Tustin to the north, Lake Forest to the east, Aliso Viejo to the southeast, Newport Beach to the south, Santa Ana to the northwest, and Costa Mesa to the west. The IBC, Planning Area 36, is a business and industrial complex covering approximately 2,800 acres in the southwestern portion of the City, approximately 40 miles south of downtown Los Angeles and 90 miles north of San Diego. More specifically, the IBC is generally bounded by the former Tustin Marine Corps Air Station (MCAS) to the north (known now as Tustin Legacy), the San Diego Creek channel to the east, John Wayne Airport and Campus Drive to the south and State Route 55 (SR-55) to the west, as shown on Figure 3-2, *Local Vicinity*. The San Diego Freeway (I-405) traverses the southern portion of the IBC, and the Santa Ana Freeway (I-5) is to the north and east. As shown on Figure 3-1, the IBC is bordered by the cities of Newport Beach to the south, Santa Ana and Costa Mesa to the west, and Tustin to the north.

The IBC also consists of a 40-acre detached parcel that is approximately a half of a mile south of the main IBC boundary area (see Figure 3-3, *Aerial Photograph*). This parcel is bounded by Jamboree Road, Fairchild Road, MacArthur Boulevard, and the San Joaquin Marsh and is adjacent to the City of Newport Beach. The parcel is also the only area of the IBC in the Coastal Zone and is subject to the Coast Plan Requirements.

The IBC consists of four zoning designations: 5.0 IBC Mixed-Use, 5.1 IBC Multi-Use, 5.2 IBC Industrial, and 5.3 IBC Residential. The detached 40 acre parcel is zoned 5.1 IBC Multi-Use. Multi-use includes uses that are high intensity and urban in character. The major prominent land use in the IBC is office, with substantial amounts of industrial/warehouse uses and several acres of medium- and high-density residential use totaling 5,011 existing dwelling units, which are mostly made up of apartments and mid- and high-rise condos. Other improvements and structures throughout the IBC include surface parking areas and parking structures, hardscape, street furniture, and landscape.

Typical uses include medium- to high-density residential, commercial, institutional, and offices. Urban and industrial provides for offices, industry, and support commercial, mixed with high-density housing and a variety of activities. Other uses include professional/medical offices, industrial manufacturing, research and development, support service retail, restaurants, multifamily housing, and hotel/motels. The IBC offers a wide range of industrial and service industries ranging from specialty pharmaceutical, healthcare and medical products, clothing manufacturers and other commercial and financial institutions. As a result of the close proximity to the John Wayne Airport, other service industries have developed, including hotels and restaurants. Several companies, like Allergan, Edwards Life Sciences, St. John Knits, and Taco Bell have located their company headquarters within the IBC, some of which date back prior to the City of Irvine's incorporation in 1971.

The University of California, Irvine (UCI) owns and operates a property along the east side of Jamboree Road between Campus Drive and Fairchild Road, adjacent to the IBC. According to the UCI 2007 Long Range Development Plan (LRDP), the site, also known as North Campus—which is currently occupied by academic and support facilities, an arboretum, and a child development center—is



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planned to be redeveloped with up to 950,000 square feet of office/research space and 455 multifamily dwelling units by the year 2036. The land use, circulation, and other development-related assumptions of the LRDP have been included in the IBC Vision Plan analysis.

Framework

The last major General Plan Amendment and Zone Change for the whole of the IBC was adopted in 1988. At that time, the General Plan and Zoning Code envisioned 58.255 million square feet of nonresidential development and 3,571 dwelling units at buildout. The 1988 entitlements also included a Circulation Mitigation Program and revised funding program, including a fee program. The IBC, as entitled in 1992, was intended to be the “urbanized” area in Irvine, taking advantage of the attraction of John Wayne Airport for businesses and the synergies created with urban development. To control development intensity and traffic volumes, the IBC zoning established an overall development intensity cap with intensity budgets allocated to each legal parcel. The development intensity cap was designed to allow market forces to dictate how and where future development rights would ultimately be utilized through the Transfer of Development Rights (TDR) provisions established in the Zoning Code. The Irvine Business Complex Land Use and Trip Generation Database (IBC Database) was created to track and monitor development intensities in the IBC.

Section 9-36-17 of the City of Irvine Zoning Code outlines the provisions by which a developer may apply for a TDR between parcels within the IBC. These provisions were established as a flex-zoning mechanism, a legal mechanism commonly used in redeveloping areas where flexibility in allowable land uses is permitted to help further community land use goals (floor-area ratios are a common example). These provisions allow for conversion of land uses, including from residential to office or vice-versa, based on intensity conversion rates for each use. Retail uses, for example, consume more intensity units than office uses. Because intensity uses were labeled “trips” in the 1988 zoning, and because there is a difference between the definition of “trips” in IBC zoning and “trips” as used for determining vehicle trip generation for traffic analysis purposes, the project includes the renaming of intensity units from “trips” to “intensity values.”

The General Plan and Zoning designations for the IBC generally encourage heavy industrial uses north of Barranca Parkway, lower-intensity industrial uses west of the Armstrong channel, and mixed-use development, including residential uses, south of Barranca Parkway. A number of development applications have been filed since early 2004 and continue to be filed for the reuse of existing sites in the IBC from nonresidential uses to high-density, urban-style residential development. The majority of new and proposed residential development has been between Barranca, Jamboree, and Von Karman north of the 405 freeway, and along Jamboree, Michelson, and Dupont and Martin south of the 405 freeway. These areas have been traditionally occupied by smaller-scale office and industrial operations, and have been evolving to mixed-use neighborhoods. Traditional industrial and office core areas remain in the western portion of the IBC west of the Armstrong channel, along Construction Circle north of Barranca parkway, and generally south of the 405 freeway along Von Karman.

In March 2009, the City adopted a Zoning Code provision to allow for accessory retail uses throughout the City. While this Citywide measure is consistent with the goals of the Vision Plan for the development of mixed uses and reducing vehicle trips, the amount and type of accessory retail

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permitted by right within a project is narrowly defined in the Zoning Code as to not generate additional trips beyond those associated with the primary use. Retail that does not meet the Zoning Code definition for accessory retail would be subject to the City's current discretionary and environmental review processes. For purposes of the IBC Vision Plan, the utilization of the accessory retail use designation has been assumed, although that assumption does not, by definition, yield any additional traffic generation.

Surrounding Land Uses

To the north of the IBC is the site of the former MCAS Tustin, also known as the Tustin Legacy Specific Plan area, which is being redeveloped for civilian use. This redevelopment plan provides for a range of residential, commercial, office, industrial, institutional, and urban-regional uses. Many of the residential and commercial portions of the redevelopment plan have already been constructed, including a one-million-square-foot regional commercial center (The District at Tustin Legacy), at the northwest corner of Jamboree Road and Barranca Parkway.

The San Joaquin Marsh is south of I-405 and abuts most of the eastern edge of the IBC. The marsh, which is a preserved natural area, is the only remaining portion of a once extensive marsh that previously covered a good portion of Irvine flatlands. Southeast of the IBC, adjacent to the marsh, is the University of California, Irvine-North Campus and a parcel owned by The Irvine Company.

The John Wayne Airport is adjacent to the southwest portion of the IBC. The airport provides service to all of Orange County and is currently served by several hotels and restaurants within the cities of Newport Beach and Irvine. There is no distinct edge clarifying the boundary between the IBC and the City of Newport Beach, as similar multi-use developments overlap each other forming a rather cohesive urban form across the border.

The San Diego Creek, which runs along the southeastern boundary of the IBC, provides an important connection to a comprehensive system of parks and open space developed within the City of Irvine. The San Joaquin Wildlife Sanctuary, also known as the San Joaquin Marsh, which abuts the IBC, offers ten miles of trails for walkers, joggers, bikers, and equestrians. A major portion of this property is owned by the Irvine Ranch Water District, and includes a water treatment facility. In addition, the General Plan and Zoning Code designate two segments (each approximately 12 acres in size) of this property at the southeast corner of Michelson and Carlson as High-Density Residential. The marsh site also includes a number of passive recreational areas and educational facilities located throughout the IBC that are available to the public. These features include several miles of walking trails, interpretive exhibits, the Audubon House, the Duck Club, and public restrooms.

4.4 ENVIRONMENTAL RESOURCES AND INFRASTRUCTURE

Biological Resources

Faunal diversity in the IBC is very low because the majority of the IBC is developed with industrial, commercial, and residential uses. Ornamental landscape plants, shrubs, and trees comprise the urban setting, resulting in a low biological diversity.



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Although the IBC is not considered a biologically sensitive area, the San Joaquin Marsh, adjacent to the IBC to the southeast, is considered a highly sensitive Biotic Resource, as identified in the Conservation/Open Space Element of the City's General Plan. The marsh contains a variety of wetland habitats, including freshwater marshlands, shallow ponds, and channels confined by earthen dikes. The San Diego Creek, also adjacent to the IBC to the east, is considered a moderately sensitive area due to its locally significant freshwater marsh habitats and is designated by the General Plan as "major scenic feature." The creek provides an effective wetland corridor between the marsh and the Upper Newport Bay.

Climate and Air Quality

The IBC is in the western portion of the SoCAB. The climate in the SoCAB is mild, tempered by cool ocean breezes. Temperatures are normally mild (62° to 72°F), with rare extremes above 100°F or below freezing (32°F). Precipitation is typically 9 to 15 inches annually in the SoCAB. The climate of Orange County is typified as temperate. In January, the average high temperature is about 69° Fahrenheit (F) and the low temperature averages about 47 degrees Fahrenheit (F) in January. In August, the average high is about 86 degrees Fahrenheit and the low averages about 64 degrees Fahrenheit. The average annual rainfall across the County is 14 inches, the vast majority of it occurring between September and April. The County's rainfall also exhibits characteristically wide variations annually, from a low of 3.6 inches in 1961 to a high of 32.1 inches in 1940. The Orange County region experienced heavier than normal rainfall during the 2004–2005 season, with measurements from the Santiago Peak station reaching 51.94 inches (WRCC 2009).

Climate change is the variation of Earth's climate over time, whether due to natural variability or as a result of human activities. Greenhouse gases (GHGs) absorb and emit infrared radiation and therefore have an affect on climate. The City of Irvine is in the process of preparing the Irvine Climate Action Plan. The City's Climate Action Plan is the City's roadmap to support the state's transition from business-as-usual (BAU) growth and development practices to a clean, low-carbon economy. The City's proposed Climate Action Plan includes the City's 2006 baseline inventory, a project of GHG emissions for year 2020 (BAU scenario), and a target to reduce GHG emissions to by 2020. The Climate Action Plan also identifies strategies for achieving this target, with an emphasis on improving transportation modes and systems, incorporating energy efficiency standards, increasing the City's renewable energy supply portfolio, and devising adaptation measures. The City's proposed Climate Action Plan proposes a GHG emissions reduction target of 15 percent below the City's existing GHG emissions inventory (2006), which is based on CARB's Scoping Plan. Existing quantities of GHG emissions are quantified in Section 5.15, *Global Climate Change*, of this DEIR.

Pollutants originating in Orange County are transported by the daytime onshore air flow, where they react to form ozone some distance from where the primary pollutants are emitted. The SoCAB is a "nonattainment" area for ozone (O₃) and particulate matters (PM₁₀ and PM_{2.5}) under both the federal and California ambient air quality standards (AAQS). In addition, the SoCAB is proposed to be designated as nonattainment for oxides of nitrogen (NO_x) (entire basin) under the new California AAQS and lead (Pb) (Los Angeles County only) under the new federal AAQS in 2010. Nonattainment refers to the fact that the federal and state AAQS are violated in the region. An air quality analysis was

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performed for the proposed project and the results are discussed in Section 5.2, *Air Quality*, of this DEIR.

Geology and Landform

The IBC is in a seismically active region. According to the California Division of Mines and Geology, there are no “active” faults within IBC (defined as having experienced movement within the last 11,000 years). However, several major active fault systems are nearby; the San Andreas Fault system (40 miles to the northeast), San Jacinto Fault (about 35 miles to the northeast), the Whittier-Elsinore Fault (15 miles to the northeast), Newport-Inglewood Fault (5 miles to the southwest) and an inferred extension of the Norwalk Fault (to the north, east of Tustin).

The major structural feature in the IBC is the Shady Canyon fault, which is a predominantly east–west trending normal fault with the downdropped block on the south-southwestern side. The Shady Canyon fault originates in the Laguna Hills, and trends essentially east–west until it reaches the San Joaquin Hills where it trends north 60 degrees west. The fault is concealed in the area around Jeffrey Road and the I-405, buried by the overlying Pliocene and Pleistocene sediments. Around Jamboree Boulevard and McGaw Avenue, the fault takes another turn trending north 80 degrees west, continuing in that direction until it finally ends near I-55. The fault is not believed to be active, since the Pliocene and Pleistocene sediments above are undisturbed.

According to the Seismic Element of the Irvine General Plan, the majority of the IBC project area is within the Seismic Response Area (SRA 1), which consists of potentially soft or loose soils and/or high ground water. This is one of two areas considered to have greater potential for ground failure in the form of liquefaction, in comparison to the other seismic response areas (liquefaction is not expected to occur for all earthquakes, nor over the whole of SRA 1). The detached 40-acre IBC parcel noted earlier in this section is in SRA 2, which consists of denser soils and/or deeper ground water. The predominant potential seismic hazard in this area is ground motion. Ground breakage or ground failure is not expected to characterize this area. Please refer to Section 5.5, *Geology and Soils*, of this DEIR for additional information concerning the project area’s existing geological conditions and an analysis of project impacts on geology and soils.

Hydrology and Water Quality

The IBC is in the western portion of the San Diego Creek watershed. San Diego Creek is the major watercourse adjacent to the IBC, and is channelized along the eastern boundary of the IBC between Barranca Parkway and Michelson Drive. Surface runoff in IBC drains to San Diego Creek, which leads to the San Joaquin Marsh, Upper Newport Bay and eventually the Pacific Ocean.

A significant portion of the IBC, primarily the western portion that is adjacent to the major flood control channels described below, is within the area of special flood hazard. Although there are no streams or flood control channels in the IBC, it is bounded on three sides by the Barranca Channel, San Diego Creek, and Lane Channel. The Barranca Channel, which lies along the northeastern side of Barranca Road, turns south and traverses the IBC, eventually entering the San Diego Creek Channel adjacent to Main Street. The Lane Channel lies along the northwestern and western periphery of the IBC. The channel then turns east, following MacArthur Boulevard to I-405 and then continues along the



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northeastern side of I-405, joining with the San Diego Creek Channel. The primary conduits for storm runoff within the IBC are the existing streets.

Upper Newport Bay and San Diego Creek currently experience water quality problems. They are listed as water quality impaired due to nutrients and sediment, pursuant to Section 303 (d) of the federal Clean Water Act. As required by Section 303(d), standards for nutrients, sediment, and fecal coliform have already been developed for the Newport Bay/San Diego Creek Watershed. The proposed project's impacts on water quality and hydrology are analyzed in Section 5.7, *Hydrology and Water Quality*, of this DEIR.

Noise

Community noise levels are measured in terms of the A-weighted decibel (dBA). A-weighting is a frequency correction that correlates overall sound pressure levels with the frequency response of the human ear. The noise rating scale normally used in California (including Irvine) for land use compatibility assessment is the Community Noise Equivalent Level (CNEL). The CNEL is a time-weighted, 24-hour average noise level based on the A-weighted decibel. Noise levels in the project area are influenced primarily by motor vehicle traffic, which has the greatest impact on residential areas in the City of Irvine. Noise levels in the IBC are also strongly influenced by major roadways, including Jamboree Road, Alton Parkway, and I-405, and by takeoffs and landings at John Wayne Airport. Please refer to Section 5.9, *Noise*, of this DEIR for further information concerning existing noise conditions in the project area and an analysis of the proposed project's impacts on the local noise environment.

Public Services and Utilities

The IBC is an already urbanized area with existing public services and utilities. All public services are currently available to the project area. Local utilities and services systems that serve the existing office, commercial, industrial, and residential uses are available to serve the IBC project. The proposed project's impact on the provision of public services is analyzed in Section 5.11, *Public Services*, of this DEIR.

Scenic Features

The IBC has relatively flat topography and there are no natural landscape features or natural visual resources or vistas within the immediate area. The scenic highway element of the City's General Plan designates I-405 as an urban freeway providing gateway views of and into the City of Irvine. The area is highly urbanized with office, light industrial, warehouse, and residential uses, and does not contain any large areas of open space or significant visual resources within the immediate vicinity of the project area. Vegetation within the project area is limited mostly to ornamental trees and landscaping materials. The existing development within the IBC does not exhibit any significant visual resources. The San Joaquin Marsh and the San Diego Creek, both adjacent to the site, are considered a highly sensitive Biotic Resource, which is identified in the City's Conservation/Open Space Element of the General Plan. Due to the IBC's urbanized setting, night lighting is widespread, with many existing sources of light and glare, such as street lights, security lighting in parking lots and along walkways, lighted shopping centers, sign and building illumination, vehicle headlights, and light emitted from the interiors of buildings. Light sources surrounding the IBC include general nighttime outdoor lights from the existing office, industrial, and commercial uses and vehicle lights from adjacent roads. Nighttime glare is

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generally limited to headlights reflecting off glass surfaces as vehicles travel along the roads in the IBC. In addition, several residential developments that emit additional light and glare have been either built or approved and are being constructed in the immediate vicinity of the IBC.

Transportation and Traffic

The IBC is bordered by the State Route 55 (SR-55) on the west, Campus Drive to the south, and Barranca Parkway to the north, and is bisected by I-405. Campus Drive is currently a four-lane Major Highway and Barranca Parkway is an six-lane Major Highway. The IBC contains three Major Highways that run north and south: Von Karman Avenue, a four-lane Major Highway; MacArthur Boulevard, an eight-lane Major Highway that runs adjacent to the airport; and Jamboree Road. Along the southern portion of the IBC, Jamboree is a six-lane Major Highway, and then turns into an eight-lane Major Highway at Michelson Drive, and at Barranca Parkway it turns into an Expressway at the north end of the IBC. Alton Parkway (four-lanes), Michelson Drive (six-lanes), and Main Street (six-lanes), which are also Major Highways, run east and west through the IBC.

On March 31, 2008, **The iShuttle**, which is operated by the City of Irvine and designed for the IBC community, began operating. The shuttle allows residents and employees to have an alternative way to commute to jobs and locations throughout the IBC. The current fares are as follows:

- \$1.00 - Boarding During Peak Period (5:30 AM – 9:30 AM and 3:30 PM – 7:30 PM)
- \$.50 - Boarding During Off-Peak Period (9:30 Am– 3:30 PM)
- Free - riders presenting valid Metrolink Pass/Ticket for rider connecting to and from Tustin Metrolink Station



While the IBC Vision Plan endorses the use of **The iShuttle**, the shuttle program exists independently of the IBC Vision Plan and was established and calibrated to serve the existing IBC community, not those that would or will exist in the future. With the implementation of the IBC Vision Plan in the future, **The iShuttle** program may need to be amended to suit increased or changing needs. But for the time being, **The iShuttle** serves its own independent purpose. The current existence of **The iShuttle** program does not make the adoption of the Vision Plan more or less likely. The fact that the Vision Plan proposes to reflect existing **The iShuttle** routes in General Plan exhibits does not change the independent and current need for **The iShuttle**.

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The shuttle offers two routes to accommodate residents and employees traveling within the area and to and from the IBC (see Figure 4-2, *The i Shuttle Route*). Route A connects the Tustin Metrolink Station to the John Wayne Airport via Von Karman Ave. This route meets the morning and afternoon Metrolink trains. Weekday service is provided from 5:30 AM to 9:30 AM and 2:00 PM to 7:30 PM. Route A has no weekend service. Route B connects the Tustin Metrolink Station to the heart of the IBC via Jamboree Rd and Michelson Drive. This route also meets the morning and afternoon Metrolink trains. Weekday service is provided from 5:30 AM to 9:30 AM and 2:00 PM to 7:30 PM. Route B has no weekend service.

Please refer to Section 5.13, *Transportation and Traffic*, for further discussion on the existing traffic conditions, and the proposed project's impacts to the traffic and circulation system.

General Plan and Zoning

City of Irvine General Plan

Future development of all land within the City of Irvine is guided by the City of Irvine General Plan, which underwent a comprehensive amendment on March 9, 1999. The most recent General Plan supplement reflecting subsequent amendments was issued in August 2007. The General Plan consists of a series of state-mandated and optional "elements" to direct the City's physical, social, and economic growth: Land Use, Circulation, Housing, Noise, Public Facilities, Waste Management, Energy, Safety, Parks and Recreation, Conservation and Open Space, Seismic, Cultural Resources, and Growth Management.

Per the City's General Plan Land Use Element and as shown on Figure A-3, Land Use, the entire IBC consists of one land use designation, Urban and Industrial. Figure A-3 is shown in Figure 4-3, *General Plan Land Use Designation*. This land use category provides for offices, industry, and support commercial, mixed with high-density residential, and a variety of activities. Typical uses are professional/medical offices, industrial manufacturing, research and development, support service retail, restaurants, multifamily housing, and hotels/motels. A full discussion of the proposed project's relationship and consistency with the applicable policies and programs of the General Plan is contained in Section 5.7, *Land Use and Planning*.

Land Use Element. The Land Use Element of the City of Irvine General Plan designates the site Urban and Industrial. The Urban and Industrial (Irvine Business Complex) land use category provides for offices, industry, and support commercial, mixed with high-density housing and a variety of activities. Typical uses are professional/medical offices, industrial manufacturing, research and development, support service retail, restaurants, churches, multifamily housing, and hotel/motels. The Land Use element also includes intensity limits for all land uses.

Circulation Element. The IBC is bordered by SR-55 on the west, Campus Drive to the south, Barranca Parkway to the north, and is bisected by I-405. Campus Drive is designated as a 6-lane Major Highway and Barranca Parkway is an 8-lane Major Highway. The IBC contains three Major Highways that run north and south through the IBC; Von Karman Avenue, a 6-lane Major Highway, MacArthur Boulevard, an 8-lane Major Highway that runs adjacent to the airport, and Jamboree Road. Along the southern portion of the IBC, Jamboree is a 6-lane Major Highway, and then turns into an 8-lane Major

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Highway at Michelson Drive, and at Barranca Parkway it turns into an Expressway at the north end of the IBC. Alton Parkway, Michelson Drive, and Main Street, which are also Major Highways with 6 lanes, run east and west through the IBC. The adopted level of service for the majority of intersections within the City is LOS D. However, LOS E is currently acceptable within the IBC.



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Housing Element. Development of housing in the City of Irvine is guided by the goals, objectives, and policies of the Housing Element. The overall goal of the Housing Element is to provide safe and decent housing for all economic segments of the community. The City of Irvine includes housing ranging from studio apartments to large single-family homes. In addition, affordable for-sale and rental housing for lower income households and households with special needs is available. The Housing Element includes a needs assessment, goals, objectives, and policies relative to the maintenance, improvement, and development of housing. It also includes a five-year schedule of implementing actions designed to achieve the stated goals and objectives, in keeping with the State Government Code and housing element guidelines for fair housing practices.

The City's General Plan includes a goal of providing affordable housing units based on the total number of units built within the Planning Areas. The goals for affordable housing units include 5 percent with financial incentives for Income I and II (below 50 percent of median income), 5 percent units with financial incentives for Income III (50 to 80 percent of median income), and 5 percent units with or without incentives for Income IV buyers (80 to 120 percent of median income). The City's Housing Element Update was certified by the State of California in 2001 and is currently being updated.

Noise Element. The Noise Element provides a means for protecting local citizens from the harmful effects of excessive exposure to noise. The noise objectives of the City are to consider noise impacts in land use, to reduce noise impacts along major transportation routes and during construction, to abate unnecessary outdoor noises, and to cooperate in intergovernmental efforts in noise control.

According to the land use compatibility chart of the Noise Element, residential land use is "clearly compatible" in exterior noise environments up to a CNEL of 55 and "normally compatible" up to 65 CNEL. "Clearly compatible" designates specified land as satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements. "Normally compatible" states that new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is 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 (General Plan Comprehensive Update Noise Element, March, 1999). The Noise Element is implemented through various discretionary and ministerial reviews, and permitting procedures.

The major noise sources in the area are traffic on Jamboree Road, Campus Drive, I-405, SR-55, Alton, Von Karman and Barranca Parkway and landings at John Wayne Airport, a commercial airport.

Public Facilities Element. Public facilities are institutional responses to basic human needs, such as health, education, safety, recreation, and worship. Examples of typical public facilities include churches, hospitals and police stations. The Public Facilities Element includes implementing actions, policies, and standards for various public facilities.

Waste Management Element. Waste management is a system for the collection and disposal of waste products generated by residential, institutional, commercial, and industrial land uses. Waste can be liquid or solid, hazardous or nonhazardous. The Waste Management Element includes implementing actions for the collection and disposal of waste.

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Energy Element. The Energy Element of the General Plan provides a basis for long-range energy planning. In addition, it summarizes information on energy supply and demand. When implemented, the associated State and local objectives will result in efficient energy consumption by the City and its residents, businesses and industries. The Energy Element includes implementing actions for the conservation of energy resources.



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The i Shuttle Route



* Time subject to change.

Source: http://www.irvineshuttle.net/system_map

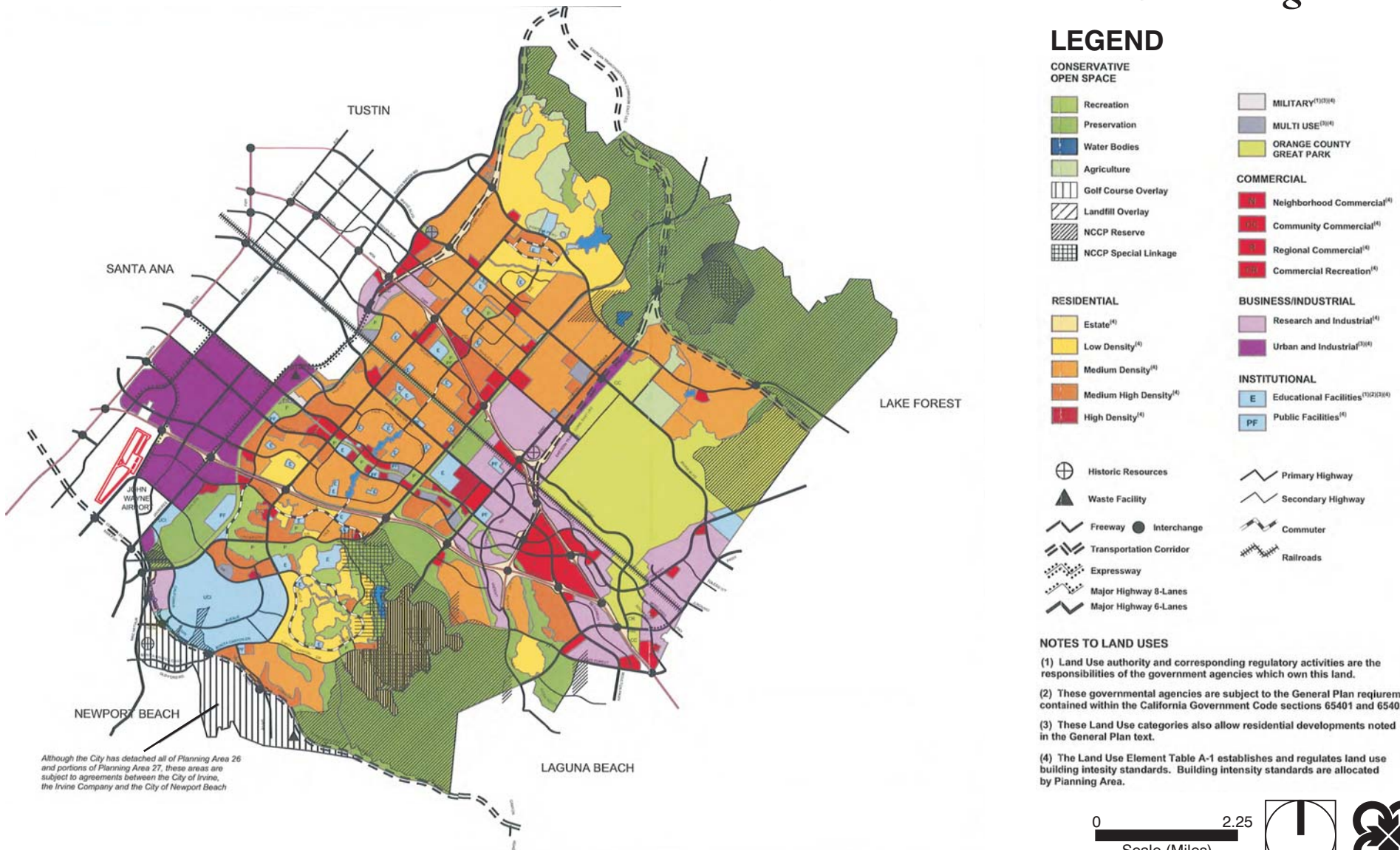
4. Environmental Setting

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4. Environmental Setting

General Plan Land Use Designation



Source: IBC General Plan 2005

IBC Vision Plan and Mixed Use Overlay Zoning Code Recirculated DEIR

City of Irvine • **Figure 4-3**

4. Environmental Setting

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4. *Environmental Setting*

Safety Element. The Safety Element provides guidelines for the protection of the community from aircraft operations, fires, floods, and geologic hazards such as soil limitations. The project site is not in a fire hazard location. The majority of the IBC site is outside of the accident potential zones as designated on Figure J-4, Clear and Accident Potential Zones, of the City of Irvine General Plan; however, as shown on Figure J-4, a small portion is within the clear zone. A significant portion of the IBC, primarily the western portion that is adjacent to the major flood control channels (the Barranca Channel, San Diego Creek, and Lane Channel) is within the area of special flood hazard.

Parks and Recreation Element. This element establishes guidelines for the orderly development of Irvine's park and recreation facilities. The Parks and Recreation Element includes goals, objectives and implementing actions for the development of recreational facilities. According to the Parks and Recreation Element, community parks shall serve a minimum population of 10,000 and shall be generally 20 acres, excluding greenbelts, trails, and school grounds. Public neighborhood parks shall serve a minimum population of 2,500 and shall be a minimum of four acres in size, excluding greenbelts, off-street trails, and school grounds. Private neighborhood parks, a minimum of one-third of an acre, serve the immediate neighborhood and are privately maintained by Homeowner Associations.

Conservation and Open Space Element. The Conservation and Open Space Element of the General Plan establishes policies that guide decisions on land use. This element provides long-term guidance for the preservation of significant natural resources and open space areas. No areas of the project site are designated for conservation and/or open space.

Seismic Element. This element identifies seismic hazards and discusses strategies for reducing disasters. In addition, the Seismic Element evaluates five general types of geologic conditions called Seismic Response Areas (SRA). The project area is designated SRA-1 (potential soft or loose soils/high groundwater). The detached 40 acre IBC parcel is within SRA 2, which consists of denser soils and/or deeper groundwater.

Cultural Resources Element. This element recognizes the importance of historical, archaeological, and paleontological resources in the City of Irvine and establishes a process for their early identification, consideration, and where appropriate, preservation. The element contains a map of all known historical and archaeological landmarks in the City of Irvine. There are no known historical/archaeological landmarks on the project site and the site is in a "Low Paleontological Sensitivity Zone."

Growth Management Element. In November 1990, Orange County voters approved a Revised Traffic Improvement and Growth Management Ordinance. This ordinance increased the retail sales tax by 0.5 percent for a 20-year period for the funding of transportation-related improvements. To receive a portion of these revenues, the City must satisfy the requirements established by the Countywide Growth Management Program. The City's Growth Management Element comprises a series of objectives and implementing actions to carry out the goals of the program and ensure that growth and development is based upon the City's ability to provide an adequate circulation system and public facilities. The intent of the Growth Management Element is to establish the basic policy framework for future implementing actions and programs within a single General Plan element.

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City of Irvine Zoning Designation

The IBC consists of four zoning designations: 5.0 IBC Mixed Use, 5.1 IBC Multi-Use, 5.2 IBC Industrial, and 5.3 (including 5.3 A-D for specific sites) IBC Residential. The 5.1 IBC Multi-Use land use district within the central area of the IBC straddles I-405 and is intended as an area in which a wide variety of uses are allowed. Specific institutional uses, particularly those proposed to serve the needs of the residential and employee populations of this district—such as schools, parks, libraries, and theaters—are especially encouraged in this area. Some examples of permitted uses include light manufacturing, retail, office, and research and development.

4.5 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed where they are significant. It further states that this discussion shall reflect the level and severity of the impact and the likelihood of occurrence, but not in as great a level of detail as that necessary for the project alone. Section 15355 of the Guidelines defines cumulative impacts to be “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Cumulative impacts represent the change caused by the incremental impact of a project when added to other proposed or committed projects in the vicinity.

The CEQA Guidelines (Section 15130 [b][1]) state that the information utilized in an analysis of cumulative impacts should come from one of two sources, either:

- A. A list of past, present and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency; or
- B. A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions.

The cumulative impact analyses contained in this DEIR use a combination of both methods A and B. Generally, a General Plan projections approach has been utilized. The cumulative impact analysis contained in this DEIR is based on the “Full Buildout of the General Plan” scenario (which includes General Plan buildout projections and approved projects not yet built). Therefore, the “Full Buildout of the General Plan Plus The Proposed Project” scenario assumes maximum development of the City of Irvine and the IBC, if the project were approved.

The Land Use Element of the Irvine General Plan designates the general distribution and location of land to be used for residential, business, industry, open space and other types of land use. The Land Use Element of the Irvine General Plan (LUE) designates the general distribution and location of land to be used for residential, business, industry, open space and other types of land use. The land use categories established in the LUE guide future development and growth in a way that promotes the health, safety, and welfare of the community. To regulate the amount of building intensity, the LUE also includes several statistical tables that define the amount of physical development that are allowed in each land use category. To further regulate the spatial distribution of planned growth, land use intensities are allocated throughout the City’s Planning Areas, as shown on Figure 4-4, *City of Irvine Planning Areas*. This



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geographic planning framework is used in both the General Plan and the Zoning Code. Planning Areas are also used for organizing the City's development monitoring database.

As shown in Table 4-1, *General Plan Land Use Summary by Planning Area*, the adopted City of Irvine General Plan includes a total of 4,108,398 square feet designated Multi-Use, 100,613,621 square feet designated Industrial uses, 22,500,088 square feet designated Commercial, 20,049,667 square feet designated Institutional, and a total of 121,042 residential units. The City has adopted growth projections for planning horizon year post-2030 (representing General Plan buildout), based upon the City's General Plan, and demographic forecasts adopted by the Orange County Council of Governments (OCCOG) in June, 2000. The County of Orange, its cities, and public agencies, have executed a Memorandum of Understanding with the OCCOG to contract with the Center for Demographic Research at California State University, Fullerton, to develop and periodically update demographic growth projections for Orange County, based on adopted General Plans and historic growth trends. OCP-2004 is the most current adopted growth projection that has been disaggregated into TAZs for use in traffic studies.

Table 4-1
General Plan Land Use by Planning Area

<i>Planning Area</i>	<i>Military (sq. ft.)</i>	<i>Multi-Use (sq. ft.)</i>	<i>Industrial (sq. ft.)</i>	<i>Commercial (sq. ft.)</i>	<i>Institutional (sq. ft.)</i>	<i>Dwelling Units</i>
1	0	0	0	132,500	0	4,088
3	0	0	0	0	0	0
4	0	85,000	1,423,000	990,000	734,364	7,969
5	0	0	0	0	0	3,830
6	0	125,000	500,000	175,000	0	4,670
8	0	171,591	0	1,051,622	188,174	8,233
9	0	450,000	0	0	0	8,832
10	0	0	2,822,921	888,800	39,950	2,743
11	0	71,324	0	724,006	435,359	5,408
12	0	470,000	3,603,231	1,105,000	386,280	4,212
13	0	0	3,558,010	0	1,585,263	0
14	0	0	0	798,707	329,461	5,246
15	0	391,483	0	956,838	624,147	9,579
16	0	0	0	0	0	0
17	0	0	1,060,000	150,000	0	2,553
18	0	0	0	0	0	750
19	0	0	0	302,168	0	1,735
20	0	0	0	173,542	229,324	2,754
21	0	0	0	0	569,351	4,253
22	0	0	0	0	0	400
23	0	0	0	0	112,230	1,040
24	0	654,000	0	86,035	0	2,757

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Table 4-1
General Plan Land Use by Planning Area

<i>Plannin g Area</i>	<i>Military (sq. ft.)</i>	<i>Multi-Use (sq. ft.)</i>	<i>Industrial (sq. ft.)</i>	<i>Commerci al (sq. ft.)</i>	<i>Institution al (sq. ft.)</i>	<i>Dwelling Units</i>
25	0	0	1,436,170	0	0	0
27	0	0	0	0	782,400	2,155
28	0	0	0	0	0	0
29	0	0	0	0	950,000	435
30	0	0	1,600,000	102,000	53,500	0
31	0	0	6,888,383	147,359	350,370	0
32	0	0	4,355,127	1,398,947	0	0
33	0	0	0	9,902,980	0	3,150
34	0	0	4,763,300	963,930	0	0
35	0	0	12,815,738	1,252,654	62,101	0
36	0	0	53,125,389	0	0	9,455
38	0	0	0	0	0	3,214
39	0	0	0	0	0	3,700
40	0	1,540,000	1,662,352	205,000	100,000	3,918
50	0	0	0	0	9,810,293	9,500
51	0	150,000	1,000,000	933,000	2,707,100	3,625
Unalloc ated	0	0	0	60,000	0	0
Total	0	4,108,398	100,613,621	22,500,088	20,049,667	121,042

Note: Only Planning Areas that are planned for development are shown. As a result, some Planning Areas are not listed above since they are designated for permanent open space. In addition, Planning Area 26 was detached from the City and annexed to the City of Newport Beach.



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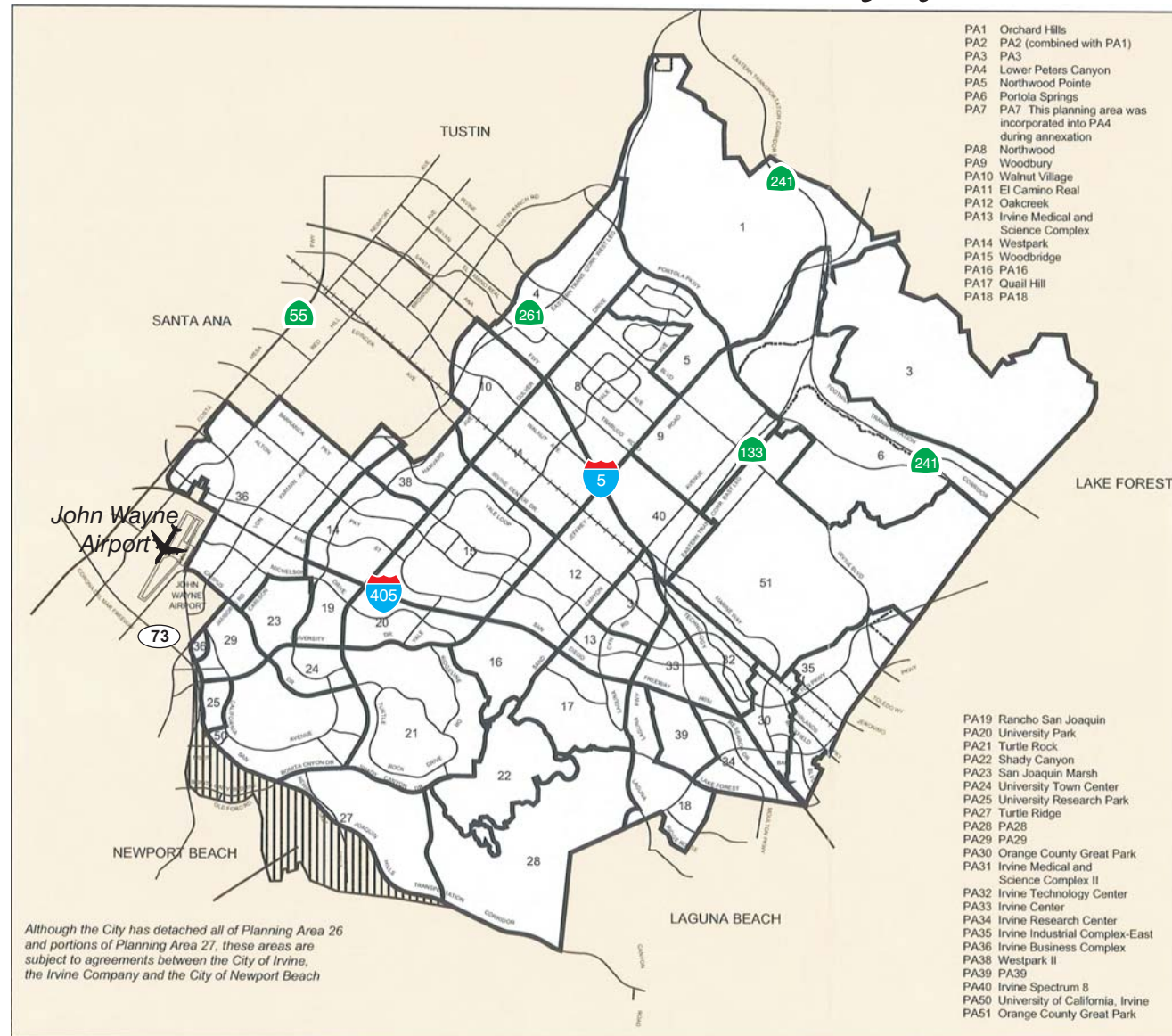
The City of Irvine has developed an Irvine Transportation Analysis Model (ITAM) utilizing OCP and Irvine's General Plan, for purposes of forecasting cumulative growth within the City of Irvine and regionally. Regional growth outside of the City of Irvine has accounted for traffic, air quality, and noise impacts through use of ITAM, a socioeconomic-based traffic model that uses regional growth projections to calculate future traffic volumes. The growth projections adopted by the City and surrounding area for ITAM are used for the cumulative impact analyses of this DEIR. For the TAZs used in the ITAM, the OCP-2004 projections were modified for the project traffic analysis as follows to reflect more recent data relevant to growth projections in and near Irvine:

- 1) The General Plan Amendment and Zone Change (GPA/ZC) for Planning Areas 1 and 9, including the Orange County Master Plan of Arterial Highways (MPAH) Amendment to delete the extension of Culver Drive.
- 2) The GPA/ZC for PA 40/12.
- 3) The GPA/ZC for PA 13 (Spectrum 4) and PA 31 (Spectrum 6).
- 4) The GPA/ZC for PA 18/33(Lot 109)/34/39.
- 5) The GPA/ZC for PA 30/51 (Heritage Fields).
- 6) Spectrum Center Housing and Pacifica Office Towers projects in Irvine Center
- 7) The tract maps for PA 6A, PA 6B, PA 9A including Woodbury Village Retail Center changes, PA 9B, and PA 18.
- 8) The Master Subdivision Map for PA 30/51.
- 9) The East Orange GPA and associated MPAH Amendments.
- 10) City of Newport Beach General Plan 2006 Update.
- 11) Tustin Legacy Specific Plan
- 12) 2007 Long Range Development Plan for the University of California, Irvine

This approach to the Regional Growth Projections Method of using adopted local growth projections along with recent updates that incorporate the major projects such as those listed above is appropriate for evaluating cumulative impacts related to the proposed project. This is especially true given the size and long-term nature of the project, which is better considered within the context of adopted growth projections than by attempting to list reasonably foreseeable individual development projects that may occur nearby over the next several years.

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City of Irvine Planning Areas



Source: City of Irvine 2006

IBC Vision Plan and Mixed Use Overlay Zoning Code Recirculated DEIR

City of Irvine • **Figure 4-4**

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Cumulative Development Assumptions for the IBC

The adopted City of Irvine General Plan includes within the IBC (Planning Area 36) a total of 53,125,389 square feet designated as non-residential and 9,445 residential units (including 440 density bonus units, which are exempt by state law from local regulatory intensity limitations), as summarized in Table 4-2.

Table 4-2 IBC Development Summary					
Residential					
	Existing General Plan			Proposed Project	
	Existing	Under Construction	Approved	Pending ¹	Potential ²
Base Units	4,779	1,814	2,422	2,035	3,950
Density Bonus Units ³	232	78	130	215	1,383
Subtotal	5,011	1,892	2,552	2,250	5,333
Total	9,455			7,583	
Total Cap for the IBC				15,000	
Total IBC Units at Buildout including Density Bonus				17,038	
Nonresidential					
	Existing General Plan		Proposed Project		
	Existing Development	Remaining Buildout Potential	Remaining Buildout Potential		
Nonresidential Square Footage	42,771,000	10,354,389	6,016,662		
Total Nonresidential	53,125,389		48,787,662		
Hotel Rooms					
	Existing General Plan		Proposed Project		
	Existing Development	Remaining Buildout Potential	Remaining Buildout Potential		
	2,496	610	372		
Total Hotel Rooms	3,106		3,478		

¹ Pending units are those for which development applications are currently on file with the City.

² Potential units are those remaining to reach the 15,000-unit cap. No development applications have been received for these units.

³ Density bonus units are exempt by state law from local regulatory limitations on development intensity but are included and analyzed in this DEIR.



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The following projects shown in Tables 4-3 and 4-4 in the IBC were also considered in the analysis (pending as of the date of the Notice of Preparation. Some projects have since been approved).

Table 4-3
Summary of Pending IBC Nonresidential Development Projects¹

<i>Project Name</i>	<i>Address</i>	<i>Use Type</i>	<i>Description</i>
Element Hotel	17662 Armstrong	Hotel	CUP for 122 Room Hotel
Hines Master Plan	18582 Teller and 2722 Michelson	Office/Retail	Master Plan for 290,000 sf office (Phase 1), 490,000 sf office (Phase 2), 15,500 sf retail/restaurant
Irvine Crossings Master Plan Modification and TPM	17871 Von Karman	Office/Industrial	Master Plan Modification to reduce office space and increase industrial/warehouse space in an existing building in PA 36. (4,726 sf office, 196,300 sf industrial)
Diamond Jamboree Master Plan Modification	2600-2798 Alton		Master Plan Modification for Shared Parking/reallocation of uses for Diamond Jamboree Center
Master Plan for GIFREHC Center	18691 Jamboree Road	Office/Retail/Hotel	Master Plan for GIFREH Multi-Use Center (250,000 sf office, 39,000 sf retail, 350 room hotel)
Allergan Master Plan Modification*	18522 Von Karman	Office	Master Plan Modification for the addition of a 250,000 sf office building
McGaw - Tentative Tract Map	1555 and 1565 McGaw, 17173 Gillette	Office Condos	Tentative Tract Map for seven office condominiums on two lots
Modification to CUP	3333 Michelson	Office	Minor modification to

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for Park Place*			CUP 87-CP-0829 (Park Place).
Alton - Tentative Parcel Map for Non-Residential Condos	2152 Alton	Office Condos	Tentative Parcel Map 2008-189 to create 15 non-residential condo units in PA 36.
Business Center - Tentative Parcel Map	2062 and 2070 Business Center Dr	Office Condos	Tentative Parcel Map 2008-137 to create 2 parcels for condominium purposes in PA 36.

Source: City of Irvine, 2009.

¹. These projects were pending as of the date of the Notice of Preparation.



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As outlined in Chapter 3, *Project Description*, the following pending residential developments have also been included in this analysis:

Table 4-4
Summary of Pending IBC Residential Development Projects

<i>Project Name</i>	<i>Location</i>	<i>Base Units</i>	<i>Density Bonus Units</i>	<i>Total Units</i>
Martin Street Condos	2301 Martin Street	82		82
2851 Alton	Northwest corner of Alton and Murphy	170		170
Avalon Jamboree II	16901 Jamboree	144	35	179
Irvine Technology Center	Northwest corner of Jamboree and Campus	1,000		1,000
Kilroy	17150 Von Karman	347	122	469
Alton/Millikan Apartments	16952 Millikan	126	30	156
2852 Kelvin	2852 Kelvin	166	28	194
Total	—	2,035	215	2,250

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